

Coláiste an Leighis, an Altranais & na nEolaíochtaí Sláinte College of Medicine, Nursing & Health Sciences

# Coláiste an Leighis, an Altranais agus na nEolaíochtaí Sláinte

# The College of Medicine, Nursing and Health Sciences

# Féilire 2024-25

# **Calendar 2024-25**

# **COLLEGE OF MEDICINE, NURSING & HEALTH SCIENCES**

AN COLÁISTE LEIGHIS, ALTRANAIS AGUS EOLAÍOCHTAÍ SLÁINTE

# CALENDAR 2024-25

# *FÉILIRE 2024-25*

# http://www.universityofgalway.ie/medicine/faculty\_calendar.html

The 2024-25 Calendar is valid for this Session. Whilst every effort is made to ensure the contents of the Calendar are accurate, the Calendar is issued for the guidance of students and staff only. The Calendar is not an offer to provide programmes of study, nor is it in any way to be construed as imposing any legal obligation on the University to provide programmes either at all or in part in respect of any subject. No guarantee is given that programmes, syllabuses, fees or regulations may not be altered, cancelled, or otherwise amended at any time. The Calendar confers no rights on any student registered for the Session 2024/25.

College of Medicine, Nursing & Health Sciences	5
School of Health Sciences	7
General Regulations	7
Bachelor of Science in Occupational Therapy	12
Bachelor of Science in Podiatric Medicine	22
Bachelor of Science in Speech & Language Therapy	26
General Regulations	31
Honours Bachelor of Arts (Social Care)	
General Regulations	41
Master of Science of Podiatric Medicine (Pre-registration)	47
Master of Arts (Health Promotion) & Postgraduate Diploma in Arts	54
Masters of Science in Applied Multilingualism	57
MSc. in Childhood Speech, Language, and Communication Needs	61
MSc. Advanced Healthcare Practice & Research	63
Master of Science (MSc) in Podiatric Medicine	65
PG Cert in Health Promotion (Approaches to Cardiovascular Health & Type II Diabetes Pre-	vention)
PG Cert in Mental Health Promotion (Mental Health Promotion)	70
PG Cert in Health Promotion (Workplace Wellness)	73
Specialist Certificate in Health Promotion (Mental Health Promotion)	75
Specialist Certificate in Health Promotion (Youth Health)	78
School of Medicine	51
General Regulations	51
Degrees of MB BCh BAO	59
MB. BCh. B.A.O Degree	61
BACHELOR OF MEDICINE (MB) OF SURGERY (BCH) AND OF OBSTETRICS (BAO)	) 61
Syllabus of Programmes of Instruction for the Degrees of MB BcH BAO	67
First Medical Year (1MB) Modules	72
Second Medical Year (2MB) Modules	82
Third Medical Year (3MB) Modules	89
Fourth Medical Year (4MB) Modules	95
Fifth Medical Year/Final Year (5MB3) Modules	101
Degrees with the Undergraduate Medical Programme	105
Medicine GY501 (8 Year)	105
Medical & Biomedical Engineering Degree	106
Bachelor of Science in Medical Subjects	106
B.Med.Sc	107
Taught Postgraduate Certificate, Diploma and Masters Programme	108
Applied Clinical Data Analytics	111
Master of Science (Applied Clinical Data Analytics)	111
PG Diploma/Certificate in Science (Applied Clinical Data Analytics)	111
Clinical Education	115
Postgraduate Diploma in Health Sciences (Clinical Education)	115

Master of Health Science (Clinical Education)	121
Clinical Research	123
Master of Science (Clinical Research)	123
PG Diploma/Certificate in Science (Clinical Research)	
Healthcare Simulation & Patient Safety	
MSc. /PDip in Healthcare Simulation & Patient Safety 1HSP1/ 1HSP9	
MSc. in Healthcare Simulation and Patient Safety 1HSP3	
MSc. Exercise Physiology and its Application in Therapy	
1EPT1 (F/T) 1EPT2 (P/T) Master	
1EPT3 F/T, 1EPT4 (P/T) PG Dip	
1EPT7 PG Cert (exit only)	
MSc Exercise Physiology & Rehabilitation 1EPT5	
PDip Exercise Physiology & Rehabilitation 1EPT6	
PG Cert Exercise Physiology 1EPT7 (exit route)	
Clinical Speciality Focused	
MSc. Interventional Cardiovascular Medicine	
PG Dip (60ECTS) (exit only)	
PG Cert (30ECTS) (exit only)	
Multidisciplinary Radiology	
MSc. Multidisciplinary Radiology F/T 1MRY1	
MSc. Multidisciplinary Radiology P/T 1MRY2	
PG Dip Multidisciplinary Radiology F/T 1MRY3	
PG Dip Multidisciplinary Radiology P/T 1MRY4	
PG Cert Multidisciplinary Radiology (exit route) 1MRY9	
MSc./PG Dip Surgery	155
MSc. Surgery F/T 1MCH3	155
MSc. Surgery P/T 1MCH1	155
PG Diploma Surgery 1MCH9(exit route)	155
Preventative Medicine & Cardiovascular Health Suite of Programmes	
Preventive Cardiology (MSc/PDip)	
Preventive Cardiology	
1MPY1 MSc Preventive Cardiology	
1MPY3 PG Diploma Preventive Cardiology (exit route)	
1MPY8 Postgraduate Certificate in Preventive Cardiology (exit route)	
Cardiac Rehabilitation (PG Cert)	
Cardiac Rehabilitation Certificate	
Cardiovascular and Pulmonary Rehabilitation (MSc)	
Cardiovascular and Pulmonary Rehabilitation (MSc/PG Dip/Cert)	
1CPR1 (MSc)	
1CPR9 (PG Dip) exit route	
1CPR8 (PG Cert) exit route	
Diabetes (MSc)	
Diabetes MSc. / PG Dip / PG Cert	

1DIA1 Master of Science (Diabetes) F/T	172
1DIA2 Master of Science (Diabetes) P/T	172
1DIA9 PG Diploma of Science (Diabetes) Exit Route	172
1DIA8 PG Cert Science (Diabetes) Exit Route	
Continuing Professional Development Medicine CPDM	177
CPDM5 Clinical Primary Care Module (Diabetes) (Standalone Module)	177
Obesity (MSc)	180
10BS1 MSc Obesity F/T, 10BS2 MSc Obesity P/T,	180
OBS9 PG Dip Obesity (exit route)	180
LAB-BASED RESEARCH:	185
CELLULAR MANUFACTURNG & THERAPY	185
Cheminformatics & Toxicology MSc./PG Dip/PG Cert	188
1CIT1 MSc Cheminformatics & Toxicology F/T	188
1CIT9 PG Dip Cheminformatics & Toxicology (exit only)	188
1CIT8 PG Cert Cheminformatics & Toxicology (exit only)	188
Regenerative Medicine MSc. / PDip	192
1MSR1 MSc. Regenerative Medicine F/T	192
1MSR9 PDip Regenerative Medicine (exit route)	192
College of Science and Engineering, Interdisciplinary with the School of Medicine	196
MSc. Toxicology	196
MSc Neuropharmacology 1NP1	199
Programmes Suspended/Formerly Retiring	202
PDip in Medical Science	202
MSc. Medical Science	205
Scholarships/Awards	208
University Scholar Scheme	208
The College of Medicine Nursing & Health Sciences Undergraduate awards	209
Postgraduate Awards	211
School of Nursing & Midwifery	214
General regulations for Undergraduate Degrees in Nursing & Midwifery	215
Bachelor of Nursing Science (General)	223
Bachelor of Nursing Science (Mental Health)	229
Bachelor of Midwifery Science	235
Taught Postgraduate Certificate, Diploma and Master's Programmes	241
Certificate in Nursing (Nurse/Midwife Prescribing)	241
Masters/Postgraduate Diploma in Health Sciences (Emergency Care)	243
Master/Postgraduate Diploma in Health Sciences (Advances Practice with Prescribing)	246
Postgraduate Diploma in Nursing (Education)	247
Master/Postgraduate Diploma in Health Sciences (Gerontology)	249
Master/Postgraduate Diploma in Health Sciences (Intensive Care)	252
Master/Postgraduate Diploma in Health Sciences (Acute Medicine )	255
Master/Postgraduate Diploma in Health Sciences (Oncology & Haematology)	258
Master/Postgraduate Diploma in Health Sciences (Children's Palliative/Complex Care)	261

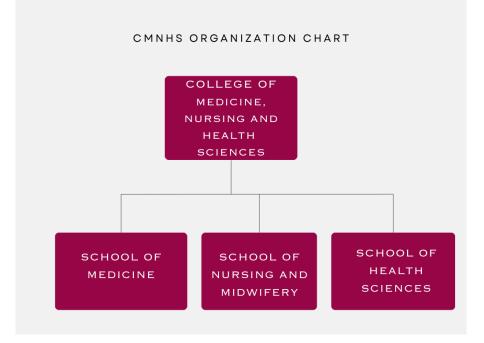
Master/Postgraduate Diploma in Health Sciences (Perioperative)	264
Master/Postgraduate Diploma in Health Sciences (Public Health Nursing)	267
Higher Diploma in Midwifery	271
Master/Postgraduate Diploma in Health Sciences (Wound Healing & Tissue Repair)	. 273
Master in Health Sciences (Nursing Education)	275
MHSc/PDipHSc (Diabetes) Nursing	. 277
Professional Credit Awards	. 283

# College of Medicine, Nursing & Health Sciences

The College of Medicine, Nursing & Health Sciences welcomes students whose academic interests include Medicine, Midwifery and Nursing, Speech & Language Therapy, Podiatric Medicine and Occupational Therapy and Health Promotion. We are also a have a range of taught and research-based postgraduate masters and diplomas. Our goal is to equip graduates with the necessary knowledge, skills, and attitudes needed for a lifetime of learning and commitment to patients and society. We make full use of traditional and modern educational methods. College members are engaged in innovative research in many areas, with particular emphasis on cancer, gene and stem cell therapy, health services research, biomedical engineering science and health promotion.

Our College is currently expanding the undergraduate medical intake and implementing an exciting new curriculum. In 2008, we commenced a 4-year Honours BSc programme in Podiatry, the only course of its kind in Ireland. We have developed Regional Academies for Teaching and Research at Sligo, Letterkenny, Mayo, and Ballinasloe. Our Nursing, Midwifery, Speech & Language, Podiatry, Social Care, Health Promotion and Occupational Therapy courses are accommodated in Áras Moyola, which was opened in 2006. A new Medical Education Centre also opened in the hospital campus in 2007. The Lambe Institute for Translational Research and the HRB Clinical Research Facility opened adjacent to the Clinical Science Institute on the grounds of University Hospital Galway in 2015. This facility is jointly funded by the University, the Health Research Board and the Health Services Executive. The Human Biology Building (HBB) opened in 2018. The Clinical Science Institute is also home to The Irish Centre for Applied Patient Safety and Simulation, a collaborative group of clinicians from the Saolta University Healthcare Group and researchers and academics from University of Galway. Their educational and research activities focus on patient safety and healthcare simulation.

The mission of the College of Medicine, Nursing and Health Sciences is to promote health and wellbeing, which improves society through training, education, research and innovation. The College of Medicine, Nursing & Health Sciences has emerged from the academic restructuring of the University and capitalizes on existing close harmony across the healthcare disciplines. It is constituted as follows:



Prof. Martin O'Donnell	Executive Dean, College Medicine Nursing and Health Sciences
Prof. Declan Devane	College Vice-Dean
Dr. Martina Ní Chuláin	Director of Strategic Development and Process
	Improvement
Prof. Gary Duffy	Vice-Dean of Research & Graduate Studies
Dr. Leo Quinlan	Vice-Dean of Learning, Teaching & Assessment
Prof. Máire Connolly	Vice-Dean of Internationalisation & Engagement
Dr. Katarzyna Whysall	Vice-Dean Equality Diversity & Wellbeing
Prof. Michael Conall Dennedy	Vice-Dean for Staff Development and Mentorship
Ms Aileen Connolly	Academic Affairs and College Operations Manager

School of Health Sciences (Áras Moyola)

Prof. Caroline McIntosh Dr.Vivienne Batt Head of School School Manager

School of Medicine (Clinical Science Institute)

Prof. Laurence Egan Ms Regina Doyle Head of School School Operations Manager

School of Nursing & Midwifery (Aras Moyola)

Dr. Andrew Hunter Ms Deirdre Roche Head of School School Manager

#### **School of Health Sciences**

#### General Regulations FOR THE FULL-TIME UNDERGRADUATE DEGREES IN HEALTH SCIENCES (NFQ Level 8 Ref; Quality and Qualifications Ireland (qqi.ie))

# EXPLANATORY NOTE

The Undergraduate Degree Programmes of the School of Health Sciences at University of Galway are fouryear Honours Degrees, which award the Bachelor of Science in one of the following specialisms: Occupational Therapy, Podiatric Medicine, Speech and Language Therapy.

Regulations may be altered periodically. The regulations applying to students are generally those, which applied to their programme at the time in which they commenced their studies, unless otherwise specified in the General Regulations hereunder.

These Regulations form a total, individual clauses may be conditioned or varied by the provision of other clauses and cannot be applied in isolation.

The Regulations may also be supported by, or refer to other publications such as the University Undergraduate Prospectus (available on request or by following on-line links for Future Students from <u>University-of-Galway-Undergraduate-Prospectus-2024.pdf (universityofgalway.ie)</u> and the General Calendar of the University <u>Academic Term Dates - University of Galway</u>.

I. Entry to the Degree is limited and is based competitively on the results of the Irish Leaving Certificate examination or its equivalent. The minimum requirement is matriculation, as set out in the Undergraduate Prospectus. [Refer Matriculation requirements and Additional Requirements in the University Undergraduate Prospectus]. Requirements arising where the results being presented are from any examination other than the Irish Leaving Certificate are also set out in the Prospectus.

#### Note:

*The competitive cut-off may be significantly higher than the Matriculation standard. All Applications are processed through the Central Applications Office* (www.cao.ie).

**II.** Candidates who do not meet the Ordinary Matriculation Requirements as set out in I above, may matriculate on grounds of Mature *Years [refer Matriculation on Mature Years in the University Undergraduate Prospectus].* 

# Note:

All Applications are processed through the Central Applications Office (refer to www.cao.ie).

- **III.** Before entering the Degree programme every student must furnish Garda Clearance. This is organised through the Undergraduate Admissions Office on entering the University. Failure to obtain clearance will result in the student being unable to access practice education placements which are a core requirement of the programme.
- **IV.** Students are required to participate in group work and experiential learning to practice skills which are required for successful programme completion.
- V. The School of Health Sciences requires students to obtain the appropriate vaccinations (details available in programme handbooks). Placement providers stipulate that students must have the appropriate vaccinations before undertaking placements at their site. If students cannot provide evidence of required vaccinations, placements will be refused. Students must satisfy the health clearance requirements of the programme including the completion of the School of Health Sciences Pre-Placement Orientation module for each year of the programme.
- **VI.** Registration is carried out by the University. Students must be registered in their Degree programme not later than fifteen days after the commencement of Programmes.
- **VII.** To obtain the degrees of B.Sc. in the selected Specialism as set out in the Explanatory Note (above):

- (a) Students must pursue programmes of Study extending over a period of not less than four Academic Years and must pass the various Examinations prescribed below, meeting the requirements as set out elsewhere in these Regulations, in the Marks and Standards of the College and in Student Handbooks where necessary.
- (b) The Examinations are as follows:
  - i. The First University Examination in their programme.
  - ii. The Second University Examinations in their programme.
  - iii. The Third University Examination in their programme.
  - iv. The Fourth University Examination, being the Final Examination in their programme.

# Note:

IX.

- 1 **The duration of the programme cannot be shortened;** no part of the Final Examination may be taken before the end of 8 Semesters of professional education.
- 2 There is a time-limit on the completion of the degree; while a student who fails their yearly examination in a particular year has the right to re-sit that/those examination(s) the following year [refer par. VIII - XI below], the total time allowed for the successful completion of the four University Examinations is 6 years or 12 semesters in total. As per the Leave of Absence Policy (QA287), the duration of a Leave of absence must not exceed 2 years per stage as per Marks and Standards applicable to that programme or otherwise as specified by the specific Programme regulations.

QA287-Leave-of-Absence-approved-AC-Oct2022.pdf (universityofgalway.ie)

Upon return from an extended Leave of Absence, students will ordinarily be required to undertake remedial placement as designated by the discipline in question, the extent of which may vary depending on the stage of the programme and duration of the absence.

- VIII. The First University Examination must be passed completely before a student can proceed to the Second Year.
  - (a) To enter this Examination, the student must have satisfied the attendance requirements on the First Year Programme as outlined in the student handbooks, including completion of all coursework. Exceptions may only be permitted by the Head of School where it is recommended by the programme on professionally verified grounds of student ill-health, close family bereavement or of significant personal difficulties.
  - (b) The Examination will be held before and during the Summer Examination session with repeat examinations, if necessary, held in the Autumn Examination session.
  - (c) Failure of the Examination in full or in part at the repeat examination will require the student to reattend the First-Year programme and re-sit the Examination in the following year.
  - (d) It is not possible to compensate marks from one module to another for the purpose of passing failed modules by compensation in the First University Examination in the following programmes:
     B.Sc. (Occupational Therapy)
     B.Sc. (Podiatric Medicine)

# **B. Sc. (Speech and Language Therapy)**

- (e) The First-Year examination must be completed within two years of entering First Year, extensions may not be given as this will breach the overall time-limit for completing the programme as set out in Par. VII above.
- The Second University Examination must be passed completely before a student can proceed to the Third Year.
- (a) To enter this Examination, the student must have satisfied the attendance requirements on the Second Year Programme, including completion of all coursework. Exceptions may only be permitted by the Head of School where it is recommended by the programme on professionally verified grounds of student ill- health, close family bereavement or of significant personal difficulties.
- (b) The Examination will be held before and during the Summer Examination session with repeat examinations, if necessary, held in the Autumn Examination session.
- (c) Failure of the Examination in full or in part at the repeat examination will require the student to reattend the Second-Year programme and re-sit the Examination in the following year, provided that this will not breach the overall time-limit as set out in Par VII above. In such a case the student will be unable to continue.
- (d) It is not possible to compensate marks from one module to another for the purpose of passing failed modules by compensation in the Second University Examination in the following programmes:

**B.Sc.** (Occupational Therapy)

B.Sc. (Podiatric Medicine)

# **B. Sc. (Speech and Language Therapy)**

- (e) The Second-Year examination must be completed within two years of entering Second Year, extensions may not be given as this will breach the overall time-limit for completing the programme as set out in Par. VII above.
- (f) Marks in repeat examinations will be capped at 50%.

- X. The Third University Examination must be passed completely before a student can proceed to the Fourth Year.
  - (a) To enter this Examination, the student must have satisfied the attendance requirements on the Third Year Programme, including completion of all coursework. Exceptions may only be permitted by the Head of School where this is recommended by the programme on professionally verified grounds of student ill-health, close family bereavement or of significant personal difficulties.
  - (b) The Examination will be held before and during the Summer Examination session with repeat examinations, if necessary, held in the Autumn Examination session.
  - (c) Failure of the Examination in full or in part at the repeat examination will require the student to reattend the Third-Year programme and re-sit the Examination in the following year, provided that this will not breach the overall time-limit as set out in Par. VII above. In such a case the student will be unable to continue.
  - (d) It will not be possible to compensate marks from one module to another for the purpose of passing failed modules by compensation in the Third University Examination in the following programmes:
    B.Sc. (Occupational Therapy)
    B.Sc. (Podiatric Medicine)
    B. Sc. (Speech and Language Therapy)
  - (e) The Third-Year examination must be completed within two years of entering Third Year, extensions may not be given as this will breach the overall time-limit for completing the programme as set out in Par. VII above.
  - (f) Marks awarded in repeat examinations will be capped at 50%.
- XI. The Fourth and Final University Examination must be passed completely before a student can be awarded the B.Sc. Degree
  - (a) To enter this Examination, the student must have satisfied the attendance requirements on The Final Year Programme, including completion of all coursework. Exceptions may only be permitted by the Head of School where this is recommended by the programme on professionally verified grounds of student ill- health, close family bereavement or of significant personal difficulties.
  - (b) The Examination will be held before and during the summer examination session with repeat examinations, if necessary, held in the autumn examination session.
  - (c) Failure of the Examination in full or in part at the repeat examination will require the student to reattend the Final Year programme and re-sit the Examination in the following year, provided that this will not breach the overall time-limit as set out in Par. VII above. In such a case the student will be unable to complete the degree.
  - (d) It is not possible to compensate marks from one module to another for the purpose of passing failed modules by compensation in the Fourth and Final University Examination in the following programmes:

#### **B.Sc. (Occupational Therapy)**

**B.Sc. (Podiatric Medicine)** 

# B. Sc. (Speech and Language Therapy)

- (e) The Final Year examination must be completed within two years of entering Final Year, extensions may not be given as this will breach the overall time for completing the programme as set out in Par. VII above.
- (f) Marks awarded in repeat examinations will be capped at 50%.
- XII. (a) The Award of the B.Sc. Degree will require successful completion of all years of the Undergraduate Programme as set out in Rules VII to XI (inclusive) above. (b) The calculation of the overall degree results awarded, including the calculation of Honours (if any), will be based on the proportion of the overall marks attained in Years 3 and 4 of the programme as set-out in the Marks and Standards and recorded in the student handbook for each programme:
  - XIII. Any student failing to pass the Examination indicated in Rules VII to XII (inclusive) above within the specified intervals will be ineligible to proceed further with his/her studies. Exemptions to this rule will be granted by the Academic Council, on the recommendation of the College of Medicine, Nursing and Health Sciences, only for very serious reasons.

- XIV. Re-attendance may be required from any student whose attendance is considered to have been unsatisfactory, or who has not attained a sufficient standard of knowledge as judged by examination or progressive assessment. Satisfactory attendance is generally regarded as attendance and participation in not less than 75% of all of the taught sessions provided. This is calculated on an individual module basis and is not based on overall attendance across modules. There are additional attendance requirements which are specific to particular modules and programmes which must be adhered to. Students who have not achieved satisfactory attendance may be refused permission to submit assignments as well as admission to examinations.
- XV. Given that these programmes award a professional qualification and lead to professional registration, there are specific requirements for the completion of clinical education and training components of the programme, which include also a prescription on the number of opportunities allowed to repeat /re-sit these components. In some cases, these are determined by the professional bodies (refer to each programme handbook for more specific rules which apply in each Therapy specialism). When students have not successfully completed these clinical components of their degree programme, in total or in part, including their practice education, clinical theory, or other such components as are required, and have exhausted all repeat /re-sit options for so doing, they are not eligible for the award of the B.Sc. in their designated Therapy specialism, but may, subject to the decision of the Head of School on the recommendation of the programme, transfer to complete the non-clinical degree, the B.Sc. (Health Studies) as outlined in the Paragraph XVI below.
- XVI. Students who are rendered ineligible for the award of the B.Sc. in their designated Therapy specialism by the provisions of Paragraph XV above, may be offered the option of transferring to complete the non-clinical award of the B.Sc. (Health Studies). This programme, also an Honours (NFQ level 8 award) will include all of the modules of the BSc in their original Therapy specialism except the practice placement, and or clinical/practice education modules. These will be substituted by independent study module(s) in years 3 or 4 which will constitute a non-clinical degree route. In the independent study module(s) students will be required to demonstrate independent and critical thinking through appropriate assignment(s). Students may be transferred either in their Third Year or their Final Year as may be deemed appropriate. The decision to transfer must be approved by the Head of School on the recommendation of the programme, only in the circumstances described in Paragraph XV above.

Bachelor of Science in Occupational Therapy

# **B.SC. IN OCCUPATIONAL THERAPY**

# **Refer to General regulations for the Undergraduate Degree in the Clinical Therapies (NFQ Level 8 Ref:** <u>Quality and Qualifications Ireland (qqi.ie)</u>)

Occupational Therapy is the treatment of people with physical and mental illness or disability through the use of occupation with the aim of enabling individuals to reach their maximum level of function and independence in all aspects of life. An occupational therapist assesses the physical, psychological and social functions of the individual, identifies areas of dysfunction and involves the individual in a structured programme of intervention to overcome the problems identified. The interventions selected relate to the persons personal, social, cultural and economic needs and include the environmental factors which govern his/her lifestyle.

The programme takes place over four academic years. Students are required to meet the required statutory regulation standards of CORU Occupational Therapists Registration Board and the professional accreditation standards of the Association of Occupational Therapists in Ireland (AOTI) on behalf of the World Federation of Occupational Therapists (WFOT). Students must participate in and achieve the requisite level of competence in all academic modules and professional practice education.

Consequences of Failing a Placement

Students who fail one placement may repeat that placement in a different clinical venue but in the same area of practice. Students who fail more than one placement during the four years cannot repeat that placement and cannot graduate as an occupational therapist at the University of Galway.

# AIMS OF THE PROGRAMME

- To prepare students to meet the professional requirements of CORU (the regulating body) and the Association of Occupational Therapists in Ireland (AOTI) on behalf of the World Federation of Occupational Therapists (WFOT).
- To prepare students to work effectively as occupational therapists in current and changing health care contexts and environments.
- To produce competent occupational therapists who can deliver interventions to a broad range of clients, carers, colleagues and the community at large.
- To produce graduate occupational therapists who have knowledge and understanding of the processes involved in evidence-based practice and are able to apply these appropriately.
- To produce graduates who are able to identify appropriate research questions and have the appropriate skills to design and carry out research to address these questions.
- To facilitate the education of therapists who are ethical practitioners, analytical thinkers and effective communicators.

# **OBJECTIVES OF THE PROGRAMME**

The student will:

- Achieve an understanding of the concept of occupational performance and its application in the practice of occupational therapy.
- Develop clinical reasoning skills which promote the appropriate selection of assessment methods and treatment programmes for clients treated by occupational therapists.
- Understand the central role of occupation in occupational therapy.
- Demonstrate an understanding of research principles and methods in promoting evidence-based practice.
- Read professional and scientific literature critically and use and apply the results.
- Select, develop and present ideas in an acceptable academic manner.
- Recognise the right of clients to participate in decision making about their therapy.
- Know the structure and functions of major government departments and other organisations relevant to the work of occupational therapists.

# **PROGRAMME CONTENT**

This is a full-time undergraduate programme over four years or eight academic semesters. The course explores how difficulties in relation to physical or mental health can affect occupation (i.e. daily activities in relation to areas such as self- care, work, leisure, play etc.) in all groups of people - children, adolescents, adults and older adults – and how to design and deliver interventions to address these. The modules studied in the four years are described briefly below.

# YEAR 1

# HUMAN BODY STRUCTURE

This module introduces students to the fundamental principles of biological science and to the basic organisation, form and structure of the human body. Students develop knowledge and understanding of the structure and functional aspects of the musculoskeletal system of the body and support knowledge in Physiology. An understanding of the musculoskeletal system forms part of the knowledge required to understand the performance components (motor/sensory, cognitive and affective) of occupation.

- The syllabus involves the completion of four units:
- Organization, Terminology & Principles of Support & Movement
- Maintenance & Continuity of the Human Body
- Control Systems of the Human Body
- Biomechanics & Functional Anatomy of the MSK System

# HUMAN BODY FUNCTION

This course covers the physiology of the major body systems with the exception of the central nervous system which will be addressed in Year 2. Students develop knowledge and understanding of the physiological processes in the body associated with a normal, healthy, functional state. It is designed to underpin subsequent development of modules related to Occupational Therapy practice. Specifically, the following areas will be covered: Body fluids and fluid compartments, Haematology, Nerve and Muscle Physiology, Cardiovascular Physiology, Respiratory Physiology, Immunology and Endocrinology.

# PSYCHOLOGY

This module introduces students to areas of psychology relevant to their professional activities. The main areas covered are Social Psychology, Clinical and Forensic Psychology, Developmental Psychology and Cognitive Psychology. The module helps to underpin some of the material encountered in Occupational Therapy modules.

Introduction to Psychology will focus on Cognitive and Social Psychology.

The content of Cognitive Psychology provides a bed rock for incremental learning during the OT programme. Whilst Social Psychology covers the nature and causes of individual behaviour and thought in social situations. The course develops the student's understanding of social cognition, social influence and social relations in the context of research and theory in psychology.

The Forensic Psychology component will introduce students to key research studies and prominent areas of professional practice in forensic psychology.

The Clinical Psychology component will afford students the opportunity to examine various psychological disorders considering such features as theoretical aetiology, assessment and diagnosis. Students will also be introduced to contemporary treatment approaches applied to mental health problems commonly encountered in professional clinical practice.

Developmental Psychology will have a particular focus on cognitive, social and emotional development.

# **PRINCIPLES FOR PRACTICE / FUNDAMENTALS 1**

The purpose of this module is to facilitate the student's exploration of the role of occupational therapist. Students will gain an understanding of the current conceptualisations of occupations and occupational performance components. Students will examine cultural influences on occupations and how occupations, tasks and activities are organised in daily life. They will be introduced to the occupational therapy process and guided through the steps involved in-depth. As part of this course, students will explore the knowledge, values, attitudes, and skills required to form effective professional relationships. Students will be introduced to both Irish and British codes of conduct and ethics. In addition, they will be introduced to the concept of a professional portfolio and to the importance of continuous professional development for CORU (the regulatory body for occupational therapists practicing in Ireland).

# MENTAL HEALTH I

This module will provide students with a framework for the work of an occupational therapist in a mental health setting. The module seeks to introduce students to contemporary practice in mental health services. This module will focus on challenging the attitudes of students in relation to mental illness in our society and focus on the potential for recovery for clients with mental illness. Students will have an opportunity to learn about diagnosis, aetiology, course, prognosis and medical management of various mental health conditions. Parallel with this, students will engage in occupational therapy specific learning in understanding the functional problems people experience as a result of mental illness.

# MENTAL HEALTH I

This module will build on the learning gained in semester one through Enabling Occupation- Mental Health 1. Grounded in the recovery model and with a strong emphasis on occupation and strengths-based approaches, the focus of this module will be on the provision of intervention for people with mental health difficulties. Students will gain an understanding of the strategies an occupational therapist uses with people and communities to promote good mental health and promote flourishing in those experiencing mental health difficulties. Students will examine the theory and evidence behind their practice as well as developing practical skills.

# ENABLING OCCUPATION - PHYSICAL DISABILITY

The module will introduce students to a variety of clinical conditions commonly encountered by occupational therapists. There will be a variety of teaching strategies used, including lectures, case-based learning, problemsolving approaches, group work, and participation in activities such as splinting, wheelchair skills, transfers, etc. When possible, the lecture, seminar and workshop content for a week will cover the same client condition. Case studies used in seminars and workshops will be organised using the format of an occupational therapy model. The case studies will also reflect the diversity of cultures and genders. Through this course, students will be given the opportunity to develop skills, knowledge, and understanding related to treatment approaches used to enhance occupational performance. A description of the occupational therapy process will be provided throughout the module.

# GROUPWORK AND PROFESSIONAL SKILLS

This module will equip students with the knowledge and skills to develop and deliver a group in an occupational therapy setting. Teaching will include lectures, small group discussions and experiential learning. The module will focus on enabling students to take part in the group process themselves by both designing a group with their peers over the first five weeks of the module. Students will be encouraged to reflect on their experience of this group process in order to commence the development of the skill of reflective practice. Students will deliver a simulated occupational therapy intervention group to peers and their final assessment for this module will include an assessment of group facilitation skills and a written group protocol.

# YEAR 2

# NEUROANATOMY

This module runs concurrently with the module in neurophysiology and includes the histology of the nervous system, the structure and functions of the brain and spinal cord, cortical organization, somatosensory and motor system and some of the special senses pathways. In unit I we learn about the structural basics, spaces inside the hemispheres of the brain, their arrangement and the layers that protect the brain and spinal cord. In unit II we move to understand communication between areas of the brain and between the brain and spinal cord as well as between the outside word through our senses and to the brain and spinal cord via cranial and spinal nerves, respectively. In unit III, developing from these first pair of units, we bring the systems together and look at speech and language, hearing and balance, the visual system and the limbic system for recognizing and processing emotion.

# NEUROPHYSIOLOGY

This module runs concurrently with the module in neuroanatomy and includes the fundamentals of neurophysiology. It will provide students with a knowledge and understanding of the function of the brain and spinal cord, which comprise the Central Nervous System. It will underpin several applied occupational Therapy modules. An understanding of neurophysiology forms part of the knowledge required to understand the performance components (motor/sensory, cognitive and affective) of occupation.

#### HEALTH PSYCHOLOGY

This module provides students with an introduction to health psychology and its relevance to OT practice. Health psychology is the branch of psychology that focuses particularly on the relationship between psychology and health. It involves the study of the promotion and maintenance of good health, the causes and experience of ill health, and the health care system. The aim of this course is to introduce students to health psychology, including its theoretical models, evidence base and application to OT.

# **ENABLING OCCUPATION – PAEDIATRICS**

This module is a comprehensive introduction to the role of the occupational therapist with children.

Students receive 10 medical lectures delivered by paediatricians on a variety of common childhood disabilities. This core knowledge provides the foundation for introducing and applying the occupational therapy process in paediatrics in 24 hours of interactive lectures. Lectures are complimented by additional skill development workshops focused on communication with families, administration and critique of standardised and non-standardised assessments, the occupations of childhood, and the facilitators and barriers of the environment.

The students' knowledge and understanding in this area will provide them with the foundation required to problem solve through clinical scenarios and case studies within this module. Students will explore the impact that childhood disabilities and the dynamic environment has on a child's participation and performance at home, school and in leisure activities. Students will identify strengths and challenges in occupational performance and explore a variety of evidence-based interventions utilised by paediatric occupational therapists. Finally, they will explore how the occupational therapist implements these interventions in partnership with the child and their family, and in collaboration with other relevant team members in the health and education systems in Ireland and internationally.

#### ENABLING OCCUPATION - INTELLECTUAL DISABILITY

In this module, students will become familiar with the specific strengths and challenges of adults and older adults with mild, moderate, severe and profound Intellectual disabilities. Students will explore the assessments and interventions utilized by occupational therapists with this client group and the evidence base supporting them. The role of the occupational therapist will also be explored in relation to topical issues for these clients such as advocacy, supported employment, personal relationships, sexuality and parenting with an intellectual disability.

#### **FUNDAMENTALS OF OCCUPATIONAL THERAPY 2**

The overall aim of this module is to prepare students for professional client-centred practice. The module will cover the theory and application of three models of practice: the Person-Environment-Occupation-Performance (PEOP) model; the Canadian Model of Occupational Performance and Engagement (CMOP-E); and the Model of Human Occupation (MOHO). A model of occupational therapy practice is a way of structuring knowledge in occupational therapy to assist with understanding the client.

# **OCCUPATIONAL SCIENCE**

This module introduces students to the field of occupational science. It further develops their understanding of people as occupational beings with an innate need for occupation. Primarily, this module will explore the impact of occupational imbalance, occupational deprivation and occupational alienation and will examine global factors relating to occupational injustice. Also included will be debate about how occupation relates to health, quality of life, identity, human development, culture, social structures and policies. Students will also explore the contribution of occupational science to the practice of occupational therapy.

# SOCIAL POLICY

This module examines policy making and the policy context, which shape practice environments for health and social care.

# COMMUNICATION FOR PRACTICE

The aim of this module is to build on the knowledge, skills and attitudes regarding communication introduced in year one and develop the key personal, professional, and inter-professional communication skills essential for occupational therapy practice. There are two components to this module. Part one focusses on interprofessional learning and communication, person centred care and team working. Part two focusses on the communication skills for occupational therapy practice.

# **PRACTICE EDUCATION 1**

This is the first practice education module and provides the opportunity for students to participate in the delivery of occupational therapy services in a work placement. Students will build on their previous learning in the BSc Occupational Therapy, and at the end of the placement evidence their progression towards the attainment of practice competencies. Practice competencies are defined by (i) the CORU Occupational Therapists Registration Board Standards of Proficiency (2017), (ii) the Association of Occupational Therapists of Ireland (AOTI) Minimum Standards for Practice Education in Ireland (2010), and (iii) the World Federation of Occupational Therapists Minimum Standards for the Education of Occupational Therapists (2016). Students will be supervised by a named qualified CORU registered occupational therapist/s. The student's progress will be monitored by telephone, videoconference and/or in a placement visit by the practice education coordinator.

## **PRACTICE EDUCATION – CASE STUDY 1**

This module provides the student with a first opportunity to produce a written case study report on a service user with whom they have worked with during their practice education placement. The case study should be a typical service user of the practice education site who does not have multiple comorbidities and is chosen in collaboration with the practice educator. The case study should reflect the knowledge, skills, and attitudes of a second-year beginner level student. Guidelines for the case study are provided to the student. The student is expected to apply their learning from their previously completed modules that includes the application of theory, to deliver a beginner level report that describes practice thinking and decision-making. The student may present the case study to the practice education site team towards the end of their placement for formative feedback. This is negotiated the between student and practice educator.

# YEAR 3

# **EVIDENCE BASED PRACTICE**

This module explores the best available clinical evidence from systematic research and applies and integrates this with clinical practice. Students will be required to make judicious use of evidence to guide professional judgment about the effectiveness of specific interventions for individual clients. Students will develop skills in literature searching, critical appraisal and clinical application of evidence.

#### STANDARDISED TESTING

With the increasing need for evidence, audit and clinical effectiveness, quantifiable measures of effectiveness are essential. In order to engage in and develop evidence-based practice, occupational therapists need to be familiar with and competent in administering, scoring and interpreting the results of standardised tests and outcome measures. This module introduces the students to a range of standardised assessments and outcome measures used in Occupational Therapy, the psychometric properties of the tests and how these influence correct administration, scoring and interpretation. Students also gain skills in report writing and synthesis of clinical and other information and appropriate presentation of this.

#### ENABLING OCCUPATION – COMMUNITY PRACTICE

In this module, students explore the policies and trends for care in the community and implications for Occupational Therapy practice. The diversity of service users within the community is a key theme and will include all ages, cultures and conditions e.g. primary care, health promotion, equipment provision, community mental health etc. This module enables students to develop the knowledge and skills to work with individuals and groups in the community.

#### **ENABLING OCCUPATION - OLDER ADULTS**

The Enabling Occupation - Older Adults module will be taught through a combination of lectures, workshops and peer learning. The emphasis is on becoming familiar with the ageing process and the role of the occupational therapist at varying stages of the ageing process and in different clinical settings. Students will also learn to work in an evidence-driven way with older adults.

The module consists of lectures and workshops on a variety of topics related to occupational therapy practice with older adults. Assessments and interventions that are relevant to the population will be explored in the modules. There will be a focus on how to work in an evidence-based way.

# **RESEARCH METHODS**

The aim of the module is to introduce the student to research, to enable them to design their own health-related research project proposal and to critically appraise the value of published research for clinical practice. The module introduces students to a range of quantitative and qualitative research methods.

# COMMUNITY ENGAGEMENT

This module is designed to provide students with the opportunity to work in collaboration with community organisations/service providers in innovative and emerging areas of practice and community development.

This social vision of occupational therapy is grounded in the central value of the profession, i.e. to honour and promote the dignity and worth of every person towards an ecology of occupation-based practices. Working in small groups students will engage in community-based learning, under supervision from academic staff. Using critical thinking and problem solving, the students will identify and examine the impact of contemporary socio economic, political, and cultural influences that facilitate and inhibit occupational performance and participation.

# COGNITIVE NEUROPSYCHOLOGY

Cognitive neuropsychology is an approach for investigating and theorizing about cognitive processes by examining patterns of impairment following brain injury. This module reviews the ways in which neuropsychological data have been used in models and ideas about the nature of brain processes and systems involved in core cognitive (and related) processes including perception, memory, language and attention. Both normal and impaired function are studied and rehabilitation approaches to impairments are described in detail. This is an interdisciplinary module taken together with speech and language therapy and denominated psychology students.

# NEUROLOGY

This interdisciplinary module introduces students to the more common neurological conditions encountered in practice. Together with the modules on neuropsychology, standardised testing and evidence-based practice students will be introduced to a coordinated concept of neurological disorders presented from the aspects of pathology, impairment, activity limitation and lack of participation and will be able to consider a variety of therapeutic approaches to address such issues. A number of people who are living with neurological conditions will contribute to the module and give their perspectives of living with the condition and their experiences of different interventions.

#### **PRACTICE EDUCATION 2**

This is the second practice education module and provides the opportunity for students to participate in the delivery of occupational therapy services in a work placement. Students will build on their previous learning in practice education placements and at the end of the placement evidence their progression towards the attainment of practice competencies. Practice competencies are defined by (i) the CORU Occupational Therapists Registration Board Standards of Proficiency (2017), (ii) the Association of Occupational Therapists of Ireland (AOTI) Minimum Standards for Practice Education in Ireland (2010), and (iii) the World Federation of Occupational Therapists Minimum Standards for the Education of Occupational Therapists (2016). Students will be supervised by a named qualified CORU registered occupational therapist/s. The student's progress will be monitored by telephone, videoconference and/or in a placement visit by the practice education coordinator.

#### **PRACTICE EDUCATION – CASE STUDY 2**

This module provides the student with a second opportunity to produce a written case study report on a service user with whom they have worked with during their practice education placement. The case study should be a typical service user of the practice education site with one complexity or challenge and is chosen in collaboration with the practice educator. The case study should reflect the knowledge, skills, and attitudes of a third-year intermediate level student. Guidelines for the case study are provided to the student. The student is expected to apply their learning from their previous practice education that includes the application of theory, to deliver an intermediate level report that describes practice thinking and decision-making. The student may present the case study to the practice education site team towards the end of their placement for formative feedback. This is negotiated between student and practice educator.

# YEAR 4

#### **PRACTICE EDUCATION 3**

This is the third practice education module and provides the opportunity for students to participate in the delivery of occupational therapy services in a work placement. Students will build on their previous learning in practice education placements and at the end of the placement evidence their progression towards the attainment of practice competencies. Practice competencies are defined by (i) the CORU Occupational Therapists Registration Board Standards of Proficiency (2017), (ii) the Association of Occupational Therapists of Ireland (AOTI) Minimum Standards for Practice Education in Ireland (2010), and (iii) the World Federation of Occupational Therapists Minimum Standards for the Education of Occupational Therapists (2016). Students will be supervised by a named qualified CORU registered occupational therapist/s. The student's progress will be monitored by telephone, videoconference and/or in a placement visit by the practice education coordinator.

# **PRACTICE EDUCATION 4**

This is the fourth and final practice education module and provides the opportunity for students to participate in the delivery of occupational therapy services in a work placement. Students will build on their previous learning in practice education placements and at the end of the placement evidence their attainment of practice competencies. Practice competencies are defined by (i) the CORU Occupational Therapists Registration Board Standards of Proficiency (2017), (ii) the Association of Occupational Therapists of Ireland (AOTI) Minimum Standards for Practice Education in Ireland (2010), and (iii) the World Federation of Occupational Therapists Minimum Standards for the Education of Occupational Therapists (2016). Students will be supervised by a named qualified CORU registered occupational therapist/s. The student's progress will be monitored by telephone, videoconference and/or in a placement visit by the practice education coordinator.

# PRACTICE EDUCATION – CASE STUDY 3

This module provides the student with a third opportunity to produce a written case study report on a different service user with whom they are currently working during Practice Education placement. The case is a typical service user of the practice education site and will have some (more than one) complexities or challenges. The student chooses the case study in collaboration with the practice educator. Consent should be given by the service user to be the student's case study. The case study should reflect the knowledge, skills and attitudes of a student who is competent to graduate. Students should be demonstrating their independence in leading, planning and delivering occupational therapy to this service user in this practice context but also demonstrate the ability to seek assistance appropriately when required. This case study can be presented to the students practice educator in practice placement for formative feedback.

# **PRACTICE EDUCATION – CASE STUDY 4**

This module provides the student with a fourth opportunity to produce a written case study report on a different service user with whom they are currently working during Practice Education placement. The case is a typical service user of the practice education site and will have some (more than one) complexities or challenges. The student chooses the case study in collaboration with the practice educator. Consent should be given by the service user to be the student's case study. The case study should reflect the knowledge, skills and attitudes of a student who is competent to graduate. Students should be demonstrating their independence in leading, planning and delivering occupational therapy to this service user in this practice context but also demonstrate the ability to seek assistance appropriately when required. This case study can be presented to the students practice educator in practice placement for formative feedback.

# **RESEARCH PROJECT**

This double module gives the student the opportunity to plan and conduct a piece of research in a scientific and organised manner under supervision. Project guidelines will be given to students and the research protocol will have been devised and ethical approval sought during the Research Methods module. Supervision will be given by an academic supervisor and where appropriate by a clinical supervisor.

#### MANAGEMENT

Students are introduced to the basic concepts of leadership and personal and professional management relevant to their practice as newly qualified therapists. They will learn about quality assurance and auditing, legislation and also about how to manage change and plan strategically. Professional documentation will be a core component of this module. The module will also encompass career development, continued professional development and preparation for employment. There is a professional development component which includes assertiveness training and strategies for dealing with challenging people. Some lectures provided will be joint with Podiatry students which will facilitate unique learning opportunities. This module is aligned with and compliments the preparation for practice module (OY409) especially in the area of CPD and reflective practice as a CORU registered OT. There will be jointly taught lectures on CPD portfolio and reflective practice.

# PREPARATION FOR PRACTICE

This module aims to support the students to make the transition from student to staff grade occupational therapist. It is a unique student-led module and therefore varies each year depending on the specific needs of the individual cohort of students.

Prior to commencement of this module, students are asked to critically reflect on their continued professional development needs and identify areas of theory and practice that they would like to consolidate. The module is then organised around their perceived learning needs and may include, for example, further training in occupational therapy knowledge and application, international practice, current health care trends and policy, and career opportunities.

This module is aligned with and compliments the Management module (OY404). For example, there may be jointly taught lectures on the CPD portfolio and reflective practice, required for CORU registered Occupational Therapists in Ireland.

# MARKS AND STANDARDS

Marks & Standards for all Fulltime Undergraduate Degree Examinations<u>Marks & Standards for all</u> <u>Fulltime Undergraduate Degree Examinations (universityofgalway.ie)</u>

Pass Standard The minimum passing mark for all modules is 50%.

#### Compensation

Compensation is NOT allowed in academic or clinical modules.

Bachelor of Science in Podiatric Medicine

# **B.SC. IN PODIATRIC MEDICINE**

# Refer to General Regulations for the Undergraduate Degree in the Clinical

Therapies (NFQ Level 8 Ref: Quality and Qualifications Ireland (qqi.ie))

Podiatric Medicine is a healthcare profession that specialises in the management of disease and disorder of the lower limb and foot. The foot is a highly complex structure, which can develop problems affecting the overall health and quality of life of the patient. Podiatric Medicine can significantly improve peoples' quality of life by promoting and maintaining mobility. Podiatrists are educated in diagnosis and in planning and implementing interventions for all age groups. Podiatrists work as autonomous practitioners demonstrating expertise in assessing, diagnosing and managing lower limb and foot related problems. As such, the Podiatrist works in a variety of health-care settings including public sector services such as the HSE in primary care and hospital settings, independent practice, the commercial and private sectors, in education, research and in industry. Podiatrists are an integral part of the health care team augmenting the physician and surgeon in treating foot disease and preventing, where possible, the onset of foot disease. Podiatrists may work in single-handed practice or as a member of the wider multi-disciplinary team working in collaboration with other health professionals including doctors, nurses, physiotherapists and orthotists.

#### PHILOSOPHY AND AIMS OF THE PROGRAMME

The B.Sc. Podiatric Medicine programme is designed to educate and train those who wish to pursue a professional career in Podiatric Medicine, as a health care professional, who specialises in the management of disease and disorder of the lower limb and foot. The Discipline is committed to providing a comprehensive education for podiatrists and the curriculum is based on best available evidence in relation to both theory and practice. The course aims to ensure that students achieve the academic and practitioner standards as laid out by regulatory and professional bodies in Ireland and the United Kingdom. The B.Sc. Podiatric Medicine extends over four years or eight academic semesters. The structure of the degree programme introduces, in a defined manner, inter- professional learning in both academic and clinical modules. It has, as its central focus, the integration of theory with clinical practice with opportunities for inter- professional learning with other health care professionals. The overall goal of this programme is to prepare competent, flexible, accountable practitioners, who are capable of lifelong learning. Preparing students to be flexible and self-directed in learning is a key outcome of the degree programme as it is recognised that the current rapid pace of change in the health services means the skills of tomorrow will be different from those of today. It is therefore fundamental that graduates "learn how to learn". Lifelong learning is a continually supportive process, which stimulates and empowers individuals to acquire the knowledge, values, skills and understanding they will require throughout their lifetime and develop the capacity to apply these with confidence.

Our mission statement is:

"To develop caring, patient-centric, highly skilled honours graduates who are knowledgeable, innovative, autonomous and competent practitioners who apply a scientific and evidence-based approach to podiatric medicine."

The B.Sc. (Hons.) Podiatric Medicine programme aims to:

- Prepare students for the demands of a career in podiatric medicine and the rapidly changing nature of podiatric practice.
- Allow students to develop a high level of clinical competence, enabling them to meet the requirements of CORU and be eligible for registration and membership of the professional body in Ireland.
- Equip students with the necessary knowledge and clinical skills to meet international standards for overseas recognition of the B.Sc. Podiatric Medicine degree in those countries where the B.Sc. is the national standard.
- Provide a comprehensive, excellent, academic and clinical teaching programme with integration of theory into the clinical practice setting.
- Provide clinical placements that span the spectrum of podiatric medicine. The clinical teaching programme involves experience with patients from various medical/surgical disciplines; this ensures a high level of quality practice education for students.
- Provide a range of clinical placement opportunities within the public and private sectors, offering over 1,000 hours of high-quality clinical placements.
- Provide a student-centred supportive environment in which the students' knowledge, understanding, skills and attitudes are developed and enhanced to a high level of clinical competence.
- Allow opportunities to explore analyse and critically assess the practice and the role of Podiatric Medicine within local, national and international inter- professional healthcare settings. This will ensure that the experiences and opportunities in the learning environment are relevant to their future careers and personal development.
- Prepare students to anticipate, adapt, influence and respond to future changes in service delivery and encourage them to become future educators and leaders in the profession. This preparation is achieved through research strategies, financial, political, professional and knowledge management.
- Produce graduates who are reflective practitioners and have a strong ethos for continuous professional development and a firm commitment to life-long learning.

# PROGRAMME STRUCTURE

The programme is outlined below:

Year 1

Podiatric Medicine 1 Podiatric Dermatology Human Body Structure Gross Anatomy of the Lower Limb Human Body Function Professional Development Redefining Health and Wellbeing Lower Limb Kinematics

# Year 2

Podiatric Medicine 2 Lower Extremity Wounds Lifestyle Medicine Functional Anatomy and Biomechanics Evidence-based Practice Applied Pathophysiology Endocrinology Microbiology Year 3 Podiatric Medicine 3 Clinical Medicine & Surgery Pharmacology for Podiatrists Research Methods & Biostatistics Podopaediatrics

Year 4 Podiatric Medicine 4 Leadership & Professional Practice Working with Vulnerable Adults Research Dissertation Podiatric Sports and Musculoskeletal Medicine High Risk Limb

#### **PROGRAMME CONTENT**

Central to the curriculum are the podiatric medicine modules. These modules extend throughout the programme building from year one to integrate and articulate with the theoretical learning. In the first year the students are introduced to clinical protocols and pre-clinical skills, they then develop and acquire the essential psychomotor and communication skills required for podiatric practice. Various aspects of management planning skills are introduced at each stage. Ultimately, the students acquire assessment and diagnostic skills and increasing competence leads to a comprehensive podiatric patient management, which requires increasing cognitive and psychomotor skills to affect safe and efficient patient care.

The theoretic components of the programme underpin the clinical podiatric management of patients. The framework provides vertical and horizontal integration for the subject areas that impact on podiatric practice. These include physiology, anatomy, pathophysiology, pharmacology, clinical medicine and surgery, lifestyle medicine and core podiatric medicine. The modules build sequentially with the 1st year modules dealing mainly with normal structure and function. This allows time to absorb and reflect on normal function and structure prior to progressing to abnormal structure and disease states.

Evidence-Based Practice informs the student of the importance of audit, research and evidence-based care. Therefore, the importance of evidence-based practice is integrated throughout all modules within the curriculum. Students are encouraged to develop the necessary skills to understand critique and apply research-based evidence in practice. Research approaches and methodologies are covered within years 2 and 3 of the programme ensuring students receive grounding in research methods and biostatistics before they apply this knowledge through their research dissertation in year 4.

A variety of approaches to learning and teaching are integrated throughout the curriculum including lectures, tutorials, workshops, online and blended learning, seminars, peer assisted learning and problembased learning.

# PRACTICE EDUCATION

Practice education is a process of work- based learning, which involves a partnership between the practice educator and the student in the practice setting. All students are required to complete a minimum of 1,000 hours of practice education successfully under the supervision of qualified Podiatrists. Practice education is undertaken each year. The majority of practice education takes place at Merlin Park Podiatry Clinic, Merlin Park University Hospital, Galway. This state-of-the-art facility provides a service to patients with a wide variety of medical and surgical conditions, children, sports injuries and patients requiring soft tissue surgery. There are also opportunities to undertake clinical placements in other regional and national settings where students can gain broader experiences, working across a range of different settings and environments.

Practice education aims to introduce the students to the culture of the profession. It facilitates the development and application of the knowledge, attitudes, values and skills needed for the execution of appropriate professional behaviours. It also gives the opportunity to practice under supervision, and be assessed on professional standards and behaviours, ethical practice and inter professional partnerships.

The main aims of practice education are:

- to integrate theory, practice, ethics and values of podiatric medicine
- to apply knowledge, professional reasoning and professional behaviours within practice
- to promote professional competence
- to work as a safe effective team member
- to promote professional confidence
- to provide opportunities for students to integrate theoretical and practical learning
- to facilitate consolidation of student's previous learning

# ASSESSMENT

A wide variety of assessment strategies are employed at stages throughout the programme in order to cater for a diversity of learning needs. The range and diversity of assessments allows the varying strengths of individual students to be demonstrated. All assessments throughout the programme are designed to assess students' theoretical knowledge and clinical practical skills to ensure students meet the necessary competencies for professional practice. Assessment strategies that are employed include clinical practical examinations, continuous assessment and end of year examinations.

Pass Standard The pass mark is 50%.

# Compensation

Compensation is NOT allowed across academic modules or within clinical modules.

# **B.SC. SPEECH AND LANGUAGE THERAPY**

# **Refer to General Regulations for the Undergraduate Degree in the Clinical Therapies (NFQ Level 8 Ref:** <u>Quality and Qualifications Ireland (qqi.ie)</u>)

Speech and Language Therapy is the health care profession specifically concerned with the assessment, diagnosis, and management of communication and swallowing disorders. Speech and language therapists enable people with communication disorders to achieve their maximum potential to communicate. Having assessed the individual and established a diagnosis, the speech and language therapist plans and implements an intervention programme with the client. This may involve direct work with the client and family. It may also involve indirect work with significant others in the individual's environment to overcome barriers to communication, thus enabling the individual to function as independently as possible. Speech and language therapists also play an important role in the prevention of communication difficulties through health promotion and education programmes. Speech and language therapists, physiotherapists, public health nurses, paediatricians, ear nose and throat consultants, teachers, educational psychologists and resource and learning support teachers. Speech and language therapists work in a range of settings including community clinics/health centres, hospitals, rehabilitation centres, child development centres, mainstream and special schools, language classes, people's homes and private practice.

#### AIMS OF THE PROGRAMME

The overall goal of the BSc Speech and Language Therapy degree programme is to prepare competent, flexible, accountable practitioners, who are capable of lifelong learning. Preparing students to be flexible and self-directed in learning is considered key because it is recognised that the current rapid pace of change in speech and language therapy practice means the skills of tomorrow may be different from those of today. It is therefore fundamental that graduates "learn how to learn". The course aims to ensure that students achieve the academic and practitioner standards as laid out by regulatory and professional bodies in Ireland. This programme has, as its central focus, the integration of theory with clinical practice and evidence-based practice. It is firmly centred on the core area of disorders of communication, dysphagia and professional development (including interprofessional learning), as reflected in the fact that all years contain substantial proportions of time devoted to these topics. The major ancillary disciplines of linguistics, biological sciences, and psychology are integrated at appropriate times in the curriculum to promote horizontal and vertical integration. In the practice education strand of the curriculum, speech and language therapy students are required to obtain experience in assessing, diagnosing, and treating communication and swallowing disorders in both children and adults in a variety of settings. The mission statement of the programme is:

"To prepare speech and language therapists in training to become competent clinicians and independent lifelong learners, by providing a supportive learning environment to explore relevant theory and apply it to clinical practice, with an emphasis on lived experiences and evidence-based practice."

#### The aims of the programme are:

- To produce graduates of a high standard who meet the specifications of the Irish Association of Speech and Language Therapists (IASLT) and CORU (the statutory registration Board for Health and Social Care Professionals).
- To enable students to gain knowledge and core theoretical underpinnings of communication disorders and dysphagia.
- To enable students to develop effective interpersonal and clinical skills.
- To enable students to develop a professional identity and ethos, with awareness of the scope and limits of the role of the speech and language therapist.
- To encourage students to be flexible and responsive practitioners, prepared for the workplace and changing patterns of service delivery.
- To provide opportunities for self-monitoring and personal development for the formation of reflective practitioners, capable of effective, critical evaluation and analysis thereby promoting continuing professional development and lifelong learning.
- To develop practitioners who appreciate their role in contributing to the knowledge and understanding of communication disorders, and who implement evidence-based approaches in intervention.

## PROGRAMME STRUCTURE AND CONTENT

The BSc Speech and Language Therapy is a four-year programme with eight academic semesters. Placements take place in each year of the programme and may be located anywhere in Ireland. Students are expected to travel to placements and undertake placements at their own expense.

#### Year 1

# Psychology 1

This module contains three components including: an introduction to the main theoretical perspectives in Developmental Psychology with a focus on the lifespan perspective on development; the theory and practice of Cognitive Psychology; and theoretical perspectives in the Psychology of Learning from a behaviour analytic perspective.

#### **Human Body Structure**

The aim of this module is to introduce students to the fundamental principles of biological science and the basic organization, form and structure of the human body. It will develop concepts which have particular relevance in the understanding of the anatomical basis of speech production.

#### **Human Body Function**

This module introduces students to the fundamental principles of human body function which underpin speech and language.

# **Practice Education 1**

This module introduces students to observation and reflection as learning and assessment tools. It will provide students with opportunities to develop observation and communication skills in a placement in a primary-school setting.

#### **Professional Studies 1**

This module will facilitate students to begin to develop key knowledge, skills, and attitudes for speech and language therapy practice. It will provide opportunities for students to integrate knowledge, skills, and attitudes from other modules.

# Linguistics 1

This module introduces students to key concepts in linguistics and to the development of communication across the lifespan.

#### **Phonetics & Phonology**

This module aims to equip students with an understanding of how speech is produced and to provide grounding in the descriptive and transcriptional conventions for transcribing speech sounds. It provides an overview of the procedures in carrying out a basic phonological analysis and to develop listening and transcription skills.

#### **Communication Impairments and Dysphagia 1**

This module aims to introduce students to classification systems, as well as the types, nature and etiology of developmental and acquired communication and swallowing impairments.

#### Year 2

#### Psychology 2

This module has two components. It introduces students to theoretical aspects of health and social psychology, as well as applications from these aspects of psychology to speech and language therapy practice.

#### Neuroanatomy

This module aims to facilitate understanding of the neuroanatomical functions of the body and how components of the central nervous system work together. Through neuroscience tutorials and cases with occupational therapy students, students will learn about the role of neuroanatomical functions in communication and swallowing impairments.

# Neurophysiology

The aim of this module is to facilitate understanding of the neurophysiological functions of the body and how components of the central nervous system work together. Through neuroscience tutorials, students will learn about the relevance of neurophysiological functions in communication and swallowing impairments.

# **Practice Education 2**

This module aims to orientate students to the professional role of a speech and language therapist. This module will prepare students to work in clinical settings. It will facilitate their active participation in the speech and language therapy process and application of theory with practice while on clinical placement.

# **Professional Studies 2**

The aim of this module is to build on the learning of key knowledge, skills and attitudes underpinning speech and language therapy practice from year one. Students will learn about personal and professional practice and key knowledge and skills for the identification and management of clients with relatively straight-forward communication impairments. Students will integrate knowledge, skills and experiences from other modules 'off-line' through provided cases with guidance.

# **Research Methodology 2**

The aim of this module is to develop the student's knowledge of research to enable them to design their own research project by posing feasible research questions and setting hypotheses. The module introduces students to research methods as a set of multiple systematic strategies derived from both the quantitative and qualitative paradigms.

# Linguistics 2

The aim of this module is to build on the knowledge and skills gained from Linguistics 1 and to focus specifically on the morphological, syntactic, semantic and pragmatic analyses of clinical data. This module aims to develop students with linguistic analytical skills which they will use in clinical practice.

# **Communication Impairments and Dysphagia 2**

This module introduces students to the core clinical aspects of the management of relatively straightforward communication and swallowing disorders e.g. specific aspects of assessment, characteristics of sub-types of communication and swallowing disorders, assessment, differential diagnosis, and management of cases.

#### Year 3

#### Psychology 3

This module introduces students to cognitive neuropsychology and builds on their knowledge from previous modules in cognitive psychology and neuroscience. This module reviews the ways in which neuropsychological data has been used in models and ideas about the nature of brain processes and systems involved in core cognitive (and related) processes including perception, memory, language and attention.

#### Practice Education 3

This module prepares students for increasingly independent work in clinical contexts. Students will have clinical placements where they will apply theory to practice in the management of complex cases.

#### **Professional Studies 3**

This module will build on the learning of key knowledge, skills and attitudes underpinning speech and language therapy practice from years 1 and 2. Students will learn about personal and professional practice and key knowledge and skills for the identification and management of clients with complex communication and swallowing impairments, with an emphasis on evidence-based practice. Students will integrate knowledge and skills from other modules. There will also be an emphasis on the wider sociocultural context and specialist service provision.

#### **Research Methodology 3**

This module broadens knowledge about research methodology by enabling students to understand and critically appraise existing research and to plan for their final year thesis.

# Linguistics 3

This module equips students with core knowledge and skills in the areas of theories of bilingualism, narrative analysis and discourse analysis. This module also introduces students to a variety of instrumental techniques applied in experimental phonetics and speech and language therapy clinical practice with an emphasis on basic skills in the use of instrumentation in speech and voice analysis.

#### **Communication Impairments and Dysphagia 3**

The aim of this module is to develop knowledge of the specific aspects of assessment, diagnostic features, assessment and treatment of complex cases. This module focuses on controversies in theoretical perspectives on communication and swallowing disorders, critical thinking and evidence-based practice.

#### Year 4

# **Practice Education 4**

The aim of this module is to facilitate students to consolidate their clinical skills, integrate theory and practice, and apply knowledge and resources to new clinical situations. It will prepare them to enter the workforce and smooth the transition to professional practice.

#### **Professional Studies 4**

This module will facilitate students to further develop personal and professional practice and key knowledge and skills for the identification and management of all clients with communication and swallowing impairments. There will also be an emphasis on prevention, organisational structures, service planning, quality systems and professional development.

#### **Research Methodology 4**

In this module students will conduct a semi-independent piece of research under the supervision of a member of staff.

# TEACHING, LEARNING, AND ASSESSMENT

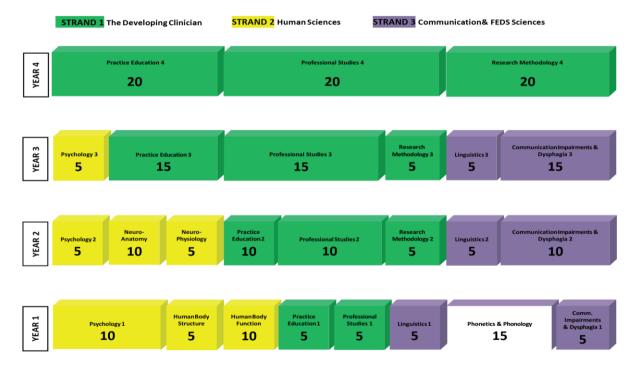
A wide variety of teaching, learning and assessment strategies are employed throughout the programme in order to cater for a diversity of learning needs. Students are expected to engage in a range of teaching and learning activities, which includes practical skill development including experiential learning and practicing on and with peers. The range and diversity of assessments allows the varying strengths of individual students to be demonstrated. All assessments throughout the programme are designed to assess students' theoretical knowledge and clinical practical skills to ensure students meet the necessary competencies for professional practice. Assessment strategies that are employed include clinical practical examinations, continuous assessment and end of year examinations.

Pass Standard The pass mark is 50%.

#### Compensation

Compensation is NOT allowed in academic or clinical modules.

#### THE OVERALL STRUCTURE AND ECTS IN THE BSC (SPEECH AND LANGUAGE THERAPY)



Page 30 of 316

#### General Regulations

# GENERAL REGULATIONS FOR THE PART-TIME UNDERGRADUATE SOCIAL CARE DEGREE IN HEALTH SCIENCES

# (NFQ Level 8 Ref; Quality and Qualifications Ireland (qqi.ie)

# EXPLANATORY NOTE

The Part-time Undergraduate Social Care Degree within the School of Health Sciences at University of Galway is a four-year Honours Degree, which awards the Honours Bachelor of Arts (Social Care).

Regulations may be altered periodically. The regulations applying to students are generally those, which applied to their programme at the time in which they commenced their studies, unless otherwise specified in the General Regulations hereunder.

These Regulations form a total, individual clauses may be conditioned or varied by the provision of other clauses and cannot be applied in isolation.

The Regulations may also be supported by, or refer to other publications such as the University Undergraduate Prospectus (available on request or by following on-line links for Future Students from

https://www.universityofgalway.ie/adult-

learning/downloads/AdultQuickGuide\_2024.pdf and the General Calendar of the University <u>Academic Term Dates - University of Galway</u>.

- I. Formal academic qualifications are not required to commence this BA. Candidates are expected to have good reading and writing skills, as well as basic IT skills, as independent home study is required. Candidates must also have a minimum of one year's experience in care work, which has been gained in either a formal (i.e. employed as a care assistant) or informal capacity (i.e. caring for a family member, voluntary work in a caring capacity). The age requirement for those wishing to commence this BA is 21 years of age on the 1st of January in the year that a candidate is applying (i.e. someone applying for September 2025 would have to have been 21 years old on the 31st of December 2024 at the latest).
- **II.** Before entering the Degree programme every student must furnish Garda Clearance. This is organised through the Undergraduate Admissions Office on entering the University. Failure to obtain clearance will result in the student being unable to access practice education placements which are a core requirement of the programme.

- **III.** Students are required to participate in group work and experiential learning to practice skills which are required for successful programme completion.
- IV. The School of Health Sciences requires that students obtain the appropriate vaccinations (Details available on the following link <u>Social Care (Degree) University of Galway</u>. Placement providers stipulate that students must have the appropriate vaccinations before undertaking placements at their site. If students cannot provide evidence of vaccinations, placements may be refused. Students must satisfy the health clearance requirements of the programme including the completion of the School of Health Sciences Pre-Placement Module for each year of the programme.
  - V. Registration is carried out by the University. Students must be registered in their Degree programme not later than fifteen days after the commencement of Programme.
  - VI. To obtain the degree of Honours Bachelor of Arts (Social Care) as set out in the Explanatory Note (above);
    - (a) Students must pursue programmes of Study extending over a period of not less than four Academic Years and must pass the various Examinations prescribed below, meeting the requirements as set out elsewhere in these Regulations, in the Marks and Standards of the College and in Student Handbooks where necessary.
    - (b) The Examinations are as follows:
      - (1) The First University Examination in their programme.
      - (2) The Second University Examination in their programme.
      - (3) The Third University Examination in their programme.
      - (4) The Fourth University Examination, being the Final Examination in their programme.

# Note:

(i) **The duration of the programme cannot be shortened;** no part of the Final Examination may be taken before the end of 8 Semesters of professional education.

- (ii) There is a time-limit on the completion of the degree; while a student who fails their yearly examination in a particular year has the right to re-sit that/those examination(s) the following year [refer par. VII X below], the total time allowed for the successful completion of the four University Examinations is 6 years or 12 semesters in total. As per the Leave of Absence Policy (QA287), the duration of a Leave of absence must not exceed 2 years per stage as per Marks and Standards applicable to that programme or otherwise as specified by the specific Programme regulations.
- **VII.** The First University Examination must be passed completely before a student can proceed to the Second Year.
  - (a) To enter this Examination, the student must have satisfied the attendance requirements on the First Year Programme as outlined in the student handbooks, including completion of all coursework and practice placement hours. Exceptions may only be permitted by the Head of School where it is recommended by the programme on professionally verified grounds of student ill-health, close family bereavement or of significant personal difficulties.
  - (b) The Examination will be held before and during the Summer Examination session with repeat examinations, if necessary, held in the Autumn Examination session.
  - (c) Failure of the Examination in full or in part at the repeat examination will require the student to re-attend the First-Year programme and re-sit the Examination in the following year.
  - (d) It is not possible to compensate marks from one module to another for the purpose of passing failed modules by compensation in the First University Examination in the Honours Bachelor of Arts (Social Care).
  - (e) The First-Year examination must be completed within two years of entering First Year, extensions may not be given as this will breach the overall time-limit for completing the programme as set out in Par. VI above.

- **VIII.** The Second University Examination must be passed completely before a student can proceed to the Third Year.
  - (a) To enter this Examination, the student must have satisfied the attendance requirements on the Second Year Programme, including completion of all coursework and practice placement hours. Exceptions may only be permitted by the Head of School where it is recommended by the programme on professionally verified grounds of student ill- health, close family bereavement or of significant personal difficulties.
  - (b) The Examination will be held before and during the Summer Examination session with repeat examinations, if necessary, held in the Autumn Examination session.
  - (c) Failure of the Examination in full or in part at the repeat examination will require the student to re-attend the Second-Year programme and re-sit the Examination in the following year, provided that this will not breach the overall time-limit as set out in Par VI above. In such a case the student will be unable to continue.
  - (d) It will not be possible to compensate marks from one module to another for the purpose of passing failed modules by compensation in the Second University Examination in the B.A. Social Care.
  - (e) The Second-Year examination must be completed within two years of entering Second Year, extensions may not be given as this will breach the overall time-limit for completing the programme as set out in Par. VI above.
  - (f) Marks in repeat examinations will be capped at 40%.
- **IX.** The Third University Examination must be passed completely before a student can proceed to the Fourth Year.
  - (a) To enter this Examination, the student must have satisfied the attendance requirements on the Third Year Programme, including completion of all coursework. Exceptions may only be permitted by the Head of School where this is recommended by the programme on professionally verified grounds of student ill-health, close family bereavement or of significant personal difficulties.
  - (b) The Examination will be held before and during the Summer Examination session with repeat examinations, if necessary, held in the Autumn Examination session.

- (c) Failure of the Examination in full or in part at the repeat examination will require the student to re-attend the Third-Year programme and re-sit the Examination in the following year, provided that this will not breach the overall time-limit as set out in Par. VI above. In such a case the student will be unable to continue.
- (d) It will not be possible to compensate marks from one module to another for the purpose of passing failed modules by compensation in the Third University Examination in the Honours Bachelor of Arts (Social Care).
- (e) The Third-Year examination must be completed within two years of entering Third Year, extensions may not be given as this will breach the overall time-limit for completing the programme as set out in Par. VI above.
- (f) Marks awarded in repeat examinations will be capped at 40%.
- X. The Fourth and Final University Examination must be passed completely before a student can be awarded the Honours Bachelor of Arts (Social Care) Degree.
  - (a) To enter this Examination, the student must have satisfied the attendance requirements on The Final Year Programme, including completion of all coursework. Exceptions may only be permitted by the Head of School where this is recommended by the programme on professionally verified grounds of student ill- health, close family bereavement or of significant personal difficulties.
  - (b) The Examination will be held before and during the summer examination session with repeat examinations, if necessary, held in the autumn examination session.
  - (c) Failure of the Examination in full or in part at the repeat examination will require the student to re-attend the Final Year programme and re-sit the Examination in the following year, provided that this will not breach the overall time-limit as set out in Par. VI above. In such a case the student will be unable to complete the degree.
  - (d) It will not be possible to compensate marks from one module to another for the purpose of passing failed modules by compensation in the Fourth and Final University Examination in the Honours Bachelor of Arts (Social Care).
  - (e) The Final Year examination must be completed within two years of entering Final Year, extensions may not be given as this will breach the overall time for completing the programme as set out in Par. VI above.
  - (f) Marks awarded in repeat examinations will be capped at 40%.

- XI. (a) The Award of the Honours Bachelor of Arts (Social Care) Degree will require successful completion of all years of the Undergraduate Programme as set out in Rules VI to X (inclusive) above. (b) The calculation of the overall degree results awarded, including the calculation of Honours (if any), will be based on the proportion of the overall marks attained across the years of the programme as set-out in the Marks and Standards and recorded in the student handbook for each programme:
- XII. Any student failing to pass the Examination indicated in Rules VI to X (inclusive) above within the specified intervals will be ineligible to proceed further with his/her studies. Exemptions to this rule will be granted by the Academic Council, on the recommendation of the College of Medicine, Nursing and Health Sciences, only for very serious reasons.
- XIII. Re-attendance may be required from any student whose attendance is considered to have been unsatisfactory, or who has not attained a sufficient standard of knowledge as judged by examination or progressive assessment. Students on the Honours Bachelor of Arts (Social Care) Degree must attend not less than 80% of all the taught sessions. This is calculated on overall attendance across modules.
- XIV. Given that these programmes award a professional qualification and lead to professional registration, there are specific requirements for the completion of practice education and training components of the programme, which include also a prescription on the number of opportunities allowed to repeat /re-sit these components. In some cases, these are determined by the professional bodies (refer to each programme handbook for more specific rules which apply in each specialism). Students are only permitted one opportunity to repeat a placement over the course of the four years on the Honours Bachelor of Arts (Social Care) programme. If a student fails an initial placement and successfully passes their repeat placement and all other modules, they will be eligible to proceed to the following year of their studies. However, if a student fails a subsequent placement over the following years of the Honours Bachelor of Arts (Social Care) programme, there is no second opportunity to repeat placement.

# HONOURS BACHELOR OF ARTS (SOCIAL CARE)

### (NFQ LEVEL 8 REF Quality and Qualifications Ireland (qqi.ie))

This programme leads to the award of Honours Bachelor of Arts (Social Care) (under the programme regulations of the College of Medicine, Nursing and Health Sciences).

### **PROGRAMME STRUCTURE**

The Honours Bachelor of Arts (Social Care) provides teaching of theoretical concepts applied to social care practice. It was developed in response to the continuing educational needs of social care workers in the context of the professionalisation of social care work and includes both theoretical and practice components. It is designed to meet the needs of adult students returning to education and to enable those working in the social care field to further develop and enhance their understanding, knowledge and skills. The programme aim is to provide students with a professional education and training in the principles and practice of social care in line with CORU requirements.

The first year provides a general introduction to the field of social care work through introducing students to theoretical frameworks, professional practice skills and a competencies-based work placement. Students receive online interactive materials for home study and attend 1-2 workshops for each module. In addition, students complete supervised work placement in a social care setting, external to their own place of work and 200 hours in duration.

Year 2 is delivered through workshops and home study. This second year develops the skills gained in year 1, as well as developing on the theoretical ideas that underpin social care practice and service provision. In addition, students complete supervised practice placement in a social care setting, external to their own place of work and 200 hours in duration.

Year 3 builds on years 1 and 2 with further theoretical exploration of social care work and service provision through workshops and work placement. The core competencies required for working in the social care field are further developed and linked to their application in a workplace setting. Students also complete supervised work placement in a social care setting, external to their own place of work and 200 hours in duration This final year of the Honours Bachelor of Arts (Social Care) is similarly comprised of workshops, work placement and self-directed study components. In addition, learners complete a dissertation on a particular area of social care work, with the support of a named individual supervisor. Students also complete supervised work placement in a social care setting, external to their own place of work and 200 hours in duration.

### PROGRAMME CONTENT

Year 1: Module	ECTS
Introduction to integrated and experiential learning for	5
social care	
Introduction to social care practice and care skills	5
Introduction to legal, ethical and professional practice	10
in social care	
Introduction to Health and health promotion	5
Introduction to communication skills for social care	5
Sociology: An Introduction	5
Practice Placement 1	10
Year 2:	
Module	ECTS
Social and Health Services: Systems, History and	5
Context	
Psychology across the lifespan: An Introduction	5
Health promotion models and frameworks	5
Care planning in social care practice	5
Communication and relationship skills	5
Legal, ethical and professional practice	5
Introduction to research	5
Practice Placement 2	10

Year 3:	
Module	ECTS
Experiential learning and evidence-based practice	5
Working with people with disabilities: A social care perspective	5
Professional autonomy and accountability	5
Social care across the lifespan working with children and young	5
people	
Health promotion strategies and approaches	5
Research methods and methodology	10
Practice Placement 3	10

Year 4:	
Module	ECTS
Health Promotion Practice	5
Social care across the lifespan – working with older	5
people	
Management and leadership in social care settings	10
Research Strategy	15
Practice Placement 4	10

## ASSESSMENT AND REGULATIONS

Assessment of course modules and practice placement is based on a combination of written assignments, practical work, practice placement, supervisor's reports, online work, project work and examinations (or any combination of these) in each year of the programme.

### ENTRY CRITERIA

Formal academic qualifications are not required to commence this BA. Candidates are, however, expected to have good reading and writing skills, as independent home study is required. Candidates must also have a minimum of one year's full-time or equivalent experience in care work, which can have been gained in either a formal or informal capacity (i.e. employed as a care assistant) or informal capacity (i.e. caring for a family member, voluntary work in a caring capacity). The age requirement for those wishing to commence this BA is 21 years of age on the 1st of January in the year that a candidate is applying (i.e. someone applying for September 2025 would have to have been 21 years old on the 31st of December 2024 at the latest).

## **EXEMPTIONS / RECOGNITION OF PRIOR LEARNING**

Applicants with existing academic qualifications may be considered for exemptions / RPL. These will only be considered where direct comparability of the module and course content meets the learning outcomes and associated CORU standards of proficiency as detailed within the module handbooks. Prior Practice Placement hours are not considered for Exemptions/RPL. An exemption can only be applied for in relation to an academic module or modules in year one and/or year two of the BA (Hons) Social Care course.

Those for whom English is not the first language should check the university requirements at: <u>Entry Requirements - University of Galway</u>

Students must satisfy Garda/Police clearance requirements. They are also required to complete the School of Health Sciences Pre-Placement Orientation Module for each year of the programme.

Pass Standard The pass mark is 40%.

### Compensation

Compensation is NOT allowed in academic or practice modules.

### General Regulations

FOR THE FULL-TIME MSC IN PODIATRIC MEDICINE (PRE-REGISTRATION) (NFQ Level 9)

### EXPLANATORY NOTE

The MSc Podiatric Medicine (Pre-Registration) at University of Galway is a two-year full-time (24 Months) Pre-Registration Degree, which awards the Master of Science in Podiatric Medicine (Pre-Registration).

Regulations may be altered periodically. The regulations applying to students are generally those, which applied to their programme at the time in which they commenced their studies, unless otherwise specified in the General Regulations hereunder.

These Regulations form a total, individual clauses may be conditioned or varied by the provision of other clauses and cannot be applied in isolation.

### Entry Requirements

- I. Pre-requisites and co-requisites.
  - Mature learners who may already be in healthcare and want to specialise in Podiatric Medicine.
  - Graduates with an equivalent to a University of Galway minimum 2.1 Degree in cognate\* disciplines in Ireland, UK and Europe.
     \*Cognate degree (To include but not restricted to): Level 8 Cognate Degrees: BSc Nursing, Biomedical engineering, Human biological/ clinical sciences (e.g. biology, physiology, pharmacology, Anatomy). Other health and social care professions, clinical services background and relevant BSc qualification e.g. HSCP Physiotherapy, Engineering, Science, Sports Science.
  - International students with an equivalent to a University of Galway minimum 2.1 Degree who would prefer the option of 2 years full-time study option other than the traditional route of 4 years BSc Podiatric Medicine. And achieve the required level of English language as per admission onto the BSc undergraduate program that currently exists on entry.

- Before entering the MSc Podiatric Medicine (Pre-Registration) programme every student must furnish Garda Clearance. This is organised through the Admissions Office on entering the University. Failure to obtain clearance will result in the student being unable to access practice education placements which are a core requirement of the programme.
- **III.** Students are required to participate in group work and experiential learning to practice skills which are required for successful programme completion.
- IV. The School of Health Sciences requires students to obtain the appropriate vaccinations (details available in programme handbooks). Placement providers stipulate that students must have the appropriate vaccinations before undertaking placements at their site. If students cannot provide evidence of required vaccinations, placements will be refused. Students must satisfy the health clearance requirements of the programme including the completion of the School of Health Sciences Pre-Placement Orientation module for each year of the programme.
- V. Registration is carried out by the University. Students must be registered in their designated programme not later than fifteen days after the commencement of Programme.
- VI. To obtain the award of the MSc Podiatric Medicine (Pre-Registration):
  - a. Students must pursue programmes of Study extending over a period of not less than two academic Calendar Years (24 months) and must pass the various Examinations prescribed below, meeting the requirements as set out elsewhere in these Regulations, in the Marks and Standards of the College and in Student Handbooks where necessary.
  - b. The Examinations are as follows:

i.The First University Examination in their programme.ii.The Second University Examinations in their programme, being the Final Examination in their programme.

## Note:

- 1. **The duration of the programme cannot be shortened;** no part of the Final Examination may be taken before the end of 2 academic calendar years (24 months) of professional education.
- There is a time-limit on the completion of the degree; while a student who fails their yearly examination in a particular year has the right to re-sit that/those examination(s) the following year the total time allowed for the successful completion of the University Examinations is 3 academic calendar years (36 months) in total. As per the Leave of Absence Policy (QA287), the duration of a Leave of absence must not exceed 1 year per stage (year).
   QA287-Leave-of-Absence-approved-AC-Oct2022.pdf

(universityofgalway.ie)

Upon return from a Leave of Absence, students may be ordinarily required to undertake remedial placement as designated by the discipline in question, the extent of which may vary depending on the stage of the programme.

- **VII.** The First University Examination must be passed completely before a student can proceed to the second and final Year.
  - a. To enter this Examination, the student must have satisfied the attendance requirements on the First Year Programme as outlined in the student handbooks, including completion of all coursework. Exceptions may only be permitted by the Head of School where it is recommended by the programme on professionally verified grounds of student ill-health, close family bereavement or of significant personal difficulties.
  - b. The Examination will be held before and during the Summer Examination session with repeat examinations, if necessary, held in the Autumn Examination session.
  - c. Failure of the Examination in full or in part at the repeat examination will require the student to re-attend the First-Year programme and re-sit the Examination in the following year.
  - d. It is not possible to compensate marks from one module to another for the purpose of passing failed modules by compensation in the First University Examination.
  - e. The First-Year examination must be completed within two years of entering First Year, extensions may not be given as this will

breach the overall time-limit for completing the programme as set out in Par. VI above.

- **VIII.** The Second and Final University Examination must be passed completely before a student can be awarded the MSc Podiatric Medicine (Pre-Registration).
  - a. To enter this Examination, the student must have satisfied the attendance requirements on The Final Year Programme, including completion of all coursework. Exceptions may only be permitted by the Head of School where this is recommended by the programme on professionally verified grounds of student ill-health, close family bereavement or of significant personal difficulties.
  - b. The Examination will be held before and during the summer examination session with repeat examinations, if necessary, held in the autumn examination session.
  - c. Failure of the Examination in full or in part at the repeat examination will require the student to re-attend the Final Year programme and re-sit the Examination in the following year, provided that this will not breach the overall time-limit. In such a case the student will be unable to complete the degree.
  - d. It is not possible to compensate marks from one module to another for the purpose of passing failed modules by compensation in the Second and Final University Examination.
  - e. The Final Year examination must be completed within two years of entering Final Year, extensions may not be given as this will breach the overall time for completing the programme,
  - f. Marks awarded in repeat examinations will be capped at 50%.
  - g. Students are required to complete a minimum of 1000 clinical hours. In such cases that students do not meet the minimum threshold they will be unable to complete the degree.
- **IX.** The Award of the MSc Podiatric Medicine (Pre-Registration) will require successful completion of all years of the Programme as set out in the Rules above. The final calculation of marks is based on 20% of the aggregate mark obtained at the Pre-final (Year 1) examinations, and 80% of the aggregate obtained at the Final (Year 2) examinations.
- X. Any student failing to pass the Examinations indicated above within the specified intervals will be ineligible to proceed further with his/her studies. Exemptions to this rule will be granted by the Academic Council, on the recommendation of the College of Medicine, Nursing and Health Sciences, only for very serious reasons.

- XI. Re-attendance may be required from any student whose attendance is considered to have been unsatisfactory, or who has not attained a sufficient standard of knowledge as judged by examination or progressive assessment. Satisfactory attendance is generally regarded as attendance and participation in not less than 75% of all of the taught sessions provided. This is calculated on an individual module basis and is not based on overall attendance across modules. There are additional attendance requirements which are specific to particular modules and programmes which must be adhered to. Students who have not achieved satisfactory attendance may be refused permission to submit assignments, attend placements as well as admission to examinations.
- XII. Given that these programmes award a professional qualification and lead to professional registration, there are specific requirements for the completion of clinical education and training components of the programme, which include also a prescription on the number of opportunities allowed to repeat /re-sit these components. In some cases, these are determined by the professional/regulatory bodies (refer to each programme handbook for more specific rules). When students have not successfully completed these clinical components of their degree programme, in total or in part, including their practice education, clinical theory, or other such components as are required, and have exhausted all repeat /re-sit options for so doing, they are not eligible for the award of the M.Sc. in Podiatric Medicine (pre-registration).
- XIII. The minimum passing mark on all modules is 50%. Module assessment can be made up of multiple components. Only an overall mark for the module will be returned. Marks will not be returned for components of a module.

A mark of 'Incomplete' must be returned to the Examinations Office where there is a requirement that an element(s) of a module be passed and that element(s) is not passed. A student is required to retake all elements of an incomplete module unless the relevant College provides by regulation that students be exempt from retaking specific components.

XIV. Carrying Forward Marks: A student will be given credit for modules passed and will not be permitted to re-present for examination in any module in which a minimum mark of 50% has been returned within the

time-limit set out in regulations for the successful completion of the particular stage (year). A College may prescribe a time-limit provision other than the preceding one with the approval of the Academic Regulations Committee.

**XV.** Compensation Provision Note: the provision of pass-by-compensation is not available as all modules are core or mandatory.

# MASTER OF SCIENCE OF PODIATRIC MEDICINE (PRE-REGISTRATION)

### M.SC. IN PODIATRIC MEDICINE (Pre-Registration)

Podiatric Medicine is a healthcare profession that specialises in the management of disease and disorder of the lower limb and foot. The foot is a highly complex structure, which can develop problems affecting the overall health and quality of life of the patient. Podiatric Medicine can significantly improve peoples' quality of life by promoting and maintaining mobility. Podiatrists are educated in diagnosis and in planning and implementing interventions for all age groups. Podiatrists work as autonomous practitioners demonstrating expertise in assessing, diagnosing and managing lower limb and foot related problems. As such, the Podiatrist works in a variety of health-care settings including public sector services such as the HSE in primary care and hospital settings, the commercial and private sectors, in education, research and in industry. Podiatrists are an integral part of the health care team augmenting the physician and surgeon in treating foot disease and preventing, where possible, the onset of foot disease. Podiatrists may work in single-handed practice or as a member of the wider multi-disciplinary team working in collaboration with other health professionals including medics, nurses, physiotherapists and orthotists.

### **Entry Requirements**

This new MSc (pre-registration) programme (starting 2024) is designed to appeal to healthcare and other professionals who hold degrees in cognate areas, leveraging their existing expertise and providing a versatile pathway into the field of Podiatric Medicine. The pre-registration course in Podiatric Medicine aims to train high calibre, competent HSCP graduates, to level 9, who can, from the point of graduation demonstrate high level skills that will enable them to become ACPs and managers/leaders.

### Pre-requisites and co-requisites

- Mature learners who may already be in healthcare or a cognate discipline and want to gain a qualification in Podiatric Medicine.
- Graduates with an equivalent to a University of Galway minimum 2.1 Degree in cognate\* disciplines in Ireland, UK and Europe.
- International students with an equivalent to a University of Galway minimum 2.1 Degree who would prefer the option of 2 years full-time study rather than the traditional route of 4 years BSc Podiatric Medicine. And achieve the required level of English language as per admission onto the BSc undergraduate program that currently exists on entry.
- Before entering the Degree programme every student must furnish Garda Clearance. This is organised through the Undergraduate Admissions Office on entering the University. Failure to obtain clearance will result in the student being unable to access practice education placements which are a core requirement of the programme.
- Students also require mandatory vaccinations as part of a health care programme, which are part of pre-placement medical requirements for practice.
  - \*Cognate degree (To include but not restricted to): Level 8 Cognate Degrees: BSc Nursing, Biomedical engineering, Human biological/ clinical sciences (e.g. biology, physiology, pharmacology, Anatomy). Other health and social care professions, clinical services background and relevant BSc qualification e.g. HSCP Physiotherapy, Engineering, Science, Sports Science.

## PHILOSOPHY AND AIMS OF THE PROGRAMME

The M.Sc. Podiatric Medicine programme is designed to educate and train those who wish to pursue a professional career in Podiatric Medicine, as a health care professional, who specialises in the management of disease and disorder of the lower limb and foot. The Discipline is committed to providing a comprehensive education for podiatrists and the curriculum is based on best available evidence in relation to both theory and practice. The course aims to ensure that students achieve the academic and practitioner standards as laid out by regulatory and professional bodies in Ireland and the United Kingdom. The M.Sc. Podiatric Medicine extends over two calendar years or six academic semesters.

The structure of the programme introduces, in a defined manner, inter- professional learning in both academic and clinical modules. It has, as its central focus, the integration of theory with clinical practice with opportunities for inter- professional learning with other health care professionals. The overall goal of this programme is to prepare competent, flexible, accountable practitioners, who are capable of lifelong learning. Lifelong learning is a continually supportive process, which stimulates and empowers individuals to acquire the knowledge, values, skills and understanding they will require throughout their lifetime and develop the capacity to apply these with confidence.

Our mission statement is:

"To develop caring, patient-centric, highly skilled honours graduates who are knowledgeable, innovative, autonomous and competent practitioners who apply a scientific and evidence-based approach to podiatric medicine."

The M.Sc. (Hons.) Podiatric Medicine programme aims to:

• Prepare students for the demands of a career in podiatric medicine and the rapidly changing nature of podiatric practice.

• Allow students to develop a high level of clinical competence, enabling them to meet the requirements of CORU and be eligible for registration and membership of the professional body in Ireland.

• Provide a comprehensive, excellent, academic and clinical teaching programme with integration of theory into the clinical practice setting.

• Provide clinical placements that span the spectrum of podiatric medicine. The clinical teaching programme involves experience with patients from various medical/surgical disciplines; this ensures a high level of quality practice education for students.

• Provide a range of clinical placement opportunities within the public and private sectors, offering over 1,000 hours of high-quality clinical placements.

• Provide a student-centred supportive environment in which the students' knowledge, understanding, skills and attitudes are developed and enhanced to a high level of clinical competence.

• Allow opportunities to explore, analyse and critically assess the practice and the role of Podiatric Medicine within local, national and international inter- professional healthcare settings. This will ensure that the experiences and opportunities in the learning environment are relevant to their future careers and personal development.

• Prepare students to anticipate, adapt, influence and respond to future changes in service delivery and encourage them to become future educators and leaders in the profession. This preparation is achieved through research strategies, financial, political, professional and knowledge management.

• Produce graduates who are reflective practitioners and have a strong ethos for continuous professional development and a firm commitment to life-long learning.

### PROGRAMME STRUCTURE

The programme is outlined below:

### Year 1 (90 ECTS)

### All Core Modules

- PO1101 Podiatric Medicine Practice 1 (30 ECTS) Semester 1, 2 & 3
- PO1102 Professional Practice Healthcare & Leadership Practice 1 (10 ECTS) Sem 1, 2
- AN230 Human Body Structure (5 ECTS) Sem 1
- AN112 Gross Anatomy of the Lower Limb (5 ECTS) Sem 2
- SI317 Human Body Function (10 ECTS) Sem 1
- PO1103 Applied Physiology (5 ECTS) Sem 1 & 2
- PO1104 Human Motion & Biomechanics (10 ECTS) Semester 1, 2
- PO1105 Integumentary System (15 ECTS) Semester 1,2

### Year 2 (90 ECTS)

### All core modules

PO2100 – Podiatric Medicine Practice 2 (30 ECTS) Semester 1, 2 &3
PO2105 – Research Dissertation (15 ECTS) Semester 1, 2
PO2106 – Lifestyle & Clinical Medicine (15 ECTs) Semester 1, 2
PO3103 – Pharmacology for Podiatrists (10 ECTS) Semester 1, 2
PO2107 – Musculoskeletal Medicine across the Lifespan (10 ECTS) Sem 1
PO2108 – Professional Practice Healthcare & Leadership Practice 2 (10 ECTS) Sem 1, 2

**Progression requirements:** Students must pass all 14 core modules and successfully complete final project to achieve the MSc award. All year 1 modules must be passed to progress to the second year of the programme.

### Pass Standard & Assessment Strategies:

A wide variety of assessment strategies are employed at stages throughout the programme in order to cater for a diversity of learning needs. The range and diversity of assessments allows the varying strengths of individual students to be demonstrated. All assessments throughout the programme are designed to assess students' theoretical knowledge and clinical practical skills to ensure students meet the necessary competencies for professional practice. Assessment strategies that are employed include clinical practical examinations, continuous assessment and end of semester/ year examinations.

Pass Standard: The pass mark is 50%.

### Compensation

Compensation is NOT allowed across academic modules or within clinical modules.

## PROGRAMME CONTENT

Central to the curriculum are the Podiatric Medicine Practice modules. These modules extend throughout the two years of the programme building from year one to integrate and articulate with the theoretical learning.

In the first year the students are introduced to clinical protocols and pre-clinical skills, they then develop and acquire the essential psychomotor and communication skills required for podiatric practice. Various aspects of management planning skills are introduced at each stage. Ultimately, the students acquire assessment and diagnostic skills and increasing competence leads to a comprehensive podiatric patient management, which requires increasing cognitive and psychomotor skills to affect safe and efficient patient care.

The theoretic components of the programme underpin the clinical podiatric management of patients. The framework provides vertical and horizontal integration for the subject areas that impact on podiatric practice. These include physiology, anatomy, applied physiology, pharmacology, clinical medicine and surgery, lifestyle medicine, microbiology and core podiatric medicine.

The importance of evidence-based practice is integrated throughout all modules within the curriculum. Research approaches and methodologies are evaluated within year 1 and 2 of the programme ensuring students receive grounding in Podiatry research methods and biostatistics before they apply this knowledge to their research dissertation in year 2.

A variety of approaches to learning and teaching are integrated throughout the curriculum including lectures, tutorials, workshops, online and blended learning, seminars, peer assisted learning and problem-based learning.

## PRACTICE EDUCATION

Practice education is a process of work- based learning, which involves a partnership between the practice educator and the student in the practice setting. All students are required to complete a minimum of 1,000 hours of practice education successfully under the supervision of qualified Podiatrists. Practice education is undertaken each year. The majority of practice education takes place at Merlin Park Podiatry Clinic, Merlin Park University Hospital, Galway. This state-of-the-art facility provides a service to patients with a wide variety of medical and surgical conditions, children, sports injuries and patients requiring complex management. Practice education aims to introduce the students to the culture of the profession. It facilitates the development and application of the knowledge, attitudes, values and skills needed for the execution of appropriate professional behaviours. It also gives the opportunity to practice under supervision, and be assessed on professional standards and behaviours, ethical practice and inter professional partnerships.

The main aims of practice education are:

• to integrate theory, practice, ethics and values of podiatric medicine

• to apply knowledge, professional reasoning and professional behaviours within practice

- to promote professional competence
- to work as a safe effective team member
- to promote professional confidence
- to provide opportunities for students to integrate theoretical and practical learning
- to facilitate consolidation of student's previous learning.

# M.A. (HEALTH PROMOTION) & POSTGRADUATE DIPLOMA IN ARTS

## **HEALTH PROMOTION**

### PROGRAMME DESCRIPTION

The MA/PGDip programme aims to provide you with professional education and training. The programme includes a work placement, facilitating the development of the core competencies of health promotion practice. The programme covers:

- Theoretical background in the concepts, principles and practice of health promotion.
- Determinants of physical, mental and social well-being.
- Application of health promotion interventions across diverse population groups, topics and settings.
- Critical role of the research process in the development of knowledge and best practice in health promotion.

The MA incorporates the taught component of the PGDip together with a minor dissertation based on original research. A full list of modules is on the course website. The programme is delivered through a blend of online and face-to-face contact with some on-campus attendance required. Support and guidance is provided to all students to optimise utilisation and engagement with online learning platforms.

## WHY STUDY THIS PROGRAMME?

- 1. **Gain valuable experience:** As well as getting workplace experience, students have the opportunity to engage with international health promotion research projects, including the development of evidence-based policy and practice.
- 2. Accredited programme: Accredited by the International Union for Health Promotion and Education. Graduates can join the global voluntary register as Health Promotion Practitioners.
- 3. **Expert research staff:** Lecturing staff are involved in research in the Health Promotion Research Centre, a World Health Organisation Collaborating Centre.

## MINIMUM ENTRY REQUIREMENTS

As Health Promotion is a multidisciplinary field, we consider applications from candidates with a primary degree from a related discipline. For the MA, eligibility for the programme is an honours degree, with minimum 2.1 or equivalent.

For the PGDip, a primary degree at any level is required. The programme board evaluates each applicant's academic record and relevant professional experience and assesses the applicant's level of motivation and suitability from the personal statement submitted as part of the online application.

For transfers from the PGDip to the MA programme, the student must attain minimum criteria in Year 1 including:

60% grade or higher for PGDip programme overall 60% grade or higher for research methods module.

All suitable criteria met before the applicant can be considered for the MA Top-Up.

### DURATION OF THE PROGRAMME

This programme is delivered as a one-year full-time programme.

Core Modules	Semester	ECTS
Dissertation (HP504)	1 & 2	30
Research Methods (HP832)	1	10
Foundations of Health Promotion (HP846)	1	10
Health Promotion Practice (HP847)	1 & 2	10
Determinants of Health (HP848)	1	10
Evidence-Based Health Promotion Practice	1 & 2	10
(HP1104)		

Optional Modules (for academic year 24-25)	Semester	ECTS
Mental Health Promotion (HP140)	2	10
Promoting Youth Health in Educational Settings (HP1106)	2	10
Promoting Health in the Workplace (HP1103)	2	10
Promoting Healthy Behaviours (HP1105)	2	10

### **CAREER OPPORTUNITIES**

A variety of career opportunities in Ireland and abroad exist for graduates of this International Union for Health Promotion and Education (IUHPE) accredited programme. Graduates are qualified to pursue a full-time career in health promotion or to incorporate health promotion principles into their work, especially those in the health and education sectors. Graduates are employed in statutory, voluntary, community and academic positions in a number of roles, including dedicated health promotion specialist posts.

### Masters of Science in Applied Multilingualism

# M.SC IN APPLIED MULTILINGUALISM

## PROGRAMME DESCRIPTION

Ireland, a state that has three official languages (Irish, English and the sign language) and includes over 180 other languages, is an excellent environment to host the MSc in Applied Multilingualism. Galway is situated close to the largest Gaeltacht (Irish speaking) area in the country and has also been identified as Ireland's most diverse city. The MSc in Applied Multilingualism will prepare and educate professionals to support this diversity while at the same time, the multilingualism of the city and its hinterland will provide many opportunities for case studies and research projects. The course will equip students with a range of practical skills preparing them for careers in different multilingual contexts as well as develop awareness of and sensitivity to multilingual settings.

### WHY STUDY THIS PROGRAMME?

The MSc in Applied Multilingualism is designed to cater for increasing linguistic diversity in communities in Ireland, the EU and globally. Multilingualism is defined as using more than one language or being able to function, at some level, in more than one language. Some people grow up in multilingual communities where they acquire multiple languages from early on, while others learn new languages later in life. Different language circumstances have a different impact on individuals and communities. This innovative programme welcomes Irish and international students alike.

The main aims of the programme are to:

- Provide a learning environment and experience that fosters problem-solving, critical thinking and critical reflection in understanding, planning and catering for multilingual people and their communities.
- Develop students' professional competencies in the field of multilingualism and critically examine their professional role and expertise.
- Encourage students to develop their own professional and research interests and to demonstrate their knowledge and capability to critique current literature, adopt best-practice and develop, undertake and disseminate research in the field of multilingualism.
- Develop advanced skills and flexibility in attitudes that will enable students to manage projects related to and in collaboration with multilingual people to maximise their quality of life and well-being.
- Stimulate and support academically oriented students further develop their academic career through a structured PhD in the field of multilingualism.

## MINIMUM ENTRY REQUIREMENTS

Applicants will be expected to possess a good quality undergraduate degree at NFQ Level 8 (at least an upper Second Class Honours degree), or an equivalent qualification from Arts programmes (e.g., languages, education, psychology, sociology and political science, geography) or from medical, nursing, and health care programmes (e.g., speech and language therapists, occupational therapists, public health nurses). Applicants intending to take modules in advanced language skills will have to present certificate indicating that they possess language proficiency equivalent to B2 level according to the Common European Framework of Reference for Languages. International applicants are required to fulfil the English language requirements of IELTS 6.5 overall and no less than 6.5 in any one component.

Module Code	Core Module Title	Credits	Semester	Module Leader	Discipline
NG6112	Sociolinguistics of Multilingualism	10	2	Prof. Tadhg Ó hIfearnáin	School of Languages, Literatures and Cultures
SL5010	Psycholinguistics of Multilingualism	10	1	Dr. Stanislava Antonijevic- Elliott	School of Health Sciences
SL5011	Cultural, Linguistic, & Social Diversity	10	1	Dr. Stanislava Antonijevic- Elliott	School of Health Sciences
HP832	Research Methods	10	1	Dr. Aoife Howard	School of Health Sciences
SL5012 (For part-time students SL5105 is taken in Year 2 only)	Dissertation in Applied Multilingualism	30	1, 2, and 3	Dr. Stanislava Antonijevic- Elliott and Dr. Andrea Ciribuco	School of Health Sciences

### **DURATION OF THE PROGRAMME**

This programme may be taken as a 1-year full-time course, or as a 2-year part-time course.

Module Code	Optional Module Title	Credits	Semester	Module Leader	Discipline
SL5110	Applied Linguistics and Multilingualism	10	2	Dr. Andrea Ciribuco	School of Health Sciences
SL5102	Using Evidence in Practice	10	1	Dr. Rena Lyons	School of Health Sciences
SL5101	Narratives in Childhood	10	2	Dr. Mary Pat O'Malley- Keighran	School of Health Sciences
SL511	Cultural Awareness in Research	10	1	Dr. Stanislava Antonijevic- Elliott	School of Health Sciences
IT6101	Audio-visual Translation: Interlingual Subtitling	10	2	Dr. Andrea Ciribuco	School of Languages, Literatures and Cultures
FR562	Advanced Language Skills I and II (French)	10 + 10	1 and 2	Dr. Máire Áine Ní Mhainín	School of Languages, Literatures and Cultures
NG6110	Teanga na Gaeilge (Advanced level Irish)	10	1 and 2	Prof. Tadhg Ó hIfearnáin	School of Languages, Literatures and Cultures
MIC6100	Resisting through Culture: Conflicts in Europe and Beyond	10	2	Dr. Deirdre Byrnes	School of Languages, Literatures and Cultures
GR130 GR131	Beginners German I and II	5+5	1 and 2	Prof. Tina Pusse	School of Languages, Literatures and Cultures

## **CAREER OPPORTUNITIES**

Increasingly multilingual societies are creating demand for professionals in the fields of health, education, public administration and NGOs who are equipped to work with multilingual populations. Furthermore, improving language skills is relevant for those intending to seek employment in the areas of language planning and policy, language teaching, cultural and heritage institutions, government, and diplomacy.

# M.SC IN CHILDHOOD SPEECH, LANGUAGE, AND COMMUNICATION NEEDS (SLCN)

### **PROGRAMME DESCRIPTION**

This interdisciplinary MSc has been designed to facilitate students to develop the knowledge, skills, and attitudes in relation to supporting children with developmental speech, language, and communication needs in the clinic, crèche, classroom, community, and service contexts.

### WHY STUDY THIS PROGRAMME

This interdisciplinary MSc. delivered via blended learning provides a unique opportunity for students from a diverse range of educational and professional backgrounds to understand children with speech, language and communication needs in the important contexts of their lives. It also enables students to appreciate how SLCN may manifest and impact on children and their families in clinics, crèches, classrooms, and community and service contexts. It provides students with an opportunity to become familiar with a range of professional perspectives on children with SLCN.

### MINIMIUM ENTRY REQUIREMENTS

Students will be expected to hold a primary degree with at least second-class honours OR equivalent qualification. Where students are conducting research with children, Garda Vetting will be required. For international students, the English level requirement is 6.5 in all areas.

### PROGRAMME AIMS

The aim of this MSc in Childhood Speech, Language, and Communication Needs is to provide a critical and conceptually sophisticated understanding of children with S.L.C.N. and the contexts of their lives. This programme has been designed to meet the needs of busy practitioners who wish to keep up to date with the emerging evidence base when working with children with S.L.C.N. in the clinic, crèche, classroom, and community.

### DURATION OF THE PROGRAMME

This programme may be taken on a 1-year full-time, or 2-year part-time basis.

Module	Semester	ECTS
Advanced Research Methods (NU502)	1	10
Narratives in Childhood (SL5101)	2	10
Using Evidence to Inform Practice	1	10
(SL5102)		
Cultural, Linguistic & Social Diversity	1	15
in Health & Education (SL5103)		
Supporting Children with SLCN	2	15
(SL5104)		
Minor Dissertation (Thesis) (SL5105)	Year Long	30

### **CAREER OPPORTUNITIES**

As students entering the programme come from a variety of professional and education backgrounds, career opportunities are wide-ranging across health and educational settings. The knowledge and insight gained from the MSc Childhood SLCN helps distinguish graduates as it is applicable to a range of employment contexts. Furthermore, completion of the MSc Childhood SLCN will give you innovative ways of seeing and understanding the children and families with whom you work.

**Please note:** This MSc does not lead to professional qualification in speech & language therapy.

## **M.SC IN ADVANCED HEALTHCARE PRACTICE & RESEARCH**

### NB: This programme will not run in 24/25.

### **PROGRAMME DESCRIPTION**

The MSc Advanced Healthcare Practice and Research is completed over a 12-month period (90 ECTS) full-time, or 2 years part-time. The programme is delivered in collaboration with the Discipline of General Practice and will primarily involve distance learning. The programme consists of 5 taught modules with a minor dissertation.

### WHY STUDY THIS PROGRAMME?

The aims of the MSc are to develop learners with the knowledge, skills and attitudes to use and contribute to evidence-based practice. Participants will be empowered to take a leadership role in designing and implementing research to support best practice in their working context.

On completing the MSc, you will have the knowledge and skills to be a:

- Highly skilled, confident clinical educator with the ability to implement evidence-based practice in teaching and assessment
- Role model in the implementation of high-quality educational environments to enhance practice for educators, students and clients.
- Competent researcher with the ability to develop research capacity in your working community. You will lead by example and empower others to pursue research and contribute to evidence-based practice.

### MINIMUM ENTRY REQUIREMENTS

Students will be expected to hold a degree in a professional healthcare course (minimum second-class degree required).

While not compulsory, it is recommended that applicants should:

Have relevant experience in clinical teaching and supervision.

### **DURATION OF THE PROGRAMME**

٠

This programme may be taken as a 1-year full-time course, or as a 2-year part-time course.

Module	Semester	ECTS
Educational Research	1 & 2	15
(MD132)		
Using Evidence to Inform	1 & 2	10
Practice (SL5102)		
Clinical Teaching (SL5107)	1	5
Clinical Teaching	2	15
Methodologies (MD112)		
Foundations of Assessment	2	15
in Clinical Education		
(MD616)		
Minor Dissertation (Thesis)	Year Long	30
(SL5108)		

## **CAREER OPPORTUNITIES**

On completion of the MSc Advanced Healthcare Practice and Research, you will be well positioned to pursue senior, specialist and managerial posts within the HSE and voluntary agencies. You may also choose to pursue opportunities in academic teaching. The interdisciplinary learning environment offered in this MSc will equip you with new and innovative ways of working in our challenging healthcare system.

# M.SC IN PODIATRIC MEDICINE

### NB: This programme will not run in 24/25.

This is a 90-credit postgraduate taught master's degree programme with  $6 \ge 10$  modules and a 30-credit research dissertation, taken over one (full-time) or two (part-time) years. There is an option to exit with a 60 credit Postgraduate Diploma.

The modules comprise: Musculoskeletal Conditions of the Foot and Ankle; Inflammatory Arthropathies of the Foot and Ankle; Management of Diabetic Foot Disease; Vascular Disease and Advanced Research Methods. Optional modules include Venous Leg Ulcers or Advanced Wound Management.

A blended learning strategy has been adopted, with a variety of instructional methods employed, all of which are appropriate for the intended learning outcomes. The distance-learning is supported by the use of a virtual learning environment (Canvas®), with blogs being used to engage students and facilitate feedback from their teachers. Assessment is distributed across the programme, and within modules, with a range of modalities being used, including 3,000-word written assignments, blog entries, an OSCE, and a 12,000-word research dissertation.

### WHY STUDY THIS PROGRAMME?

- 1. The course will provide a postgraduate learning experience that adopts problem solving, clinical reasoning and critical reflection in the analysis of podiatric practice and advancement of individual expertise.
- 2. It will provide students with the opportunity to develop their own clinical and professional interests.

Enhances knowledge and capacity to critique current literature, adopt best practice, and develop, undertake and disseminate research pertinent to podiatric medicine. Admissions will normally be restricted to those who hold an honours degree, first or upper 2<sup>nd</sup> class or equivalent in Podiatry / Podiatric Medicine. Those with degrees in cognate medical / science / engineering disciplines may be eligible for entry. An interview is part of the process.

### **DURATION OF THE PROGRAMME**

This programme may be taken as a 1-year full-time course, or as a 2-year part-time course.

Module	Semester	ECTS
Management of venous leg ulceration (Optional)	Semester 1	10
Inflammatory Arthropathies of the Foot & Ankle	Semester 1	10
Musculoskeletal Conditions of the Foot & Ankle	Semester 1	10
Advanced Wound Care Management (Optional)	Semester 2	10
Advanced Research Methods	Semester 2	10
Vascular Disease	Semester 2	10
Management of Diabetic Foot Disease	Semester 2	10
Research Dissertation Project	Semester 1 & 2	30

PG Cert in Health Promotion (Approaches to Cardiovascular Health & Type II Diabetes Prevention)

# PG CERT IN HEALTH PROMOTION (APPROACHES TO CARDIOVASCULAR HEALTH & TYPE II DIABETES PREVENTION)

### NB: This programme will not run in 2024/25.

### **PROGRAMME DESCRIPTION**

The Postgraduate Certificate in Health Promotion (Approaches to Cardiovascular Health and Type II Diabetes Prevention) offers students a unique opportunity to increase their knowledge and understanding of cardiovascular health and Type II Diabetes prevention. The programme is developed and delivered in partnership with Croí, the West of Ireland Cardiology Foundation, the Irish Heart Foundation and Diabetes Ireland.

This interdisciplinary programme is designed for professionals who wish to develop knowledge, skills and competencies in the principles and practice of health promotion as applied to the promotion of cardiovascular health and the prevention of Type 2 Diabetes. The programme is aimed at healthcare professionals from a range of professional and educational backgrounds, including nursing, public health, general practice, pharmacy, nutrition and exercise sciences, physiotherapy, medicine, and health and weight loss industries.

Successful completion of the programme will equip learners with an in-depth understanding of how to critically assess the evidence base, understand national and international policy approaches to the promotion of cardiovascular health and the prevention of Type II diabetes, and to appreciate the role of advocacy in influencing health and environmental public policies. Course participants will gain skills and competencies for effective design, implementation and evaluation of health promotion interventions, as well as project management and advocacy.

### **Course Delivery**

This course is a blended learning programme, which is taught through a combination of online self-directed learning and lectures, as well as monthly on-campus interactive workshops, tutorials and face-to-face lectures. Workshops are delivered on campus at the University of Galway one day per month. A combination of teaching techniques are employed to support learning, including participatory workshops, interactive project work, self-paced learning using instructional materials, as well as online academic resources. Support and guidance is provided to all students in order to optimise utilisation and engagement with online learning platforms.

## WHY STUDY THIS PROGRAMME?

This programme may be of interest if:

- 1. You wish to develop your knowledge, skills and competencies of health promotion and its effective implementation as applied to the promotion of cardiovascular health and the prevention of Type II Diabetes.
- 2. You are interested in expanding your understanding of the determinants of health, and how societal and lifestyle factors can impact the health of the individual.
- 3. You wish to incorporate the principles of best practice in implementing health promotion in your work interventions (based on current international and national research on evidence-based practice and policy).
- 4. You would like to gain the knowledge and skills to influence behaviour change at the individual and population level.
- 5. This Postgraduate Certificate Course is particularly suited to individuals who work full-time with timetables and assessments organised accordingly.

## MINIMUM ENTRY REQUIREMENTS

Entry requirement is a primary degree. Each applicant is assessed individually on relevant professional experience, level of motivation and suitability as per the personal statement submitted on the online application.

### **DURATION OF THE PROGRAMME**

The Postgraduate Certificate in Health Promotion (Approaches to Cardiovascular Health and Type II Diabetes Prevention) is a part-time course of one academic year duration. The programme runs from September to the following May.

Core Modules	Semester	ECTS
Concepts, Principles and Practice of	Trimester 3	10
Health Promotion (HP6102)		
Health Promotion Projects (HP6103)	Trimester 3	10
Approaches to Cardiovascular Health and	Trimester 3	10
Diabetes Prevention (HP6101)		

## CONTINUED PROFESSIONAL DEVELOPMENT

This is a NFQ Level 9 programme comprising of 30 European Credit Transfer System (ECTS) points in total. Each module is worth 10 ECTS points. Successful graduates of this programme who wish to apply to the Masters or Postgraduate Diploma in Health Promotion Programme(s) offered by University of Galway can carry forward 20 ECTS.

### **CAREER OPPORTUNITIES**

Students with the Postgraduate Certificate in Health Promotion have an opportunity to move into a health promotion post connected with their work or to achieve promotion within their work. They may also extend the remit of their job to include health promotion and intervention design. Several past graduates of the programme work in national organisations such as the HSE, Irish Heart Foundation and Diabetes Ireland. Previous students of this course, with healthcare qualifications, stated that it broadened their understanding of the socio-ecological determinants of health, and as such has informed the approach, they take to tackling non-communicable diseases in the workplace and community setting.

### PG Cert in Mental Health Promotion (Mental Health Promotion)

## PG CERT IN MENTAL HEALTH PROMOTION

### NB: This programme will not run in 2024/25.

### **PROGRAMME DESCRIPTION**

The Postgraduate Certificate in Mental Health Promotion has been jointly developed by University of Galway and Mental Health Ireland. This programme is designed for professionals working in different sectors who wish to develop knowledge, skills and competencies of mental health promotion and its implementation in practice.

The programme aim is to provide participants with professional education and training in the principles and practice of promoting positive mental health and wellbeing. This part-time programme is open to those working in a professional capacity in areas such as mental health, health promotion, public health, primary care, education, community work, nursing, social work, psychology and allied fields.

Course participants will acquire an understanding of the concepts, principles and evidence base for mental health promotion and the practical implementation of mental health promotion interventions from a national and international perspective. Course participants will gain skills and competencies for the effective implementation of mental health promotion interventions based on principles of evidence-based practice and policy.

### **Programme structure**

The programme comprises three modules. The first two modules include participation in workshops and self-paced instructional materials with assignments and independent study, while the third module focuses on project work.

### 1. Concepts and Principles of Health Promotion

This module includes:

- Definitions of health and Health Promotion
- Health Promotion programme development
- Current issues and discourse in Health Promotion policy and practice
- Communication training and facilitation skills.

#### 2. Specialism module

This module includes:

- Concepts and determinants of positive mental health and wellbeing, mental health equity, frameworks for practice

- Effective mental health promotion interventions, evidence-based principles of effective practice

- Implementing mental health promotion strategies across the life course in key settings such as the home, schools (primary and post-primary), community, primary care and mental health services

– International and national policy development, advocacy and capacity development in the promotion of mental health and wellbeing.

#### 3. Project development

Course participants will design a mental health promotion intervention for implementation with a specific population group in a setting of their choice.

#### ENTRY REQUIREMENTS

Entry requirement is a primary degree. Each applicant is assessed individually on relevant professional experience, level of motivation and suitability, as per a Personal Statement submitted on the online application.

#### **DURATION OF THE PROGRAME**

The Postgraduate Certificate in Mental Health Promotion is a part-time course of one academic year duration. The programme runs from September to the following May.

Core Modules	Semester	ECTS
Concepts, Principles and Practice of Health Promotion (HP6102)	Semester 1	10
Specialism - Mental Health Promotion (HP140)	Semester 2	10
Health Promotion Projects (HP6103)	Semester 2	10

#### CONTINUED PROFESSIONAL DEVELOPMENT

This is a Level 9 programme comprising of 30 European Credit Transfer System (ECTS) points in total. Each module carries 10 ECTS points. Successful graduates who wish to apply to the MA/Postgraduate Diploma in Health Promotion programme, offered by University of Galway, can carry forward up to 20 ECTS.

#### **CAREER OPPORTUNITIES**

This part-time outreach programme is intended for professionals working in different sectors who wish to acquire knowledge and skills related to planning and implementing mental health promotion interventions. The programme will be open to those working in a professional capacity in areas such as mental health, health promotion, public health, primary care, education, community work, nursing, social work, psychology and allied fields. The course will be designed to develop their knowledge, skills and competencies of mental health promotion and its implementation in practice.

### PG CERT IN HEALTH PROMOTION (WORKPLACE WELLNESS)

#### NB: This programme will not run in 2024/25.

#### **PROGRAMME DESCRIPTION**

The *Postgraduate Certificate in Health Promotion in Workplace Wellness* has been jointly developed by University of Galway, the Department of Health, and the Department of Business, Enterprise and Innovation under the Healthy Ireland Framework. The course is suitable for a variety of professions and settings. It is particularly suited to those working in Health Promotion, Human Resources, Management, Public Health, Nursing, Occupational Health and Safety, and the evergrowing corporate wellness industry.

The programme guides students through the stages of effective intervention design, such as needs analysis, planning, implementation, and evaluation. This will be embedded in an understanding of the fundamentals of Health Promotion and framed around real-world experience and examples. Course participants will gain skills and competencies for the effective implementation of evidence-based Health Promotion interventions and project management.

It is a blended learning part-time programme, with a combination of teaching techniques employed to support learning. This includes participatory workshops, project work, and self-paced learning using instructional materials, as well as other academic resources. The programme is delivered through a blend of online and face-to-face contact. Some on-campus attendance is expected from students. Support and guidance is provided to all students in order to optimise utilisation and engagement with online learning platforms.

The workshops take place at the University of Galway campus.

#### WHY STUDY THIS PROGRAMME?

This programme will be of interest if:

- 1. You have an interest in health and wellness in the workplace.
- 2. You would like to update knowledge and skills in your area as part of your job.
- 3. You would like to gain the knowledge and skills to influence behaviour change at the individual and population level.

#### MINIMUM ENTRY REQUIREMENTS

Entry requirement is a primary degree; each applicant is assessed individually on relevant professional experience, level of motivation and suitability as per the personal statement submitted on the online application.

#### **DURATION OF THE PROGRAMME**

This programme is a one-year part-time programme. This is a NQF Level 9 programme comprising of 30 European Credit Transfer System (ECTS) points in total. Each module is worth 10 ECTS points.

Core Modules	Semester	ECTS
Concepts, Principles and	Trimester 3	10
Practice of Health Promotion		
(HP6102)		
Health Promotion Projects	Trimester 3	10
(HP6103)		
Workplace Wellness	Trimester 3	10
(HP6106)		

Successful graduates who wish to apply to the MA/Postgraduate Diploma in Health Promotion programme, offered by University of Galway, can carry forward up to 20 ECTS.

#### **CAREER OPPORTUNITIES**

Workplace wellness is an area that is becoming increasingly prevalent and topical in Ireland at present, as reflected in a national workplace wellness programme, which is being coordinated and lead through the Department of Health under the Healthy Ireland Framework. The Discipline of Health Promotion at University of Galway is contacted by public and private companies who see the importance of upskilling and training their staff in this area to become workplace wellness leaders and managers in their organisations. Students on the course come from a wide range of academic backgrounds and professions including nursing, physiotherapy, HSE management, pharmacy, prison services, CSO, private organisations such as insurance and health and fitness as well as health promotion. Specialists in workplace health and wellbeing will become essential agents of change within organisations globally.

# SPECIALIST CERTIFICATE IN HEALTH PROMOTION (MENTAL HEALTH PROMOTION)

#### **PROGRAMME DESCRIPTION**

The Specialist Certificate in Youth Mental Health Promotion is a Level 7 course delivered by the National Youth Council of Ireland and Jigsaw, in partnership with the University of Galway. This programme is designed for those working with young people, in the youth work and related sectors, and will be of interest to anyone looking to gain knowledge, skills and confidence in the principles and practices of promoting youth mental health.

The programme aim is to provide participants with professional education and training in the principles and practice of youth mental health promotion. It is designed for those working in the youth work and related sectors who wish to develop knowledge, skills and competencies in youth mental health promotion and its implementation in practice.

Course participants will acquire an understanding of the concepts and principles of youth mental health promotion, including the determinants, risk and protective factors for positive youth mental health and wellbeing. Course participants will gain skills and competencies for the effective implementation of youth mental health promotion programmes in the youth work and related sectors, based on principles of evidence-based practice.

#### **Programme Structure**

The programme comprises three modules. The first two modules include participation in workshops and self-paced instructional materials with assignments and independent study, while the third module focuses on project work.

#### 1. Principles and Practice of Health Promotion

This module includes:

- Definitions of health and health promotion
- Health Promotion programme development
- Current issues and discourse in Health Promotion policy and practice
- Communication training and facilitation skills.

#### 2. Specialism module

This module includes:

- Concepts and determinants of youth mental health, mental health equity, frameworks for practice
- Principles of mental health promotion implementation- exploring the socialecological model and a settings-based approach
- Effective youth mental health promotion interventions, evidence-based principles of effective practice
- Implementing youth mental health promotion strategies in youth work.

#### 3. Project Development

Course participants will design a mental health promotion intervention for implementation with young people in the youth work context or a related setting.

#### ENTRY REQUIREMENTS

The Specialist Certificate in Youth Health Promotion is a Level 7 award on the National Framework of Qualifications. Each applicant is assessed individually on relevant professional experience, level of motivation and suitability, as per a Personal Statement submitted on the online application.

#### **DURATION OF THE PROGRAME**

The Specialist Certificate in Youth Mental Health Promotion is a part-time course of one academic year duration. The programme runs from September to the following May.

Core Modules	Semester	ECTS
Principles and Practice of Health	Semester 1	10
Promotion (HP130)		
Specialism in Health Promotion	Semester 2	10
(Youth Mental Health Promotion)		
(HP6107)		
Project for Specialist Certificate	Semester 2	10
(HP131)		

#### CONTINUED PROFESSIONAL DEVELOPMENT

This is a Level 7 programme comprising of 15 European Credit Transfer System (ECTS) points in total. Each module carries 5 ECTS points.

#### **CAREER OPPORTUNITIES**

This part-time outreach programme is intended for professionals who wish to acquire knowledge and skills in implementing youth mental health promotion. The programme will be open to those working with young people, in the youth work and related sectors, and will be of interest to anyone looking to gain knowledge, skills and confidence in the principles and practices of promoting youth mental health.

# SPECIALIST CERTIFICATE IN HEALTH PROMOTION (YOUTH HEALTH)

#### **PROGRAMME DESCRIPTION**

The Specialist Certificate in Health Promotion (Youth Health) has been developed in partnership with the University of Galway and The National Youth Council of Ireland. The course encourages, supports and facilitates youth organisations to become effective settings for health promotion. Graduates of this programme will be equipped to develop the capacity of an organisation to identify and address effectively the health needs of young people, employing a whole organisational approach to health promotion. The course is suitable for a variety of professions and settings.

#### COURSE AIM

The course aims to provide learners with a professional education and training in the principles and practice of health promotion. The programme supports the implementation of the National Quality Standards Framework, as well as promotes the learner to develop of a range of competencies for health promotion. The programme guides students through the stages of effective intervention design, such as needs analysis, planning, implementation, and evaluation. This learning will be embedded in an understanding of the fundamentals of Health Promotion and framed around real-world experience and examples. Course participants will gain skills and competencies for the effective implementation of evidence-based Health Promotion interventions and project management.

#### WHY STUDY THIS PROGRAMME?

This programme will be of interest to individuals who:

- Have an interest in responding to the health needs of young people.
- Wish to develop their understanding of the determinants of health on people's lives.
- Are interested in the significant role of research in the development of knowledge and best practice in health promotion.
- Wish to acquire or further develop the core competencies to practice health promotion.

#### MINIMUM ENTRY REQUIREMENTS

Each applicant is assessed individually on relevant professional experience, level of motivation and suitability as per the personal statement submitted on the online application. Applications are processed and selected by the National Youth Council of Ireland.

#### **DELIVERY & DURATION**

This one-year part-time programme is delivered by the National Youth Council of Ireland in Dublin. It takes place over one academic year, starting in September and finishing in May. It is a blended learning part-time programme, with a combination of teaching techniques employed to support learning. This includes participatory workshops, project work, and self-paced learning using instructional materials, as well as other academic resources. The programme is delivered through a blend of online and face-to-face contact. Some on-campus attendance is expected from students. Support and guidance is provided to all students in order to optimise utilisation and engagement with online learning platforms.

#### PROGRAMME STRUCTURE

The course is delivered via three modules: two that include workshop participation and distance education materials for home study, and one module consisting of project work. Examinations on each module are by continuous assessment throughout the year, with the submission of a final year project also being required.

Core Modules	Semester	ECTS
Principles and Practice of	Trimester 3	5
Health Promotion (HP130)		
Health Promotion Projects	Trimester 3	5
(HP131)		
Youth Health Promotion	Trimester 3	5
(HP132)		

#### ACCREDITATION AND CONTINUED PROFESSIONAL DEVELOPMENT

The Specialist Certificate in Health Promotion (Youth Health) is a National Qualification Framework Level 7 programme. Each module comprises a total of 5 European Credit Transfer System (ECTS) points. Successful graduates who wish to apply for the Postgraduate Diploma in Health Promotion Programme offered by University of Galway can carry forward ECTS.

#### School of Medicine

#### General Regulations

#### GENERAL REGULATIONS FOR THE DEGREES OF MB BCh BAO (NFQ LEVEL 8 REF; <u>Quality and Qualifications Ireland (qqi.ie)</u>)

#### EXPLANATORY NOTES

- 1. The Programme of the Medical School at University of Galway is a highly integrated modular five-year programme, with a requirement for a Foundation Year for some students.
- 2. In the Session 2024.2025 the University will consider applications for up to two places on the ACCESS entry route
- 3. In the Session 2024.2025 the University will consider applications for up to seven places on the HEAR entry route.
- 4. In the Session 2024.2024 the University will consider applications for up to seven places on the DARE entry route.
- 5. All applications are processed through the Central Applications Office (CAO).
- 6. In the Session 2024.2025 the University will consider applications for up to 3 places for Mature entry route)

Medicine Mature - University of Galway

#### REGULATIONS

- I. Entry to the Medical School is limited and is at present based competitively on the results of School-Leaving Examinations and the HPAT aptitude test. Standards as deemed equivalent from time to time are applied to International Students presenting alternative qualifications. Students must also satisfy the Garda Vetting and Pre-Placement Health Assessment requirements.
- II. Students for admission to the First Medical Year must have successfully completed the Foundation Year for Medical School **OR** - subject to attainments at Biology, Chemistry and Physics in Leaving Certificate or its equivalent - students may be deemed to have met the requirements for direct admission to the First Medical Year.
- III. Before Registration as a medical student every applicant must furnish evidence
  - (a) that he/she has passed a recognised Examination in General Education (the Examination in General Education required by the National University of Ireland is Matriculation according to the requirements of the College of Medicine, Nursing and Health Sciences, or an Examination accepted by the University in lieu thereof, normally the Irish Leaving Certificate or its recognised equivalent);

Page 52 of 316

- (b) That he/she has EITHER passed the Foundation Year for Medical School. (To fulfil this requirement, programmes in Biology, Chemistry and Physics are given in the National University of Ireland, Galway, in the Foundation Year for Medical School) OR has satisfied the requirements for direct admission to the First Medical Year.
- IV. Registration is carried out by the University. Students must be registered as Medical Students not later than fifteen days after the commencement of those Programmes for which Certificates of attendance will be required of them (First Medical Programmes).
- V. To obtain the degrees of MB BCh BAO Medical Students must pursue programmes of Study extending over a period of not less than five Academic Years and must pass the various Examinations prescribed in the Regulations.
- VI.

#### The Examinations are as follows:

- (1) The Foundation Year in Medicine
  - (Where the student is commencing their medical studies in this year)
- (2) The First University Examination in Medicine.
- (3) The Second University Examinations in Medicine.
- (4) The Third University Examination in Medicine.
- (5) The Fourth University Examination in Medicine.
- (6) The MB BCh BAO Degree Examinations.

#### **Completion Rule:**

- (1) One repeat year is permitted from 0MB to 2MB
- (2) One repeat year is permitted from 3MB to 5MB
- (3) Health related concerns may be exempt and will be reviewed on a case-bycase basis.
- VI. For the student who commences their medical studies in the Foundation Year this Examination must be passed before a student can proceed to the First Year Medical Programme.

However:

(a) Students are permitted a maximum of 4 years to complete 0MB to 2MB i.e., are permitted ONE repeat year during this stage.

(b)The Foundation year examination will comprise of examinations on Semester 1 modules in the Winter Examination Session and examinations on the Semester 2 modules in the Summer Examination Period. Repeat examinations, for both Semester 1 and Semester 2 modules, if necessary, will be held during the Autumn Examination Sessions.

(c) It is not possible to compensate marks from one module to another for the purpose of passing failed modules by compensation in the Foundation Year Examination.

(d) Students that fail 0MB twice will be asked to exit the program.

VII. **The First University Examination** in Medicine must be passed before a student can proceed to the Second Year Medical Programme.-However:

(a) Students are permitted a maximum of 4 years to complete 0MB to 2MB i.e., are permitted ONE repeat year during this stage.

(b) The First Medical University Examination will consist of the examination of the learning from each of the introductory modules, systems-based and Medical professionalism modules in the programme.

(c) The First University examination will comprise of examinations on Semester 1 modules in the Winter Examination Session and examinations on the Semester 2 modules in the Summer Examination Session. Repeat examinations, for both Semester 1 and Semester 2 modules, if necessary, will be held during the Autumn Examination Sessions.(d) It is not possible to compensate marks from one module to another for the purpose of passing failed modules by compensation in the First Medical University Examination.(e) Students that fail 1MB twice will be asked to exit the program.

VIII. **The Second University Examination** in Medicine must be passed before a student can proceed to the Third Year Medical Programme. However:

(a) Students are permitted a maximum of 4 years to complete 0MB to 2MB i.e., are permitted ONE repeat year during this stage.

(b) The Second Medical University Examination will consist of the examination of the learning from each of the systems-based and Medical professionalism modules in the programme.

(c) The Second University Examination will comprise examinations on Semester 1 modules in the Winter Examination Session and examinations on the Semester 2 modules in the Summer Examination Session. Repeat examinations, for both Semester 1 and Semester 2 modules, if necessary, will be held during the Autumn Examination Sessions.

(d) It is not possible to compensate marks from one module to another for the purpose of passing failed modules by compensation in the Second Medical University Examination.(e) Students that fail 2MB twice will be asked to exit the program.

IX. **The Third Medical University Examinations** must be passed before a student can proceed to the Fourth Medical Year.

(a) Students need to complete 3MB prior to entry to 4MB.

(b) Carry forward of failed modules is <u>NOT</u> permitted from 3MB to 4MB.

(c) Students are permitted ONE additional repeat year from 3MB to 5MB, complete the

3 years in a maximum of 4 years.

(d) Students that fail 3MB twice will be asked to exit the program.

- X. **The Fourth Medical University Examinations** must be passed before a student can proceed to the Final Medical Year.
  - (a) Students need to complete 4MB prior to entry to 5MB.
  - (b) Carry forward of failed modules is NOT permitted from 4MB to 5MB.

(c) Students are permitted ONE additional repeat year from 3MB to 5MB, complete the 3 years in a maximum of 4 years.

- (d) Students that fail 4MB twice will be asked to exit the program.
- XI. **The Final Medical University Examinations** must be passed within **seven** years of entry or of passing the Foundation Medical Examination.

(a) Students are permitted ONE additional repeat year from 3MB to 5MB, complete the 3 years in a maximum of 4 years.

(b) Students that fail 5MB twice will be asked to exit the program.

# XII. The Award of the MB BCh BAO Degree will require successful completion of all years of the Medical Undergraduate Programme as set out in Rules VI, to XI (inclusive) above.

**Note**: The operation of these regulations will invoke a time-limit on completing the programme - a student who fails a year-of-programme for the **second time** may not continue and must withdraw from the Medical Programme. Similarly, a student who fails to complete two separate years-of-programme within the academic years allowed for each may not continue and must withdraw from the Medical Programme.

(a) The calculation of the overall degree results awarded, including the calculation of Honours (if any), will be based on the proportion of the overall marks attained across the final two years of the programme as follows:

- i. The degree result is calculated on the final two (2) years of the programme; based on 50% of the result attained in the Fourth Medical Examination and 50% of the result attained in the Final Medical Examination.
- ii. Repeat Examinations or re-sits. Examinations of all modules deferred in the corresponding regular session (Christmas and/or May) can be retaken in the August session. The marks attained at a deferred examination will not be capped. Marks will be fully as attained on merit, including honours, if any, in the repeat/re- sit examination. Capping of marks will apply to all years excluding 0MB3 and 1MB3. Repeating the year-of-programme is required from any student whose attendance is considered to have been unsatisfactory, or who has failed individual modules of the programme at the second (autumn repeat) sitting.

- iii. Satisfactory attendance is generally regarded as attendance and participation in not less than 80% of the compulsory components of the programme. All such components are appropriately notified in the course information material provided to students. Attendance at not less than 80% of these components is a pre-requisite for taking the assessments and examinations of the relevant semester and /or year-of- programme. Students deemed to have unsatisfactory attendance will be excluded from the examinations of that programme component, or of the module(s) in which these components occur, and in the event that examinations are taken, any results will be rendered null. The provisions of this requirement may only be varied by the approval of the Student Affairs Committee and agreed by the Head of the Medical School where exceptional circumstances beyond the control of the student are clearly demonstrated to their satisfaction.
- XIII. A student who does not successfully pass any year of the Medical programme within the provisions set out in Rules VI to XI and Rule XII above, is required to register for the repeat year and, to re-attend as set out above, and complete all continuous assessments, other coursework and examinations in each failed module. This requirement may be varied in exceptional circumstances on the recommendation of the Student Affairs Committee and agreed by the Head of the Medical School.
- XIV. Special Provisions may be applied in individual cases at the discretion of the Medical School as follows:
  - (a) **Exemptions** from modules on the basis of previous academic achievement are not allowed.

Deferral of examinations is considered only in certain circumstances such as bereavement, personal or medical circumstances, which can be professionally or independently verified. Requests should be discussed with the appropriate Module Lead or to the Year Head in the first instance, applications are made by the student centrally <u>Exams/timetable-advice/deferrals/</u> and ratified at the Student Affairs Committee. Deferral normally applies only between the period of the scheduled first sitting and the first opportunity for a re-sit – normally the autumn. Deferral extending into the following academic year falls within the terms of Leave of Absence described below. In foreseen circumstances (e.g. pregnancy) requests should be made at least 3 months in advance. Deferring the first sitting of examinations will not incur any mark penalties. Students who defer will sit examinations in the autumn and this will be deemed to be their first sitting and will fall outside also of the general time-limit referred in Par. XII above.

(b) **Leave of Absence** involving the withdrawal of the student from their studies for a period of time and consequently the loss of opportunity to sit examinations also is considered on similar grounds as the *deferral of examinations* set out in the paragraph above. Students applying for a Leave of Absence should apply through the University on the following link: Leave of Absence - University of Galway

Where leave extends for a significant period, there is a limit on the period for which results of examinations successfully passed may be retained. In any year-of-programme which remains incomplete at the time that leave commences, the results in any such modules are valid for a maximum period of 2 years (Students should refer also the time-limit noted in Par. XII above). Students requesting a leave of absence between years, must have successfully passed the most recent year of program.

**Compensation:** It is not possible to compensate marks from one module to another for the purpose of passing failed modules by compensation. This includes all core or mandatory prescribed modules or groups of modules, or between sub-components of Modules.

XV. Medical Graduates, in addition to holding the Degrees of MB BCh BAO must be registered as Medical Practitioners in the appropriate Medical Register. All graduates who wish to practice must register provisionally with the Irish Medical Council. Graduates who wish to practice in Ireland (excluding Northern Ireland) must, after completing one year's internship in an approved hospital, be fully registered with the Irish Medical Council. Those who wish to practice in Great Britain and Northern Ireland must be fully registered with the General Medical Council. Graduates may, if they so wish, be fully registered in both Registers. The attention of Medical Graduates is directed to the following Extract from Medical Practitioners' Act, 1978: "A Certificate of Experience shall not be granted to any person unless, after he had been awarded a primary qualification, that person had been engaged in employment in a residential medical capacity in one or more hospitals approved by the Council for this purpose and had been so engaged for such period or periods as may be determined by the Council." In accordance with Regulation of Medical Council the period for which a person shall have been engaged as an Intern shall be a period of 12 months.

Sources from which information may be obtained:

- Registrar, Medical Council, Portobello Court, Lower Rathmines Road, Dublin 6.
- Registrar, General Medical Council, 44, Hallam St., London WIN 6AE.
- Royal College of Physicians of Ireland and Royal College of Surgeons in Ireland (L.R.C.P. and S.I.)
- The Secretary, Royal College of Surgeons, St. Stephen's Green, Dublin 2. Royal College of Physicians of London, 11 St. Andrew's Place, Regent's Park, London.
- Royal College of Surgeons of England, 35-43 Lincoln's Inn Field, London.
- Royal College of Physicians and Surgeons of Edinburgh.
- Royal Faculty of Physicians and Surgeons of Glasgow.

#### Degrees of MB BCh BAO

**Refer to General regulations for the Degrees of MB BCh BAO NFQ Level 8 Ref;** <u>Quality and Qualifications Ireland (qqi.ie)</u>

The following Section provides an outline of the individual years-of-programme of the medical degree programme and the rules which are applied. The curricular detail is provided in the further section entitled [SYLLABUS OF PROGRAMMES OF INSTRUCTION FOR THE DEGREES OF MB BCh BAO] **PROGRAMME LEVEL OUTCOMES FOR THE UNDERGRADUATE MEDICAL DEGREE** (MB, BCh, BAO).

#### Programme aims

The programme aims to provide students with an integrated, holistic, studentcentred medical curriculum based on the principles of adult learning and emphasising professionalism and life-long learning skills; to comply with the statutory requirements laid down by the Irish Medical Council, the Medical Practitioners' Act and the European Commission and in accordance with other international licensing and registering bodies.

#### **Outcomes/Competences:**

#### On completion of the programme, the medical graduate will be able to<sup>1</sup>:

1. Diagnose, explain and manage health problems using the current scientific principles, knowledge and understanding that underpin medicine whilst demonstrating a sound knowledge of the biological, social and psychological basis of health and disease

(Medical Expert, Scholar)

2. Communicate effectively and compassionately with patients, carers, colleagues and society in all relevant media necessary to provide high quality, scientific and multidisciplinary patient care

(Communicator, Collaborator)

3. Perform a range of clinical skills and procedures safely, reliably, unsupervised and to the standard of a pre-registrations doctor

(*Medical Expert*), Identify, evaluate and apply evidence to their practice of medicine while demonstrating an understanding of how such knowledge is created, shaped, appraised and shared (*Medical Expert, Scholar*)

4. Apply their knowledge of the ethical, regulatory and legal framework within which they operate to their practice of medicine while recognising the roles and contributions of other healthcare professionals to the provision of high quality, holistic care

(Professional, Collaborator)

- 5. Provide the highest levels of ethical, rational and humane care to all patients they encounter while managing effectively the resources available to them (*Professional, Manager*)
- 6. Apply effectively knowledge of principles of health promotion and disease prevention at individual and population level to their practice medicine (*Medical Expert, Health Advocate*).
- 7. Manage their own professional development and demonstrate an ability to contribute effectively to the teaching of others (*Professional, Scholar*).

#### MB. BCh. B.A.O Degree

#### BACHELOR OF MEDICINE (MB) OF SURGERY (BCH) AND OF OBSTETRICS (BAO)

#### **PROGRAMME OVERVIEW**

Medicine (Surgery and Obstetrics) - University of Galway

FOUNDATION YEAR (UMB)	
Semester 1	Semester 2
BO101 Biology (15)	
CH120 Chemistry (15)	
PH101 Physics (15)	
MD103 Introduction to Medicine (15)	

Modules (and ECTS weightings) for Foundation Year are as listed above with lectures and practical being provided over two semesters. Students will be assessed on completion of their relevant module i.e. during the Summer Examination Session, with the exception of the Early Patient Contact component of MD103 which will be examined at the end of Semester I. Students required to take the Foundation Year cannot be registered for the five years Integrated Medical Programme until they have passed the Foundation Year Medical Examination. See section above for General Regulations regarding examinations. See School of Medicine Undergraduate Medical Programme Curriculum Document for assessment details for each module. Further information and guidance is available on Canvas.

#### FIRST MEDICAL YEAR (1MB)

Semester 1	Semester 2
MD137 Principles of	MD121 Cardiovascular System (5)
Physiology (10)	MD122 Respiratory System (5)
MD138 Biomolecules, Metabolism and Energy (5)	MD124 Gastro Intestinal System (5)
MD1101 Basics of Body	MD123 Renal System (5)
Structure/ Musculoskeletal System (10)	MD140 Metabolism, Nutrition and Health (5)

MD139 Medical Professionalism 1 (10)

Modules (and ECTS weightings) for Year 1 are as listed above. Semester1 modules provide discipline specific introductory material relating to Anatomy, Physiology, and Biochemistry. Semester 2 modules are devoted to integrated systems-based modules. Medical professionalism is taught throughout the year. Students are examined on completion of each module, at the end of the relevant semester. Continuous assessment is also provided for. See section above for **General Regulations** regarding examinations. See School of Medicine Undergraduate Medical Programme **Curriculum Document** for assessment details for each module. Further information and guidance available on **Canvas**.

Semester 1	Semester 2
MD224 Central Nervous System (10)	MD201 Health and Disease 2
MD214 Introduction to Pharmacology (5)	(15)
MD210 Genes, Gametes and Embryos (5)	MD204 Drugs and Disease (5)
MD206 Molecular Medicine (5)	MD209 Multi Organ Failure (5)
MD202 Medical Professionalism 2 (10)	

#### SECOND MEDICAL YEAR (2MB)

See section above for **General Regulations** regarding examinations. See School of Medicine Undergraduate Medical Programme **Curriculum Document** for assessment details for each module. Further information and guidance available on Canvas.

#### THIRD MEDICAL YEAR (3MB)

Semester 1	Clinical Phase Semester 2	
MD302 Health & Disease II (15)	MD 313 Foundations of Clinical Management (10)	
MD304 Global Health and Development (5)		
MD3110 Foundations in Clinical Skills and Diagnosis (15)		
MD3111 Foundations in Clinical Knowledge (15)		

Modules (and ECTS weightings) for Year 3 are as listed above. The teaching programme for the  $2^{nd}$  Semester (3.2) is delivered over 18 weeks at Galway University Hospital and at the affiliated Academies in Castlebar, Sligo, Letterkenny and Portiuncula Hospital, Ballinasloe. The 3.2 programme is organised into three clinical immersion blocks five weeks each as follows:

Surgical Block
Critical Care Block
Medicine Block

See section above for **General Regulations** regarding examinations. See School of Medicine Undergraduate Medical Programme **Curriculum Document** for assessment details for each module. Further information and guidance available on **Canvas.** 

#### FOURTH MEDICAL YEAR (4MB)

Semester 1	Semester 2
MD4100 General Practice incorporating Otorhinolaryngology (10)	
MD4101 Obstetrics & Gynaecology (10)	
MD 4102 Paediatric Medicine (10)	
MD 4103 Psychiatry (10)	
MD4104 Advanced Clinical Skills and Professional Development (20)	

#### **Programme Structure and Delivery Approach**

The Year 4 programme consists of modules as listed above. These modules will be delivered by the disciplines of Obstetrics & Gynaecology, Paediatrics, Psychiatry, General Practice, and Oto-rhino-laryngology. The Advanced Clinical Skills and Professional Development Module is a core component. Other aspects of professionalism training including clinical methods, ethics, and understanding health & illness will be threaded throughout the specialist modules and delivered by the respective specialist disciplines. All modules will be delivered in both Semester 1 and Semester 2. Teaching methods will include lectures, small group teaching, case studies, clinical, procedural skill workshops, simulation and clinical attachments at UHG and at medical academies. A proportion of the students will complete all of semester 1 in either the Sligo, Letterkenny, Castlebar, or Ballinasloe Medical Academy, and another proportion of the class will complete all of semester 2 in one of the academies.

See section above for **General Regulations** regarding examinations. See School of Medicine Undergraduate Medical Programme **Curriculum Document** for assessment details for each module. Further information and guidance is available on **Canvas.** 

#### FIFTH MEDICAL YEAR /FINAL YEAR (5MB)

Semester 1	Semester 2	
MD542 Advanced Clinical Theory (20)		
MD540 Advanced Clinical Diagnosis (20)		
MD541 Advanced Clinical Management	(20)	

The teaching in Year 5 comprises three modules as listed above. These are delivered in an integrated design with input from medicine, surgery, anaesthesia and radiology, and will cover essential topics in nine clinical disciplines. These modules aim to enhance the students' knowledge of and professional skills and behaviours in clinical practice and builds on the Year 3 modules: Foundations of Clinical Theory, Foundations of Clinical Diagnosis, and Foundations of Clinical Management incorporating the teaching of Professionalism seamlessly within the following strands. Year 5 Strands (core & specialty)

- 1. Cardiovascular studies
- 2. Gastrointestinal medicine & surgery
- 3. Respiratory, Preoperative & Critical Care Medicine
- 4. General medicine and Surgery
- 5. Cancer and Imaging studies
- 6. Musculoskeletal studies
- 7. Renal-Urology
- 8. Dermatology, Plastics
- 9. Neurology and Ophthalmology

In semester one, students experience clinical immersion blocks of 4 weeks each in Medicine, Surgery and Acute & Critical Care, with lecture and workshop weeks interspersed. The overall aim is to equip the final medical student with the necessary skills to the standard of a pre-registration medical doctor in the areas of knowledge, application and interpretation, clinical and diagnostic skills, communication skills, professional behaviour, scholarly traits in accordance with the Medical Council guidelines for undergraduate medical training.

In semester 2, students complete three Junior Internships (JI's). Junior internships immerse the student in a clinical learning environment as part of a clinical team, in preparation for Internship. The JI allows the student to observe & carry out clinical skills & develop professional attributes that are important for the delivery of safe & effective patient care.

Students also complete a Preparedness for Clinical Practice (PCP) module in semester 2. This is a 3-week interactive programme delivered by a multidisciplinary team. It is a combination of high-fidelity simulation sessions (incorporating acutely unwell patients & transitions of care), medical ethics, prescribing workshops and procedural skills.

See section above for **General Regulations** regarding examinations. See School of Medicine Undergraduate Medical Programme **Curriculum Document** for assessment details for each module. Further information and guidance is available on **Canvas.** 

#### STUDENT ASSESSMENT ON THE UNDERGRADUATE MEDICAL PROGRAMME

A wide variety of assessment strategies are employed at successive stages throughout the programme. Using a range and diversity of techniques, assessment is matched to the learning outcomes for each module (which are detailed below). Assessment is designed to assess students' theoretical knowledge, clinical skills and professional behaviour, to ensure they meet the necessary competencies for professional practice as a doctor. Assessment techniques include written examination, practical, projects, case studies, and clinical examinations. Assessment is carried both during and at end of modules. Formative assessment is also used to support learning process.

See;

- Section above for General Regulations regarding examinations.
- School of Medicine Undergraduate Medical Programme Curriculum Document for details of assessment for each module.
- Relevant Canvas sites for further details and guidance.

Syllabus of Programmes of Instruction for the Degrees of MB BcH BAO

#### MODULE DESCRIPTIONS

Title, code, credit weighting (ECTs), description and learning outcomes

FOUNDATION YEAR (OMB) MODULES		
Semester 1	Semester 2	
BO101 Biology (15)		
CH120 Chemistry (15)		
PH101 Physics (15)		
MD103 Introduction to Medicine (15)		
CH 120 CHEMISTRY: MOLECULAR SCIENCE (15 ECTS)		

This module provides a broad and targeted introduction to Chemistry for students who require a full two semester foundation course, who are pursuing medicine related courses and who will not be continuing with Chemistry in higher years. The module assumes no prior knowledge of Chemistry, though a significant proportion of those taking it (perhaps 50%) will have a level 5 qualification in Chemistry. The course addresses the particular needs of these students through the use of examples and applications related to biology and medicine. The course is based on the concept that an appreciation of how materials (including biomaterials) behave and function on the macroscopic level requires an understanding of their molecular basis. The course is designed to provide an introduction to the molecular world in terms of its structures and the factors that affect how these structures behave. This approach is reflected in both the lecture and the laboratory components of the course.

#### Learning Outcomes:

#### On successful completion of the module, you will be able to:

- 1 Recognize the molecular basis of biological and medicine related processes and phenomena.
- 2 Explain the macroscopic behaviour of matter in terms of molecular scale forces and effects.
- 3 Recognize the link between chemical changes and environmentally important effects such as global warming and ozone layer depletion.
- 4 Carry out calculations relating to the material balance in chemical processes.
- 5 Recognize the factors that control the rates of chemical processes and of the importance of chemical and enzymic catalysis.
- 6 Carry out basic thermodynamic calculations relating to enthalpy, entropy and free energy in chemical and biochemical processes.
- 7 Recognize how basic chemical principles control the behaviour of biological molecules.
- 8 Recognize the importance of chemical principles in relation to medicine related issues: magnetic resonance imaging, mechanism of action of pharmaceuticals such as aspirin at a molecular level.
- 9 Recognize the chemical basis of many biomedical processes.
- 10 Recognise the importance of carbon-based molecules and their importance in terms of the petrochemical, chemical and pharmaceutical industries.
- 11 Apply the scientific method in terms of problem-solving Laboratory.
- 12 Carry out basic qualitative analyses in the laboratory relating to aqueous solutions of the most important anions and cations, and to organic molecules.
- 13 Use appropriate laboratory techniques and equipment to synthesise, separate and purify chemical compounds.
- 14 Use titrimetry and physicochemical techniques for quantitative analysis and in the determination physicochemical properties.
- 15 Implement safe work practices in a chemistry laboratory, to include an awareness of common hazards and appropriate safety precautions.
- 16 Carry out practical experiments in the laboratory, analyse the results and write technical reports on same.

#### PH 101 PHYSICS (15 ECTS)

This module lays a broad foundation in physics, both for students who will continue to study physics in subsequent years of their degree programme and for those who will instead continue to study other subjects. No prior knowledge of physics is assumed, though a significant minority of students (perhaps 33%) will have a Leaving Certificate qualification in physics. The level of mathematics required is simple algebra and trigonometry.

The general aim of this module is to equip the learner with knowledge of the basic rules of nature that physical systems follow. The student will learn how to express these rules in simple mathematical form and to apply these rules to solve problems. They will also learn how to make measurements in the physics laboratory which can test the rules. They will acquire transferable skills in measurement, numeracy and analysis which will be useful across a broad range of scientific and medical disciplines.

#### Learning Outcomes:

On successful completion of the module, you will be able to;

- 1 Understand and explain basic physical principles related to topics such as motion, forces, energy, heat, waves, electricity, light, atoms and radiation.
- 2 Identify basic physical principles governing the behaviour of simple systems.
- 3 Describe physical processes using simple equations and solve numerical problems.
- 4 Make measurements in the physics laboratory.
- 5 Record and analyse experimental data and draw conclusions based on these data.

#### **BO101 BIOLOGY (15 ECTS)**

Biology is an integrative and interdisciplinary field that aims to investigate the dynamic and complex nature of living systems in terms of their molecular components and the interactions between organisms and their biotic and abiotic environment. This module will introduce students to fundamental concepts of biology. The course is intended to provide the necessary biological background to allow learners in general and specialised Science courses, Foundation Medicine and Biomedical Engineering to progress into more specialised topics in later years. First, the nature of biomolecules and the basis for cellular form and function are discussed. Then students are introduced to the structure, function, diversity and impact of plants, animals and microorganisms. This module aims to provide learners with a basic knowledge of the structure and function of biomolecules and cells. The module also seeks to provide learners with an understanding of the evolutionary process and the range of interactions between organisms and their environment. Finally, the module seeks to enable learners to gain an appreciation of major human impacts on the biosphere and the role of biological sciences in societal development.

#### Learning Outcomes:

#### On successful completion of the module, you will be able to:

- 1 Explain the structure and function of biomolecules
- 2 Describe the form and function of cells
- 3 Discuss organism diversity and evolutionary mechanisms
- 4 Relate basic principles of organismal interactions
- 5 Critically evaluate major human impacts on the environment
- 6 Understand the role of biological sciences in societal development

#### MD103 INTRODUCTION TO MEDICINE (15 ECTs)

The module consists of two components: Early Patient Contact and Contemporary Topics in Medicine. The module has been designed to maximise students' exposure to real patients and to clinical practice at an early stage in your professional development.

Contemporary Topics in Medicine component: Section 1 of this course will start with an introduction to Human Form, Function and Composition: Introductory lectures in Anatomical terminology, Physiology and Medically relevant Biochemistry. It will also include an Introduction to Medical Imaging. The next section will examine aspects of Biomechanics and how understanding interactions with the physical environment aid in our understanding of various injuries to the musculoskeletal system. Section will allow a downward vertical integration of some of the clinical disciplines by providing an introduction to the Clinical Disciplines including, Surgery, Medicine, Anaesthesiology, General Practice, Psychiatry and Introduction to the Allied Health Sciences (Nursing/Occupational Therapy/SLT). The final section of the course consists of Contemporary Topics in Medical Research including Gene and Stem Cell therapy, Aging, Antibiotic Resistance, Tissue Engineering, Cellular Imaging and Cancer. This will provide the student with some basic terminology and exposure to the multifaceted nature of modern medicine.

#### Learning Outcomes:

#### On successful completion of the module, you will be able to:

#### Early Patient Contact

- 1 Demonstrate an approach to interaction with simulated patients commensurate with recognised professional standards of medical etiquette.
- 2 Demonstrate an ability to take a basic history from a simulated patient and to reflect on the information obtained.
- 3 Demonstrate an ability to work as part of a group in searching, appraising and synthesising information related to an assigned clinical topic.
- 4 Demonstrate an ability to present a case history and a PowerPoint presentation on an assigned topic.
- 5 Have a basic understanding of the structure and operation of the Irish health service.
- 6 Show an understanding of the roles of different members of a multidisciplinary healthcare team.
- 7 Demonstrate a basic understanding of the global impact of infectious disease and the burden of imported tropical diseases in Ireland.
- 8 Discuss ways in which healthcare professionals can promote health and prevent disease.
- 9 Demonstrate ability to record and interpret a patient's vital signs.
- 10 Demonstrate an awareness of the importance of observation in making bedside diagnoses in clinical medicine.
- 11 Demonstrate an ability to practice handwashing to a standard that complies with hospital infection control policies.
- 12 Demonstrate an ability to assess a patient's pulse and respiratory rate and to measure a patient's blood pressure using a sphygmomanometer.

#### **Contemporary Topics in Medicine**

- 13 Demonstrate awareness of basic Anatomical/Physiological and Biochemical Terminology.
- 14 Have a basic understanding of Human Biomechanics in relation to Connective Tissues including Bone and Cartilage.
- 15 Demonstrate an awareness of the pivotal role of the Physical sciences in Medical imaging.
- 16 Demonstrate a basic understanding of the Importance of the Basic sciences in modern therapeutic approaches and challenges.

#### First Medical Year (1MB) Modules

SEMESTER 1	SEMESTER 2
MD137 Principles of Physiology	MD121 Cardiovascular
(10)	System (5)
	MD122 Respiratory
	System (5)
MD138 Biomolecules, Metabolism	MD124 Gastro Intestinal
and Energy (5)	System (5)
MD1101 Basics of Body Structure/	MD123 Renal System (5)
Musculoskeletal System (10)	MD140 Metabolism,
	Nutrition and Health (5)
MD139 Medical Professionalism 1 (10)	

#### MD137 PRINCIPLES OF PHYSIOLOGY (10ECTS) \*

This module is an introduction to fundamental principles of physiology covering aspects of maintenance of cellular homeostasis, cell communication, the blood system and the immune system. At the end of this module the student should know and understand.

#### Learning Outcomes:

#### On successful completion of the module, you will be able to:

- 1 Understand basic design of the organ systems of the body.
- 2 Display an understanding of the fluid compartments of the body, composition, properties and clinical significance.
- 3 Understand the mechanisms whereby substances are transported in and out of cells and its relevance to absorption in the gut and the kidney.
- 4 Understand the fundamentals of body pH regulation and its clinical significance.
- 5 Demonstrate detailed knowledge of the role of second messengers in various cellular responses.
- 6 Understand the endocrine system and hormonal regulation.
- 7 Understand blood composition and function including both cells and plasma; this should include formation of blood cells, haemoglobin, blood groups, blood clotting, blood indices and blood disorders
- 8 Understand the fundamentals of immunity, including structure and function of the white blood cells and both cellular and humoral immunity.
- 9 Describe physiological basis of nerve and muscle activity.
- 10 Understand how nerve impulses are generated and propagated, including the role of ion channels and the physiology of a typical chemical synapse.
- 11 Give some key examples to illustrate the chemical diversity of neurotransmitter molecules.
- 12 Understand the structure and function of skeletal, smooth & cardiac muscle, how these muscle types contract and the role of calcium.
- 13 Describe skeletal muscle fibre types, metabolism, and contractile parameters.
- 14 Have knowledge of muscle fatigue, adaptation to physiological stress /work.
- 15 Understand how the autonomic nervous system works in regulating cellular and organ function.

#### MD138 BIOMOLECULES, METABOLISM AND ENERGY (5ECTS)

This module introduces students to the basic biochemical definitions, concepts and mechanisms that relate to biomolecules, metabolism and energy and that are important in normal cell and tissue functioning. Through study of clinical correlations, the module also highlights how defects in these cellular biochemical processes can lead to human disease. In addition, the students will practice basic biochemistry methods and work collaboratively during laboratory practical sessions.

#### Learning Outcomes:

#### On successful completion of the module, you will be able to:

- 1. Understand and describe key biochemical concepts relating to the fundamental features and functions of biomolecules, metabolism and energy.
- 2. Describe the structure and explain the function of the four major types of biomolecules (proteins, nucleic acids, lipids and carbohydrates).
- 3. Explain the roles and functions of proteins.
- 4. Describe the role of key metabolic pathways and their controls and demonstrate an integrated understanding of their functions disease and its specific symptoms.
- 5. Illustrate with specific examples how interference with or defects in biochemical pathways leads to disease and its specific symptoms.
- 6. Understand some basics of laboratory tests used in biochemistry and the concepts involved in writing laboratory report and analyzing results obtained.

#### MD1101 Basics of body structure/musculoskeletal system (10 ECTs)

The module is aimed at giving a general introduction on the body structure and a more detailed knowledge of the individual components of the Musculoskeletal system

#### **Learning Outcomes:**

#### On successful completion of the module, you will be able to:

- 1. Have command of the medical/anatomical terminology.
- 2. Have an overview of the general body structure including body compartments and the layers of the body.
- 3. Have a clear understanding on the general structure of the Musculo-skeletal, cardiovascular, and peripheral nervous systems.
- 4. Have detailed knowledge on the skeletal system.
- 5. Have detailed knowledge of the functional anatomy of the individual muscles of the body, including their innervation and vascular supply.
- 6. have clear understanding of the localisation and topography of the major muscles, blood vessels and nerves of the limbs.
- Have clear understanding of the localization and topography of the blood vessels and nerves of the limbs and of the clinical significance of their anatomical relations

#### MD139 MEDICAL PROFESSIONALISM (10 ECTS)

The aim of this module is to instil professional behaviour in students from the start of their medical career. Students will develop structured, evidence-based communication skills and learn the basics of near patient testing and the fundamentals of basic patient assessment through workshop and skills practice. Students will learn to analyse the ethical, legal and psychosocial dimensions of clinical practice and will develop an understanding of statistical analysis and evidence-based medicine.

#### Learning Outcomes:

#### On successful completion of the module, you will be able to:

- Е
- 1. Demonstrate understanding of the doctor-patient relationship and explain the role of communication skills in the doctor patient relationship.
- 2. Define verbal and non-verbal communication and its role in patient centered communication skills.
- 3. Explain the importance of rapport and active listening in the consultation and identify behaviors which illustrate this.
- 4. Understand and demonstrate use of the Calgary-Cambridge model of consultation.
- 5. Demonstrate an ability to measure, record and interpret components of the Early Warning System (EWS) and Biometric data including BMI.
- 6. Demonstrate an ability to perform and interpret core clinical skills such as urinalysis, capillary blood glucose, capillary ketone.
- 7. Develop an awareness of self as a medical student in training, recognizing one's own development, challenges in training and responding mindfully.

#### MD121 CARDIOVASCULAR SYSTEM (5ECTS)

This module covers the anatomy, physiology and biochemistry of the cardiovascular system with clinical applications in an integrated fashion. The anatomy of the heart and blood vessel distribution is covered, as is the microscopic anatomy of the blood vessels. The genesis of the electrical activity of the heart and the formation of the electrocardiogram is described as is the function of the heart as a pump. The control of arterial blood pressure is described as is the control of the various regional circulations. This module will incorporate a clinical seminar session at the end of the module (one day's duration). It is also envisaged that some clinical lectures will be interspersed throughout the module.

#### Learning Outcomes:

#### On successful completion of the module, you will be able to:

- 1 Know and be able to demonstrate the position and function of the heart valves the positions for auscultation of the valves and the positions for placing the chest leads for the ECG.
- 2 Know the Anatomy of the heart and of anatomically and functionally related structures, including why the coronary arteries are important to the functional microanatomy of the heart.
- 3 Know the general plan of distribution of arteries, veins, lymphatics.
- 4 Know about cardiac cell action potentials and how they give rise to the rhythmical excitation of the heart.
- 5 Know how the spread of cardiac action potentials throughout the heart gives rise to the electrocardiogram (ECG).
- 6 Know the clinical significance of the ECG.
- 7 Know the cardiac cycle and the working of the heart as pump.
- 8 Know the function and roles of the different parts of the systemic circulation (arteries, arterioles, capillaries and veins).
- 9 Know arterial blood pressure, its clinical significance, how to measure it and its mechanisms of control and the targets for drug intervention.
- 10 Know the control of the various regional circulations.
- 11 Discuss the anatomy and pathophysiology related to cardiovascular disease.

#### MD122 RESPIRATORY SYSTEM (5 ECTs)

This module integrates the structure and function of the respiratory system with clinical applications. The anatomy of the respiratory system and associated structures is covered including the structure of the nose, larynx and upper airway, anterior thoracic wall and the diaphragm. The microscopic structure of all parts of the airway is included. There is brief coverage of the embryonic development of the respiratory system and associated structures. The ventilation of the lungs with air, diffusion of gases in the lungs, the perfusion of the lungs with blood, and gas exchange in the lungs are then described. Gas transport in the blood and gas exchange in the tissues are covered. The regulation of respiratory system. It is also envisaged that some clinical lectures will be interspersed throughout the module. Practicals are given which explore and reinforce the material covered in lectures.

#### Learning Outcomes

- 1 Explain the general plan of the functional anatomy of the respiratory system.
- 2 Be able to demonstrate the positions of the pleurae and lungs and their relations during normal and strenuous breathing and of structures anatomically and functionally related to them.
- 3 Describe the anatomy of the intercostal spaces and the diaphragm and the functional anatomy of ventilation.
- 4 Understand the principles underlying an examination of the lungs including the interpretation of routine radiographs and MRI scans.
- 5 Explain the role of the respiratory system in the control of blood gases and pH, including how normal levels are maintained and the causes and consequences of disturbances.
- 6 Describe the microscopic structure of the airways and lungs and understand how structure and function are interrelated.
- 7 Describe the development of the trachea, lungs and pleura and know the most common developmental anomalies.
- 8 Outline the factors that govern alveolar ventilation in health and disease.
- 9 Understand the peripheral and central mechanisms involved in controlling respiration.
- 10 Discuss the anatomy and pathophysiology related to respiratory disease.

#### MD124 GASTRO-INTESTINAL SYSTEM (5 ECTS)

This module covers the structure and function of the gastrointestinal system and some clinical applications of this knowledge. The Gross Anatomy of the GIT is covered along with aspects of embryology and histology. Aspects of GIT motility, digestion and absorption of nutrients and their control are considered along with the clinical importance of enzymes and GIT secretions. The role of the accessory organs of digestion is described. GIT reflexes such as vomiting, and defecation are covered. Clinical lectures may be presented from time to time.

#### **Learning Outcomes:**

#### On successful completion of the module, you will be able to:

- 1 Know and be able to demonstrate the surface projections of clinically relevant components of the GIT.
- 2 Know the macro and micro anatomy of the main elements of the GIT.
- 3 Have an understanding of the importance of sphincteric competence in the GIT.
- 4 Understand the four key functions of the GIT.
- 5 Understand how these functions are regulated.
- 6 Understand the biochemical mechanisms by which proteins, carbohydrates and fats are digested and absorbed by the GIT.
- 7 Understand how defects in biochemical processes can lead to diseases of malabsorption.

#### MD123 Renal System (5 ECTs)

This module covers the structure and function of the renal system with clinical applications in an integrated fashion. The development, anatomy and histology of the kidney are described as is the anatomy of the pelvic floor. The formation of urine is covered in terms of the underlying processes of renal blood flow, glomerular filtration and tubular absorption and secretion and their local control. The control of salt and water, pH balance and the medical importance of these processes are indicated. The anatomy and mechanism of the micturition reflex is described. Students are also introduced to medical imaging of the kidney. It is also envisaged that some clinical lectures may be interspersed throughout the module.

#### Learning Outcomes:

#### On successful completion of the module, you will be able to:

- 1 Know and be able to demonstrate the positions of the bladder, urethra, rectum and anal canal.
- 2 Know the macro and microstructure of the kidney, ureter, urinary bladder and urethra.
- 3 Know the neuroanatomical basis of urinary incontinence.
- 4 Be familiar with the medical imaging of the urinary system.
- 5 Understand the dynamics of renal blood flow regulation.
- 6 Understand the special features of the renal blood supply which adapt the organ for filtration and reabsorption and how blood flow and GFR can be measured.
- 7 Describe the transport properties of the nephron and how these relate to the re-absorptive and excretory roles of the kidney.
- 8 Understand the role of the kidneys in regulating body fluid osmolarity, ECF volume and acid base balance and the methods of investigation used to examine these processes.
- 9 Discuss the anatomy and pathophysiology of processes related to renal disease.

#### MD140 Metabolism, Nutrition and Health (5 ECTs)

This module describes how the pathways of energy metabolism are regulated and integrated to meet the energy needs of the body as a whole. It describes the fundamentals of human molecular nutrition providing a basic knowledge and understanding of nutrient biochemistry and function. It follows the route of nutrients from digestion to the tissues, discusses essential dietary requirements, the regulation of food intake (appetite) and how these biochemical processes cause physiological and pathophysiological changes. The module details the biochemical flux and precursor function of all the major macro- and micronutrients. The link between diet and the diseases of affluence is discussed along with alcohol and drug metabolism. The course is aimed to provide an integrated scheme of how nutrient uptake and biochemical metabolism is controlled at the level of the organism throughout the stages of life and in disease conditions.

#### Learning Outcomes:

- 1 Obtain and use the current scientific knowledge on the normal function of the human organism and its organs and use this knowledge to explain health problems and pathogenesis of diseases.
- 2 Be familiar with clinical reasoning, the use of evidence and critical thinking in the process of decision making and how research and scientific methodologies contribute to evidence-based medicine.

#### Second Medical Year (2MB) Modules

Semester 1	Semester 2		
MD224 Central Nervous System (10)	MD201 Health and Disease 2 (15)		
MD214 Introduction to Pharmacology (5)			
MD210 Genes, Gametes and Embryos (5)	MD204 Drugs and Disease (5)		
MD206 Molecular Medicine (5)	MD209 Multi Organ Failure (5)		
MD202 Medical Professionalism 2 (10)			

#### MD224 CENTRAL NERVOUS SYSTEM (10 ECTS)

Module examining the structure, organisation and functions of the spinal cord and the different parts of the brain and introducing students to the clinical disciplines of neurology, psychiatry and radiology. Topics covered include Somatosensory systems and pain circuitry; Special sense systems; Motor system; Vestibular system; Language implementation system; Limbic system; The control of appetite, thirst, thermoregulation; The sleep cycle; Learning and memory.

#### Learning Outcomes:

- 1. Demonstrate a comprehensive understanding of the structure, organisation and functions of the central nervous system; and introducing students to the clinical disciplines of neurology, psychiatry and radiology.
- 2. Describe the structure and function of neurones and glial cells and be able to discuss the process of CNS neurotransmission.
- 3. Describe the production of cerebrospinal fluid and its functions.
- 4. Demonstrate a comprehensive understanding of the structure, organisation and functions of the following systems: Somatosensory systems and pain circuitry; Special sense systems: vision, hearing, taste and smell; Motor system; Vestibular system; Language implementation system; Limbic system.
- 5. Describe the homeostatic control of appetite, thirst and thermoregulation; the physiology of the sleep cycle; the basis of plasticity in learning and memory.
- 6. Demonstrate a basic understanding of pathophysiologies of the Central Nervous System through introduction to clinical cases in neurology, psychiatry and radiology.

#### MD214 INTRODUCTION TO PHARMACOLOGY (5 ECTs)

This module provides an introduction to Pharmacology and serves as a foundation to aid the understanding of the drug treatment of disease. Topics include an overview of the various molecular targets for drugs, dose-response relationships, pharmacokinetics (drug absorption, distribution, metabolism and elimination), drugs acting on the autonomic nervous system (cholinergic and adrenergic, drug discovery and clinical development and drug safety and drugs acting on the central nervous system.

#### **Learning Outcomes:**

- 1. Describe the origins and classification of drugs, the nature of drug targets and how drugs work at a molecular, tissue and whole organism level.
- 2. Describe how the efficacy and safety of drugs are assessed in order to determine their place in therapy.
- 3. Describe the pharmacokinetic processes of drug absorption, distribution, metabolism and excretion/elimination, and how these can differ between drugs and individual subjects.
- 4. Construct drug profiles (either graphically or by using appropriate resources) from which a range of pharmacodynamic and pharmacokinetic parameters can be determined.
- 5. Describe the components of the peripheral nervous system and its effects on physiological functions.
- 6. Distinguish between the different ways in which drugs can affect peripheral neurotransmission and how such approaches have yielded clinically useful drugs.
- 7. Describe how the study of central neurotransmission explains the mechanism of action of centrally active drugs and has provided targets for the treatment of disorders of the central nervous system.
- 8. Describe the pharmacology of the main classes of drugs used to treat psychiatric and neurological conditions.
- 9. Appraise experimental findings derived from key stages in the drug development process.
- 10. Describe how the study of central neurotransmission explains the mechanism of action of centrally active drugs and has yielded targets for the treatment of disorders of the central nervous system.
- 11. Describe the pharmacology of the main classes of drugs used to treat psychiatric and neurological conditions.
- 12. Appraise data derived from key stages in the drug development process.

#### MD210 GENES, GAMETES AND EMBRYOS (5 ECTS)

This module, building on previous knowledge of DNA structure, replication and endocrinology, will equip students with a knowledge of the core concepts in reproduction and genetics. Medical students will be introduced to the principles of modern genetics and its application to the understanding and treatment of inherited disease. Clinical context, ethical and professional issues and genetic counselling will be addressed in addition to anatomical and physiological issues related to reproduction.

#### **Learning Outcomes:**

- 1. Explain the main principles of modern human genetics and cytogenetics and apply these to solve problems based on modern medical practice.
- 2. Apply knowledge of chromosome analysis, molecular genetics and the causes and consequences of cytogenetic disorder to diagnose important human genetic disorders and identify strategies for their management.
- 3. Explain the role of chromosome rearrangement, DNA mutations and other heritable changes to the genome in cancer, immunity and important human genetic disorders.
- 4. Identify the main ethical issues associated with the use of genetic testing, preimplantation genetic diagnosis, gene editing and gene patenting.
- 5. Identify the anatomy and physiology of the male and female reproductive systems and discuss the hormonal and nervous control of human reproduction
- 6. Demonstrate sufficient anatomical knowledge to understand the anatomy of urinary and faecal continence, of taking cervical smears and of pelvic examination and the anatomical basis of passing a urinary catheter in the male.
- 7. Demonstrate an understanding of anatomical and physiological changes that occur during pregnancy and the anatomy underlying anaesthesia during childbirth.
- 8. Explain the basis of sexual determination of sex, the control of parturition and lactation.
- 9. Demonstrate an understanding of the medical program safety and quality curriculum

#### MD206 MOLECULAR MEDICINE (5 ECTS)

24 lectures (3 x 3 lectures from 8 lecturers) covering Signalling pathways; Molecular Diagnosis; Cell Cycle; DNA Repair; Oncogenes & Tumour Suppressors; DNA Damage Response & Cancer; Cell Biology; Cell Death; Future Therapies and, finally, Drug Discovery & Small Molecules.

#### Learning Outcomes:

#### On successful completion of the module, you will be able to:

- 1. Describe the role of signal transduction mechanisms in health and disease.
- 2. Describe the mechanisms cell division of DNA repair and programmed cell death and their relevance to cancer.
- 3. Discuss the hallmarks of cancer
- 4. Describe the mechanisms of DNA damage responses and their implication on cancer development and therapy
- 5. Discuss the principles of chemotherapy and describe the processes of drug discovery & development
- 6. Demonstrate understanding of molecular targeted therapeutics and chemotherapeutic strategies against cancer driven by oncogenic proteins or by loss of tumour suppressors
- 7. Describe how the immune system protect from cancer and cell-based therapies
- 8. Describe and discuss molecular techniques and technological advances relevant to cancer diagnosis

#### MD202 MEDICAL PROFESSIONALISM 2 (10 ECTS)

This module introduces students to clinical history-taking and physical examination in respect of the cardiovascular, gastrointestinal, genitourinary, nervous and musculoskeletal systems. Students will be able to apply communication, historytaking and examination skills during a clinical encounter. Students will learn to analyse the ethical, legal and psychosocial dimensions of clinical practice and will develop an understanding of the principles of evidence-based medicine and statistical analysis.

#### Learning Outcomes:

- 1. Describe the symptoms and signs of common diseases of the cardiovascular system, respiratory system, gastrointestinal system, urological system and neurological system.
- 2. Perform a clinical examination of the cardiovascular system, respiratory system and the peripheral nervous system in the skills lab.
- 3. Demonstrates effective communication skills when conducting a clinical examination in a simulated environment.
- 4. Behave in a professional manner when conducting a clinical examination in a simulated environment.
- 5. Demonstrate an ability to identify and analyse ethically challenging issues arising in clinical practice.
- 6. Demonstrate an appreciation of the important role played by values in the clinical encounter.
- 7. Demonstrate an understanding of the importance of sharing decisions with patients.
- 8. Demonstrate an understanding of the legislation governing clinical practice in Ireland and relevant case law.
- 9. Critically evaluate the role of psychological and social factors in treatment adherence for chronic illness.
- 10. Describe the importance of health literacy for patients and health care providers, and how it can be promoted.
- 11. Appraise the theories and models of health behaviour change and their application in practice.
- 12. Systematically search for, store and use scientific papers related to a specific topic and cite this information while writing a paper, essay or case report.
- 13. Categorise various scientific papers according to the 5 existing levels of evidence provided by the Oxford Centre for Evidence Based Medicine and use the evidence to promote best practice in clinical decision-making.
- 14. Demonstrate knowledge and skills in order to analyse and interpret medical research data from observational studies using inferential statistics and binary logistic regression models.
- 15. Understand Confidence Intervals for a difference and for a Ratio.
- 16. Appreciate the role of medical statistics in medical research.
- 17. Develop presentation skills by presenting the results to their classmates.

#### MD201 HEALTH AND DISEASE (15 ECTS)

The module aims to introduce to students the various disciplines, key concepts and knowledge that underpin the development, diagnosis and management of clinical conditions. The module will highlight the interplay between molecular, cellular, microbiological, pharmacological, environmental, epidemiological and social mechanisms in disease development and progression. Principles of health promotion and disease prevention at individual and population levels will also be introduced.

#### Learning Outcomes:

- 1 Discuss the interplay of molecular, cellular, microbiological, pharmacological and environmental factors in the causation of different diseases, and the clinical relevance of such underlying mechanisms.
- 2 Describe the mechanisms, aetiologies and responses relating to cell injury, death, growth and neoplasia, as well as the subsequent healing, repair and/or neoplastic processes.
- 3 Explain the basic alterations of haemodynamic processes including thrombosis, ischaemia, infarction and shock.
- 4 Explain the principles and application of biomedical statistical methods in population health and clinical settings.
- 5 Discuss the functions of public health and health promotion, including epidemiology, healthcare needs assessment, disease prevention relating to both individual and population health services, and wider determinants of health.
- 6 Discuss pathobiology, aetiology, diagnosis, as well as general principles in surveillance, prevention, control and management of infectious diseases.
- 7 Explain the principles and application of infection prevention/control measures and rational use of antimicrobial agents in healthcare settings.
- 8 Describe the pathobiology, microbiology, pharmacology, surveillance and prevention of cardiovascular disorders including atherosclerosis, myocardial infarction, valvular disorders, cardiomyopathy, cardiac failure and hypertension.
- 9 Describe the pathobiology, microbiology, surveillance and prevention of respiratory disorders including asthma and other allergic disorders, pneumonia, tuberculosis, inflammatory disorders, COPD, cystic fibrosis and neoplasia.
- 10 Describe the principal pharmacological approaches to the treatment of bacterial and HIV infection.

#### MD209 MULTI ORGAN FAILURE (5 ECTS)

The students are introduced to core concepts required for and understand of the causes and effects of failing organs, including heart, liver, kidney, central nervous system and lung. Lectures are provided on essential physiology of the relevant organs (Dept of Physiology) followed in a matched fashion by lectures on clinical concepts (clinical lecturers). A self-directed learning (SDL) task focuses on a clinical scenario that illustrates the concepts introduced in the lectures.

#### **Learning Outcomes:**

#### On successful completion of the module students will be able to:

- 1. Explain essential aspects of physiology of major organ function pertinent to the heart, liver, kidney, central nervous system and lung.
- 2. Understand the causes of common diseases that contribute to organ failure.
- 3. Describe the clinical manifestations of organ failure.
- 4. Explain these clinical manifestations as consequences of deranged physiology.
- 5. Describe basic aspects of clinical management of the failing organ.
- 6. Provide more detailed examples of specific clinical conditions highlighted in the SDL tasks.
- 7. Working as a group encourages the development of critical thinking skills, deeper learning as well as promoting interaction and co-operation.
- 8. Search for and use scientific papers related to disease and cite this information in SDL case reports.

#### MD204 DRUGS AND DISEASE (5 ECTS)

In this module, students will learn the basic Pharmacology & Drugs used in the treatment of a variety of disorders including Endocrine, Immunological, Respiratory, Gastrointestinal, Nervous System and Cancer. The content covers not only basic Pharmacology of important drug group used in the treatment of patients with those diseases, but also clinically relevant topics.

#### **Learning Outcomes:**

- 1. Describe the Pharmacology of drugs used in the treatment of Endocrine, Gastrointestinal, Respiratory, Immunological and Oncological Diseases, and pain and anesthesia.
- 2. Understand the mechanisms of action and important side effects in the use and administration of drugs specifically in relation to the diseases that they are used to treat.
- 3. Explain how drugs interfere with mechanisms of disease or modify the progression of disease.
- 4. Discuss and outline important drug interactions.
- 5. Understand and explain important drug side effects.

#### Third Medical Year (3MB) Modules

Semester 1	Clinical Phase Semester 2				
MD302 Health & Disease II (15)	MD 313 Foundations of Clinical Management (10)				
MD304 Global Health and Development (5)					
MD3110 Foundations in Clinical Skills and Diagnosis (15)					
MD3111 Foundations in Clinical Knowledge (15)					

#### SEMESTER 3.1

#### MD 302 Health and Disease II (15 ECTS)

Students will build on the knowledge of H&D module I to understand the common disease processes affecting different organ systems and their clinical implications. They will learn to apply these principles to common clinical problems. Students will build on the knowledge of biomedical science achieved to develop a basic understanding of the principles of forensic medicine. They will become familiar with the role of the coroner, the role of the autopsy and the inquest.

#### Learning Outcomes:

#### On successful completion of the module the learner will be able to:

- Explain pathobiology and microbiology of diseases affecting central nervous system including the causes and effects of raised intracranial pressure, stroke, head trauma, infection and neurodegenerative diseases.
- Explain pathobiology and microbiology of diseases of the gastrointestinal system including infections, inflammatory conditions, common malabsorptive disorders, benign and malignant diseases.
- Discuss diseases of hepatobiliary system and pancreas including infections, inflammatory disorders, inherited diseases, neoplasms and organ failure.
- Discuss haematological disorders including anaemias, haematological malignancy and pathology of the lymph node.
- Explain pathobiology of the breast and endocrine system, screening services.
- Explain pathobiology and microbiology of the skin and musculoskeletal system.
- Discuss the functions of public health and health promotion, including topics of epidemiology, healthcare needs assessment, and prevention of

diseases related both to individual and population health services and wider determinants of health.

- Explain principles and practical aspects of infection control in the health care setting and use of antimicrobial agents.
- Discuss the principles of prevention, control and management and aetiology of major infectious diseases.
- Explain basic principles of forensic medicine in relation to common causes and signs of injury, disease and death.
- Describe the role of the coroner, recognise the circumstances in which death should be reported to the coroner, discuss the role of the autopsy and the inquest.
- Describe the process of identification of dead, the importance of accurate certification of death and be familiar with the signs of violence and injury/trauma.
- Establish cause of death in a given case, i.e. whether it is natural, accidental, homicidal or suicidal and recognise the signs of unnatural death, including the effects of various drugs and toxins.

#### MD304 Global Health and Development (5 ECTS)

Global health can be defined as "health problems, issues and concerns that transcend national boundaries; that may be influenced by circumstances or experiences in other countries; and that are best addressed by cooperative actions and solutions". The Global Health and Development module provides an introduction to key concepts in understanding the challenges of human health and development from a global perspective. The content focuses on social and economic development as it relates to global health, underpinned by the Sustainable Development Goals.

#### Learning Outcomes:

#### On successful completion of the module the learner will be able to:

- 1. Global Epidemiology: Demonstrates awareness of the main global causes of morbidity and mortality globally including major infectious, non-communicable and chronic diseases and injuries; the impact of travel and migration on diseases seen in Ireland; Recognises issues related to global health security and addressing the causes and control of public health risks from epidemic prone diseases and climate change.
- 2. Social and Environmental Determinants of Health: Demonstrates awareness of social, economic, political, environmental and gender determinants of health disparities; Recognises the impacts of globalisation, poverty and widening socio-economic inequalities as determinants of health; Understands the concepts of development, poverty, economic and social development, and the right to health.

- 3. Health Systems and Health Workforce: Discuss the components of a health system and how health system structures and functions vary; Understand how global trends in healthcare practice, commerce and culture contribute to health and the quality and availability of healthcare Be aware of the difficulties faced by health services in resource poor settings and the challenges of strengthening health systems, ensuring adequate human resources for health and equitable access.
- 4. Health Implications of Travel and Migration: Understand risks associated with travel and migration Describe how travel and trade contribute to the spread of disease Know where to identify sources of information for medical advice for international travellers.
- 5. Global Health Governance: Demonstrate awareness of the complexity of global health governance including the roles of international agencies such as WHO and other UN agencies, civil society organisations and new partnerships for health; Recognise how health related research is conducted and governed.
- 6. Diversity, Human Rights and Ethics: Understand the concepts of respect for the rights and equal value of all people without discrimination, and to provide compassionate care for all; Examine how international legal frameworks impact on health-care delivery in Ireland; Discuss and critique the concept of the right to health; Consider some of the health issues faced by migrants including refugees and asylum seekers; Recognise the role of doctors as advocates for patients, including prioritising health needs and adhering to codes of professional conduct.
- 7. Demonstrate understanding of the importance of culture and its influences on behaviour; Communicate and work effectively with people from different ethnic, religious and social backgrounds.

#### YEAR LONG MODULES

#### MD 3110 Foundations in Clinical Skills and Diagnosis (15 ECTS)

This module builds spirally upon the learning acquired in the Professionalism modules in Years 1MB3 and 2MB3. This module learning outcomes lays the foundation in Clinical and Diagnostic skills. This module will be delivered over both semesters 3.1 and 3.2. In semester 3.1, large group teaching includes a lecture series covering history-taking, physical examination, ECGs and a weekly case conference. Small group teaching includes clinical reasoning tutorials, practical procedural skills sessions, physical examination workshops, ward placement induction workshops, evidence-based medicine workshops and medical imaging. In semester 3.2, students attend 3 x 5-week clinical placements in core clinical specialties of Medicine, Surgery and Acute Care. This is supported by structured teaching activities in the form of lectures, case based

small group tutorials, bedside tutorials, along with further skills sessions and workshops.

#### Learning Outcomes:

#### On successful completion of the module the learner will be able to:

- 1. Take a history and perform a physical examination of patients to reach a clinical diagnosis/differential diagnosis, demonstrating critical skills at the level of a third -year medical student in Medicine, Surgery and Acute Care.
- 2. Perform a body system focused clinical examination for common presentations in Medicine, Surgery and Acute Care.
- 3. Perform and interpret point -of- care investigations and clinical data for common presentations in Medicine, Surgery and Acute Care.
- 4. Justify reason to order laboratory and radiological investigations for common presentations in Medicine, Surgery and Acute Care.
- 5. Evaluate and interpret evidence from laboratory and radiological investigations for common presentations in Medicine, Surgery and Acute Care.
- 6. Demonstrate an understanding of their position and role within the structure, function and culture of the health service.
- 7. Demonstrate an understanding of practice of patient-centred care.
- 8. Apply current evidence- based medicine in devising a plan of investigation and interpretation thereof, in clinical diagnosis.
- 9. Communicate effectively in all areas i.e. with patients, colleagues, health care professionals, and in all media i.e. writing, electronically, by phone, in person, in the practice of medicine.
- 10. Demonstrate effective multidisciplinary team working in simulated healthcare setting.
- 11. Apply principles of ethical reasoning, compliance with the law, and professional behaviour in patient management scenarios in a simulate setting.

#### MD 3110 Foundations in Clinical Skills and Diagnosis (15 ECTS)

This module compliments Foundations in Clinical Skills and Diagnosis in preparing the student to acquire and demonstrate the appropriate knowledgebased outcomes, with emphasis on the fundamental principles underlying patient care, diagnosis and management. This module will be delivered in Semester 1 & 2 of the third medical year. This is supported by structured teaching activities in the form of lectures, case based small group tutorials and workshops. Students have the opportunity to apply knowledge in their clinical placements and simulation sessions.

#### Learning Outcomes:

#### On successful completion of the module the learner will be able to:

- 1. Apply basic science and clinical theory (aetiology, pathogenesis, presentation) to common clinical presentations (and clinical case studies) in Medicine, Surgery and Acute Care to generate most likely working diagnosis.
- 2. Apply risk estimates for common conditions i.e. total cardiovascular risk estimation.
- 3. Apply basic science principles to explain investigation results for common presentations in Medicine, Surgery and Acute Care.
- 4. Analyse the limitations, risks, costs and potential side-effects of investigations and their impact on decision making in clinical diagnosis.
- 5. Explain the indications and preparatory steps for surgery, and the management of common post-anesthesia and post-operative complications
- 6. Apply the theoretical principles of therapeutics (safe prescribing) in medicine and surgery
- 7. Critically analyse published research articles, in terms of study objectives, design, methodology, statistics, limitations and implications for clinical practice.
- 8. Apply the principles of evidence-based medicine to patient care for common presentations in Medicine, Surgery and Acute Care to a standard of a third year medical student.
- 9. Describe the approach to the management of the unwell patient in common in Medical & Surgical settings.
- 10. Apply the principles of ethical reasoning, law, and professional standards to clinical case studies,

#### SEMESTER II

#### MD313 FOUNDATIONS OF CLINICAL MANAGEMENT T (10 ECTS)

This module complements Foundations in Clinical Theory and Clinical Diagnosis in preparing the medical student to acquire and demonstrate the outcomes and competencies of the undergraduate medical programme, with an emphasis on the principles of patient management and care. This module is delivered in Semester 2 of the third medical year as 5 week clinical placements in core clinical specialities and subspecialties. This is supported by structured teaching activities.

#### Learning Outcomes

- 1 Formulate a plan of treatment demonstrating application of principles of patient management in the following disciplines Gastro-intestinal Studies: Cardiovascular Studies Respiratory and Peri-operative/Critical Care Medicine: General Medicine General Surgery: Geriatric and Stroke Medicine
- 2 Demonstrate the knowledge and skills to devise a management plan for surgical patients during the pre, peri and post-operative phases of their treatment. This includes demonstrating an understanding of consent, risk assessment and postoperative management.
- 3 Recognise the need and appropriate timing for senior input in the acutely unwell patient.
- 4 Apply the principles of evidence-based medicine to patient care and become familiar with the principle of critically appraising patient treatments.
- 5 Discuss the importance of effective multidisciplinary team working in patient management.
- 6 Communicate effectively in all areas i.e. with patients, colleagues, health care professionals, and in all media i.e. writing, electronically, by phone, in person, in the practice of medicine.
- 7 Explain the principles of therapeutics and patient safety to management and evaluate response to prescribed medications.
- 8 Demonstrate the critical skills necessary for effective decision making and judgements in patient care to evaluate and adapt management plans.
- 9 Apply the principles of ethical reasoning, compliance with the law, and professional behaviour in patient management to a predetermined standard and understand the importance of incorporating these principles into one's own practice.

#### Fourth Medical Year (4MB) Modules

Semester 1	Semester 2			
MD4100 General Practice incorporating Otorhinolaryngology (10)				
MD4101 Obstetrics & Gynaecology (10)				
MD 4102 Paediatric Medicine (10)				
MD 4103 Psychiatry (10)				
MD4104 Advanced Clinical S (20)	Skills and Professional Development			

#### Structure and delivery

Year 4 will consist of year-long modules in General Practice incorporating Otorhinolaryngology, Obstetrics & Gynaecology, Paediatric Medicine, Psychiatry and Advanced Clinical Skills and Professional Development. Teaching and assessment will be delivered both in Galway and in medical academies. Modules consist of 4 week rotating attachments in semesters 1 and 2. ACSPD will be threaded throughout the year. Teaching will take the form of clinical placement, lectures, small group tutorials, case studies, case presentations, self-directed learning, communication and clinical skills teaching and simulation.

#### MD4100 General Practice incorporating Otorhinolaryngology (10 ECTS)

This module introduces students to the principles and practice of medicine in the community, as well as the knowledge and skills to assess, diagnose and manage the major mental illnesses. During this module students will also acquire knowledge and skills to diagnose and manage diseases of the ear, nose, throat, head and neck. Students will learn about biopsychosocial risk factors for a range of illnesses presenting to mental health and community services and their multidisciplinary management.

#### Learning Outcomes

- Be able to describe the principles and organisation of General Practice. Principles include- first contact, continuity of care, comprehensiveness, coordination of care; person-centered; holistic, community orientation, and evidence based clinical decision making. Organisation includes - how general practice (including out of hours) is organised and delivered in Ireland and compared to international models of healthcare, gatekeeping and the interface between general practice and secondary care.
- Be able to describe the social determinants of health as they relate to general practice, including inequality, access to healthcare, health literacy and patient advocacy. Be able to effectively apply knowledge of principles of health promotion and disease prevention in primary care medicine, including the principles of behaviour change and promoting healthy lifestyles.
- Demonstrate awareness of the importance of physical, psychological and social factors (the bio-psycho-social paradigm) in the patient's lived experience of illness and the role of families/ partners as sources of care and support or alternatively contributors to the illness experience.
- Explain the sources of uncertainty in general practice and describe how GPs manage uncertainty, and how they deal with presentation of illness at an early undifferentiated stage.
- Demonstrate that they are competent in the basics of clinical decision making by taking a focused history taking, performing an appropriate clinical examination, reaching a differential diagnosis and devising a management plan.
- Demonstrate that they are competent in the basics of communicating with patients, from all backgrounds, including identifying the patient's reason for attendance, explaining the diagnosis and reaching a shared management plan
- Describe the clinical presentations, epidemiology, aetiology, differential diagnosis and management of common acute and chronic conditions in GP. Common acute conditions include asthma, contraception, urinary tract infections, respiratory tract infections, otitis media and tonsillitis. Common chronic conditions include diabetes, hypertension, ischaemic heart disease, asthma.
- Be able to reflect on his/her own attitudes to different patients, demonstrate appropriate professionalism and awareness of the ethical, regulatory and legal frameworks within which general practitioners operate.
- An introduction to the fundamental principles of ORL, including history taking and clinical examination of the ear, nose, throat and head and neck, together with basic ORL clinical tests, including audiology.
- Demonstrate competency in developing informed differential diagnoses and management plans, for paediatric and adult patients, with appropriate consideration of head and neck cancer and red flags in Otorhinolaryngology.

#### MD4101 Obstetrics and Gynaecology (10 ECTS)

The purpose of the OBGYN module is to provide students with a solid theoretical foundation in the principles and practices of women's health, during pregnancy and throughout life. In addition, the module will give students knowledge and skills to enable them to recognise and manage common disorders, medical and surgical, that affect women's health. The student will learn about the principles of screening for disease, disease prevention and treatment within the setting of women's health, obstetrics, and gynaecology.

#### Learning Outcomes

- 1 Describe the clinical presentations, epidemiology, aetiology, differential diagnosis and management of common obstetric and gynaecological illnesses.
- 2 Create and justify management plans for common health problems in obstetrics and gynaecology, which are evidence-based and that provide high quality holistic care effectively, within available resources.
- 3 Diagnose and have knowledge of the evidence-based management of elective and emergency presentations in obstetrics and gynaecology.
- 4 Apply models of care in a women's health context demonstrating a sound knowledge of clinical, social and psychological aspects of health and illness (e.g. provision of antenatal care, management of labour, the diagnosis and treatment of gynaecological cancers and benign diseases in gynaecology).
- 5 Through the medium of case presentation, demonstrate knowledge of the principles of health promotion and disease prevention in women's health (e.g. antenatal care, cervical screening).
- 6 Demonstrate knowledge of perinatal data collection and its use in women's health (e.g. perinatal and maternal morbidity and mortality data) and its application to everyday clinical practice.
- 7 Become familiar with the ethical, regulatory and legal frameworks within which the obstetrician/gynaecologist operates, in relation to such issues in clinical practice (e.g. contraception, prenatal diagnosis, fertility treatments and termination of pregnancy).

#### MD 4102 Paediatric Medicine (10 ECTS)

Paediatric Medicine involves health and disease of children from 0-18 years of age. The purpose of this module is to give students a foundation in clinical paediatrics, which encompasses the recognition and management of common paediatric illnesses and emergencies, both in the community and paediatric setting. Semester 1 introduces the student to common paediatric presentations and associated conditions, in addition to paediatric emergencies hence enabling the student to gain knowledge on how patients present, as well as building on the students' prior clerking, communication and clinical skills and adapting them to the paediatric setting. Additionally, students acquire knowledge and skills in management of these common paediatric conditions, including evidence based critical analysis of case management. Semester 2 builds on paediatric knowledge, skills and attitudes acquired in semester 1, through exploring more complex paediatric presentations. Additionally, students will evaluate and apply evidence through creation of practice guidelines or critically appraising established guidelines, health promotion and disease prevention. Ethical and legal aspects of paediatric presentations are opportunistically explored. The student role during clinical clerkships evolves during the module from observation in semester 1 to team immersion and supervised engagement in semester 2.

#### Learning Outcomes

- 1. Via effective history taking and physical examination, recognise clinical presentations of common illnesses presenting in infants and children.
- 2. Illustrate an awareness of the epidemiology, aetiology and differential diagnoses of common illnesses presenting in infants and children.
- 3. Demonstrate effective clinical reasoning and an ability to formulate assessment and management plans for common illnesses and emergencies arising in infants and children.
- 4. Demonstrate an awareness of evidence based clinical practice and how to put it to use.
- 5. Examine the biopsychosocial context of illness and its impact on the infant, child and family.
- 6. Develop an understanding of normal growth and development of infants and children.
- 7. Foster an understanding of the importance of preventive, protective and promotional functions of paediatric care.
- 8. Demonstrate how the legal and ethical principles apply to the practice of medicine in infants and children.

#### MD4103 Psychiatry (10 ECTS)

This module introduces students to the knowledge, skills and attitudes required to assess, diagnose and manage the major mental illnesses. Students will learn about biopsychosocial risk factors for a range of illnesses presenting to mental health services and their multidisciplinary management.

#### Learning Outcomes:

#### On successful completion of the module the learner will be able to:

- 1. Create and justify case-based management plans for presentations of mental illness, which are evidence based and will provide high quality holistic care effectively, within available resources.
- 2. Recognise and theoretically manage common psychiatric emergencies.
- 3. Describe the clinical presentations, epidemiology, aetiology, differential diagnosis and management of common illnesses presenting to mental health services.
- 4. Describe the principal mechanisms of action and appropriate use of common psychotropic medications, and the principles of the main forms of psychotherapy and their appropriateness for different patients with mental illness.
- 5. Demonstrate an awareness of the impact of mental illness on the patient, their family and the doctor, the resources available to help those with chronic enduring illnesses, the operation and respective roles of multidisciplinary teams, and indications for referral to specialist services.
- 6. Apply effectively knowledge of the principles of health promotion and disease prevention in mental health in the Irish context, including maximising the social integration of patients with mental health problems, and reducing the negative impact of stigma.
- 7. Demonstrate awareness of the ethical, regulatory and legal frameworks within which the psychiatrist operates, in relation to such issues in their clinical practice.

#### MD4104 Advanced Clinical Skills and Professional Development (20 ECTS)

The Advanced Clinical Skills and Professional Development (ACSPD) module combines the teaching of focused history taking, communication skills, examination skills and general consultation skills in Paediatric Medicine, Obstetrics and Gynaecology, General Practice (incorporating ORL) and Psychiatry. The students will also develop their clinical reasoning skills, and emergency management skills in these contexts. Students will be expected to demonstrate professional attitude and behaviour with patients, carers<sub>4</sub> and colleagues.

#### Learning Outcomes

#### On successful completion of the module the learner will be able to:

- 1. Take a history from people in the relevant specialties, across a wide range of different scenarios, showing a patient-centred, sensitive, multicultural, structured and thorough approach, with demonstration of principles of good communication.
- 2. Undertake a physical examination/mental state examination that is appropriate for patient's age, gender and state of mental and physical health, in a rigorous, sensitive, efficient and systematic manner.
- 3. Demonstrate professional attitude and behaviour with patients, carers and colleagues as defined in programme professional guidance document.
- 4. Demonstrate awareness of patient safety in the specialist areas of Paediatrics, Obstetrics and Gynaecology, General Practice (incorporating ORL) and Psychiatry as defined in the programme graduate attribute document.
- 5. Demonstrate clinical reasoning by synthesizing competently, in the specialist clinical context, all available information gathered from patient evaluation and formulate a reasonable working diagnosis, whilst recognising life threatening conditions that require immediate treatment.
- 6. Communicate effectively the diagnosis/prognosis and agree a management plan with the patient, including reference to appropriate additional sources of information.
- 7. Communicate effectively with clinical team. For example, use ISBAR framework to hand over patient care effectively in the clinical setting.
- 8. Demonstrate engagement in reflective practice.

#### Fifth Medical Year/Final Year (5MB3) Modules

#### Year 5

Semester 1	Semester 2				
MD542 Advanced Clinical Theory (20)					
MD540 Advanced Clinical Diagnosis (20)					
MD541 Advanced Cli	nical Management (20)				

The final academic year is composed of three year -long modules as listed above. In the first Semester of the Final Medical Year programme (Semester 5.1) the student will complete three blocks of four weeks clinical immersion in Medicine, Surgery and Acute & Critical Care and three lecture and workshop weeks. In the second semester students experience three Junior Internship attachments and a classroom-based block- "Preparing for Clinical Practice." Clinical placements and teaching occur at the Galway University Hospitals and the Affiliated Academy Hospitals as well as "away" clinical placements at a variety of other hospitals in Ireland and abroad subject to approval. The teaching of Professionalism is incorporated throughout. Each of the modules is linked to learning objectives below, which together reflect and closely follow the outcomes for undergraduate medical training as specified by the Medical Council.

#### MD542 ADVANCED CLINICAL THEORY (20 ECTs)

This module compliments MD542 & amp; MD541 in preparing the graduating doctor to acquire the outcomes and competencies of the Undergraduate Medical Programme, with emphasis on the theoretical principles underlying patient care, diagnosis and management. Delivery is in semester 1 and 2 through clinical placements in core clinical specialities and subspecialities and through structured teaching activities. All learning outcomes need to be attained to the standard of a junior doctor prepared for internship

#### Learning outcomes

#### On successful completion of this module the student should be able to:

- 1 Apply the principles of basic sciences to the clinical diagnosis and management of diseases.
- 2 Evaluate patient's risks in pre- and post-operative settings.
- 3 Apply the principles of therapeutics to effective and safe patient management.
- 4 Apply the principles of evidence-based medicine to patient care.
- 5 Formulate a plan for the assessment and management of an acutely unwell patient.
- 6 Apply the principles of patient assessment and management in acute and chronic illnesses.
- 7 Apply principles of basic sciences to the prescription of oxygen, fluids and blood products.
- 8 Follow hospital guidelines and protocols.

## MD540 ADVANCED CLINICAL DIAGNOSIS (20 ECTs)

This module complements MD 542 & MD 541 in preparing the graduating doctor to acquire and demonstrate the outcomes and competencies for the Undergraduate Medical Programme, with emphasis on the principles of patient investigation and diagnosis. The module is delivered in semester 1 and 2 through clinical placements in core clinical specialities and subspecialities and by teaching activities. All learning outcomes need to be attained to the standard of a junior doctor prepared for internship.

#### Learning Outcomes

## On successful completion of this module the student should be able to:

- 1. Formulate a clinical diagnosis/differential diagnosis, based on clinical skills and judgement to the level of a junior doctor prepared for internship.
- 2. Select appropriate investigations for clinical diagnosis taking account of the limitations and risks.
- 3. Evaluate and interpret evidence from laboratory and radiological investigations.
- 4. Apply the principles of evidence-based medicine to clinical diagnosis.
- 5. Communicate effectively with patients, families, health care professionals in all media (e.g. in person, writing, electronically, by phone) in the practice of medicine.
- 6. Work effectively as part of a multi-disciplinary team (e.g. closed loop communication, teamwork, leadership, situation awareness, decision-making) utilising all available resources, getting the job done.
- 7. Apply the principles of ethical reasoning, compliance with the law, and professional behaviour in patient care.
- 8. Document medical data in a logical and legible manner, consistent with accurate patient records and legal requirements.
- 9. Recognise and report potentially life-threatening iatrogenic conditions (e.g. adverse drug reactions, transfusion reactions, closing errors and allergic reactions).

## MD541 ADVANCED CLINICAL MANAGEMENT (20 ECTs)

This module complements MD 542 & MD 540 in preparing the graduating doctor to acquire and demonstrate the outcomes and competencies of the Undergraduate Medical Programme, with an emphasis on the principles of patient management and care. This module is delivered in semester 1 and 2 through clinical placements in core clinical specialities and subspecialities and supported by structured teaching activities. All outcomes need to be attained to the standard of a junior doctor prepared for internship.

#### Learning Outcomes

- 1 Formulate a clinical management plan for acute and non-acute patients based on patient assessment and investigations.
- 2 Manage pre\_, peri\_ and post-operative patients including consent, risk assessment and postoperative.
- 3 Be situation aware and call for senior help in a timely manner
- 4 Re-assess and re-evaluate patient response to treatment, prescribed medications and management plans in ongoing patient care.
- 5 Work effectively as part of a multi-disciplinary team (e.g. close-loop communication, teamwork, leadership, situation awareness, decision-making) utilising all available resources.
- 6 Communicate effectively in all areas i.e. with patients, colleagues, health care professionals, and in all media e.g. writing, electronically, by phone, in person, in the practice of medicine.
- 7 Use clinical judgement and decision-making skills in the ongoing clinical management of patients.
- 8 Apply principles of ethical reasoning, compliance with the law, and professional behaviour in patient care.
- 9 Perform procedural skills required to manage patients.
- 10 Prescribe accurately and safely in all manner of prescriptions e.g. in-patient charts, discharge prescriptions, out-patient prescriptions.

Degrees with the Undergraduate Medical Programme

Medicine GY501 (8 Year)

# MEDICINE GY501 (8 YEAR)

#### Medical & PhD Degree

Students entering the Medical programme have the opportunity also to engage a PhD degree through a period of dedicated research. This is done on an integrated schedule, so that at the end of a period that is likely to involve eight years successfully completed, both the Medical degree and the PhD are conferred.

Students of the Medical programme who are interested will undergo a selection process after the third year of their medical studies, which includes an assessment of their academic performance to date and an interview. Students undertaking this programme are required to have taken a minimum of 2 undergraduate summer research projects (or equivalent). The results of these projects will be written up and submitted as a Bachelor of Medical Science after their third year of study.

The students will be facilitated by the course director to engage with a funded and experienced principle investigator (PI). Funding will be provided by the PI or through application for PhD funding from university or external funders. The programme and the research themes are agreed prior to the commencement of the research.

Medical & Biomedical Engineering Degree

# MB,B.CH,BAO,BE) PHYSICIANEER DEGREE - withdrawn

Bachelor of Science in Medical Subjects

# **Bachelor of Science in Medical Subjects**

# Refer to General regulations for the Degrees of MB BCh BAO (NFQ Level 8 Ref; <u>https://www.qqi.ie/</u>)

Students can, if they wish, undertake a B.Sc. Degree in Anatomy, Physiology, Biochemistry, or Pharmacology.

A period of additional study outside of the Medical Degree is required, in general conformity with the regulations for the award of the B.Sc. Degree, as may be prescribed. Admission to the B.Sc. degree programme is subject to the approval of the relevant head of discipline.

The First Medical Examination of the Degree of MB BCh BAO shall be accepted as equivalent to the First University Examination in Science in the case of medical students who propose to proceed to a B.Sc. Degree. Such students are eligible to take the B.Sc. Honours Degree only in the professional subjects, Anatomy, Physiology, Biochemistry, Pathology, Bacteriology and Pharmacology. The standard of entry to the degree shall be Honours at the First, Second or Third University Medical Examination, as appropriate, in the relevant subject.

In addition to attending the course in the professional subjects in the Second and Third Medical Years (and the Fourth Medical Year in the case of Bacteriology and Pathology), students shall be required to take special courses for one session in the subject of the Honours B.Sc. Degree.

Candidates holding the degrees of MB BCh, who wish to proceed subsequently to the B.Sc. Honours Degree in one of the Medical subjects, must have attained Honours standard in that subject, or a related subject, at the last Medical Examination in which he/she sat that subject, or the related subject, and be recommended by the Professor of the subject.

B.Med.Sc.

# **Bachelor of Science in Medical Subjects**

# Refer to General regulations for the Degrees of MB BCh BAO (NFQ Level 8 Ref; <u>https://www.qqi.ie/</u>)

The B.Med.Sc. may be awarded to students who have completed the programmes and examinations in the following subjects: Anatomy, Physiology, Biochemistry, Pathology, Bacteriology, Pharmacology and Medical Informatics & Medical Education.

To be eligible for award of the degree candidates must present a minor thesis of not more than 2,000 words embodying a review of the literature or a research project in one of the above subjects.

Students in the Fourth and subsequent years who do not intend proceeding to the MB, BCh, BAO and who wish to be considered for the B.Med.Sc. may be accepted subject to undertaking a period of three months under the Head of one of the specified subjects and submission of a thesis as described above.

#### **Taught Postgraduate Certificate, Diploma and Masters Programme**

(NFQ level 9 awards; ref. https://www.qqi.ie/)

#### **Clinical Research and Education Postgraduate Taught Programmes:**

# **Applied Clinical Data Analytics**

https://www.universityofgalway.ie/courses/taught-postgraduate-courses/appliedclinical-data-analytics.html#course\_why

# Clinical Education (Master of, PDip/Cert)

http://www.universityofgalway.ie/clinicaleducation

#### Clinical Research (MSc) http://www.universityofgalway.ie/clinicalresearch

## Healthcare Simulation and Patient Safety http://universityofgalway.ie/healthcaresimulationandpatientsafetv

# Exercise Physiology & Application in Therapy (MSc)

http://www.universityofgalway.ie/exercisephysiology

# **Exercise Physiology and Rehabilitation**

https://www.universityofgalway.ie/courses/taught-postgraduate-courses/exercisephysiology-rehabilitation.html

# **Clinical Speciality Focused Postgraduate Taught Programmes**

# Interventional Cardiovascular Medicine (MSc)

http://universityofgalway.ie/interventionalcardiovascularmedicine

# Multidisciplinary Radiology (MSc/PDip)

http://www.universityofgalway.ie/multidisciplinaryradiology

# Surgery, Masters in (MCh)

http://www.universityofgalway.ie/mastersurgery

#### Preventive Medicine and Cardiovascular Health Suite of Programmes:

# Preventive Cardiology (MSc/PDip)

http://universityofgalway.ie/preventivecardiology

# Cardiovascular and Pulmonary Rehabilitation (MSc)

http://www.universityofgalway.ie/courses/taught-postgraduatecourses/cardiovascular-pulmonary-rehabilitation.html

# **Cardiac Rehabilitation (PG Cert)**

https://www.universityofgalway.ie/courses/taught-postgraduate-courses/cardiacrehabilitation.html

# **Diabetes (MSc)**

https://www.universityofgalway.ie/courses/taught-postgraduate-courses/diabetesmedicine-msc-pdip.html

# Professional Credit Award (Diabetes)/CPDM5 Clinical Primary Care Module

https://www.universityofgalway.ie/courses/taught-postgraduate-courses/diabetesprofessional-credit-award.html

# **Obesity (MSc)**

http://www.universityofgalway.ie/obesitymsc/

#### Lab-Based Research Postgraduate Taught Programmes:

## **Cellular Manufacturing and Therapy (MSc)**

http://www.universityofgalway.ie/cellular-manufacturing-therapy

# **Cheminformatics and Toxicology (MSc)**

http://www.universityofgalway.ie/cheminformaticsandtoxicology

## **Regenerative Medicine (MSc)**

http://www.universityofgalwaynuigalway.ie/regenerativemedicine

College of Science and Engineering, Interdisciplinary, with the School of Medicine

# **MSc in Toxicology**

https://www.universityofgalway.ie/courses/taught-postgraduatecourses/toxicology.html

# MSc Neuropharmacology

https://www.universityofgalway.ie/courses/taught-postgraduatecourses/neuropharmacology.html

#### **Programmes Suspended/Retiring**

**Medical Science MSc/PG Dip-**no new entrants from AY2021. Honouring students who registered prior to AY2021. Plan to formerly retire when 2 years elapse with no students.

#### **CLINICAL RESEARCH AND EDUCATION:**

#### **Applied Clinical Data Analytics**

Master of Science (**Applied Clinical Data Analytics**) Full time 1ACA1, Part time 1ACA2

PG Diploma/Certificate in Science (Applied Clinical Data Analytics) 1ACA9 (exit route), 1ACA8 (exit route)

#### **PROGRAMME DESCRIPTION**

The taught postgraduate course in Applied Clinical Data Analytics employs a unique and innovative spiral curriculum, designed specifically for training healthcare professionals in analysis of healthcare data. Domain experts in Clinical Data Analytics from the College of Medicine, Nursing and Health Sciences will deliver the program. Assignments are all real-world examples of clinical research including clinical trials, systematic reviews, observational research, and data from administrative clinical datasets.

#### UNIVERSITY OF GALWAY CODE:

1ACA1 (Full Time); 1ACA2 (Part-Time)

#### PROGRAMME AIMS AND OBJECTIVES

- The course is designed to train healthcare workers without a background in data analytics, statistics, or computer programming, to analyse and interpret healthcare data.
- Applies research and data analytics knowledge to clinical and health data to effectively answer research questions.
- We will teach students to understand and learn how to apply traditional statistical techniques and machine learning by completing weekly assignments and an end of year thesis.
- Students will learn data import, cleaning, exploration and analysis using the R programming language and R packages for data analysis, machine learning and source control using GitHub.
- We will teach research methodology and appropriate statistical analysis using R for randomised controlled trials, systematic reviews, case control studies and prospective cohort studies.

#### ECTS WEIGHTING 90 ECTS.

#### MINIMUM ENTRY REQUIREMENTS

- Applicants must hold a healthcare related undergraduate degree with a minimum of 2nd Class Honours.
- A minimum overall score of 7.0 IELTS, with no less than 6.5 in any one band.

### **COURSE OUTLINE:**

University of Galway have launched a graduate course in Applied Clinical Data Analytics that employs a unique and innovative spiral curriculum, designed specifically for training healthcare professionals in analysis of clinical data.

The programme will be delivered by domain experts in Clinical Data Analytics from primarily within the School of Medicine and wider College of Medicine, Nursing and Health Science. Working within a dynamic active learning environment on clinical data will facilitate the development of profession appropriate, individual, collective and interprofessional data skills. Assignments are all real-world examples of clinical research including clinical trials, systematic reviews, observational research, and data from administrative clinical datasets.

Full-time students must complete six core modules (Figure 1) across semester 1 and 2 worth 60 ECTS. Students are also required to complete a Thesis project (30 ECTS) split into two parts. Part-time students complete this program over 2 years, completing 40 ECTS in year 1 and 50 ECTS in year 2 (Figure 2).

Range of Teaching/Formal Learning:

Tutorial-based teaching, flipped classroom, problem-based learning, real life case studies will be applied and students will learn by applying statistical tools to work through data sets.

Research project:

Self-directed research project with continuous supervision and feedback.

1ACA1	MSc Applied Clinical Data Analytics	F/T	90ECTS		
Module	Module Desc	Sem	Module Semester (desc)	Credits	Module Type
MD1590	Health Research Methodology I	1	Semester 1	10	Core
MD1591	Applied Medical Statistics I	1	Semester 1	10	Core
MD1592	Clinical Data Analytics I	1	Semester 1	10	Core
MD1593	Health Research Methodology II	2	Semester 2	10	Core
MD1594	Applied Medical Statistics II	2	Semester 2	10	Core
MD1595	Clinical Data Analytics II	2	Semester 2	10	Core
MD1596	Clinical Data Analysis Thesis Part I	2	Semester 2	10	Core
MD1597	Clinical Data Analysis Thesis Part II	3	Trimester 3	20	Core

#### PART TIME- MSc Applied Clinical Data Analytics:

1ACA2	MSc Applied Clinical Data Analytics	P/T	40ECTs Yr 1		
Module	Module Desc	Sem	Module Semester	Module Credits	Module Type
MD1590	Health Research Methodology I	1	Semester 1	10	Core
MD1591	Applied Medical Statistics I	1	Semester 1	10	Core
MD1592	Clinical Data Analytics I	1	Semester 1	10	Core
MD1596	Clinical Data Analysis Thesis Part I	2	Semester 2	10	Core
2ACA2	MSc Applied Clinical Data Analytics	P/T	50 ECTs Yr 2		
Module	Module Desc	Sem	Module Semester	Module Credits	Module Type
MD1593	Health Research Methodology II	2	Semester 2	10	Core
MD1594	Applied Medical Statistics II	2	Semester 2	10	Core
MD1595	Clinical Data Analytics II	2	Semester 2	10	Core
MD1597	Clinical Data Analysis Thesis Part II	3	Trimester 3	20	Core

#### **EXIT ROUTES:**

For those who are unable to complete masters but have completed 60ects, there is an option to transfer to 1ACA9 and exit with a PG Diploma.

For those who are unable to complete masters but have completed 30ects, there is an option to transfer to 1ACA8 and exit with a PG Certificate.

To transfer the student's fees must be up to date and student will need to authorize the transfer by April 30<sup>th</sup> or ahead of PG Summer exam boards, which are usually held inMay. There will be no refund of fees.

1ACA9	ACA9 Postgraduate Diploma in Science (Applied Clinical Data Analytics) 60ECTS				
Module	Module Desc	Sem	Module Semester	Mod ule Cred its	Modu le Type
MD1590	Health Research Methodology I	1	Semester 1	10	Core
MD1591	Applied Medical Statistics I	1	Semester 1	10	Core
MD1592	Clinical Data Analytics I	1	Semester 1	10	Core
MD1593	Health Research Methodology II	2	Semester 2	10	Core
MD1594	Applied Medical Statistics II	2	Semester 2	10	Core
MD1595	Clinical Data Analytics II	2	Semester 2	10	Core

1ACA8	ACA8 Postgraduate Certificate in Science (Applied Clinical Data Analytics) 30ECTS				
Module	Module Desc	Sem	Module Semester	Mo dule Cre dits	Modul e Type
MD1590	Health Research Methodology I	1	Semester 1	10	Core
MD1591	Applied Medical Statistics I	1	Semester 1	10	Core
MD1592	Clinical Data Analytics I	1	Semester 1	10	Core

# **CAREER OPPORTUNITIES**

- Well positioned to carryout robust data analysis and interpretation of your health data.
- Strengthening opportunities for career progression in medicine, nursing and allied health.

### **Clinical Education**

Postgraduate Diploma in Health Sciences (Clinical Education) 1CED9 Full time/ 1CED10 Part time

#### RATIONALE

In the health professions, much of the undergraduate teaching and most postgraduate education takes place in clinical settings. Most clinical teachers have little background knowledge of adult learning and have received no formal training in clinical teaching techniques. The purpose of this programme is to provide health professionals with the knowledge and skills required for effective clinical teaching and to become successful clinical supervisors and motivators of student learning.

#### **PROGRAMME OBJECTIVES**

The Postgraduate Diploma in Clinical Education is aimed at qualified health professionals for whom clinical teaching forms part of their role or work plan. The aim of the programme is to provide a theoretical and experiential platform for the participants to develop expertise in all of the key components of clinical teaching.

# PROGRAMME LEARNING OUTCOMES-PG Dip Clinical Education

- 1. Demonstrate an awareness of the key relevant theories of learning and how they relate to clinical education.
- 2. Demonstrate an understanding of the purposes and effects of assessment.
- 3. Demonstrate an awareness of different types and styles of leadership as well as sound knowledge of appropriate educational leadership strategies in the health professions.
- 4. Implement and evaluate effective clinical education using appropriate theorybased techniques.
- 5. Demonstrate proficiency in key clinical education skills such as bed side teaching, giving feedback, using questions appropriately and learner appraisal.
- 6. Demonstrate an ability to critically evaluate assessment strategies and to create robust, appropriately standard-set assessments.
- 7. Implement creative and innovative solutions to educational problems using reflective and mindful techniques.
- 8. Construct learning events on courses based on an understanding of the principles of adult learning and course design.
- 9. Participate in the design and implementation of objective and reflective methods of assessment.
- 10. Demonstrate an ability to design and implement simulation-based educational approaches and strategies.
- 11. Demonstrate an ability to direct the learning of self as well as trainees/students using appropriate, current and effective supervisory techniques.
- 12. Demonstrate an ability to be creative as a teacher and the supervisor of others.

# **ENTRY REQUIREMENTS:**

Applicants must be registered healthcare professionals with at least two years' post-registration experience and be actively involved in clinical practice. General computer literacy is essential as parts of the programme are delivered via distance-learning. Selection is based on ability/opportunity to apply learning to your daily work, relevant experience and academic record.

# PROGRAMME STRUCTURE

The Postgraduate Diploma comprises 6 modules which can be completed over 1 year (2 modules per semester for 3 semesters), or over 2 years (3 modules per year).

Most programme material will be delivered using distance learning techniques. Programme materials will be made available sequentially on the Canvas virtual learning environment. Communication and discussion will be electronic and assessments will be submitted online. The distance learning components will be supported by face-to-face teaching skills workshops and online webinars.

Each module will require approximately 50 hours of effort of which 25 hours will be contact time. The contact hours include reading formal programme materials, participation in practical workshops, participation in discussion board activities, carrying out assignments and mini projects (e-tivities), and the practical application of new knowledge in the workplace.

### PROGRAMME OUTLINE

The majority of teaching is by distance learning. The skills of clinical teaching are taught in face-to-face workshops, one day per module. In addition, there is a two-day face-to- face introductory workshop in September.

Modules labelled core below are mandatory for all students. Postgraduate Diploma students must choose 2 of the 5 optional modules listed below to complete 60ECTS.

1CED9	CED9 Postgraduate Diploma in Health Sciences (Clinical Education) 60ects				
Module Code	Module Title	Semester	ECTS	Module Type	
MD1570	Learning Theory in Clinical Settings	1	10	Core	
MD1571	Clinical Teaching Course Design & Evaluation	1	10	Core	
MD1572	Clinical Teaching Methodologies	2	10	Core	
MD1576	Foundations of Assessment in Clinical Education	2	10	Core	
MD1573	Professional Development	3	10	Optional	
MD1574	Advanced Assessment in Clinical Education (Approved)	3	10	Optional	
MD1575	Creativity & Innovation	3	10	Optional	

MD1577	Leadership & Management in Healthcare Education	3	10	Optional
MD1579	Simulation in Clinical Education	3	10	Optional

There is a part time PG Diploma option where learners complete 30ECTS in Year 1 (1CED10) and another 30ETS in Year 2 (2CED10).

1CED10	CED10 Postgraduate Diploma in Health Sciences (Clinical					
	Education) (P/T) 30ECTS					
Module	Module Title	Semester	ECTS	Module Type		
Code						
	Learning Theory in					
MD1570	Clinical Settings	1	10	Core		
	Clinical Teaching Course					
MD1571	Design & Evaluation	1	10	Optional		
	Clinical Teaching					
MD1572	Methodologies	2	10	Optional		
MD1573	Professional Development	3	10	Optional		
	Advanced Assessment in					
	Clinical Education					
MD1574	(Approved)	3	10	Optional		
MD1575	Creativity & Innovation	3	10	Optional		
	Foundations of					
	Assessment in Clinical					
MD1576	Education	2	10	Optional		
	Leadership &					
	Management in Healthcare					
MD1577	Education	3	10	Optional		
	Simulation in Clinical					
MD1579	Education	3	10	Optional		

2CED10	CED10 Postgraduate Diplo	oma in Health S	ciences (C	linical
Module	Education) (P/T) 30ECTS Module Title	Semester	ECTS	Module Type
Code				
	Clinical Teaching Course			
MD1571	Design & Evaluation	1	10	Optional
	Clinical Teaching			
MD1572	Methodologies	2	10	Optional
	Foundations of			
	Assessment in Clinical			
MD1576	Education	2	10	Optional
MD1573	Professional Development	3	10	Optional
	Advanced Assessment in			
	Clinical Education			
MD1574	(Approved)	3	10	Optional
MD1575	Creativity & Innovation	3	10	Optional
	Leadership &			
	Management in Healthcare			
MD1577	Education	3	10	Optional
	Simulation in Clinical			
MD1579	Education	3	10	Optional

### Incomplete Diploma: \_ Exit with a Certificate in Clinical Education

For those who register for the PG diploma and cannot continue may be awarded PG Cert if they have completed 30ECTS. Students must request to transfer to PG Cert prior to PG Summer Exam boards which are typically held in May. To transfer student's fees will need to be up to date and student will need to authorize the transfer with registration office.

1CED8	CED8 Postgraduate Certificate in Health Sciences (Clinical Education) Exit route				
Module		Semester	ECTS		
Code	Module Title			Module Type	
	Learning Theory in Clinical	1	10		
MD1570	Settings			Core	
	Clinical Teaching Course	1	10		
MD1571	Design & Evaluation			Optional	
	Clinical Teaching	2	10		
MD1572	Methodologies			Optional	
MD1573	Professional Development	3	10	Optional	

	Advanced Assessment in	3	10	
MD1574	Clinical Education			Optional
MD1575	Creativity & Innovation	3	10	Optional
	Foundations of Assessment in	2	10	
MD1576	Clinical Education			Optional
	Leadership & Management in	3	10	
MD1577	Healthcare Education			Optional
	Simulation in Clinical			
MD1579	Education	3	10	Optional

### ASSESSMENT

Modules are assessed by problem-based assignment and reflective portfolio. The assignment should be not less than 1,000 words and not more than 1,500 words long. Students will be asked to solve a generic clinical teaching problem using knowledge and skills gained during the module in question. They will also have to justify their choice of solution using evidence from the programme and other resources. The assignment is assessed according to criteria which are published in the programme handbook. Each problem-based assignment is worth 55% of the marks for the module in question, while portfolios are worth 45%.

### **CAREER OPPORTUNITIES**

Our clinical education focus leads to major changes in how you will be able to facilitate the learning and development of your students in clinical settings. You will know more about how learners learn, how to create safe and effective learning environments, how to assess learners and how to support their professional development. These courses will help you create new pedagogical approaches and improve the clinical education experience for learners.

### Master of Health Science (Clinical Education)

# 1CED1

The Master of Health Sciences (Clinical Education) has been designed to address the higher educational needs of health care professionals involved in the delivery of teaching and training in the health care environment. It builds on the Postgraduate Diploma in Health Sciences (Clinical Education), successful completion of which is a requirement for entry into the Master's programme.

# AIMS

The programme aims to:

- 1. Develop the teaching and educational planning skills of experienced clinical professionals who have significant educational responsibilities.
- 2. Provide students with relevant knowledge to both manage and lead effective educational innovations within their profession.
- 3. Provide students with the relevant knowledge and skills to plan and teach clinical and communication skills at an advanced level.
- 4. Enable students to develop the knowledge and skills required to practice evidence-based education.
- 5. Enable students to develop and implement a sound educational research protocol.
- 6. Enable students to complete an educational research project and to submit in the form of a research paper.

### ENTRY

The programme will be offered to health professionals who have completed the Postgraduate Diploma in Clinical Education (or equivalent) and who have achieved at least 60% in their final mark. Applicants must be currently registered with their relevant professional body and actively involved in clinical teaching. Applicants will be selected on the basis of the quality of their C.V., and an application essay (personal statement) in which each candidate must outline their rationale for doing the programme.

### STRUCTURE

The programme will be delivered using online distance learning techniques, supported by face-to-face teaching skills workshops. Students will each have an academic mentor/supervisor for the duration of the Masters. The content of the course is as follows:

1CED1	CED1 Master of Health Sciences (Clinical Education)				
Module Code	Module Title	Semester	ECTS	Module Type	
MD130	Evidence Based Education	5	5	Core	
MD132	Educational Research	5	15	Core	
	Clinical Teaching Research				
MD133	Dissertation	8	40	Core	

### ASSESSMENT

The taught modules will be assessed using:

- A literature review for the evidence-based education module.
- A methodology paper for the educational research module.
- Students are also required to submit a clinical teaching research dissertation at the end of the academic year, in the form of a 4,000-word ready for publication research paper.

# **CAREER OPPORTUNITIES**

Our clinical education focus leads to major changes in how you will be able to facilitate the learning and development of your students in clinical settings. You will know more about how learners learn, how to create safe and effective learning environments, how to assess learners and how to support their professional development. These courses will help you create new pedagogical approaches and improve the clinical education experience for learners. The Masters Programme represents an opportunity to develop an area of specialist expertise, as well as answer research questions of importance to Irish healthcare education. Our unique 4,000-word 'ready-for-publication' thesis design increases the likelihood of publication in a peer-reviewed journal.

### **Clinical Research**

Master of Science (Clinical Research) Full time 1MCR1, Part time 1MCR2

PG Diploma/Certificate in Science (Clinical Research) 1MCR9 (exit route), 1MCR8 (exit route)

### PROGRAMME DESCRIPTION

The objective of this course is to provide course facts training for the next generation of healthcare workers in the clinical research arena, providing a platform for more enhanced efficiencies in the translation of medical discoveries into clinical practice. Course contributors include senior academics and medical professionals from University of Galway and Saolta Galway University Health Care Group, who are actively engaged in clinical research. This programme is closely linked with the Institute for Clinical Trials and HRB Clinical Research Facility, Galway. Aimed at individuals employed in the healthcare sector, this course has been developed to meet the needs of working graduates who wish to up-skill, specialise or change career direction. For further details of the course, see <a href="https://www.universityofgalway.ie/courses/taught-postgraduate-courses/clinical-research.html">https://www.universityofgalway.ie/courses/taught-postgraduate-courses/clinical-research.html</a>

The MSc in Clinical Research is intended to be a part-time two-year programme of academic study in Clinical Research Methodology. Year 1 will be spent at University of Galway and Year 2 is completed by a combination of distance learning through modules and on-site modules delivered by University of Galway. A <u>full-time</u>1-year option is available to students who wish to complete the MSc in a full-time capacity.

This course is delivered through blended learning, to include lectures, tutorials, problem-based learning (PBL) and distance learning.

### UNIVERSITY OF GALWAY CODE:

1MCR1 (Full Time); 1MCR2 (Part-Time)

# PROGRAMME AIMS AND OBJECTIVES

• Understand primarily quantitative and qualitative research approaches, including their strengths and limitations, and learn how to apply research approaches and methods by completing weekly assignments and preparing a research protocol in the student's area of interest.

• Be comfortable examining data analysis, statistical concepts and be able to think on a practical level, to apply simple statistical techniques to design, analyse and interpret studies in a wide range of disciplines and to utilise statistical package(s) and to further illustrate the power of statistical techniques.

• Have an in-depth understanding of sampling, causation, survey research, cohort study (retrospective and prospective), case-control, bias in observational research, multivariable analysis and propensity analysis.

• Have an appreciation and understanding of the main elements of clinical trial design,

execution, and analysis. At the end of the course, students should have a firm grasp of clinical trial methodology at a level that would allow them to prepare successful grant applications.

• Understand systematic review methodology and be able to execute a rigorous systematic review. Students will be introduced to review methodology outlined in the Cochrane Handbook for Systematic Reviews and will explore concepts and controversies in review methodology.

• Have an in-depth understanding of the translational process to enable development of

therapeutic strategies, Good Clinical Practice (GCP), the clinical trial process and Good Manufacturing Practice (GMP), including validation, regulatory and legislation requirements for the design and translation of medical therapies and ethical issues underpinning the practice of translational medicine.

• Understand how to examine the various elements involved in the establishment and operation of clinical research facilities and clinical trials, regulatory and ethical principles, procedures for successful completion and reporting of clinical trials and financial management issues.

• Have been provided with an opportunity to develop a personalised approach to training in clinical research, drawing from a variety of core and optional modules.

# ECTS WEIGHTING 90 ECTS.

# MINIMUM ENTRY REQUIREMENTS

Students must have completed either; 1) Undergraduate degree in medicine or; 2) Other healthcare-related undergraduate degree with a minimum of  $2^{nd}$  Class Honours degree (including Nursing, Occupational therapy, Physiotherapy, Speech and Language Therapy and Pharmacy) or; 3) Biomedical sciences with a minimum of  $2^{nd}$  Class Honours degree. Applications from graduates of non-healthcare related degrees are also considered (minimum requirement of  $2^{nd}$  Class Honours) on a case-by-case basis, at the discretion of the admissions committee. Students who have a degree without Honours in a related area and have 3 or more years of practical experience in the subject area will also be considered for this programme. Potential students should be seeking a career in clinical research as a principal investigator, research coordinator or research administration.

# **COURSE OUTLINE:**

**FULL TIME M.SC. (CLINICAL RESEARCH):** Students are required to complete three compulsory/core modules at University of Galway. A further 3 modules are selected from optional/additional courses available at University of Galway via face-face lectures and distance learning.

1MCR1	MCR1 M.Sc. (Clinical Research	h) 90ects		
Module	Module Title	Semester	ECTS	Module
Code				Туре
	Introduction to the Ethical and			
	Regulatory Frameworks of			
MD1602	Clinical Research*	1	10	Core
	Fundamentals of Health			
	Research & Evaluation			
MD510	Methods	1	10	Core
MD511	Introduction to Biostatistics I	1	10	Core
	Economic Evaluation in Health			
EC584	Care	1	10	Optional
	Harnessing the Basic Biology			
	of Cancer for Development of			
MD1541	Novel Therapeutics*	1	10	Optional
MD1600	Bio-Ethics*	1	10	Optional
	Clinical Research Site Level			
MD1603	Activities	1	10	Optional
	Health Systems & Policy			
EC572	Analysis	2	10	Optional

	Biobank– Advanced Clinical Application and Clinical			
MD1601	Testing*	2	10	Optional
MD513	Introduction to Biostatistics II	2	10	Optional
	Introduction to Research Methods for Randomized			
MD514	Controlled Trials*	2	10	Optional
MD515	Systematic Review Methods*	2	10	Optional
MD517	Clinical Research Administration	2	10	Optional
MD518	Observational Studies & Analytical Research Methods	2	10	Optional
		12 months		
MD520	THESIS	long	30	Core

#### \* Online

**<u>Full Time</u>: Thesis** (30 ECTS), completed over the 1 year period. Thesis defence will be completed at University of Galway.

**PART TIME MSC. (CLINICAL RESEARCH):** Students are required to complete three compulsory modules at University of Galway.

Module Code	Module Title	Semester	ECTS
MD1602	Introduction to the Ethical and Regulatory	1	10
	Frameworks of Clinical Research		
MD510	Fundamentals of Health Research &	1	10
	Evaluation Methods		
MD511	Introduction to Biostatistics I	1	10

A further 3\* or 5\*\* modules are selected from additional courses available at University of Galway via face-face lectures and distance learning.

Module Code	Module Title	Semester	ECTS	Module Type
	Harnessing the Basic Biology of Cancer for Development of Novel			
MD1541	Therapeutics*	1	10	Optional

MD1600	Bioethics*	1	10	Optional
	Clinical Research Site			
MD1603	Level Activities	1	10	Optional
	Health Systems &			
EC572	Policy Analysis	2	10	Optional
	Biobank-Advanced			
	Clinical Application			
MD1601	and Clinical Testing*	2	10	Optional
	Introduction to			
MD513	Biostatistics II	2	10	Optional
	Introduction to			
	Research Methods for			
	Randomized Controlled			
MD514	Trials*	2	10	Optional
	Systematic Review			
MD515	Methods*	2	10	Optional
	Clinical Research			
MD517	Administration	2	10	Optional
	<b>Observational Studies</b>			
	& Analytical Research			
MD518	Methods	2	10	Optional
MD519	Independent Study	3	10	Optional
		12 months		
MD520	THESIS	long	30	Optional

\*Online

<u>**Part Time</u></u>: Thesis (30 ECTS), completed over the 2 year period. Thesis defence will be completed at University of Galway <b>OR \*\*Independent Study Module** (10 ECTS), completed and assessed by University of Galway.</u>

TOTAL: 90 ECTS over 1 year (FT) or 2 years (PT).

**Module assessment:** Departmental assessment, end of module exam, interim assignments or as directed by module leader.

Minimum threshold of students per module will apply.

# **EXIT ROUTES:**

For those who are unable to complete master's but have completed 60ects, there is an option to transfer to 1MCR9 and exit with a PG Diploma.

For those who are unable to complete master's but have completed 30ects, there is an option to transfer to 1MCR8 and exit with a PG Certificate.

To transfer the student's fees must be up to date and student will need to authorize the transfer by April 30<sup>th</sup> or ahead of PG Summer exam boards within the academic year of study, which are usually held in May. There will be no refund of fees.

1MCR9	MCR9 Postgraduate Diplo	ma (Clinical F	Research) 6	<b>DECTS</b>
Module Code	Module Title	Semester	ECTS	Module Type
MD1602	Introduction to the Ethical and Regulatory Frameworks of Clinical Research*	1	10	Core
MD510	Fundamentals of Health Research & Evaluation Methods	1	10	Core
MD511	Introduction to Biostatistics I	1	10	Core
EC584	Economic Evaluation in Health Care	1	10	Optional
MD1541	Harnessing the Basic Biology of Cancer for Development of Novel Therapeutics*	1	10	Optional
MD1600	Bioethics*	1	10	Optional
MD1603	Clinical Research Site Level Activities	1	10	Optional
EC572	Health Systems & Policy Analysis	2	10	Optional
MD1601	Biobank– Advanced Clinical Application and Clinical Testing*	2	10	Optional
MD513	Introduction to Biostatistics II	2	10	Optional
MD514	Introduction to Research Methods for Randomized Controlled Trials*	2	10	Optional
MD515	Systematic Review Methods*	2	10	Optional

MD517	Clinical Research Administration	2	10	Optional
MD518	Observational Studies & Analytical Research Methods	2	10	Optional
MD519	Independent Study	3	10	Optional

\*Online

1MCR8	MCR8 Postgraduate Certificate (Clinical Research) 30ects			
Module	Module Title	Semester	ECTS	Module
Code				Туре
MD1602	Introduction to the Ethical and Regulatory	1	10	Core
	Frameworks of Clinical Research*			
MD510	Fundamentals of Health Research & Evaluation Methods	1	10	Core
MD511	Introduction to Biostatistics I	1	10	Core

\*Online

# **CAREER OPPORTUNITIES**

The MSc program provides training for qualified individuals (see entry requirements) who wish to become independent clinical investigators **or** those who wish to seek employment in leadership positions in clinical research teams The conduct and oversight of clinical research has become a prominent source of jobs in a variety of settings, including university and colleges, pharmaceutical industry, non-academic clinical research organizations, independent funding agencies and government agencies. Additional opportunities include employment in teaching and consultation.

### Healthcare Simulation & Patient Safety

MSc. /PDip in Healthcare Simulation & Patient Safety 1HSP1/1HSP9 (Master-requires PG Dip for entry) 1HSP8 PG Cert (exit route).

### **COURSE OVERVIEW**

Healthcare simulation education is a bridge between classroom learning and real-life experience. There has been a lack of education and training in how simulation can be used to educate healthcare practitioners or how it can be incorporated into existing educational programmes. The main goal of these postgraduate qualifications in Healthcare Simulation and Patient Safety is to prepare the student to design and deliver effective healthcare simulation education to improve patient safety.

Applications are made online via Sign In | Sínigh isteach(elluciancrmrecruit.com).Relevant PAC application code(s) above.About Us - Simulation MastersPaul O'Connor, PhD, MA, MSc, BSc (Hons)About Us - Simulation MastersAngela O'Dea, PhD, MSc, BA

### ENTRY REQUIREMENTS

An honours Bachelor's degree at NFQ Level 8 in a relevant healthcare discipline (e.g., medicine, nursing, speech and language therapy, pharmacy), although applicants with evidence of at least three years' equivalent professional/academic experience will be considered (e.g., Emergency Medicine Technicians, simulation laboratory staff and simulation technicians etc.). Demonstrated proficiency in English. Previous experience, or an academic qualification, in the education and teaching of healthcare professionals. Demonstrated interest in simulation.

### Postgraduate Diploma in Healthcare Simulation and Patient Safety

An honours Bachelor degree at NFQ Level 8 Demonstrated interest insimulation Demonstrated proficiency in English Previous experience or academic qualification

### Masters in Healthcare Simulation and Patient Safety

An honours Bachelor degree at NFQ Level 8 Demonstrated interest in simulation Demonstrated proficiency in English Previous experience or academic qualification Achieving a minimum 65% average grade across the Diploma modules

Master-24 months; PDip-12 months Average intake 20 students (Masters); 40 students (PDip) Closing Date: Please refer to the <u>review/closing date</u> website.

# **MODE OF STUDY**

The course is delivered as much as possible online. This delivery method allows the student to study at a time that is convenient to them, no matter where they live. The modules are delivered using a combination of multi-media presentations, online discussion boards, and online tutorials. There will also be a need to attend a 2.5-day intensive immersive simulation workshops held at the Irish Centre for Applied Patient Safety and Simulation (ICAPSS) at Galway University Hospital and the University of Galway.

### ECTS WEIGHTING

Master 120 ECTS; PDip 60 ECTS PAC code 1HSP1 (Master) 1HSP9 (PDip) 1HSP3 (Master –requires PG dip for entry) 1HSP8 (PG cert exit route)

# **COURSE STRUCTURE:**

# Postgraduate Diploma in Healthcare Simulation and Patient Safety 1HSP9

The course will be delivered in six sequential modules during the academic year.

Module 1. An introduction to simulation and training in healthcare.

Module 2. Simulation with manikin and task-based trainers.

Module 3. Standardised patients, virtual patients, and hybrid simulation.

Module 4. Running an effective simulation-based education programme.

Module 5. Human factors and patient safety in simulation.

Module 6. Uses of medical and healthcare simulation beyond education

1HSP9	HSP9 PG DIP SC. HEALTHCARE SIMULATION AND PATIENT SAFETY 1 Year Full Time				
Module Code	Module Title	Semester	ECTS	Module Type	
MD1501	Introduction to simulation-based education	1	10	Core	
MD1502	Simulation with manikin and task-based trainers	1	10	Core	
MD1503	Standardised patients, virtual patients, and hybrid simulation	1	10	Core	
MD1504	Human factors and patient safety in simulation	2	10	Core	
MD1505	Uses of medical and healthcare simulation beyond education	2	10	Core	
MD1506	Running an effective simulation-based education programme	2	10	Core	

The course will be assessed by:

Student participation and reflection on weekly discussion board activities related to the materials presented during the week of instruction. The completion of e-tivities, and one end of module assignment for each module. Participation, and reflection on, simulation-based teaching activities. Demonstration of competency in delivering simulation-based education.

# Master's in Healthcare Simulation and Patient Safety 1HSP1, 2HSP1

Modules 1 to 6 will be delivered during the first academic year. Modules 7 and 8 will be delivered during the second academic year of study.

Module 1. An introduction to simulation and training in healthcare.

Module 2. Simulation with manikin and task based trainers.

Module 3. Standardised patients, virtual patients, and hybrid simulation.

Module 4. Running an effective simulation-based education programme.

Module 5. Human factors and patient safety in simulation.

Module 6. Uses of medical and healthcare simulation beyond education

Module 7. Research Methods for Medical and Healthcare Simulation.

Module 8. Research Thesis.

# Course will be assessed by:

Student participation and reflection on weekly discussion board activities related to the materials presented during the research methods module. Completion of module assignments.

Completion of a research proposal and methodology paper

Completion of a 3,000 to 5,000 simulation-focused research dissertation in the format of a peer-reviewed journal.

1HSP1	HSP1 MSC. HEALTHCARE SIMULATION AND PATIENT SAFETY Year 1			
Module Code	Module Title	Semester	ECTS	Module Type
MD1501	Introduction to simulation-based education	1	10	Core
MD1502	Simulation with manikin and task-based trainers	1	10	Core
MD1503	Standardised patients, virtual patients, and hybrid simulation	1	10	Core
MD1504	Human factors and patient safety in simulation	2	10	Core
MD1505	Uses of medical and healthcare simulation beyond education	2	10	Core
MD1506	Running an effective simulation-based education programme	2	10	Core
2HSP1	HSP1 MSC. HEALTHCARE SIMULATION AN	ID PATIENT	SAFETY	Year 2
Module Code	Module Title	Semester	ECTS	Module Type
MD2507	Research methods - medical and healthcare simulation	1	15	Core
MD2508	Research thesis - medical and healthcare simulation	8	45	Core

# MSc. in Healthcare Simulation and Patient Safety 1HSP3

# Requires PG Dip for entry

Module 7. Research Methods for Medical and Healthcare Simulation.

Module 8. Research Thesis.

1HSP3	HSP3 MSc. Healthcare Simulation and Patient Safety requires PG Dip for entry				
Module Code	Module TitleModuleModule TitleSemesterECTSType				
	Research methods - medical and healthcare				
MD2507	simulation	1	15	Core	
	Research thesis - medical and healthcare				
MD2508	simulation	8	45	Core	

1HSP8	HSP8 PG CERT SC. HEALTHCARE SIMULATION AND PATIENT SAFETY exit route				
Module	Module Title Semester ECTS Module				
Code				Туре	
MD1501	Introduction to simulation-based education	1	10	Core	
MD1502	Simulation with manikin and task-based trainers	1	10	Core	
MD1503	Standardised patients, virtual patients, and hybrid simulation	1	10	Core	

# PG Cert Sc. Healthcare Simulation & Patient Safety (exit route)

In the last decade, there have been large changes in undergraduate healthcare education, postgraduate healthcare education, delivery of healthcare, and the working environment. These changes have led to a large investment in simulation centres nationally and internationally. A postgraduate qualification in Healthcare Simulation and Patient Safety will provide the student with the expertise required to deliver simulation-based education in undergraduate and postgraduate healthcare teaching environments, implement a simulation-based programme in their facility and run skills and team-based training to improve patient safety and the quality of patient care.

### Who is suited to this course?

If you are a doctor, nurse, allied health professional (e.g. speech and language, pharmacy, physiotherapy), paramedic, dentist, veterinary surgeon or work in a healthcare simulation facility and have an interest in simulation-based education, you should consider applying for one of our simulation programmes.

# GOALS

# Postgraduate Diploma in Healthcare Simulation and Patient Safety

The main goal of the Diploma in Healthcare Simulation and Patient Safety is to prepare the student to run a simulation centre and use simulation for research, improving patient safety, testing equipment and processes, and integrating simulation into institutional healthcare training, education and delivery systems.

# Master's in Healthcare Simulation and Patient Safety

Completing a Master's in Healthcare Simulation and Patient Safety will prepare the student to deliver healthcare simulation, run a healthcare simulation centre, and carry out research on or using healthcare simulation.

Find out More Visit <u>http://www.simulationmasters.com/</u> Paul O'Connor T: +353 91 492 897 | E: paul.oconnor@universityofgalway.ie

## MSc. Exercise Physiology and its Application in Therapy

PAC Code; 1EPT1 (F/T) 1EPT2 (P/T) Master 1EPT3 F/T, 1EPT4 (P/T) PG Dip 1EPT7 PG Cert (exit only)

### Introduction

This exciting new degree is the first of its kind in the West of Ireland. This course will enable students to have a full and comprehensive understanding of the integrated physiological responses to exercise, evaluation of fitness levels and exercise prescription according to individual needs. Upon completion students will be able to work in the emerging area of exercise physiology and exercise prescription in health and as therapy.

#### About this Program

In this course, students will develop an advanced knowledge of exercise physiology including a full and in-depth understanding of physiological processes and changes that occur during routine exercise and during training. Students will understand how these changes are beneficial to general health and fitness. Students will have a clear understanding of the methods of evaluation that can be used to assess these changes, to evaluate the fitness level and to plan and prescribe an exercise program that will be beneficial to the individual in health and in certain chronic disease settings.

This unique course will enable students to -

- Develop knowledge of exercise physiology and evaluation of fitness.
- Learn to prescribe an exercise program to healthy clients and as therapy in certain clinical settings.
- Obtain professional recognition from Register of Exercise Professionals Ireland and American College of Sports Medicine.
- Pursue a career as an exercise specialist/therapist. Total ECTS 90.

# **Course Modules**

1EPT1	EPT1 Master of Science (Exercise Phy 90ECTS	siology & App	lication in	Therapy)
Module	Module Desc	Semester	ECTS	Module Type
ET1500	Introduction to Exercise Physiology	Semester 1	10	Core
ET1501	Integrated Physiological Responses to Exercise	Semester 1	10	Core
ET1518	Rehabilitation I: Physiologic Basis of Exercise Testing and Prescription	Semester 2	10	Core
ET1519	Rehabilitation II - Exercise in Population Health and Rehabilitation	Semester 2	10	Core
ET1505	Laboratory Methods in Exercise Physiology	Trimester 3	10	Core
ET1515	Neurophysiology and Exercise	Semester 1	5	Core
ET1516	Metabolism and Nutrition in Exercise	Semester 1	5	Core
ET1506	Research Project and Dissertation	15 months long	25	Core
ET1507	Personal Training and Gym Instruction	Trimester 3	5	Optional
ET1511	Research Methods for Physiotherapists and Healthcare Professionals	Semester 2	5	Optional
ET1512	Community Engaged Learning and Outreach	Trimester 3	5	Optional

1EPT2	EPT2 Master of Science (Exercise Physiology & Application in Therapy) P/T 45ECTS Year 1			
Module	Module Desc	Semester	ECTS	Module Type
ET1500	Introduction to Exercise Physiology	Semester 1	10	Core
ET1501	Integrated Physiological Responses to Exercise	Semester 1	10	Core
ET1518	Rehabilitation I: Physiologic Basis of Exercise Testing and Prescription	Semester 2	10	Core
ET1515	Neurophysiology and Exercise	Semester 1	5	Core
ET1517	Metabolism and Nutrition in Exercise	Semester 2	5	Core
ET1507	Personal Training and Gym Instruction	Trimester 3	5	Optional
ET1511	Research Methods for Physiotherapists and Healthcare Professionals	Semester 2	5	Optional
ET1512	Community Engaged Learning and Outreach	Trimester 3	5	Optional
2EPT2	EPT2 Master of Science (Exercise Physiology & Application in Therapy) P/T 45ECTS Year 2			
ET1505	Laboratory Methods in Exercise Physiology	Trimester 3	10	Core
ET1506	Research Project and Dissertation	15 months long	25	Core
ET1521	Rehabilitation II - Exercise in Population Health and Rehabilitation	Semester 1	10	Core

1EPT3	EPT3 Postgrad Diploma in Science (Exercise Physiology & Application in Therapy) 60ECTS				
Module	Module Desc	Semester	ECTS	Module Type	
ET1500	Introduction to Exercise Physiology	Semester 1	10	Core	
ET1501	Integrated Physiological Responses to Exercise	Semester 1	10	Core	
ET1518	Physiological Evaluation of Exercise (Rehabilitation I)	Semester 2	10	Core	
ET1519	Exercise in Health and Disease, Exercise as Therapy (Rehabilitation II)	Semester 2	10	Core	
ET1505	Laboratory Methods in Exercise Physiology	Trimester 3	10	Core	
ET1515	Neurophysiology and Exercise	Semester 1	5	Core	
ET1516	Metabolism and Nutrition in Exercise	Semester 1	5	Core	

1EPT4	EPT4 Postgrad Diploma in Science (Exercise Physiology & Application Therapy) P/T Year 1				
Module	Module Desc	Semester	ECTS	Module Type	
ET1500	Introduction to Exercise Physiology	Semester 1	10	Core	
ET1505	Laboratory Methods in Exercise Physiology	Trimester 3	10	Core	
ET1515	Neurophysiology and Exercise	Semester 1	5	Core	
ET1517	Metabolism and Nutrition in Exercise	Semester 2	5	Core	
2EPT4	EPT4 Postgrad Diploma in Science (Exercise P P/T Year 2	hysiology & Ap	oplication 7	Therapy)	
ET1501	Integrated Physiological Responses to Exercise	Semester 1	10	Core	
ET1518	Physiological Evaluation of Exercise (Rehabilitation I)	Semester 2	10	Core	
ET1519	Exercise in Health and Disease, Exercise as Therapy (Rehabilitation II)	Semester 2	10	Core	

1EPT7	EPT7 Postgrad Certificate in Science (Exercise Physiology) 30ECTS Exit only				
Module	Module Desc	Semester	ECTS	Module Type	
ET1500	Introduction to Exercise Physiology	Semester 1	10	Core	
ET1501	Integrated Physiological Responses to Exercise	Semester 1	10	Core	
ET1515	Neurophysiology and Exercise	Semester 1	5	Core	
ET1516	Metabolism and Nutrition in Exercise	Semester 1	5	Core	

This programme is open to students who have completed a Level 8 degree with a minimum of second-class honors in Physiology, Biomedical Science, Un-denominated Science, Biochemistry, Microbiology, Exercise Science, Nursing and Health Science, Physiotherapy, Podiatry, or any other related degree in biology. NFQ level 7 (ordinary Bachelor's degree) in Physiotherapy or Exercise Science will also be considered and a bridging module in human body functions will be made available for transfer to the course.

Applicants who are not from Physiology, Exercise or Life science backgrounds but have a degree in other Exercise related areas or Sports management and having significant work experience and interest in the area of exercise science or sports will be considered on a case-by-case basis at the discretion of the program board. Students who have a Level 8 degree with less than second class honors in a related area and have 3+ years of practical experience in the subject area will also be considered.

# **Career Opportunities:**

With the increasing number of people living with chronic illnesses the demand for exercise physiologists capable of giving personal exercise advice that can improve the living standards of an individual is growing. Upon successful completion of this course students will be able to work in areas such as:

- Hospital, Health Care Centre and Outpatient Clinic
- Professional Sports and Coaching Centre
- Health club, Leisure Centre and related organizations
- Public sports and recreation facilities
- Local public health authorities
- Nursing Homes and Residential Care Facilities
- Schools, further education and higher education institutions

### MSc Exercise Physiology & Rehabilitation 1EPT5

PDip Exercise Physiology & Rehabilitation 1EPT6 PG Cert Exercise Physiology 1EPT7 (exit route)

#### **COURSE OVERVIEW**

The **MSc in Exercise Physiology and Rehabilitation** (a blended learning programme: mode of study is taught and online) will provide knowledge and skill sets required for exercise prescription in a clinical setting. Physical interventions consisting of personalised exercise is a crucial component of rehabilitation programs for people recovering from chronic disorders and musculoskeletal injury. These interventions when tailored to the individuals' current physical fitness can help to reduce the symptoms of disease and improve their physical function and quality of life. Such physical interventions also help to reduce the risks of developing further comorbidities. This course will help qualified physiotherapists obtain specific skills in applying exercise physiology interventions in a clinical setting for rehabilitation of patients and obtain the compulsory CPD credits required for their professional development and progression.

#### ABOUT THIS PROGRAMME

This course is designed to provide qualified physiotherapists advanced knowledge and training in the development and application of exercise interventions in the rehabilitation of various chronic diseases.

Students will develop an advanced knowledge of exercise physiology including in-depth understanding of physiological processes that occur during exercise. Students will understand how these changes are beneficial to improving health and fitness. Students will have a clear understanding of the methods of evaluation that can be used to assess these changes, to evaluate the fitness level and to plan and prescribe an exercise program that will be beneficial to the individual as a therapeutic intervention in certain chronic disease settings.

This unique course will enable students to-

- Develop a comprehensive knowledge of EXERCISE PHYSIOLOGY
- Learn to evaluate the various PHYSIOLOGIC RESPONSES to EXERCISE.
- Learn to prescribe an EXERCISE PROGRAM as a THERAPEUTIC INTERVENTION in a CLINICAL settings
- Obtain PROFESSIONAL RECOGNITION in the form of CPD credits

# PROGRAMME LEARNING OUTCOMES

- 1. Evaluate the functional musculoskeletal anatomy and kinesiology its role in movement and exercise. Attribute this knowledge to outline the bio-mechanical principles involved in human movement.
- 2. Appraise and assimilate the individual and integrated physiological responses (Cardiorespiratory, Neurological and humoral responses) to different types of exercise.
- **3.** Summarize the importance of metabolism and nutrition in maintaining an effective exercise program. Apply this knowledge to design and develop appropriate nutritional interventions.
- 4. Assess the physiological responses for an individual during exercise and apply this information to the design of a suitable and relevant exercise programme.
- 5. Critically apply knowledge of the adaptations to chronic exercise: to provide a rationale for the provision of exercise programmes, to provide planning and implementation of exercise programmes to improve and maintain specific aspects of health and fitness.
- 6. Design and develop an exercise program that meets the needs of individuals in consideration of current research evidence, best-practice guidelines, risk category and the exercise capacity, tolerance and motivation of the individual. Develop comprehensive knowledge of international recommendations and guidelines for exercise prescription and its implementation.
- 7. Critically evaluate the role of exercise interventions in rehabilitation of patients with chronic disease and recommend appropriate strategies to implement exercise as a therapeutic tool. Apply specialist knowledge and understanding of movement and movement dysfunction to clinical practice. Develop and implement exercise programmes for rehabilitation of patients with chronic disease.
- 8. Demonstrate the use of an evidence-based approach in practice which integrates research findings into patient assessment and management.
- **9.** Analyse and apply knowledge and skills acquired in a clinical setting. Obtain clinical skills through work-place experience. Outline occupational roles and responsibilities as a physiotherapist.
- **10.** Recognise and critically evaluate the professional issues associated with the provision of exercise interventions and services. Design solutions to support best practice guidelines.

# **COURSE STRUCTURE:**

1EPT5	EPT5 Master of Science (Exercise Physiology & Rehabilitation) F/T 90ECTS			
Module	Module Desc	Semester	ECTS	Module Type
ET1500	Introduction to Exercise Physiology	Semester 1	10	Core
ET1501	Integrated Physiological Responses to Exercise	Semester 1	10	Core
ET1518	Rehabilitation I: Physiologic Basis of Exercise Testing and Prescription	Semester 2	10	Core
ET1519	Rehabilitation II - Exercise in Population Health and Rehabilitation	Semester 2	10	Core
ET1505	Laboratory Methods in Exercise Physiology	Trimester 3	10	Core
ET1515	Neurophysiology and Exercise	Semester 1	5	Core
ET1516	Metabolism and Nutrition in Exercise	Semester 1	5	Core
ET1506	Research Project and Dissertation	15 months long	25	Optional
ET1507	Personal Training and Gym Instruction	Trimester 3	5	Optional
ET1520	Placement Based Learning	15 months long	25	Optional
ET1511	Research Methods for Physiotherapists and Healthcare Professionals	Semester 2	5	Optional
ET1512	Community Engaged Learning and Outreach	Trimester 3	5	Optional

1EPT6	EPT6 Postgrad Diploma in Science (Exercise Physiology & Rehabilitation) 60ECTS			
Module	Module Desc	Semester	ECTS	Module Type
ET1500	Introduction to Exercise Physiology	Semester 1	10	Core

ET1501	Integrated Physiological Responses to Exercise	Semester 1	10	Core
ET1518	Rehabilitation I: Physiologic Basis of Exercise Testing and Prescription	Semester 2	10	Core
ET1519	Rehabilitation II - Exercise in Population Health and Rehabilitation	Semester 2	10	Core
ET1505	Laboratory Methods in Exercise Physiology	Trimester 3	10	Core
ET1515	Neurophysiology and Exercise	Semester 1	5	Core
ET1516	Metabolism and Nutrition in Exercise	Semester 1	5	Core

1EPT7	EPT7 Postgrad Certificate in Science (Exercise Physiology) 30ECTS				
Module	Module Desc	Semester	ECTS	Module	
				Туре	
ET1500	Introduction to Exercise Physiology	Semester	10	Core	
		1			
ET1501	Integrated Physiological Responses to Exercise	Semester	10	Core	
		1			
ET1515	Neurophysiology and Exercise	Semester	5	Core	
		1			
ET1516	Metabolism and Nutrition in Exercise	Semester	5	Core	
		1			

# ASSESSMENTS

All students will engage with continuous assessments. Students will be assessed during each semester by continuous assessments and end of semester exams. In module 7 in semester 2, students will attend a three week-long hands-on training workshop to gain practical experience in exercise testing and physiological methods of evaluating human performance and application of their knowledge in exercise prescription. Students will

also attend a workshop in professionalism and learn about the roles and responsibilities of physiotherapist in a rehabilitation setting.

In semester 3 students will complete a work placement for six weeks. For the clinical placement module, the students will complete a reflective journal reporting their experience and also complete a case study report reviewed during their clinical placement. Students will also have the opportunity to present their work at the Exercise is Medicine research symposium.

# **CAREER OPPORTUNITIES**

Course syllabus is aligned to CORU recommendations in Ireland and American College of Sports Medicine (ACSM) Clinical Exercise Physiologist Qualification. Upon completion students will be able to obtain CPD points. Students will also be eligible for Clinical Exercise Physiologist certification from ACSM. International students with an appropriate undergraduate degree in Physiotherapy will be able to apply for registration in Ireland. Upon completion of the course students will receive appropriate professional qualification and recognition. This programme, due to its online mode of study, will appeal to busy professionals wishing to upskill.

### ENTRY REQUIREMENTS

Level 8 (or equivalent) Bachelor's degree in Physiotherapy, Physical Therapy or Occupational Therapy, with a minimum score of 2.2 (or equivalent). Global students will need to obtain an IELTS score of 6.5.

### Clinical Speciality Focused

## MSc. Interventional Cardiovascular Medicine

#### MSc (90ECTs)

PG Dip (60ECTS) (exit only) PG Cert (30ECTS) (exit only)

#### **Programme Description**

The Masters in Interventional Cardiovascular Medicine will be attractive to clinical doctors who are interested in furthering their careers in interventional medicine. In addition, the course will be highly attractive to biomedical engineers in the research and development sector of the medical device industry. The programme will be delivered in collaboration with PCR (<u>PCRonline.com</u>). Course modules cover coronary artery disease (CAD), CAD Treatments, structural heart disease, vascular intervention, medical device innovation and research methods for evidence-based practice.

UNIVERSITY OF GALWAY CODE: 11CM1 ECTS WEIGHTING: 90ECTS

### **Programme Aims and Objectives**

To adequately train future Interventional physicians and cardiologists. The Master's will focus on core competencies of clinical knowledge, clinical decision-making, procedural skills, research methodology, professionalism, and interpersonal skills.

The overall objectives of the Masters in Interventional Cardiovascular Medicine are to:

- Establish a working understanding of key scientific and practical principles supporting interventional cardiovascular medicine.
- Acquire, organize, critically evaluate and apply relevant literature, data and results relevant to interventional cardiovascular medicine.
- Apply the knowledge and skills developed within the programme to produce an in-depth review of the scientific literature.
- Critically evaluate professional practices at local, national and international levels.
- Communicate complex scientific principles effectively via written, oral and practical methodologies.
- To identify, organize, evaluate and apply knowledge to solve relevant problems in interventional cardiology.
- Demonstrate an ability to communicate relevant information to peers, colleagues and examiners.
- Exhibit self-confidence and capability to identify, interpret and analyse data relevant to interventional cardiovascular medicine and establish an

extensive understanding of associated techniques and instrumentation.

- Attract highly motivated students, both from Ireland, Europe and overseas.
- Develop a high level of knowledge and understanding of interventional procedures.
- Develop high-level understanding of procedural skills in interventional medicine and cardiology.
- Provide an experience which is intellectually stimulating, enjoyable, and meets diverse students' needs.
- Provide a solid foundation for those Master's students who intend to proceed to study for a PhD.

### Minimum Entry Requirements:

Applicants will be expected to possess a good quality undergraduate degree (at least an upper second-class honours standard 2:1 academic qualification). It is expected that most of the students will be medical graduates with an interest in interventional medicine/cardiology. The Master's will attract non-consultant hospital doctors. The medical graduates/doctors applying for the Master's will not require prior essential exposure to cardiology or interventional medicine. The course will also be open to applicants from biomedical engineering. Candidates coming to Ireland from abroad or who do not have a degree from Ireland or the UK will be asked to provide evidence of an acceptable result in one of the recognised English language proficiency tests, e.g. IELTS total score of 6.5.

1ICM1	ICM1 Master of Science (Interventional Cardiovascular Medicine) 1 Year full time			
Module	Module Title	Semester	ECTS	Module
Code				Туре
MD1530	Fundamentals of Vascular Intervention	2	10	Core
MD1531	Fundamentals of Coronary Artery Disease	1	10	Core
	(Treatments)			
MD1532	Fundamentals of Coronary Artery Disease	1	10	Core
	(Diagnostics)			
MD1535	Medical Device Innovation	1	10	Core
MD1537	Fundamentals of Structural Heart Disease	2	10	Core
MD1538	Research Methods for Evidence Based Practice	2	10	Core
MD1533	Research Thesis	Year long	30	Core

### **Course Outline:**

1ICM9	ICM9 Postgraduate Diploma in Science (Interventional Cardiovascular Medicine) exit route				
Module	Module Title	Semester	ECTS	Module	
Code				Туре	
MD1530	Fundamentals of Vascular Intervention	2	10	Core	
MD1531	Fundamentals of Coronary Artery Disease	1	10	Core	
	(Treatments)				
MD1532	Fundamentals of Coronary Artery Disease	1	10	Core	
	(Diagnostics)				
MD1535	Medical Device Innovation	1	10	Core	
MD1537	Fundamentals of Structural Heart Disease	2	10	Core	
MD1538	Research Methods for Evidence Based Practice	2	10	Core	

1ICM8	ICM8 Postgraduate Certificate in Science (Interventional Cardiovascular Medicine) exit route			
Module Code	Module Title	Semester	ECTS	Module Type
MD1535	Medical Device Innovation	1	10	Core
MD1531	Fundamentals of Coronary Artery Disease (Treatments)	1	10	Core
MD1532	Fundamentals of Coronary Artery Disease (Diagnostics)	1	10	Core

### **Career Opportunities:**

After successful completion of the Master's programme, graduates will have a better understanding of the field of interventional medicine. Career opportunities will be enhanced depending on students' interest and background. Physicians are expected to obtain easier access to training programs in cardiology or interventional fellowship. Engineers can apply for better positions within the MedTech sector.

The Master's qualification will increase chances to be selected for PhD programmes.

# Multidisciplinary Radiology

MSc. Multidisciplinary Radiology F/T 1MRY1 MSc. Multidisciplinary Radiology P/T 1MRY2 PG Dip Multidisciplinary Radiology F/T 1MRY3 PG Dip Multidisciplinary Radiology P/T 1MRY4 PG Cert Multidisciplinary Radiology (exit route) 1MRY9 Radiology is a vast and ever-growing field within medicine that is evolving at a pace that is almost difficult to comprehend. It plays a major role within multidisciplinary team care provision with many specialists now dependent on radiological imaging for clinical decision making. Clinicians must evolve with this in terms of our own understanding, clinical skills and engagement with research and development.

For more information: <u>http://www.universityofgalway.ie/courses/taught-postgraduate-courses/multidisciplinary-radiology.html</u>

#### **PROGRAMME DESCRIPTION**

This programme is multidisciplinary in nature, with a fully integrated clinical and radiological approach to patient care both among both faculty and learners. We have designed our modules with distance learning in mind with lectures for modules delivered synchronously online and utilising contemporary distance learning online technologies, students can complete the remaining components of the module in their own time. We run an on campus workshop during semester 1 and semester 2 to cover more practical elements of the programme.

It is designed for health professionals who rely on imaging for decision-making, or those for whom a radiology qualification may offer new career progression routes or those who wish to further their individual radiological knowledge, skills and research capabilities.

#### **CAREER OPPOURTUNITIES**

The majority of graduates successfully entered national radiology training programmes in Ireland and the United Kingdom. Others used the programme to upskill either in specific areas (musculoskeletal, for instance) or to further their research careers in other disciplines. The experience and knowledge gained through this course also lends itself to specialities with high dependence on radiological imaging.

## MINIMUM ENTRY REQUIREMENTS

Successful applicants will normally hold a primary degree in Medicine at second class Honours grade one level or above. Competence in English language equivalent to IELTS 6.5 is required. Interviews may apply.

## ASSESSMENT

Assessment techniques will vary, depending on the module. For most modules assessment will consist of a short-written exam consisting of multiple-choice questions/short answer/identifying structures on radiological images in addition to elements of continuous assessment (e.g. problem based and written assignments, online discussion boards, presentations). Students must complete and pass the assignments and course work attached to each module attended.

# PROGRAMME DURATION AND CONTENT

The programme can be completed full time (1 year) or part-time (2 years). All students must complete 60 European Credit Transfer (ECT). This is made up from six 10 ECTS modules:

- Research Methods for Evidence Based Practice
- 5 clinical modules:
  - 1. Introduction to Basic Radiological Sciences.
  - 2. Chest, Cardiovascular and Breast Imaging.
  - 3. Musculoskeletal Imaging.
  - 4. Central Nervous System and Head and Neck.
  - 5. Gastrointestinal and Genitourinary Imaging.

Students undertaking the programme to MSc degree level must also complete a research project and submission of their dissertation (30 ECTS).

1MRY1	MRY1 Master's in science (Multidisciplinary Radiology) Full Time 90ECTS			
Module	Module Title	Semester	ECTS	Module
Code				Туре
MD1560	Genitourinary and Gastrointestinal Imaging	1	10	Core
MD6105	Musculoskeletal (MSK) System Imaging	1	10	Core
MD1561	Chest, Cardiovascular and Breast Imaging	2	10	Core
MD6106	Central Nervous System (CNS) and Head & Neck (H&N)	2	10	Core
MD1562	Research Methods for Evidence Based	Sem 1+2	10	Core
	Practice			
MD6101	Introduction to Basic Radiologic Sciences	Sem 1+2	10	Core
MD6109	Dissertation	Year long	30	Core

1MRY2	MRY2 Master's of Science (Multidisciplinary Radiology) Part/time 40ECTS				
Module	Module Title	Semester	ECTS		
Code					
MD6105	Musculoskeletal (MSK) System Imaging	1	10		
MD6106	Central Nervous System (CNS) and Head & Neck	2	10		
	(H&N)				
MD1562	Research Methods for Evidence Based Practice	Sem 1+ 2	10		
MD6101	Introduction to Basic Radiologic Sciences	Sem 1+ 2	10		
2MRY2	MRY2 Master's of Science (Multidisciplinary Radi	iology) p/t 50EC	ГS		
Module	Module Title	Semester	ECTS		
Code					
MD1560	Genitourinary and Gastrointestinal Imaging	1	10		
MD1561	Chest, Cardiovascular and Breast Imaging	2	10		
MD6109	Dissertation	Year long	30		

# **Incomplete Masters**

Students who register for the Master's but who cannot complete the programme may be eligible for a PG Diploma or PG Certificate if the student has completed modules equivalent to 60ects (PG dip) or 30ECTS for PG Cert.

Students must request to transfer to PG Dip/Cert prior to PG Summer Exam boards, which are typically held in early May. To transfer student's fees will need to be up to date and student will need to authorize the transfer with registration office. There will be no refund of fees.

1MRY3	MRY3 Postgraduate Diploma in Science (Multidisciplinary Radiology) Full Time 60ECTS			
Module	Module Title	Semester	ECTS	Module
Code				Туре
MD1560	Genitourinary and Gastrointestinal Imaging	1	10	Core
MD6105	Musculoskeletal (MSK) System Imaging	1	10	Core
MD1561	Chest, Cardiovascular and Breast Imaging	2	10	Core
MD6106	Central Nervous System (CNS) & Head &	2	10	Core
	Neck (H&N)			
MD1562	Research Methods for Evidence Based Practice	Sem 1+ 2	10	Core
MD6101	Introduction to Basic Radiologic Sciences	Sem 1+ 2	10	Core

# Programme Content PG Dip(full time & Part time); PG Cert Exit routes.

1MRY4	MRY4 Postgraduate Diploma of Science (Multidisciplinary Radiology) Part/Time 40 ECTS			
Module	Module Title	Semester	ECTS	
Code				
MD6105	Musculoskeletal (MSK) System Imaging	1	10	
MD6106	Central Nervous System (CNS) and Head & Neck	2	10	
	(H&N)			
MD1562	Research Methods for Evidence Based Practice	Sem 1+ 2	10	
MD6101	Introduction to Basic Radiologic Sciences	Sem 1+ 2	10	
2MRY4	MRY4 Postgraduate Diploma of Science (Multidiscipl 20ECTS	inary Radiology	) p/t	
Module	Module Title	Semester	ECTS	
Code				
MD1560	Genitourinary and Gastrointestinal Imaging	1	10	
MD1561	Chest, Cardiovascular and Breast Imaging	2	10	

1MRY9	MRY9 Postgraduate Certificate in Science (Multidisciplinary Radiology) 30ECTS (exit route)						
Module Code	odule Title Semester ECTS Module Type						
MD1560	Genitourinary and Gastrointestinal Imaging	1	10	Optional			
MD6105	Musculoskeletal (MSK) System Imaging	1	10	Optional			
MD1561	Chest, Cardiovascular and Breast Imaging	2	10	Optional			
MD6106	Central Nervous System (CNS) and Head & Neck (H&N)	2	10	Optional			
MD6101	Introduction to Basic Radiologic Sciences	Sem 1+2	10	Core			
MD1562	Research Methods for Evidence Based Practice	Sem 1+2	10	Optional			

Marks and Standards as per University <u>QA236-Postgraduate-Marks-and-Standards-final-marked-with-Irish-updates-following-Dec-22-AC-to-AC-Feb-23-June2023.pdf</u> (universityofgalway.ie)

**Penalties (for late submission of Course/Project Work etc.):** 15% of the marks will be deduced in submission delay in the first week and 10% per week thereafter.

# MSc./PG Dip Surgery

MSc. Surgery F/T 1MCH3 MSc. Surgery P/T 1MCH1 PG Diploma Surgery 1MCH9<u>(exit route)</u>

#### **PROGRAMME DESCRIPTION**

An exciting study programme the Master's Degree in Surgery (MCh) is designed to enhance the academic and professional development of surgical trainees by improving the level of scientific appreciation for evidence-based clinical practice. Running parallel to the basic surgical training scheme (BST) this programme will provide surgical trainees with the academic and scientific research skills needed for progression to higher surgical training schemes and academic surgery.

#### MINIMUM ENTRY REQUIREMENTS

Successful candidates will hold a primary degree in Medicine and are conferred with the degrees of Bachelor of Medicine, Bachelor of Surgery and Bachelor of Obstetrics (MB BCh BAO). The applicants should be selected for the BST national programme but will be required to demonstrate an equivalent clinical and academic competence and have appropriate interview and clinical skills. Candidates not on the BST programme may be eligible and interviews may apply. Competence in English language equivalent to IELTS 6.5. 25 places available.

#### **CAREER OPPORTUNITIES**

This programme is designed to enhance the academic and professional development of surgeons. The combination of professional surgical training and research output will appeal to graduates intending to apply for higher surgical training (HST) schemes in Surgery or similar medical specialities. Surgeons require recognised postgraduate research and academic qualifications for progression to higher surgical training schemes. This programme will serve as a stepping stone to an MD or PhD.

# PROGRAMME AIMS

The Programme Learning Outcomes are classified in the broad categories of cognitive skills, subject specific skills and transferable skills. Upon successful completion of the Master of Surgery graduates will be able to:

- Recognise and perform research techniques such as electronic searching for publications, research design, statistical analysis, and scientific writing.
- Demonstrate cognitive and technical skills in the design and execution of a specialised research project in surgery.
- Perform common laboratory analytical processes in Translational Research.
- Investigate and synthesise the role of therapeutic strategies and medical devices in clinical decisions.
- Analyse technical and non-technical skills required to be a competent surgeon.
- Explore and evaluate simulation and technological approaches to surgical education and patient safety.
- Conduct and disseminate research with creativity, initiative, and competence.

# **DURATION OF THE PROGRAMME**

The programme may be taken on a full time (one year) or part-time basis over a 2 year period. An exit award, The Postgraduate Diploma in Surgery is available on completion of 60ects. Students must request to transfer to PG Diploma prior to PG Autumn Exam boards which are typically held in August. To transfer students fees will need to be up to date and student will need to authorize the transfer with registration office.

1MCH3	MCH3 Masters in Surgery 90ects	MCH3 Masters in Surgery 90ects				
Module Code	Module Title	Semester	ECTS	Module Type		
	Informatics I : Retrieval & Appraisal of					
MD550	Scientific Literature	1	10	Core		
MD551	Informatics II : Research Methods	1	10	Core		
MD1550	Translational Research	2	10	Core		
	Biostatistics I : Critical Appraisal of Published					
MD552	Statistics	2	10	Core		
MD6108	Patient Safety & Human Factors	2	10	Core		
MD6107	Surgical Education	3	10	Core		
		Year				
MD565	Research Thesis	long	30	Core		

#### **Programme Content:**

1MCH1	MCH1 Masters in Surgery (M.Ch.)Part Time 50ects				
Module	Module Title	Semester	ECTS	Module	
Code				Туре	
MD550	Informatics I : Retrieval & Appraisal of	1	10	Core	
	Scientific Literature				
MD551	Informatics II : Research Methods	1	10	Core	
MD1550	Translational Research	2	10	Core	
MD6108	Patient Safety & Human Factors	2	10	Core	
MD6107	Surgical Education	3	10	Core	
2MCH1	MCH1 Masters in Surgery (M.Ch.)Part Time	e 40ects			
	Biostatistics I : Critical Appraisal of				
MD552	Published Statistics	2	10	Core	
		Year			
MD565	Research Thesis	long	30	Core	

1MCH9	MCH9 Postgraduate Diploma in Surgery (Exit route) 60ects			
Module Code	Module Title	Semester	ECTS	Module Type
MD550	Informatics I : Retrieval & Appraisal of Scientific Literature	1	10	Optional
MD551	Informatics II : Research Methods	1	10	Optional
MD1550	Translational Research Biostatistics I : Critical Appraisal of	2	10	Optional
MD552	Published Statistics	2	10	Optional
MD6108	Patient Safety & Human Factors	2	10	Optional
MD6107	Surgical Education	3	10	Optional

# Preventative Medicine & Cardiovascular Health Suite of Programmes

*Preventive Cardiology (MSc/PDip)* http://universityofgalway.ie/preventivecardiology

# **Preventive Cardiology**

1MPY1 MSc Preventive Cardiology 1MPY3 PG Diploma Preventive Cardiology (exit route) 1MPY8 Postgraduate Certificate in Preventive Cardiology (exit route)

## Introduction

The scientific evidence for cardiovascular disease prevention and rehabilitation is compelling. Multidisciplinary approaches to cardiovascular health and lifestyle medicine are cornerstone to preventive cardiology practice. This course aims to equip students with the knowledge and skills required to make meaningful contributions to primary, secondary and tertiary prevention; both at an individual level as well as within populations.

The programme is delivered in partnership with the National Institute for Prevention and Cardiovascular Health, with the taught component largely taking place in the Croí Heart and Stroke Centre. A dual-delivery approach is used, enabling students working in applicable clinical settings to attend the taught components in-person or join from afar remotely. This in-service design enables students working in relevant clinical settings to complete their studies whilst simultaneously maintaining professional roles. Those not in clinical roles are supported with scheduled residential in-practice observational experience. This course remains one of the only of its kind worldwide and has a strong focus on translational medicine.

## **Course Facts**

Course Level: Level 9

Duration: 1 year full-time in service (MSc); 9 months full-time in service (PG

Diploma)

**Entry Requirements:** Successful applicants will possess at least a Second-Class Honours Grade 1 degree, in an appropriate life science, biological science, medicine, nursing or allied professions. For those who do not hold a primary degree at the required level, a special case can be made if they have demonstrated aptitude for the course material through at least 3 years of high-quality work experience in a relevant field of cardiovascular health.

International students who do not have a degree from a programme taught and assessed in English, or where English may not be their first language, will be required to provide evidence of an acceptable result in one of the recognised English language proficiency tests, e.g. IELTS total score of 6.5.

Applying: <u>https://universityofgalway.elluciancrmrecruit.com/Apply/Account/Login</u> PAC Code: 1MPY1 (MSc)

Closing Date: Open call

#### Learning outcomes and study approaches in brief

This course equips students with the knowledge and skills required to make meaningful contributions to the discipline of preventive cardiology. The taught modules address the development and practical use of cardiovascular disease risk estimation tools, implementation of healthcare policy, behavioural change strategies, lifestyle approaches to risk factor modification and medical management of risk factors including hypertension, dyslipidaemia, diabetes mellitus, obesity and smoking.

A dual-delivery approach is used, enabling students to either study full-time in person, or where applicable join a hybrid option remotely; enabling students to adapt their learning to their professional lives. The course includes a scheduled taught element coupled with guided directed learning and application to practice dimensions. Small group case-based discussions and clinical activities supplement structured directed study materials. This core teaching is delivered via scheduled virtual tutorials and workshops taking place typically 1-2 Thursday/Friday evenings (3-8 pm) and one Saturday per month (10am – 3pm). In conjunction with this scheduled contact, students are expected to complete intensive directed studies. Students are also required to complete a clinical application component and can do so by participating in a range of preventive cardiology programmes at the Croí Heart and Stroke Centre in Galway. These application activities can also be completed in other arranged relevant settings or the student's own workplace, where appropriate.

As per the nature of the programme, its teaching faculty is interdisciplinary in nature and comprises of national and international specialists from across speciality of Preventive Cardiology. Our dedicated tutors provide an enriched student experience, joining from across the Saolta group, scientific and healthcare disciplines at the University of Galway, the National Institute for Prevention and Cardiovascular Health, the Croí clinical team and a wide range of World-leading experts and specialist practioners in policy and service delivery.

#### **Programme outline**

The core compulsory modules cover all relevant topics to ensure a comprehensive student learning experience. The elective advanced module includes a specialist area aligned with the student's own professional interests to be studied in greater depth at a higher level.

1MPY1	MPY1 Masters in Preventive Cardiology 90ECTS			
Module	Module Title	Semester	ECTS	Module
Code				Туре
MD1801	Fundamentals of Preventive Cardiology	1	10	Core
MD1802	Research Methods	1	10	Core
MD1800	Cardiac Rehabilitation	2	30	Optional
MD1803	Tobacco Cessation in Noncommunicable Disease	2	10	Optional
	Prevention and Management			
MD1804	Diet and Weight Management in Preventive	2	10	Optional
	Medicine and Cardiovascular Health			
MD1805	Physical Activity and Exercise in Chronic Disease	2	10	Optional
	Management			
MD1810	Pharmacotherapeutic Approaches in	2	10	Optional
	Cardiometabolic Medicine			
MD578	Lifestyle Risk Factor Modification	2	30	Optional
MD576	Reflective Clinical Practice	Sem 1+2	10	Core
MD577	Research Project	Year long	30	Core

1MPY3	MPY3 Postgraduate Diploma in Preventive Cardiology 60ECTS Exit route				
Module Code	Module Title	Semester	ECTS	Module Type	
MD1801	Fundamentals of Preventive Cardiology	1	10	Core	
MD1802	Research Methods	1	10	Core	
MD1800	Cardiac Rehabilitation	2	30	Optional	
MD1803	Tobacco Cessation in Noncommunicable Disease Prevention and Management	2	10	Optional	
MD1804	Diet and Weight Management in Preventive Medicine and Cardiovascular Health	2	10	Optional	
MD1805	Physical Activity and Exercise in Chronic Disease Management	2	10	Optional	
MD1810	Pharmacotherapeutic Approaches in Cardiometabolic Medicine	2	10	Optional	
MD578	Lifestyle Risk Factor Modification	2	30	Optional	
MD576	Reflective Clinical Practice	Sem 1+2	10	Core	

\*Only MSc candidates complete an original research project and dissertation

Each module is individually assessed through a diverse range of departmentally delivered examinations, written assignments, presentations and case-based scenarios. In Semester 1, students are expected to achieve a minimum of 60% in the core compulsory module "MD1801 Fundamentals of Preventive Cardiology". Those not reaching this threshold are encouraged to consider either taking the research project into a second year of studies (which does have a fee implication) or converting to the Postgraduate Diploma in Preventive Cardiology pathway.

1MPY8	MPY3 Postgraduate Certificate in Preventive Cardiology 30ECTS Exit route				
Module	Module Title	Semester	ECTS	Module	
Code				Туре	
MD1801	Fundamentals of Preventive Cardiology	1	10	Optional	
MD1802	Research Methods	1	10	Optional	
MD1800	Cardiac Rehabilitation	2	30	Optional	
MD1803	Tobacco Cessation in Noncommunicable Disease Prevention and Management	2	10	Optional	
MD1804	Diet and Weight Management in Preventive Medicine and Cardiovascular Health	2	10	Optional	
MD1805	Physical Activity and Exercise in Chronic Disease Management	2	10	Optional	
MD1810	Pharmacotherapeutic Approaches in Cardiometabolic Medicine	2	10	Optional	
MD578	Lifestyle Risk Factor Modification	2	30	Optional	
MD576	Reflective Clinical Practice	Sem 1+2	10	Optional	
MD579	Medical Risk Factor Management	2	10	Optional	
MD580	Cardiovascular Risk, Guidelines & Policy	2	10	Optional	

## **Employment and career opportunities**

Graduates of the course will be positioned as leaders in cardiovascular disease prevention and will find ample opportunities to apply their learning across a variety of clinical settings in both primary and secondary care. There will also be employment opportunities in public health, health promotion, healthcare management, academic and research settings and the pharmaceutical industry. Clinician graduates will benefit from career advancement within their chosen disciplines. Master's students completing the 5,000word 'ready-for-publication' dissertation will be supported in preparing their work for submission to a peer-reviewed journal, which will further augment their career prospects.

## **Unique and Dedicated Learning Environment**

The course uses a dual-delivery approach enabling a full-time in-person study, in service online or combination study experience. The taught programme is delivered in partnership with the National Institute for Prevention and Cardiovascular Health and largely takes place in the Croí Heart and Stroke Centre in Galway. This facility is adjacent to the University of Galway campus and University Hospital Galway. It is the first purpose-built centre of its kind in Europe dedicated to cardiovascular disease prevention and rehabilitation. The project is a flagship initiative for the promotion of cardiovascular wellbeing, with a strong focus on prevention, rehabilitation, education, and patient and family support. It operates as an institute for teaching and training, education and research; a centre for healthy living; and a centre for patient and family support.

#### Cardiac Rehabilitation (PG Cert)

https://www.universityofgalway.ie/courses/taught-postgraduate/cardiac-rehabilitation

Cardiac Rehabilitation Certificate

## Cardiac Rehabilitation 1CRB1PG

#### **Course Overview**

This fully online postgraduate qualification equips students with the knowledge and skills required to make meaningful contributions to cardiac rehabilitation practice. The scientific evidence for cardiovascular disease prevention and rehabilitation is compelling. As such, evidence-based practice features strongly together with multidisciplinary approaches to the comprehensive delivery of high-quality care. The effective implementation of intensive lifestyle and medical risk factor management together with enabling psychosocial health and wellbeing are cornerstone.

**Course Facts** 

Course Level: Level 9

**Duration:** 5-months full-time in service (January – May)

## **Entry Requirements**

Successful applicants will possess at least a Second Class Honours, Grade 1 degree (or equivalent) in a health care discipline or related subject area (e.g., medicine, nursing, physiotherapy, dietetics, sport and exercise science, clinical or health psychology, pharmacy, health promotion, public health etc). For those who do not hold a primary degree at the required level, consideration will also be given to applicants with relevant work experience, background knowledge and skills.

Overseas students will need to satisfy the University's English Language requirement of IELTS 6.5 or above (or equivalent).

## Learning outcomes and study approaches

The Postgraduate Certificate in Cardiac Rehabilitation involves students participating in a 30 ECTS Level 9 module that runs from the first week of January to the beginning of May each year. This module is delivered fully online with scheduled virtual tutorials and workshops taking place typically 1-2 Thursday/Friday evenings (3-8 pm) and one Saturday (10am - 3pm) per month.

This course equips students with the knowledge and skills required to make meaningful contributions to the discipline of cardiac rehabilitation. The programme aims to develop advanced knowledge of cardiac rehabilitation including the latest evidence, guidelines and practice. Individual and population-based strategies feature strongly with critical review of healthcare policy, behavioural change strategies, lifestyle approaches to risk factor modification and medical management of risk factors including hypertension, dyslipidaemia, diabetes mellitus, obesity and smoking. Current perspectives of cardiac rehabilitation and future advances, including telemedicine and alternative delivery models, also form a core component. The programme has an emphasis on implementation sciences, supporting knowledge acquisition to its translation to clinical practice.

#### **Programme outline**

1CPR8	CPR8 PG Certificate in Cardiovascular and Pulmonary Rehabilitation 30ECTS					
Module Code	Module Title         Semester         ECTS         Module Type					
MD1800	ardiac Rehabilitation 2 30 Core					

The Postgraduate Certificate in Cardiac Rehabilitation comprises of one 30 ECTS compulsory module. The module is divided into 5 specified Units.

Unit 1: Evidence, Guidelines and Practice.

Unit 2: Health Behaviour Change and Education.

Unit 3: Lifestyle Risk Factor Management.

Unit 4: Medical Risk Factor Management.

Unit 5: Current and Future Perspectives in Cardiac Rehabilitation.

Students complete three assessment tasks as part of the module: An evidence-based literature review / feature-piece, a group-based presentation and a case-based management report. This is a coursework-based programme.

## **Employment and career opportunities**

Graduates of the course with a clinical background will also specifically benefit from career advancement in the specialty of cardiac rehabilitation, chronic disease management and integrated care programmes more broadly. There is also an array of employment opportunities in public health, health promotion, healthcare management, academic and research settings and the pharmaceutical industry.

# Unique and Dedicated Learning Environment

The taught programme is delivered in partnership with the National Institute for Prevention and Cardiovascular Health whose headquarters are based at the Croí Heart and Stroke Centre in Galway. This facility is adjacent to the University of Galway campus and University Hospital Galway. It is the first purpose-built centre of its kind in Europe dedicated to cardiovascular disease prevention and rehabilitation. The project is a flagship initiative for the promotion of cardiovascular wellbeing, with a strong focus on prevention, rehabilitation, education, and patient and family support. It operates as an institute for teaching and training, education and research; a centre for healthy living; and a centre for patient and family support.

*Cardiovascular and Pulmonary Rehabilitation (MSc)* Cardiovascular and Pulmonary Rehabilitation (MSc) - University of Galway

Cardiovascular and Pulmonary Rehabilitation (MSc/PG Dip/Cert) 1CPR1 (MSc) 1CPR9 (PG Dip) exit route 1CPR8 (PG Cert) exit route

## **Course Overview**

The course equips students with the knowledge and skills required to make meaningful contributions to cardiovascular and pulmonary rehabilitation practice. The scientific evidence for comprehensive rehabilitation is compelling in these populations. Furthermore, service transformations advocate for integrated approaches to delivery. As such, contemporary and evidence-based practice features strongly together with multidisciplinary approaches to the comprehensive delivery of high-quality care. The effective implementation of intensive lifestyle and medical risk factor management together with enabling psychosocial health and wellbeing are cornerstone.

The programme is delivered in partnership with the National Institute for Prevention and Cardiovascular Health, with the taught component largely taking place in the Croí Heart and Stroke Centre. A dual-delivery approach is used, enabling students to attend the taught components in-person or join remotely. The in-service option enables students working in relevant clinical settings to complete their studies whilst simultaneously maintaining professional roles. This course remains the only one of its kind worldwide and has a strong focus on translational medicine.

## **Course Facts**

Course Level: Level 9

Duration: 1 year full-time in service (MSc); 9 months full-time in service (PG

Diploma)

# **Entry Requirements:**

Successful applicants will possess at least a Second Class Honours, Grade 1 degree (or equivalent) in a health care discipline or related subject area (e.g., medicine, nursing, physiotherapy, dietetics, sport and exercise science, clinical or health psychology, pharmacy, health promotion, public health, etc). For those who do not hold a primary degree at the required level, consideration will also be given to applicants with relevant work experience, background knowledge and skills. International students will need to satisfy the University's English Language requirement of IELTS 6.5 or above (or equivalent).

**Entry Requirements:** Successful applicants will possess at least a Second-Class Honours Grade 1 degree, in a health care discipline or related subject area (e.g., medicine, nursing, physiotherapy, dietetics, sport and exercise science, clinical or health psychology, pharmacy, health promotion, public health, etc.). For those who do not hold a primary degree at the required level, consideration will also be given to applicants with relevant work experience, background knowledge and skills. A special case can be made if they have demonstrated aptitude for the course material through at least 3 years of high-quality work experience in a relevant field of cardiovascular health.

International students who do not possess a degree from a programme taught and assessed in English, or where English may not be their first language, will be required to provide evidence of an acceptable result in one of the recognised English language proficiency tests, e.g. IELTS total score of 6.5.

# Applying: <u>https://universityofgalway.elluciancrmrecruit.com/Apply/Account/Login</u> PAC Code: 1CPR1 (MSc);

Closing Date: Open call

## Learning outcomes and study approaches

This course equips students with the knowledge and skills required to make meaningful contributions to the disciplines of cardiac rehabilitation, pulmonary rehabilitation but also cardiometabolic based disease and chronic disease more broadly. The taught modules address the development advanced knowledge of cardiovascular and pulmonary diseases practice (including relevant to rehabilitative aetiology, epidemiology and pathophysiology) together with the latest evidence and best practice guidelines in cardiac / cardiovascular and pulmonary rehabilitation. Population-based and individual strategies feature strongly together with critical review of healthcare policy together with the latest evidence-base in behavioural change strategies, lifestyle approaches to risk factor modification and medical management of risk factors including hypertension, dyslipidaemia, diabetes mellitus, obesity and smoking. The programme includes knowledge acquisition, development of research skills as well as the translation to implementation sciences.

A dual-delivery approach is used, enabling students to either study full-time in person, or where applicable join a hybrid option remotely; enabling students to adapt their learning to their professional lives. The course includes a scheduled taught element coupled with guided directed learning and application to practice dimensions. Small group case-based discussions and clinical activities supplement structured directed study materials. This core teaching is delivered via scheduled virtual tutorials and workshops taking place typically 1-2 Thursday/Friday evenings (3-8 pm) and one Saturday per month (10am – 3pm). In conjunction with this scheduled contact, students are expected to complete intensive directed studies. Students are also required to complete a clinical application component and can do so by participating in a range of rehabilitation and chronic disease management programmes at the Croí Heart and Stroke Centre in Galway. These application activities can also be completed in other arranged relevant settings or the student's own workplace, where appropriate.

As per the nature of the programme, its teaching faculty are interdisciplinary in nature and comprise of national and international specialists from cardiovascular and pulmonary rehabilitation as well as chronic disease management more broadly. Our dedicated tutors provide an enriched student experience, joining from across the Saolta group, scientific and healthcare disciplines at the University of Galway, the National Institute for Prevention and Rehabilitation, the Croí clinical team and a wide range of World-leading experts and specialist practioners in policy and service delivery.

#### **Programme outline**

The core compulsory modules cover all relevant topics to ensure a comprehensive student learning experience. The elective advanced module includes a specialist area aligned with the student's own professional interests to be studied in greater depth at a higher level.

1CPR1	CPR1 Masters in Cardiovascular and Pulmon	ary Rehabilit	ation 90H	ECTS
Module	Module Title	Semester	ECTS	Module
Code				Туре
MD1802	Research Methods	1	10	Core
MD1811	Cardiovascular and Pulmonary Disease	1	10	Core
MD1800	Cardiac Rehabilitation	2	30	Optional
MD1803	Tobacco Cessation in Noncommunicable	2	10	Optional
	Disease Prevention and Management			
MD1804	Diet and Weight Management in Preventive	2	10	Optional
	Medicine and Cardiovascular Health			
MD1805	Physical Activity and Exercise in Chronic	2	10	Optional
	Disease Management			
MD1810	Pharmacotherapeutic Approaches in	2	10	Optional
	Cardiometabolic Medicine			
MD578	Lifestyle Risk Factor Modification	2	30	Optional
MD1812	Cardiovascular and Pulmonary Rehabilitation	2	30	Optional
MD576	Reflective Clinical Practice	Sem 1+2	10	Core
MD577	Research Project	Year long	30	Core

1CPR9	CPR9 PG Diploma in Cardiovascular and Pulm	onary Rehal	bilitation	n 60ects
	(exit route)			
Module	Module Title	Semester	ECT	Module
Code			S	Туре
MD1802	Research Methods	1	10	Core
MD1811	Cardiovascular and Pulmonary Disease	1	10	Core
MD1800	Cardiac Rehabilitation	2	30	Optional
MD1803	Tobacco Cessation in Noncommunicable Disease	2	10	Optional
	Prevention and Management			
MD1804	Diet and Weight Management in Preventive	2	10	Optional
	Medicine and Cardiovascular Health			
MD1805	Physical Activity and Exercise in Chronic	2	10	Optional
	Disease Management			
MD1810	Pharmacotherapeutic Approaches in	2	10	Optional
	Cardiometabolic Medicine			
MD578	Lifestyle Risk Factor Modification	2	30	Optional
MD1812	Cardiovascular and Pulmonary Rehabilitation	2	30	Optional
MD576	Reflective Clinical Practice	Sem 1+2	10	Core

1CPR8	CPR8 PG Certificate in Cardiovascular and Pul	monary Rel	nabilitatio	on
	30ECTS (exit route)			
Module	Module Title	Semester	ECTS	Module
Code				Туре
MD1802	Research Methods	1	10	Optional
MD1811	Cardiovascular and Pulmonary Disease	1	10	Optional
MD1800	Cardiac Rehabilitation	2	30	Optional
MD1803	Tobacco Cessation in Noncommunicable Disease	2	10	Optional
	Prevention and Management			_
MD1804	Diet and Weight Management in Preventive	2	10	Optional
	Medicine and Cardiovascular Health			
MD1805	Physical Activity and Exercise in Chronic	2	10	Optional
	Disease Management			
MD1810	Pharmacotherapeutic Approaches in	2	10	Optional
	Cardiometabolic Medicine			
MD578	Lifestyle Risk Factor Modification	2	30	Optional
MD1812	Cardiovascular and Pulmonary Rehabilitation	2	30	Optional
MD576	Reflective Clinical Practice	Sem 1+2	10	Optional

Each module is individually assessed through a diverse range of examinations, written assignments, presentations and case-based scenarios. In Semester 1, students are expected to achieve a minimum of 60% in the core compulsory module "MD1807 Cardiovascular and Pulmonary Rehabilitation Theory to Practice". Those not reaching this threshold are encouraged to consider either taking the research project into a second year of studies (which does have a fee implication) or converting to the Postgraduate Diploma in Cardiovascular and Pulmonary Rehabilitation pathway.

## **Employment and career opportunities**

There is an array of employment opportunities in public health, health promotion, healthcare management, academic and research settings and the pharmaceutical industry. Graduates of the course with a clinical background will also specifically benefit from career advancement in the specialty of cardiac rehabilitation, pulmonary rehabilitation and integrated care programmes more broadly. Masters students completing the 5,000-word 'ready-for-publication' dissertation will be supported in preparing their work for submission to a peer-reviewed journal, which will further augment their career prospects.

# **Unique and Dedicated Learning Environment**

The course uses a dual-delivery approach enabling a full-time in-person study, in service online or combination study experience. The taught programme is delivered in partnership with the National Institute for Prevention and Cardiovascular Health and largely takes place in the Croí Heart and Stroke Centre in Galway. This facility is adjacent to the University of Galway campus and University Hospital Galway. It is the first purpose-built centre of its kind in Europe dedicated to cardiovascular disease prevention and rehabilitation. The project is a flagship initiative for the promotion of cardiovascular wellbeing, with a strong focus on prevention, rehabilitation, education, and patient and family support. It operates as an institute for teaching and training, education and research; a centre for healthy living; and a centre for patient and family support.

*Diabetes (MSc)* www.universityofgalway.ie/diabetes-medicine

Diabetes MSc. / PG Dip / PG Cert

1DIA1 Master of Science (Diabetes) F/T 1DIA2 Master of Science (Diabetes) P/T 1DIA9 PG Diploma of Science (Diabetes) Exit Route 1DIA8 PG Cert Science (Diabetes) Exit Route

## **Course Overview**

Diabetes is a global health emergency with over 600 million people expected to have the condition by 2030, representing 10% of the world's population. Therefore, the World Health Organisation (WHO) has classed diabetes as an epidemic requiring urgent action for both prevention and management. This has been echoed in Ireland's Health Service Executive national policy and clinical strategy for diabetes. It is a chronic metabolic condition that can cause significant cardiovascular morbidity and mortality if not managed correctly. Central to this management is controlling key physiological indices such as blood sugar, blood pressure and blood lipid levels, as well as promoting health behaviours such as regular exercise, healthy eating and not smoking. Unfortunately achieving these biological targets and lifestyle goals is extremely challenging. Therefore, given its growing prevalence and resulting impact on health care resources, there is an urgent need to provide specialist training in diabetes. This interdisciplinary programme aims to meet this need.

#### Level 9

Duration 1 year full time/2 years part time

# Learning outcomes

- 1. Have a systematic understanding of diabetes informed by the latest scholarship.
- 2. Have a critical awareness of the current problems / new insights in diabetes.
- 3. Demonstrate a range of standard and specialised research tools for diabetes
- 4. Develop new skills to a high level including novel and emerging techniques in diabetes.
- 5. Be able to act in a variety of professional contexts on the topic of diabetes.
- 6. Be able to take significant responsibility for leading diabetes research.
- 7. Be able to self-evaluate and take responsibility for continuing academic / professional development in diabetes.
- 8. Be able to scrutinise and reflect on diabetes social norms and relationships and act to change them.

# **Entry Requirements**

Successful applicants will possess at least a Second Class Honours, Grade 1 degree in an appropriate clinical or life science degree program. For those who do not hold a primary degree at the required level, a special case will be made if they have demonstrated aptitude for the course material through at least three years of high-quality work experience in a relevant field of diabetes health.

Candidates coming to Ireland from abroad or who do not have a degree from Ireland or the UK will be asked to provide evidence of an acceptable result in one of the recognised English language proficiency tests, e.g., IELTS total score of 6.5.

All prospective candidates will be interviewed by telephone or Skype.

# **Course Outline**

This programme aims to prepare graduates to effectively contribute to diabetes management through comprehensive academic and research training.

The course is delivered through blended learning (online content and face to face workshops), with an attendance requirement of approximately 10 days per 4 month semester (please note some workshops may be scheduled at weekends).

The yearlong full-time masters Semesters 1 & 2 are theoretical based and represents 60 ECTS credits which is equivalent to a Postgraduate Diploma Diabetes at completion (which students can exit with, if they wish, at the end of Semester 2). Semester 3 is research thesis based which builds on the knowledge and skills learned in Semester 1&2 and represents 30 ECTS credits, thus providing a total of 90 ECTS which is the requirement for the awarding of a Master's of Science Diabetes.

1DIA1	DIA1 Master of Science (Diabetes) 90ects			
Module	Module Title	Semester	ECTS	Module
Code				Туре
GPN10	Diabetes	1+2	10	Core
MD1801	Fundamentals of Preventive Cardiology	1	10	Core
MD1803	Tobacco Cessation in Noncommunicable Disease Prevention and Management	2	10	Optional
MD1804	Diet and Weight Management in Preventive Medicine and Cardiovascular Health	2	10	Optional
MD1805	Physical Activity and Exercise in Chronic Disease Management	2	10	Optional
MD1810	Pharmacotherapeutic Approaches in Cardiometabolic Medicine	2	10	Optional
MD578	Lifestyle Risk Factor Modification	2	30	Optional
MD1802	Research Methods	1	10	Core
MD577	Research Project	Year long	30	Core

The part time master's is delivered over 2 years. Year 1 students are required to pass 50ects of modules (20ects core modules and 30ects of optional modules) before being progressed to year 2. Year 2 students are required to complete 40ects of core modules (1 x 10ects taught module) and 30ECTS thesis.

1DIA2	DIA2 Master of Science (Diabetes) (Part Time)	50ects		
Module Code	Module Title	Semester	ECTS	Module Type
GPN10	Diabetes	1+2	10	Core
MD1801	Fundamentals of Preventive Cardiology	Semester 1	10	Core
MD1803	Tobacco Cessation in Noncommunicable Disease Prevention and Management	2	10	Optional
MD1804	Diet and Weight Management in Preventive Medicine and Cardiovascular Health	2	10	Optional
MD1805	Physical Activity and Exercise in Chronic Disease Management	2	10	Optional
MD1806	Pharmacological Approaches in Preventive Medicine and Cardiovascular Health	2	10	Optional
MD1810	Pharmacotherapeutic Approaches in Cardiometabolic Medicine	2	10	Optional

MD578	Lifestyle Risk Factor Modification	2	30	Optional
	DIA2 Master of Science (Diabetes) (Part Time) 40ects			
2DIA2				
Module	Module Title	Semester	ECTS	Module
<b>a</b> 1				
Code				Туре
Code MD1802	Research Methods	1	10	Type Core

#### Exit Routes:

Students who cannot complete the Master's programmes have an option to exit with a PG Diploma (on completion of 60ects) or PG Cert (on completion of 30ects). To exit fees will need to be up to date and students will need to authorize the transfer. Transfer request should be made by April 30<sup>th</sup> of the current academic year they are registered or ahead of PG Summer exam boards.

1DIA9	DIA9 Postgraduate Diploma in Science (Diabetes)	90ects Exit	Route	
Module	Module Title	Semeste	ECTS	Module
Code		r		Туре
GPN10	Diabetes	1+2	10	Core
MD1801	Fundamentals of Preventive Cardiology	Semester 1	10	Core
MD1803	Tobacco Cessation in Noncommunicable Disease Prevention and Management	2	10	Optional
MD1804	Diet and Weight Management in Preventive Medicine and Cardiovascular Health	2	10	Optional
MD1805	Physical Activity and Exercise in Chronic Disease Management	2	10	Optional
MD1810	Pharmacotherapeutic Approaches in Cardiometabolic Medicine	2	10	Optional
MD578	Lifestyle Risk Factor Modification	2	30	Optional
MD1802	Research Methods	1	10	Core

1DIA8	DIA8 Postgraduate Certificate in Science (Diabetes) 30ects Exit Route						
Module	Indule Title         Semester         ECTS         Mod						
Code				Туре			
GPN10	Diabetes	1+2	10	Core			
MD1801	Fundamentals of Preventive Cardiology	Semester	10	Core			
		1					
MD1802	Research Methods	1	10	Core			

# **Career Opportunities**

Specialist training in diabetes at postgraduate level will demonstrate an academic commitment to diabetes care and research, and therefore will allow the graduate to be competitive in pursing future healthcare opportunities.

# **Continuing Professional Development Medicine CPDM**

CPDM5 Clinical Primary Care Module (Diabetes) (Standalone Module)

# **COURSE OVERVIEW**

Diabetes is a continuous professional development course that has been designed for all health care professionals including, doctors and nurses to help develop the knowledge and skills to manage diabetes mellitus effectively. This course helps the candidate develop the knowledge and confidence to deliver an effective management plan based on up-to-date resources and support from multi-professional specialists from the diabetic patient group in general practice. Emphasis will be placed on developing a structured system of care, which supports patients in successfully managing their diabetes and lifestyle. This course will be delivered by experts in diabetic care through online distance learning and workshops. We believe our graduates are competent in delivering a comprehensive management plan for their diabetic patients and improve the overall care of this patient group.

With the introduction of the Diabetes Cycle of Care Contract, the burden of chronic disease management is now recognised and remunerated in General Practice. This course has the main focus of upskilling health care practitioner already working in primary care and those that wish to transition to this area. Confidence in diagnosis and management of patients with diabetes or those at risk of diabetes improves diabetic patient care.

# MODULE LEARNING OUTCOMES

- 1. Demonstrate competency in diagnosis, screening and classification of patients with diabetes.
- 2. Critically analyse the challenges of diabetes control, monitoring and selfmanagement education.
- 3. Implement appropriate structure of care for patients with diabetes.
- 4. Integrate health behaviours methodology in the care of patients with diabetes.
- 5. Demonstrate a clear understanding of the appropriate use of therapeutics in diabetes.
- 6. Demonstrate the ability to recognise and manage acute and chronic diabetes complications.
- 7. Implement appropriate screening and pathways of care for pregnancy and diabetes.

# ENTRY REQUIREMENTS

Allied health care practitioners that are currently involved in the care of patients with diabetes, including general practitioners, practice nurses, hospital-based nurses, dieticians and podiatrists, are welcome to apply.

# **COURSE OUTLINE**

This course runs for three months from September to December. This is a fully online course consisting of ten distance learning units supported by two online clinical workshop days. This course will be delivered by experts in diabetic care through online distance learning and workshops.

This course consists of ten online learning units supported by two online clinical workshop days. Each unit lasts 1-2 weeks and is tutored by a designated specialist. Through online learning with weekly units and two online clinical workshop days the following key areas are covered:

- 1. Diagnosis of diabetes
- 2. Diabetes control & monitoring; self-management education
- 3. Structured diabetes care
- 4. Lifestyle modification
- 5. Therapeutics of diabetes—glucose-lowering agents
- 6. Therapeutics of diabetes—insulin
- 7. Acute complications of diabetes; driving and travel for patients with diabetes
- 8. Preventing cardiovascular disease in diabetes
- 9. Preventing diabetic eye, kidney and foot disease
- 10. Diabetes and pregnancy.

The workshops are specialist-led, and a key component of each workshop are case based discussions. The workshops include:

- Lifestyle and diabetes
- Obesity
- The diabetic foot
- Therapeutics in diabetes, monitoring devices, blood pressure management in diabetes, diabetic emergencies, insulin and pumps
- Behaviour changes in chronic diseases
- Diabetes cycle of care, practice IT system support

1CPDM5	PDM5 CPDM5 Clinical Primary Care Module (Diabetes)				
Module Code	Module Title	Semester	ECTS	Module Type	
GPN10	Diabetes	1+2	10	Optional	

# ASSESSMENT

The module assessed by continuous assessment through online participation and etivities which accounts for 45% and an essay worth 55% of overall module result.

# **CAREER OPPORTUNITIES**

We believe our graduates are competent in delivering a comprehensive management plan for their diabetic patients and improve the overall care of this patient group.

The focus of the course has led to significant advances in practice in how participants deliver their care to their diabetic patient group in primary care. Such advances include the development of a diabetic register and a recall system, use of in-practice diabetic clinics and the use of audit to monitor and improve care. Support from local specialists in diabetes care in this course also establishes a good link between the general practitioner, the practice nurse and secondary care. This course is fully accredited for CPD and also includes the CPD requirement for an audit.

# Obesity (MSc)

http://www.universityofgalway.ie/obesitymsc

1OBS1 MSc Obesity F/T, 1OBS2 MSc Obesity P/T, OBS9 PG Dip Obesity (exit route)

# **COURSE OVERVIEW**

This newly established Master's programme provides a broad and comprehensive curriculum that is clinically relevant and that also has a strong theoretical basis. Obesity is a major health problem, both for affected individuals and for society. There is a growing awareness of the need to provide effective treatments and prevention strategies. Our motivation in developing this programme at University of Galway is two-fold: To inform better, evidence-based, compassionate and dignified care to patients affected by obesity and related disorders and secondly to inform better population level strategies to mitigate the obesity epidemic.

This "two-pronged" approach is a strong theme throughout the programme, reflected in the two distinct obesity modules that form part of the core learning. Our students will develop in-depth knowledge of the various therapeutic strategies available to patients and will understand the factors underlying variations in the obesity phenotype. Students will also appreciate the potential benefits and disadvantages of various population level strategies that can be formulated to address the obesity crisis, and the societal, political and legislative challenges faced in deploying these.

University of Galway is uniquely well placed to deliver this course, which forms part of an integrated suite of Master's programmes including cardiovascular disease prevention, diabetes and clinical research. It will be delivered by clinical academic staff attached to the regional bariatric service, providing multidisciplinary medical, nursing, surgical, dietetic and psychological care to patients with severe and complicated obesity.

# **Programme Learning Outcome**

- 1. Appreciate the impact of obesity as a risk factor for other diseases, and the factors influencing that relationship.
- 2. Appreciate the role of structured lifestyle modification strategies to treat overweight and obesity and prevent their complications.
- 3. Explore the core principles of nutritional science as they pertain to excess energy accumulation within humans.
- 4. Distinguish between population-level and patient-level interventions to mitigate the harms caused by obesity.
- 5. Understand the epidemiology of obesity and the factors driving its rising prevalence.
- 6. Understand the mechanistic basis for pharmacological and surgical therapy for obesity and related disorders, including efficacy, indications and complications of treatment.
- 7. Understand ethical and moral issues in obesity as they pertain to public discourse, policy implementation, stigma and bias against people with obesity.
- 8. Recognise the importance of exercise, aerobic fitness and physical activity as related, but distinct entities influencing obesity and cardiometabolic risk.

# ENTRY REQUIREMENTS

Successful applicants will possess at least a Second Class Honours, Grade 1 degree in an appropriate clinical or life science degree programme. However, for those who do not hold a primary degree at the required level, a special case can be made if they have demonstrated aptitude for the course material through at least three years of high-quality work experience in an obesity-related field (relevant to their background). Candidates coming to Ireland from abroad or who do not have a degree from Ireland or the UK, will be asked to provide evidence of an acceptable result in one of the recognised English language proficiency tests, e.g., IELTS total score of 6.5. All prospective candidates will be interviewed either by telephone or by Skype.

# **COURSE CONTENT**

The range of modules on offer makes the programme uniquely versatile and well placed to meet the needs of healthcare professionals, scientists, policy makers and those working in industry seeking to develop and in-depth understanding of the causes of and solutions to the obesity crisis. The full-time yearlong Master's is delivered over three semesters. Learners are required to complete 2 x10 ECTs core modules in semester 1; choose 40ects of optional taught modules and complete a 30ects core thesis module which is 90ects overall.

10BS1	OBS1 Master of Science (Obesity) 90ECTS			
Module Code	Module Title	Semester	ECTS	Module Type
MD1700	Obesity in the Population	1	10	Core
MD1701	Obesity in the Patient	1	10	Core
EC584	Economic Evaluation in Health Care	1	10	Optional
MD1602	Introduction to the Ethical and Regulatory Frameworks of Clinical Research	1	10	Optional
MD510	Fundamentals of Health Research & Evaluation Methods	1	10	Optional
EC572	Health Systems & Policy Analysis	2	10	Optional
MD1803	Tobacco Cessation in Noncommunicable Disease Prevention and Management	2	10	Optional
MD1804	Diet and Weight Management in Preventive Medicine and Cardiovascular Health	2	10	Optional
MD1805	Physical Activity and Exercise in Chronic Disease Management	2	10	Optional
MD1810	Pharmacotherapeutic Approaches in Cardiometabolic Medicine	2	10	Optional
MD578	Lifestyle Risk Factor Modification	2	30	Optional
MD1702	Research Dissertation	Year long	30	Core

For the part time masters (over 2 years), learners are required to pass 50ects in year 1 and 40ects in year 2.

In year one learners are required to complete  $2 \times 10$  ECTs core modules in semester 1 and 30ects of optional taught modules ( $3\times 10$ ects) before being progressed to year2.

In year 2, learners are required to complete thesis 30ects with 1 optional 10ects module.

10BS2	OBS2 Master of Science (Obesity) Part Time 50ECT	S		
Module	Module Title	Semester	ECTS	Module
Code				Туре
MD1700	Obesity in the Population	1	10	Core
MD1701	Obesity in the Patient	1	10	Core
EC572	Health Systems & Policy Analysis	2	10	Optional
MD1803	Tobacco Cessation in Noncommunicable Disease Prevention and Management	2	10	Optional
MD1804	Diet and Weight Management in Preventive Medicine and Cardiovascular Health	2	10	Optional
MD1805	Physical Activity and Exercise in Chronic Disease Management	2	10	Optional
MD1810	Pharmacotherapeutic Approaches in Cardiometabolic Medicine	2	10	Optional
MD578	Lifestyle Risk Factor Modification	2	30	Optional
2OBS2	OBS2 Master of Science (Obesity) Part Time 40EC	ГS	•	
Module	Module Title	Semester	ECTS	Module
Code				Туре
EC584	Economic Evaluation in Health Care	1	10	Optional
MD1602	Introduction to the Ethical and Regulatory Frameworks of Clinical Research	1	10	Optional
MD510	Fundamentals of Health Research & Evaluation Methods	1	10	Optional
MD1702	Research Dissertation	Year long	30	Core

For students who cannot complete the Master's there is an option to exit with PG Diploma (on completion of 60ects). To transfer fees must be up to date and student will need to authorize the transfer by April 30<sup>th</sup> or before PG Summer exam board meeting in early May.

10BS9	OBS9 Postgraduate Diploma in Science (Obesity) 60ects Exit route			
Module Code	Module Title	Semester	ECTS	Module Type
MD1700	Obesity in the Population	1	10	Core
MD1701	Obesity in the Patient	1	10	Core
EC584	Economic Evaluation in Health Care	1	10	Optional
MD1602	Introduction to the Ethical and Regulatory Frameworks of Clinical Research	1	10	Optional
MD510	Fundamentals of Health Research & Evaluation Methods	1	10	Optional
EC572	Health Systems & Policy Analysis	2	10	Optional
MD1803	Tobacco Cessation in Noncommunicable Disease Prevention and Management	2	10	Optional
MD1804	Diet and Weight Management in Preventive Medicine and Cardiovascular Health	2	10	Optional
MD1805	Physical Activity and Exercise in Chronic Disease Management	2	10	Optional
MD1810	Pharmacotherapeutic Approaches in Cardiometabolic Medicine	2	10	Optional
MD578	Lifestyle Risk Factor Modification	2	30	Optional

# **Career Opportunities**

For doctors, this programme will be an adjunct to specialist training (rather than an alternative to it). The appeal will be broad and include general practice, cardiology, gastroenterology, endocrinology, public health and occupational health as well as surgery. Similarly, psychology, dietetic, occupational therapy and physiotherapy graduates who will ultimately contribute to obesity multidisciplinary care will need advanced training in obesity. Managers within the health service, hospital groups, policy makers and industry stakeholders are also likely to enhance their career prospects through completion of this programme. While this course is open to nurses, there is a dedicated MHSc in Obesity at University of Galway, delivered through the School of Nursing, which integrates different core modules that are more relevant to advanced nursing theory and practice.

# LAB-BASED RESEARCH:

# CELLULAR MANUFACTURNG & THERAPY 1CMT1 MSc Cellular Manufacturing & Therapy F/T,

The clinical-grade production of advanced medicinal therapeutics, such as cellular therapy, is quickly evolving as the future of medicine. These therapeutics utilize immune cells, mesenchymal progenitor cells or induced pluripotent stem cells to treat injured or diseased tissues. The postgraduate programmes in Cellular Manufacturing and Therapy will provide scientific and practical training in the production of these cells as therapeutics for clinical application.

# PROGRAMME AIMS AND OBJECTIVES

The MSc programme is full time, consisting of 90 ECTS in total.

This programme consists of taught modules such as cellular manufacturing, immune cell therapy, mesenchymal stem cell therapy and induced pluripotent stem cell therapy. Training will be delivered both as scientific concepts and practical training. The summer session will concentrate on conducting a dissertation in the field of cellular manufacturing and therapy.

# **PROGRAMME LEARNING OUTCOMES:**

- 1. Establish a working understanding of key scientific and engineering principles supporting cellular manufacturing and therapy.
- 2. Acquire, organize, critically evaluate and apply relevant literature, data and results relevant to cellular manufacturing and therapy.
- 3. Apply the knowledge and skills developed within the programme to produce an in-depth thesis document.
- 4. Communicate complex scientific principles effectively via written, oral and practical methodologies.
- 5. Identify, organize, evaluate and apply knowledge to solve relevant problems or design systems in manufacturing or cellular therapy.
- 6. Demonstrate an ability to communicate relevant information to peers, colleagues and examiners.
- 7. Exhibit self-confidence and capability to identify, interpret and analyse data relevant to cell manufacturing and therapy and establish an extensive understanding of associated techniques and instrumentation.
- 8. Critically evaluate professional practices at local, national and international levels.

# COURSE STRUCTURE

MSc Cellular Manufacturing & Therapy full time 1CMT1 is a yearlong masters delivered over three semesters. Learners are required to complete two 10 ECTs core taught modules in semester 1 and three 10 ECTs core taught modules in semester 2. Learners must pick one10ect optional module and complete a 30 ECTS thesis module for 90 ECTS total.

1CMT1	CMT1 MASTER OF SCIENCE (CELLULAR MANUFACTURING AND				
	THERAPY) 90ects		1		
Module	Module Title	Semester	ECTS	Module	
Code				Туре	
MD1521	Cellular Manufacturing I	1	10	Core	
MD1522	Cellular Immunotherapy	1	10	Core	
MD1528	First in Human, Early Phase Clinical Trials	1	10	Optional	
MD1541	Harnessing the Basic Biology of Cancer for	1	10	Optional	
	Development of Novel Therapeutics				
MD1600	Bioethics	1	10	Optional	
MD550	Informatics I: Retrieval & Appraisal of	1	10	Optional	
	Scientific Literature				
MG529	Introduction To Business	1	10	Optional	
MD1524	Cellular Manufacturing II	2	10	Core	
MD1526	Mesenchymal Stromal Cell Therapy	2	10	Core	
MD1529	Induced Pluripotent Stem Cell Therapy	2	10	Core	
MD1523	Cellular Manufacturing and Therapy	Year	30	Core	
	Dissertation	long			

For those who cannot complete the Master's there is an option to exit with a PG diploma (on completion and passing of 60 ects) or a PG cert on completion and passing of 30ects. Fees will need to be up to date and student will need to authorize the transfer. Transfer requests should be made before April 30<sup>th</sup> or prior to PG Summer exam boards which are usually scheduled for early May.

This programme is open to students who have completed a Level 8 degree in 1) medicine, pharmacy, manufacturing, biology, engineering or 2) an equivalent biomedical sciencerelated Level 8 degree with a minimum of 2<sub>nd</sub> class honours. Applicants from nonbiomedical science related backgrounds will be considered on a case-by-case basis at the discretion of the coordinators. Students who have a Level 8 degree with less than 2<sub>nd</sub> class honours in a related area and have 3+ years of practical experience in the subject area will also be considered.

# **CAREER OPPORTUNITIES**

Graduates will be well positioned for careers in advanced medicinal therapy development and manufacturing, biotechnology and biopharmaceutical manufacturing in academic, regulatory or industrial settings.

# Cheminformatics & Toxicology MSc./PG Dip/PG Cert

1CIT1 MSc Cheminformatics & Toxicology F/T 1CIT9 PG Dip Cheminformatics & Toxicology (exit only) 1CIT8 PG Cert Cheminformatics & Toxicology (exit only)

#### PROGRAMME DESCRIPTION

Cheminformatics is the use of computational techniques to solve chemistry, pharmacology and toxicology problems. Students will understand and apply a range of computational tools to address toxicological questions in preparation for a career in in silico toxicity prediction in the pharma, industry, consultancy, academia and government. The course is delivered over one year by the disciplines of Pharmacology and Therapeutics, Mathematics and Chemistry.

The ideal student will have a BSc or MSc in chemistry with an interest in toxicology, and computational approaches to toxicity prediction. Students with a background in Pharmacology or Bioinformatics (or related disciplines) will also be encouraged to apply.

# UNIVERSITY OF GALWAY CODE: 1CIT1

#### PROGRAMME AIMS AND OBJECTIVES

The course delivers a desirable and highly valued technical skill set that provides strong and diverse employment prospects industry, academia or regulatory bodies. A graduate will contribute to human health and help protect the environment by contributing to a chemically safe society.

# PROGRAMME LEARNING OUTCOMES

- 1. Demonstrate a detailed knowledge of the principles and concepts of Pharmacology or Toxicology.
- 2. Understand the theory behind computational approaches and apply these approaches to the analysis of molecular interactions.
- 3. Apply the principles of toxicology to the assessment of toxicological catastrophes, individual toxicants and classes of toxicants.
- 4. Develop algorithms and combine programs into pipelines to analyse biological datasets and use appropriate tools to represent and statistically analyse large data sets.
- 5. Understand key bioinformatics concepts, access public data repositories and implement key bioinformatics analytical approaches.
- 6. Develop data analysis skills through the investigation of advanced and controversial topics in toxicology.
- 7. To develop and test a novel hypothesis using experimental/computational approaches.
- 8. Understand the principles of QSAR modelling and apply these principles to the analysis of large collections of chemicals using a range of computational approaches.

# **COURSE OUTLINE**

The course is delivered over three semesters. In semester 1 students learn the fundamentals of pharmacology, toxicology and are introduced to computational drugdesign, programming for biology and statistical computing in R. This forms a foundation for more advanced material explored in semester 2.

In semester 2 students consider more advanced concepts in toxicology and investigate controversial areas of toxicology. They also develop a theoretical and a practical understanding of high through put and high content screening technologies that are used to generate large data sets for analysis. The students will learn to apply bioinformatic and cheminformatic tools to such large data sets. This semester equips the students to develop and test a novel hypothesis through independent research that is completed in the third semester.

In the third semester students work independently but with the guidance of an academic or industry-based thesis supervisor on a cheminformatics research project.

The course involves lectures, laboratory-based training, self-directed learning and a threemonth independent research project. Competence is assessed through a mixture of written examinations, computer-based examinations, course work (including verbal presentations and poster presentations) and a research thesis.

### **COURSE STRUCTURE:**

Learners are required to complete 90ects of core modules over 3 semesters.

1CIT1	CIT1 Master of Science (Cheminformatics and Toxicology) 90ECTS				
Module Code	Module Title	Semester	ECTS	Module Type	
CH5106	Computational Approaches to Drug Design and Biomolecular Structure	1	5	Core	
ST2001	Statistics for Data Science 1	1	5	Core	
CS103	Computer Science	1	5	Core	
PM208	Fundamental Concepts in Pharmacology	1	5	Core	
PM311	Introduction to Toxicology	1	5	Core	
PM5108	Applied Toxicology	1	5	Core	
MA324	Introduction to Bioinformatics (Honours)	2	5	Core	
PM5115	Advanced Cheminformatics	2	5	Core	
PM5110	Current Topics in Toxicology	2	10	Core	
PM5111	Advanced Toxicology	2	5	Core	
PM5114	Screening Molecular Libraries	2	5	Core	
PM5112	Research Project in Toxicology	Year long	30	Core	

For those who cannot complete the Master's there is an option to exit with a PG diploma (on completion and passing of 60 ects) or a PG cert on completion and passing of 30 ects. Fees will need to be up to date and student will need to authorize the transfer. Transfer requests should be made before April 30<sup>th</sup> or prior to PG Summer exam boards which are usually scheduled for early May.

1CIT9	CIT9 Postgraduate Diploma in Science (Cheminformatics and Toxicology) 60ECTS exit route			
Module Code	Module Title	Semester	ECTS	Module Type
CH5106	Computational Approaches to Drug Design and Biomolecular Structure	1	5	Core
ST2001	Statistics for Data Science 1	1	5	Core
CS103	Computer Science	1	5	Core
PM208	Fundamental Concepts in Pharmacology	1	5	Core
PM311	Introduction to Toxicology	1	5	Core
PM5108	Applied Toxicology	1	5	Core
MA324	Introduction to Bioinformatics (Honours)	2	5	Core
PM5115	Advanced Cheminformatics	2	5	Core
PM5110	Current Topics in Toxicology	2	10	Core
PM5111	Advanced Toxicology	2	5	Core
PM5114	Screening Molecular Libraries	2	5	Core

1CIT8	CIT8 Postgraduate Certificate in Science (Cheminformatics and Toxicology) 30ECTS exit route			
Module Code	Module Title	Semester	ECTS	Module Type
CH5106	Computational Approaches to Drug Design and Biomolecular Structure	1	5	Optional
ST2001	Statistics for Data Science 1	1	5	Optional
CS103	Computer Science	1	5	Optional
PM208	Fundamental Concepts in Pharmacology	1	5	Optional
PM311	Introduction to Toxicology	1	5	Optional
PM5108	Applied Toxicology	1	5	Optional
MA324	Introduction to Bioinformatics (Honours)	2	5	Optional
PM5115	Advanced Cheminformatics	2	5	Optional
PM5110	Current Topics in Toxicology	2	10	Optional
PM5111	Advanced Toxicology	2	5	Optional
PM5114	Screening Molecular Libraries	2	5	Optional

**ECTS WEIGHTING** 90 ECT MSc, 60ECTS PG dip (exit route), 30ECTS PG Cert (exit route).

# MINIMUM ENTRY REQUIREMENTS

2.2 degree or higher in chemistry, pharmacology or related discipline and an IELTS score of 6.5 for those whose first language is not English. A short-listing procedure will be applied that evaluates undergraduate academic performance throughout their time at university, the content and quality of their personal statement, prior research or work experience and reference letters.

#### **CAREER OPPORTUNITIES**

The ability to identify the toxicity and assure the safety of chemicals used in drugs, foodstuffs, consumer products, industry and agriculture is essential for modern society and the global toxicology testing market is projected to surpass \$16.2 billion by 2024. Scientists to develop and use computational tools that better predict toxicity are at a premium. The value of these skills is further enhanced by the scarcity of training programmes to produce toxicologists with the appropriate computational skills. Graduates from the course will be employed in the Pharmaceutical industry, the Cosmetics Industry, National and EU Regulatory bodies, Toxicology Consultancies and academia.

Regenerative Medicine MSc. / PDip

1MSR1 MSc. Regenerative Medicine F/T 1MSR9 PDip Regenerative Medicine (exit route)

Regenerative Medicine is a discipline which generates novel therapeutics to mediate repair and generation of damaged and diseased organs. These therapeutics are based on stem cells, gene therapy, biomaterials, engineering tissue and other biologically active compounds. This 12 month taught programme aims to provide graduates in life sciences, biomedical engineering, nursing or medicine with an understanding of Regenerative Medicine and to equip them with the skills necessary for a career in this emerging discipline.

#### PROGRAMME AIMS AND OBJECTIVES

This programme aims to provide graduates with an understanding of Regenerative Medicine integrating information, technologies and skills from biological sciences, engineering, legal and ethical disciplines. These modules will address the science behind Regenerative medicine, its application to human disease and its importance to modern society.

#### ECTS

90 ECTs (M.Sc) 60 ECTs (PG Dip) exit route

#### PROGRAMME LEARNING OUTCOMES

- 1. Display knowledge of key scientific principles underpinning regenerative medicine including stem cells biology, gene therapy and tissue engineering.
- 2. Evaluate the potential risks, benefits and implications of therapies associated with regenerative medicine.
- 3. Design, execute and analyse a laboratory-based experiment and report the data
- 4. Demonstrate an ability to acquire, organise, integrate and analyse information from different sources.
- 5. Demonstrate an ability to communicate information, data and ideas to peers, colleagues, staff and examiners.

# **COURSE STRUCTURE**

Compulsory/Core modules 75ECTS Students will select options worth 15ECTS See Table with list of core and optional modules.

1MSR1	MSR1 Master of Science (Regenerative Med	icine)		
Module Code	Module Title	Semester	ECTS	Module Type
BME405	Tissue Engineering	1	5	Core
AN230	Human Body Structure	1	5	Optional
EC584	Economic Evaluation in Health Care	1	10	Optional
MD1541	Harnessing the Basic Biology of Cancer for Development of Novel Therapeutics	1	10	Optional
MD1542	Stem Cells and Regenerative Medicine	1+2	10	Core
MD511	Introduction to Biostatistics I	1	10	Optional
MG529	Introduction To Business	1	10	Optional
PM208	Fundamental Concepts in Pharmacology	1	5	Optional
PM209	Applied Concepts in Pharmacology	1	5	Optional
SI317	Human Body Function	1	10	Optional
BES519	Scientific Writing	Sem 1 and 2	5	Optional
REM503	Advanced Research Techniques	Sem 1 and 2	10	Core
BI5108	Green Lab Principles and Practice	Sem 1 and 2	5	Optional
BME502	Advanced Tissue Engineering	2	5	Core
REM502	Translational Medicine	2	5	Core
REM508	Graduate Course in Basic and Advanced Immunology	2	5	Core
MA324	Introduction to Bioinformatics (Honours)	2	5	Optional
REM506	Independent Study Module	2	5	Optional
SI5100	Gene Therapy	1	10	Core
REM505	Research Project	Year long	30	Core

If required students can exit the course after completing modules totalling 60 ECTs and be awarded a Postgraduate Diploma. Fees will need to be up to date and student will need to authorize the transfer. Transfer requests should made by April 30<sup>th</sup> or prior to PG Summer exam board which is usually scheduled for early May.

1MSR9	MSR9 Postgraduate Diploma in Science (R	egenerative Medi	cine) Exi	t Route
Module Code	Module Title	Semester	ECTS	Module Type
BME405	Tissue Engineering	1	5	Core
AN230	Human Body Structure	1	5	Optional
EC584	Economic Evaluation in Health Care	1	10	Optional
MD1542	Stem Cells and Regenerative Medicine	1+2	10	Core
MD1541	Harnessing the Basic Biology of Cancer for Development of Novel Therapeutics	1	10	Optional
MD511	Introduction to Biostatistics I	1	10	Optional
MG529	Introduction To Business	1	10	Optional
PM208	Fundamental Concepts in Pharmacology	1	5	Optional
PM209	Applied Concepts in Pharmacology	1	5	Optional
SI317	Human Body Function	1	10	Optional
BES519	Scientific Writing	Sem 1 and 2	5	Core
REM503	Advanced Research Techniques	Sem 1 and 2	10	Core
BI5108	Green Lab Principles and Practice	Sem 1 and 2	5	Optional
BME502	Advanced Tissue Engineering	2	5	Core
REM508	Graduate Course in Basic and Advanced Immunology	2	5	Core
SI5100	Gene Therapy	1	10	Core
MA324	Introduction to Bioinformatics (Honours)	2	5	Optional
REM506	Independent Study Module	2	5	Optional

This programme is open to students who have obtained at least a Second Class Honours degree in an appropriate biological science, biomedical engineering, medicine or nursing. Students who have a degree without Honours in a related area and have 3 or more years of practical experience in the subject area will also be eligible to apply for this programme.

# **CAREER OPPORTUNITIES**

This programme will equip students for careers in biomedical research and development in academic or industrial settings. Graduates will also receive training relevant to clinical and translational research. Graduates are employed in research, development, manufacturing and regulatory affairs around the world. Around 40% of the graduates from this course go on to Ph.D. studentships based in Ireland, the UK, Europe, USA, and Canada.

# College of Science and Engineering, Interdisciplinary with the School of Medicine

#### MSc. Toxicology

# Toxicology F/T 1MST1 (90ECTS)

#### **COURSE OVERVIEW**

Toxicology is the study of poisons, drawing heavily on life and physical sciences, as well as being an applied practically based subject. It is designed to acquaint students with the breadth of Toxicology, with a considerable emphasis on its practical application. The first semester consists of a foundation in Pharmacology and Toxicology and their applications. Workshops provide students with a theoretical basis in data handling and interpretation.

The second semester consists of lectures in advanced topics such as Risk Assessment, Target Organ Toxicity, Reproductive and Regulatory Toxicology. In addition, there is more emphasis on laboratory mini projects (in vivo, in vitro & molecular projects) that introduce students to the practical elements of toxicity testing and data interpretation. There are also a number of written projects on toxicity testing used in the drug industry as well as recent advances in toxicity assays which involve self-directed learning.

In the third semester, there is a 3-month research project to investigate an aspect of toxicology and deliver a seminar on this area. This involves the student preparing a research proposal, carrying out the lab-based project and preparing a thesis on the findings.

#### **PROGRAMME LEARNING OUTCOMES INCLUDE:**

- Demonstrating a detailed knowledge of the principles and concepts of toxicology and pharmacology
- Demonstrating an in-depth knowledge of the recent developments and applications in the field of toxicology
- Demonstrating a high skill level in a wide range of laboratory skills for toxicological investigations
- Communicating experimental findings in toxicology effectively, using a variety of verbal, written and visual means.
- Designing, conducting, analysing and presenting their original laboratorybased research.

#### ENTRY REQUIREMENTS

Successful students will normally hold at least a Second-Class Honours Level 8 degree, or equivalent international qualification, from a diversity of undergraduate disciplines.

Students are also considered who have a Level 7 degree, or equivalent international qualification, and three years' relevant postgraduate full-time work experience. IELTS score of 6.5 (with not less than 5.5 in any one component).

# **COURSE OUTLINE**

The programme is divided into three trimesters (each of 30 ECTS) in the following manner:

#### Trimester One

- Introduction to Toxicology: 5 ECTS
- Applied Toxicology: 5 ECTS
- Fundamental Concepts in Pharmacology: 5 ECTS
- Applied Concepts in Pharmacology: 5 ECTS
- Experimental Methods in Pharmacology: 10 ECTS

#### Trimester Two

- Experimental Toxicology: 15 ECTS
- Current Topics in Toxicology: 10 ECTS
- Advanced Toxicology: 5 ECTS

#### Trimester Three

• Toxicology Research Project: 30 ECTS

1MST1	1MST1 MST1 Master of Science (Toxicology) 90ECTS			
Module Code	Module Title	Semester	ECTS	Module Type
PM208	Fundamental Concepts in Pharmacology	1	5	Core
PM209	Applied Concepts in Pharmacology	1	5	Core
PM311	Introduction to Toxicology	1	5	Core
PM5102	Experimental Methods in Pharmacology	1	10	Core
PM5108	Applied Toxicology	1	5	Core
PM5109	Experimental Toxicology	2	15	Core
PM5110	Current Topics in Toxicology	2	10	Core
PM5111	Advanced Toxicology	2	5	Core
PM5112	Research Project in Toxicology	Year long	30	Core

# **PROGRAMME CONTENT** (subject to change)

If a student has previously completed some of the core modules listed above they will be required to select alternative modules from modules listed below. Student must contact programme director to arrange registration of alternative modules.

1MST1	MST1 Master of Science (Toxicology) 90ECTS		
Module Code	Module Title	Semester	ECTS
BI5107	Introduction to Molecular and Cellular Biology	1	5
PM5114	Screening Molecular Libraries	2	5
REM506	Independent Study Module	2	5
BI5108	Green Lab Principles and Practice	Sem 1+ 2	5

#### **CAREER OPPORTUNITIES**

Previous graduates of this programme have either found employment in toxicological testing and product quality testing within industry or government agencies or in the field of regulatory toxicology within governmental and international regulatory bodies. Graduates have also enrolled in PhD programmes and further academic studies in related disciplines.

### MSc Neuropharmacology 1NP1

# **COURSE OVERVIEW**

Attempting to find new drug treatments central nervous system (CNS) diseases is a major global priority. This requires a collaboration between pharmaceutical companies, hospitals and academic institutions. It involves:

- 1. The identification of drug targets in the CNS disease state of interest.
- 2. Discovery and preclinical profiling of substances acting on this drug target.
- 3. The clinical evaluation for efficacy and safety.

The Discipline of Pharmacology and Therapeutics has been actively engaged in neuropharmacological research for over 30 years. In 1998, the MSc in Neuropharmacology was introduced to provide students with the skills necessary to develop a career in important area of research.

# **PROGRAMME OUTCOMES INCLUDE:**

- Demonstrating a detailed knowledge of the principles and concepts of neuropharmacology.
- Demonstrating an in-depth knowledge of the recent developments and applications in the field of neuropharmacology.
- Demonstrating a high-skill level in a wide range of laboratory skills for neuropharmacological investigations.
- Communicating experimental findings in neuropharmacology effectively, using a variety of verbal, written and visual means.
- Designing, conducting, analysing and presenting their original laboratory-based research.

# ENTRY REQUIREMENTS

Successful students will normally hold at least a Second-Class Honours Level 8 degree from any of a range of undergraduate disciplines, from Chemistry to Life Science subjects to Psychology. Students are also considered who have a Level 7 degree and three years' relevant work experience. IELTS score of 6.5 (with not less than 5.5 in any one component).

# **COURSE OUTLINE**

The programme is divided into three trimesters (each of 30 ECTS) in the following manner:

#### Trimester 1

- Neuroscience: 5 ECTS
- Central Neurotransmission: 5 ECTS
- Fundamental Concepts in Pharmacology: 5 ECTS
- Applied Concepts in Pharmacology: 5 ECTS
- Experimental Methods in Pharmacology: 10 ECTS

#### Trimester 2

- Experimental Neuropharmacology: 15 ECTS
- Current Topics in Neuropharmacology: 10 ECTS
- Neuropharmacology & Therapeutics: 5 ECTS

#### Trimester 3

• Neuropharmacology Research Project: 30 ECTS

1NP1	NP1 Master of Science (Neuropharmaco	logy) 90ects		
Module Code	Module Title	Semester	ECTS	Module Type
PM208	Fundamental Concepts in Pharmacology	1	5	Core
PM209	Applied Concepts in Pharmacology	1	5	Core
PM5101	Central Neurotransmission	1	5	Core
PM5102	Experimental Methods in Pharmacology	1	10	Core
SI209	Neurophysiology	1	5	Core
BI5107	Introduction to Molecular and Cellular Biology	1	5	Optional
PM311	Introduction to Toxicology	1	5	Optional
PM5103	Experimental Neuropharmacology	2	15	Core
PM5104	Current Topics in Neuropharmacology	2	10	Core
PM5105	Neuropharmacology & Therapeutics	2	5	Core
PM5114	Screening Molecular Libraries	2	5	Optional
AN508	Anatomy Thesis	7	30	Optional
BI503	Biochemistry Thesis	7	30	Optional
PM517	Pharmacology Thesis	7	30	Optional
SI503	Physiology Thesis	7	30	Optional
SY502	Psychiatry Thesis	7	30	Optional

Students are advised to register for PM517 initially and may change to discipline specific project in semester 2 if applicable.

# **CAREER OPPORTUNITIES**

The majority of graduates of the programme have entered the workforce either in technical or research roles within hospitals, universities or companies, mostly in Ireland. In addition, approximately one-third have embarked on PhD research following graduation.

Programmes Suspended/Formerly Retiring

**Medical Science** 

# PDip in Medical Science

# 1MMH9 (Exit Route)

Not open to registrations from AY2021 onwards- Honouring students who registered prior to AY2021. Plan to formerly retire when 2 years elapse with no registered students.

#### PROGRAMME DESCRIPTION

The Medical Science programmes introduce candidates to techniques and frameworks to enable them to critically appraise scientific evidence to answer researchable clinical questions and conduct dedicated research in their own speciality or field of interest. The postgraduate programmes are designed for health care providers with an interest in evidence-based medicine/practice and health and medical research. Content is delivered via distance learning and face-to-face teaching. Beginners in EBM are brought to an advanced level through enquiry-based learning. Through this course professionals become better health care providers.

The Postgraduate Diploma is a one-year part time course completed over two semesters (60 ECTS). The programme consists of six online modules with candidates completing three modules each semester. The Postgraduate Diploma is also an exit award for the Master's in Medical Science programme available after successful completion of 60 credits.

#### MINIMUM ENTRY REQUIREMENTS

Successful applicants will normally hold a primary degree in health care, medicine or equivalent qualification, at second class Honours grade one level or above, in a relevant subject. Competence in English language equivalent to IELTS 6.5. 25 places available

#### **CAREER OPPORTUNITIES**

Graduates of our Postgraduate Diploma in Medical Science have gone on to pursue careers in a diverse range of fields including the completion of a Master's degree in Medical Science, Medical Research and improved professional attitude in daily practice (Evidence Based Practice/Medicine).

#### PROGRAMME AIMS

The broad aim of this programme is to strengthen a health care provider's knowledge and skills in subjects particular to medical research and clinical teaching. In particular the programme aims to:

- Using a blend of enquiry-based learning and a self-directed interactive approach, by the end of this programme you should be able to:
- To search, retrieve, and store scientific information related to a specific topic of interest.
- Demonstrate critical appraisal skills regarding specified scientific literature.
- Demonstrate an ability to ask researchable questions related to a specified field of interest.
- To detect the validity and reliability of published evidence and measurement devices aimed to be used in a future research project.
- To write a scientific essay in *Word* and referencing according to Vancouver formats (*Word* plus *Endnote*).
- To know how to use advanced descriptive and inferential statistics and critical appraisal of published statistics.
- Demonstrate competence in designing your own research design and to produce an appropriate research proposal.
- To organise a research meeting(s) with fellow researchers/heads of departments aiming the launch of your own research strand.
- To submit an approved research proposal.
- To be enrolled in the second year of the Master of Medical Science (Health Informatics).

# **DURATION OF THE PROGRAMME**

The programme may be taken on a part-time basis over at least 1 year.

# **Programme Content**

All modules are delivered in one-week blocks and include distance-learning element.

1MMH9	MMH9 Postgraduate Diploma in Medical Science 60ECTS				
Spring		Semester	ECTS	Module Type	
MDI400	Finding the needle in the I-stack	Spring	10	Core	
MDI402	Lies, damned lies and statistics	Spring	10	Core	
MDI403	From Popper to Proposal	Spring	10	Core	
MDI401	Advanced Statistics Level II	2	10	Core	
MD6108	Patient Safety & Human Factors	2	10	Optional	
MDI409	Research methods and research proposal advanced level II	3	10	Core	
MD6107	Surgical Education	3	10	Optional	

# **Medical Science**

MSc. Medical Science

# 1MMH3 F/T, 1MMH2 (P/T)

Medical Science MSc-Not open to new entrants from AY2021 onwards. Honouring students who registered prior to AY2021. Plan to formerly retire when 2 years elapse with no students.

# PROGRAMME DESCRIPTION

The Master's in Medical Science (Health Informatics) is a one-year programme designed for health care providers to conduct and publish dedicated evidence-based research in their own speciality or field.

The Master's in Medical Science (Health Informatics) is completed over a 12-month period (90 ECTS). The programme consists of the modular content of the Postgraduate Diploma plus a dedicated Research Thesis.

### MINIMUM ENTRY REQUIREMENTS

Successful applicants will normally hold a primary degree in health care, medicine or equivalent qualification, at second class Honours grade one level or above, in a relevant subject. Competence in English language equivalent to IELTS 6.5. All candidates must have successfully completed the Postgraduate Diploma in (Health Informatics) or a comparable award deemed by the School of Medicine to satisfy these requirements.

#### **CAREER OPPORTUNITIES**

Graduates of the Master's in Medical Science have gone on to pursue careers in a diverse range of fields including the completion of a MD and PhD degrees in Medical Science and Medical Research. They have brought improved professional skills and attitudes into their daily practice (Evidence Based Practice/Medicine).

# PROGRAMME AIMS

The broad aim of this programme is to strengthen a health care provider's knowledge and skills in subjects particular to medical research and clinical teaching. In particular the programme aims to:

- Using a blend of enquiry-based learning and a self-directed interactive approach, by the end of this programme you should be able to:
- To search, retrieve, and store scientific information related to a specific topic of interest.
- Demonstrate critical appraisal skills regarding specified scientific literature.
- Demonstrate an ability to ask researchable questions related to a specified field of interest.
- To detect the validity and reliability of published evidence and measurement devices aimed to be used in a future research project.
- To write a scientific essay in *Word* and referencing according to Vancouver formats (*Word* plus *Endnote*).
- To know how to use advanced descriptive and inferential statistics and critical appraisal of published statistics.
- Demonstrate competence in designing your own research design and to produce an appropriate research proposal.
- To organise a research meeting(s) with fellow researchers/heads of departments aiming the launch of your own research strand.
- To submit a research Thesis.
- Publish a research paper.
- To encourage progression to PhD programmes.

# **DURATION OF THE PROGRAMME**

The programme may be taken on a 1-year full-time (MMH3), or 2-year part-time basis (MMH2).

# **Programme Content**

For the full time Master's in Medical Science, learners are required to complete 50 ECTS of core taught modules, select one optional 10 ECTS taught module and complete a core 30 ECTS thesis module to make up 90 ECTS overall.

1MMH3	MMH3 Masters in Medical Science 90ECTS			
Sem 1	Module Title	Semester	ECTS	Module Type
MDI415	Introduction to Medical Statistics	1	10	Core
MD466	Applied Musculoskeletal Anatomy	1	10	Optional
MDI414	Medical Research Skills I	Spring	10	Core
MDI416	Research Methods I	Spring	10	Core
MDI401	Advanced Statistics Level II	2	10	Core
MD6108	Patient Safety & Human Factors	2	10	Optional
MDI411	Database Development & Medical Informatics	2	10	Optional
MDI412	Exercise Physiology	2	10	Optional
MDI409	Research methods and research proposal advanced level II	3	10	Core
MDI407	Thesis	Year long	30	Core

The part time Master's in Medical Science is completed over two years. Year 1 learners are required to complete 60 ECTS (50 ECTS core modules and select one 10 ECTS optional module) before being progressed to year two where they are required to complete a 30 ECTS thesis module.

1MMH2	MMH2 Master in Medical Science (p/t) 60ECTS			
Sem 1	Module Title	Semester	ECTS	Module Type
MDI415	Introduction to Medical Statistics	1	10	Core
MD466	Applied Musculoskeletal Anatomy	1	10	Optional
MDI414	Medical Research Skills I	Spring	10	Core
MDI416	Research Methods I	Spring	10	Core
MDI401	Advanced Statistics Level II	2	10	Core
MD6108	Patient Safety & Human Factors	2	10	Optional
MDI411	Database Development & Medical Informatics	2	10	Optional
MDI412	Exercise Physiology	2	10	Optional
MDI409	Research methods and research proposal advanced level II	3	10	Core
MD6107	Surgical Education	3	10	Optional
2MMH2	MMH2 Master in Medical Science (p/t) 30ECTS			
MDI407	Thesis	8	30	Core

# Scholarships/Awards

# University Scholar Scheme

Údarás na hOllscoile will confer the title University Scholar on students who obtain the minimum requirement at the relevant examination as specified at 5.2 below.

The title University Scholar may be held with other Scholarships or Grants awarded by the University or by an external body.

Value - An award of €250 will be made to each University Scholar.

Tenure The title is tenable only at National University of Ireland, Galway.

**Condition of Award -** To register as a student of the University in the College in which the title is awarded by the due registration date. Failure to complete the registration requirement will render the student ineligible without further notice.

# **Basis of Award**

5.1 The award will be made on the results of fulltime undergraduate degree examinations other than the degree examination itself.

College	Years /Stages	Minimum Requirement
The College of Medicine,	Medicine	
Nursing and Health		
Sciences	Foundation Year	First-class Honours – 80% or over
	First Medical Year	First-class Honours – 80% or over
Students whose	Second, Third and	First-class Honours – 70% or over
examination performance	Fourth	
meets the minimum	Nursing - First,	First-class Honours -70% or over
requirement <u>AND</u> is	Second and Third	
	Year	
ranked in the top 7% of	Programmes in	
the year class <sup>2</sup>	Occupational	First-class Honours -70% or over
	Therapy, Podiatry,	
	Speech and	
	Language Therapy	
	First, Second and	
	Third Year	

5.2 In September 2013, the title will be awarded to students who obtained the following minimum standards in the session 2012/13.

#### The College of Medicine Nursing & Health Sciences Undergraduate awards

#### BANK OF IRELAND AWARDS: HONOURS BACHELOR OF NURSING SCIENCE (GENERAL): BEST RESEARCH PROJECT MARK

Awards are presented to students from the undergraduate programme honours Bachelor of Nursing Science (General) for the best research project mark. The awards are sponsored by the Bank of Ireland.

#### DR REUBEN BERMAN PRIZES

Medical Informatics and Medical Education award each year two fourth year medical students with the Berman Prizes which consists of six weeks clinical attachments in the Hennepin County Medical Center in Minneapolis, Minnesota, USA. These awards are based on the results the students achieved in the subject Medical Informatics and Medical Education that year.

#### GOLD MEDALS IN THE FINAL MEDICAL YEAR

A Gold Medal will be awarded annually to the top performing student as determined by the Extern in the following subjects: Anaesthesia, Civic Engagement, General Practice, IUMC Comerford, Pathology, Bacteriology, Medicine, Obstetrics & Gynaecology, Ophthalmology, Oto-Rhino-Laryngology, Paediatrics, Psychiatry, Radiology and Surgery during the penultimate medical year of the MB Degree Examination.

#### IRISH ASSOCIATION OF SPEECH AND LANGUAGE THERAPISTS PRIZE

The annual Irish Association of Speech and Language Therapists (IASLT) Prize is awarded to the SLT in training who obtains the highest overall mark for fourth year (i.e. marks in Year 4 only and not the degree classification mark) on the Speech and Language Therapy course at University of Galway.

#### TAVISTOCK PRIZE FOR APHASIA

The Tavistock Prize for Aphasia is awarded to either an undergraduate or postgraduate student who demonstrates 'excellence' in either academic or practical work (i.e. an essay, a piece of research, clinical practice, conversation partners or similar scheme) relating to

Aphasia. The student will receive the equivalent of £300 in Euro, a certificate and a badge. http://www.aphasiatavistocktrust.org/aphasia/university-student-prizes/

#### THE NOLAN MEDAL (Clinical Ophthalmology)

Ophthalmology, a discipline within the College of Medicine, Nursing and Health Sciences has awarded for many years the O'Malley Medal for the first placed student in the Ophthalmology Final Medical Part I Examination. I n view of the outstanding

contributions made by Dr John Nolan, retired Consultant Ophthalmologist, to the development of Ophthalmology, both within the College and in the Western Health Board, his colleagues have agreed to sponsor a further prize for students taking the OphthalmologyExamination.

The student who obtains first place in the clinical section of the Ophthalmology Examination at the Summer M.B. Degree Examination will be awarded the Nolan

Medal for Clinical Opthalmology. The first award was made to graduates of 2003.

# DOCTORS SAL AND CONOR O'MALLEY MEDAL (Ophthalmology)

A Gold Medal will be awarded annually to the student who obtains the highest marks in Ophthalmology at the Summer M.B. Degree Examination.

#### JAMES P. MURRAY MEMORIAL GOLD MEDAL IN RADIOLOGY

The James P. Murray Memorial Gold Medal is awarded for the best presentation from registered medical students (undergraduate and postgraduate) made at the College of Medicine, Nursing and Health Sciences Medical Students' Research Meeting.

#### SIEMENS AWARD IN RADIOLOGY

The Siemens Award is given to the student who obtains the highest marks in the Radiology attachment in Final Medical.

PRIZES: Dr. Henry Hutchinson Stewart – Awarded by the NUI Excellence Scholarships

Undergraduate Scholarships - University of Galway

Postgraduate Awards

# THE AGFA-GEVAERT TRAVELLING SCHOLARSHIP IN RADIOLOGY

This Scholarship has been endowed by Agfa-Gevaert (Ireland) Limited and is awarded to enable a young Galway, Graduate to pursue a short course of study or research abroad, as part of his/her post-graduate training in Radiology. Graduates of National University of Ireland, Galway, up to 10 years after graduation, are eligible for this award, which will be decided by a University Committee representative of the Medical, Nursing and Health Sciences College. In the event of a suitable applicant not being available in any year, the interest available may be carried over to augment the funds available in the subsequent year. Further information and details concerning application are available from the Professor of Radiology, University College Hospital, Galway.

The value of the Scholarship is €1,200.

# DR TONY CARNEY GOLD MEDAL (MSc (SPORTS AND EXERCISE MEDICINE))

The Gold Medal is awarded to the student who achieves the best overall result in the MSc (Sports and Exercise Medicine) Degree Programme.

# MARY COSTELLO GOLD MEDAL (MSc (SPORTS AND EXERCISE PHYSIOTHERAPY))

The Gold Medal is awarded to the student who achieves the best overall result in the MSc (Sports and Exercise Physiotherapy) Degree Programme.

### THE PROFESSORIAL POSTGRADUATE TRAVEL PRIZE IN OBSTETRICS AND GYNAECOLOGY SUPPORTED BY ETHICON LIMITED

Ethicon Limited have agreed to award a sum of approximately €777 (£500 sterling) per annum over the next five years to help fund a short course abroad for a postgraduate trainee in Obstetrics and Gynaecology, to be known as "The Professorial Postgraduate Travel Prize".

#### THE DOCTOR JOHN F. KEENAN TRAVELLING SCHOLARSHIP

This Scholarship is endowed by the late John F. Keenan, B.A., MB BCh BAO (a graduate of the University 1892-1897), who by his Will bequeathed to the University certain portions of his estate for the promotion of Medical Research. The original Endowment, as ascertained by the Executors of the donor on the seventh day of March 1947, consisted of securities and cash valued at  $\epsilon$ 7,063 (approx.).

The present value of the Scholarship is €12,500.

Údarás na hOllscoile, having accepted the Bequest has founded the above Scholarship, and has adopted the following rules in regard to it;

- 1. The value of the Scholarship shall be as determined by Údarás na hOllscoile.
- 2. The Scholarship is available to a graduate in Medicine and Health Sciences of the University of either sex of Irish parentage, who has;
  - (a) obtained Honours in the MB BCh BAO Examination;
  - (b) presented for the MB BCh BAO Examination not later than the month of December in the sixth year of medical study;
  - (c) been adjudged by the College of Medicine, Nursing and Health Sciences to have attained an adequate Honours Standard in the undergraduate course as a whole;
  - (d) been adjudged by the College of Medicine, Nursing and Health Sciences to have shown special aptitude for research during the undergraduate course.

*Note:* For the purpose of (*b*) above there shall not be counted: an extra year spent in taking a Medical B.Sc. Degree;

(i) time lost owing to illness properly certified.

3. The Scholarship shall be awarded by Údarás na hOllscoile on the recommendation of the Academic Council made after consultation with the College of Medicine, Nursing and Health Sciences. The College of Medicine, Nursing and Health Sciences shall, for the purpose, consider the report of the Professor of Medicine and of the External Examiner in Medicine. Údarás na hOllscoile may withhold the Scholarship if sufficient merit be not shown.

4. (*a*) The Scholarship shall be awarded once only in every four years, shall be awarded in the month of January, and was first awarded in January 1951;

(b) If the Scholarship be not awarded in the official year of award, it may be awarded in any one of the three succeeding years of a four-year period;

(c) Should no award be made in a four-year period, more than one Scholarship may be subsequently offered.

5. Only Graduates in Medicine and Health Sciences of the four years preceding the first day of January of the year of award, are eligible for the Scholarship.

6. The Candidate to whom the Scholarship is awarded shall before being permitted to take up the Scholarship first serve as a House Physician in a Recognised General Hospital for a period of not less than six months or more than twelve months unless he/she has already done so. He/she shall then pursue a Course of Research in Medicine and Health Sciences at some centre abroad approved by the Professor of Medicine in the University.

7. The Scholarship is tenable by the Scholar for a period of two consecutive years. The said two-year period shall commence from the day of termination of period of service as House Physician or (in the case of a candidate who has already served as House Physician) from the date of award of the Scholarship. The Scholarship shall in the first instance be awarded for one year only but may be continued by Údarás na hOllscoile for a second year on the recommendation of the Academic Council. Before making such recommendation, the Academic Council must be satisfied of the progress of the scholar and shall consider the report of the College of Medicine, Nursing and Health Sciences and the report of the Head of the Research School in which the Scholar is engaged.

8. Candidates shall lodge their applications for the Scholarship with the Admissions Office of the University not later than the first day of December of the year immediately preceding the year of award.

9. The Scholarship will be paid in equal half-yearly instalments. The first instalment will be paid on receipt of official notification from a Research Centre abroad to the effect that the Scholar has commenced work there.

# School of Nursing & Midwifery

The School of Nursing and Midwifery is situated on-campus in a purpose-built building. The philosophy underpinning programme design and delivery is student- focused and aims to inculcate values of caring, dignity and respect. The School has a reputation for being vibrant and dynamic and its purpose is to develop innovative, practice focused programmes and to undertake quality research of local, national and international relevance. There are two broad goals: to prepare graduates who are analytical, knowledgeable, responsive and highly skilled and to undertake quality research that effects change and makes a difference to client care and service delivery.

# Undergraduate Programmes (NFQ Level 8 awards; *ref. <u>https://www.qqi.ie/</u>*) provided include

Bachelor of Nursing Science (General) Bachelor of Nursing Science (Mental Health) Bachelor of Midwifery Science.

#### Postgraduate Programmes

Professional Credit Award Certificate in Nursing (Nurse/Midwife Prescribing) Higher Diploma Midwifery Master/Postgraduate Diploma in Health Sciences (Emergency Care) Master/Postgraduate Diploma in Health Sciences (Advanced Practice with Prescribing) Postgraduate Diploma in Nursing (Education) Master/Postgraduate Diploma in Health Sciences (Gerontology) Master/Postgraduate Diploma in Health Sciences (Children's Palliative/Complex Care) Master/Postgraduate Diploma in Health Sciences (Wound Healing and Tissue Repair) Master/Postgraduate Diploma in Health Sciences (Oncology and Haematology) Master of Health Sciences (Nursing) Master/Postgraduate Diploma in Health Sciences (Diabetes)

Master of Health Sciences (Nursing/Midwifery Education) Master/Postgraduate Diploma in Health Sciences (Public Health Nursing) Master/Postgraduate Diploma in Health Sciences (Acute Medicine) Master/Postgraduate Diploma in Health Sciences (Intensive Care) Structured Master of Health Sciences (Specialist Nursing)

# General regulations for Undergraduate Degrees in Nursing & Midwifery

(NFQ Level 8 Ref; <u>https://www.qqi.ie/</u>)

#### EXPLANATORY NOTE

The Undergraduate Degree Programmes of the School of Nursing and Midwifery at National University of Ireland, Galway are four-year Honours Degrees, which award the: Bachelor of Nursing Science (General), Bachelor of Nursing Science (Mental Health) and Bachelor of Midwifery Science.

Regulations may be altered periodically. The regulations applying to students are generally those which applied to their programme at the time in which they commenced their studies, unless otherwise specified in the General Regulations hereunder.

These Regulations form a total, individual clauses may be conditioned or varied by the provision of other clauses and cannot be applied in isolation.

The Regulations may also be supported by, or refer to other publications such as the University Undergraduate Prospectus (available on request or by following on-line links for Future Students from <u>University-of-Galway-Undergraduate-Prospectus-</u>2024.pdf (universityofgalway.ie) and the General Calendar of the University Academic Term Dates - University of Galway

I. Entry to the Degree is limited and is based competitively on the results of the Irish Leaving Certificate examination or its equivalent. The minimum requirement is matriculation, as set out in the Undergraduate Prospectus. [refer Matriculation Requirements and Additional Requirements in the University Undergraduate Prospectus]. Requirements arising where the results being presented are from any examination other than the Irish Leaving Certificate are also set out in the Prospectus.

*Note: The competitive cut-off may be significantly higher than the Matriculation standard. All Applications are processed through the Central Applications Office.* (www.cao.ie)

II. Candidates who do not meet the Ordinary Matriculation Requirements as set out in II above, may matriculate on grounds of Mature Years [refer Matriculation on Mature Years in the University Undergraduate Prospectus]. Note: All Applications are processed through the Central Applications Office. (refer to www.cao.ie). All applications must be successful at the Nursing Careers Centre (NCC) written assessment before being considered for an offer as a mature applicant (refer to <u>www.nursingcareers.ie</u>). However, success at the NCC written assessment does not guarantee an offer of a place.

- III. Every student must satisfy Garda Vetting and Medical Clearance requirements. Garda Vetting is organised through the Undergraduate Admissions Office. The Pre-placement Health Assessment is organised through the Student Health Unit. Failure to meet the Garda Vetting requirements results in the student being removed from the Degree programme. (please refer to University of Galway Garda Vetting and Police Clearance for Undergraduate and Postgraduate Student Policy QA231) https://www.universityofgalway.ie/media/registry/admissions/files/internaldoc uments/GardaVettingPolicy\_v2.2.pdf
- IV. Registration is carried out by the University. Students must be registered in their Degree programme not later than fifteen days after the commencement of Programmes.
- V. To obtain the degrees of Bachelor of Nursing Science or Bachelor of Midwifery Science as set out in the Explanatory Note (above);
  - (a) Students must pursue programmes of Study extending over a period of not less than four Academic Years and must pass the various Examinations prescribed below, meeting the requirements as set out elsewhere in these Regulations, in the Marks and Standards of the School <u>Marks & Standards for all Fulltime</u> <u>Undergraduate Degree Examinations (universityofgalway.ie)</u> and in Student Handbooks where necessary.
  - (b) The Examinations are as follows:
    - (1) The First University Examination in their programme.
    - (2) The Second University Examinations in their programme.
    - (3) The Third University Examination in their programme.
    - (4) The Fourth University Examination, being the Final Examination i their programme.

Students receive a schedule of assessment for each year of the programme.

**Note:** The duration of the programme cannot be shortened; no part of the Final Examination may be taken before the end of 8 Semesters of professional education. A student who fails their yearly examination in a particular year has the right to re-sit that/those examination(s) the following year Students that fail the repeat year will be asked to exit the program.

- (i) There is a time-limit on the completion of the degree; while a student who fails their yearly examination in a particular year has the right to re-sit that/those examination(s) the following year [refer par. VIII XI below], the total time allowed for the successful completion of the four University Examinations is 6 years or 12 semesters in total.
- VI. The First University Examination must be passed completely before a student can proceed to the Second Year.
  - (a) To enter this Examination, the student must have satisfied the attendance requirements on the First Year Programme, including completion of all coursework and required clinical placement(s). Exceptions may only be permitted by the Head of School where this is recommended by the programme on professionally verified grounds of student ill-health, close family bereavement or of significant personal difficulties.
  - (b) The Examination will comprise examinations on Semester 1 modules in the Winter Examination Session and examinations on the Semester 2 modules in the Summer Examination Session. Repeat examinations, for both Semester 1 and Semester 2 modules, if necessary, will be held, during the Autumn Examination Sessions. Capping of marks will not apply to repeat exams for Year 1 of the programme
  - (c) Failure of the Examination in full or in part at the repeat examination will require the student to re-sit the Examination in the following year.
  - (d) Students that fail the Repeat First Year will be asked to exit the program
  - (e) From September 2013 it will not be possible to compensate marks from one module to another for the purpose of passing failed modules by compensation in the First University Examination in the following programmes: Bachelor of Nursing Science (General), Bachelor of Nursing Science (Mental Health, Bachelor of Midwifery Science.
  - (f) The First-Year examination must be completed within two years of entering First Year.

Page 217 of 316

- VII. The Second University Examination must be passed completely before a student can proceed to the Third Year.
  - a) To enter this Examination, the student must have satisfied the attendance requirements on the Second Year Programme, including completion of all coursework and required clinical placements(s). Exceptions may only be permitted by the Head of School where this is recommended by the programme on professionally verified grounds of student ill-health, close family bereavement or of significant personal difficulties.
  - b) The Examination will comprise examinations on Semester 1 modules in the Winter Examination Session and examinations on the Semester 2 modules in the Summer Examination Session. Repeat examinations, for both Semester 1 and Semester 2 modules, if necessary, will be held, during the Autumn Examination Sessions.
  - c) Failure of the Examination in full or in part at the repeat examination will require the student to re-sit the Examination in the following year Provided that this will not breach the overall time-limit as set out in Par. V above. In such a case the student will be unable to continue.
  - d) Students that fail the Repeat Second Year will be asked to exit the program
  - e) Capping of marks will apply to repeat exams for Second Year, Third Year and Fourth year of the programme.
  - f) Since September 2013 it will not be possible to compensate marks from one module to another for the purpose of passing failed modules by compensation in the Second University Examination in the following programmes: Bachelor of Nursing Science (General), Bachelor of Nursing Science (Mental Health), Bachelor of Midwifery Science.
  - g) The Second-Year examination must be completed within two years of entering Second Year.
- VIII. The Third University Examination must be passed completely before a student can proceed to the Fourth Year.
  - (a) To enter this Examination, the student must have satisfied the attendance requirements on the Third Year Programme, including completion of all coursework and required clinical placements(s). Exceptions may only be permitted by the Head of School where this is recommended by the programme on professionally verified grounds of student ill-health, close family bereavement or of significant personal difficulties.
  - (b) The Examination will comprise examinations on Semester 1 modules in the Winter Examination Session and examinations on the Semester 2 modules in the Summer Examination Session. Repeat examinations, for both Semester 1 and Semester 2 modules, if necessary, will be held, during the Autumn Examination Sessions.
  - (c) Capping of marks will apply to all repeat exams for Second Year, Third Year and Fourth year

- (d) Failure of the Examination in full or in part at the repeat examination will require the student to re-sit the Examination in the following year provided that this will not breach the overall time-limit as set out in Par. V above. In such a case the student will be unable to continue.
- (e) Students that fail the Repeat Third Year exams will be asked to exit the programme
- (f) From September 2013 it will not be possible to compensate marks from one module to another for the purpose of passing failed modules by compensation in the Third University Examination in the following programmes: Bachelor of Nursing Science (General), Bachelor of Nursing Science (Mental Health), Bachelor of Midwifery Science.
- (g) The Third-Year examination must be completed within two years of entering Third Year.
- IX. The Fourth and Final University Examination must be passed completely before a student can be awarded the Bachelor of Nursing Science or Bachelor of Midwifery Science
  - (a) To enter this Examination, the student must have satisfied the attendance requirements on the Final Year Programme, including completion of all coursework, required clinical placement(s) and clinical hours. Exceptions may only be permitted by the Head of School where this is recommended by the programme on professionally verified grounds of student ill health, close family bereavement or of significant personal difficulties.
  - (b) The Examination will comprise examinations on Semester 1 modules in the Winter Examination Session and examinations on the Semester 2 modules in the Summer Examination Session. Repeat examinations, for both Semester 1 and Semester 2 modules, if necessary, will be held, during the Autumn Examination Sessions. These results will not be ratified until the Winter Exam Board,
  - (c) Semester 1 Placement Assessments will go to the summer exam board along with the theoretical modules. Repeats for the Semester1 Placement and Theoretical Modules go to Winter Exam Board.
  - (d) Students who are unable to complete their clinical placement hours or placement modules in time for the Autumn exam board (regardless of circumstances) must be submitted as a deferral or a fail whichever is appropriate. Repeats from this process will be ratified at the Winter Board.
  - (e) Students in 4<sup>th</sup> year cannot progress into internship placements until they have passed the pre-internship placement assessment(s). Students will be provided with a repeat opportunity for any failed or incomplete Practice Assessment prior to staring internship. This will result in a delay to the start and completion dates on internship.

- (f) The Internship Assessments Modules and Clinical Hours module are not completed until the end of Trimester 3, consequently they go to the October Board along with the students overall Degree Award.
- (g) Students who fail any of the Fourth Year Internship Assessments Modules or Clinical hours have a repeat opportunity which goes to the Winter Board. To facilitate the recording of assessment outcomes for clinical examinations as required by the Nursing and Midwifery Board of Ireland, and to expedite the awarding of the degree to successful students, clinical examinations relating to the 4<sup>th</sup> year of the general nursing, mental health nursing and midwifery programmes will have first sitting recorded in the Autumn board and an opportunity for a second sitting recorded in the Winter board. (As per Marks and Standards)
- (h) A case conference will be held in the event of an Internship student failing a Competency Assessment. The case conference will agree on one of the two following outcomes: a) the student will not proceed to the next placement when > General and Mental Health Nursing. "...to ensure the safety of the person in the practice setting is central to all assessment of competency decisions and their wellbeing supersedes all other considerations relating to the student's performance" (NMBI, 2023, p. 24) , > Midwifery "....the wellbeing of the mother and her baby overrules all other considerations with regard to student performance in the clinical area" (NMBI,2022 p.18) ; OR b) the student will proceed to the next placement
- (i) Failure of the Examination in full or in part at the repeat examination will require the student to re-sit the Examination in the following year provided that this will not breach the overall time-limit as set out in Par. V above. In such a case the student will be unable to continue.
- (j) Students that fail the repeat Fourth Year exams will be asked to exit the programme
- (k) From September 2013 it will not be possible to compensate marks from one module to another for the purpose of passing failed modules by compensation in the Fourth University Examination in the following programmes: Bachelor of Nursing Science (General), Bachelor of Nursing Science (Mental Health), Bachelor of Midwifery Science.
- (1) The Final Year examination must be completed within two years of entering Final Year. To be awarded the Degree students must meet the requirements of An Bord Altranais agus Cnaimhseachais na hEireann (Nursing and Midwifery Board of Ireland) in full.
- X. (a) The Award of the Bachelor of Nursing Science or Bachelor of Midwifery Science Degree will require successful completion of all years of the Undergraduate Programme as set out in Rules V to IX (inclusive) above.

- (b) The calculation of the overall degree results awarded, including the calculation of Honours (if any), will be based on 30% of the aggregate mark obtained at the 3<sup>rd</sup> Year examinations, and 70% of the aggregate obtained at the 4<sup>th</sup> year examinations.
- XI. Any student failing to pass the Examination indicated in Rules VI, to IX (inclusive) above within the specified intervals will be ineligible to proceed further with his/her nursing / midwifery studies. Exceptions to this rule will be granted by the Academic Council, on the recommendation of the College of Medicine, Nursing and Health Sciences, only for very serious reasons.

Re-attendance may be required from any student whose attendance is considered to have been unsatisfactory, or who has not attained a sufficient standard of knowledge as judged by examination, competency or progressive assessment. Satisfactory attendance is generally regarded as attendance and participation in not less than 70% of the taught sessions provided. Students who have not achieved satisfactory attendance may not be admitted to examinations.

- XIII Given that these programmes award a professional qualification and lead to professional registration, there are specific requirements for the completion of clinical education and training components of the programme, which include also a prescription on the number of opportunities allowed to repeat/re-sit these components. When students have not successfully completed these clinical components of their degree programme, in total or in part, including their practice education, clinical theory, or other such components as are required, and have exhausted all repeat-re-sit options for so doing, they are not eligible for the award of the B.Sc. in their designated nursing/midwifery programme but may, subject to the decision of the Head of School on the recommendation of the programme, transfer to complete the non-clinical degree, the BSc (Heath Studies) as outlined in the Paragraph XIV below.
- XIV Students who are rendered ineligible for the award of the BSc in their designated Nursing/Midwifery programme by the provisions of Paragraph XIII above, may be offered the option of transferring to complete the non-clinical award of the BSc (Health Studies). This programme also an Honours (NFQ Level \* award) will include all of the modules of the BSc in their original nursing/midwifery programme except the practice placement, and or clinical practice education modules. These will all be substituted by independent study module(s) which will constitute a non-clinical degree route. Students may be transferred into the non-clinical award route in their Final Year. The decision

to transfer must be approved by the Head of School on the recommendation of the programme, only in the circumstances described in Paragraph XIII above.

Bachelor of Nursing Science (General)

## Refer to General regulations for the Undergraduate Degrees in Nursing &Midwifery (NFQ Level 8 Ref; <u>https://www.qqi.ie</u>) Paragraphs to I to XII above

This programme leads to the award of Bachelor of Nursing Science (General) and registration in the General division of the Nurse Register maintained by Bord Altranais agus Cnáimhseachais na hÉireann (Nursing and Midwifery Board of Ireland). The programme is offered in partnership with the Health Service Executive, West, Saolta University Health Care Group

## PROGRAMME STRUCTURE

The Bachelor of Nursing Science Programme is a four-year academic programme, which is delivered over two semesters for the first three years. Year four of the programme comprises of clinical/theory instruction in semester one and a clinical internship which occurs in year four, semester two, to run over 36 weeks. The theoretical component comprises of lectures, seminars, workshops, experiential learning, skills' training and reading time. The clinical practice placements are linked to the theoretical input. Clinical practice modules require students to complete clinical placements throughout the Health Service Executive region. While on clinical placements students will be supervised by a named preceptor. In accordance with Bord Altranais agus Cnáimhseachais na hÉireann (Nursing and Midwifery Board of Ireland) the total requirements of the programme are 144 weeks. During clinical internship students will be paid a salary and are employed by the HSE.

## PROGRAMME CONTENT

Theoretical content aims to provide students with the knowledge necessary to underpin their professional practice. The following key themes will be addressed: Biological Sciences, providing students with a basis for understanding the structure and function of the human body in health and ill-health.

Social Sciences, introducing students to the disciplines of sociology, psychology, philosophy and law as applied to nursing practice. The overall aim is to provide students with an understanding of what influences behaviour in both personal and professional contexts

Nursing practice, including an exploration of the nature and goals of nursing, the nursing management of the ill adult and specialist client groups and preparation for practice. Later in the programme the focus is on enabling students to make the transition from student nurse to registered practitioner.

Research / Informatics, introducing students to the concepts and principles of research and its use in clinical practice. Students will also have an opportunity to develop competency in basic information technology skills.

Health promotion, introducing students to the principles and skills of promoting health.

Leading & Developing practice – focuses on exploring the transition from student nurse to that of registered practitioner, further developing students' skills in care provision, examining issues around leadership, management and clinical governance in relation to factors that affect the quality of care for clients.

Clinical modules provide students with the opportunity to develop their nursing skills in the reality of practice.

## ASSESSMENT AND REGULATIONS

Each year both the theoretical and clinical components of the programme will be assessed. Modules are assessed by means of a combination of written examinations and coursework; this includes both theoretical and clinical modules. Students' clinical performance/progress is assessed on an on-going basis while on placements to determine competency. To be deemed competent students must attain the level specified in the Assessment of Competency Tool, based on the Domains of Competency identified by Bord Altranais agus Cnáimhseachais na hÉireann (Nursing and Midwifery Board of Ireland), assessed by trained preceptors. Students must pass both theoretical and clinical competency assessments to be deemed to have passed the year. Students will not be permitted to proceed to the next year of the programme until they have met all the requirements specified in the Marks and Standards. Students who fail to proceed must pass within one further year or they will be required to withdraw from the programme.

To pass the programme overall students must pass the required theoretical and clinical competency assessments. In addition, to be awarded the degree and to register as a general nurse, students must meet the requirements for registration identified by Bord Altranais agus Cnáimhseachais na hÉireann (Nursing and Midwifery Board of Ireland). The calculation of the overall degree results awarded, including the calculation of Honours, will be based on 30% of the aggregate mark obtained at the 3<sup>rd</sup> Year examinations, and 70% of the aggregate obtained at the 4<sup>th</sup> year examinations. A full account of programme regulations, compensation and credits is provided in the Marks and Standards.

# ENTRY CRITERIA

Applicants must meet the following criteria to be eligible for admission to the Bachelor of Nursing Science (General) programme.

Applicants must be at least 17 years of age on 15 January of the year of entry onto the programme. Applicants must also achieve the following:

H5 in two higher level papers and O6/H7 in four ordinary or higher-level papers in the Republic of Ireland Leaving Certificate Examination in the following subjects:

Irish (not foundation level). English. Mathematics (not foundation level). A laboratory science subject (Biology, Physics, Chemistry, Physics and Chemistry, or Agricultural Science). Any two other subjects accepted for matriculation registration purposes Or

Have second level education qualifications equivalent to the above

An applicant who does not meet the education requirements and who is 23 years of age or over on 15 January in the year of application may apply as a mature student. A separate pathway is available for mature students.

Successful applicants must be of good mental and physical health and free from any defect or abnormality which would interfere with the efficient performance of their role as nurse. All successful applicants are required to have medical screening and be deemed fit to undertake this role.

## SELECTION CRITERIA

Selection of applicants meeting the minimal educational requirements is on the basis of points obtained in the Leaving Certificate (or equivalent). Applicants apply through the CAO. A separate pathway applies to mature applicants, that is, those who are applying on the grounds of mature years only and not on the basis of educational achievement. Further details are available from the Nursing Careers Centre, Bord Altranais agus Cnáimhseachais na hÉireann (Nursing and Midwifery Board of Ireland).

UG General Module List							
Year 1 Modules							
Module Title         Module ECTs         General         Semester							
Module The	Code	ECIS	or Shared				
Health and Applied	NU1107			Sem. 1			
Biosciences 1		10	Shared				
The Nature of	NU1108			Sem. 1			
Nursing		5	General				
Foundations of	NU1109			Sem. 1			
Nursing Practice		10	Shared				

Research and	NU1112			Sem. 2
Evidence for				2000
Practice 1		5	Shared	
	NU1113	-		Sem. 2
Applied Health 1		10	General	
Communication and	NU1114			Sem. 2
Intrapersonal Skills		5	Shared	
Clinical Practice 1	NU1115			Sem. 1 & 2
& 2		15	General	
	NU1129			Sem. 1 & 2
	&			
Practice	NU1105			
Assessments		0	General	
Year 2 Modules	•	•		
Module Title	Module Code	ECTs	General	Semester
		10	or Shared	
Health and Applied	NU2200	10	Shared	Sem. 1
Biosciences 2		1.0		
Community Care	NU2201	10	General	Sem. 1
and Specialist Client				
Groups				
Applied Health 11	NU2206	5	General	Sem 1
Concepts of Pain	NU2203	5	General	Sem 2
and Life Limiting Conditions				
Applied Psychology	NU2204	5	Shared	Sem 2
for Nursing and	1102201	5	bharea	Selli 2
Midwifery				
Research and	NU2202	5	Shared	Sem 2
Evidence for	1102202	5	Sharea	Selli 2
Practice 2				
Sociology of Health	NU2305	5	Shared	Sem 2
and Healthcare	1102303	5	Shareu	Jelli Z
and meanurearc				

Clinical Practice 3	NU2307	15	General	Sem 1 &2
and 4				
Practice	NU220			Sem1 & 2
Assessments		0	General	
Year 3 Modules				
Module Title		ECTs	General	
			or shared	
The Acutely Ill	NU3101	10	General	Sem. 1
Adult				
Health Promotion	NU3102	5	General	Sem. 1
Living Well with	NU3103	10	General	Sem. 1
Long Term				
Conditions				
Elective Option	NU314	5	Shared	Sem. 2
Medicines and	NU3105	10	Shared	Sem. 2
Clinical Practice				
Law and Ethics	NU3104	5	Shared	Sem. 2
Clinical Judgement	NU3106	5	General	Sem. 2
& Decision Making				
Clinical Practice 5	NU3107	10	General	Sem. 1&2
and 6				
Practice	NU317/			Sem. 1&2
Assessments	NU347	0	General	
Year 4 Modules				
Module Title	Module	ECTs	General	
	Code		or Shared	
Research Project	NU4110	20	Shared	Sem. 1 &2
Leading and	NU4106	10	Shared	Sem. 1
developing				
Practice				
Clinical Practice 7	NU4107	10	General	Sem. 1

Transition to	NU4108	5	General	Sem. 2
Practice				
Clinical Internship	NU4109	15	General	Sem. 2
	NU470,			Sem. 1&2
	NU486,			
	NU487,			
Practice	NU488,			
Assessments	NU489	0	General	

## Bachelor of Nursing Science (Mental Health)

# Refer to General regulations for the Undergraduate Degrees in Nursing & Midwifery (NFQ Level 8 Ref; <u>https://www.qqi.ie/</u>)

This programme leads to the award of Bachelor of Nursing Science (Mental Health) and registration in the Psychiatric division of the Nurses Register maintained by Bord Altranais agus Cnáimhseachais na hÉireann (Nursing and Midwifery Board of Ireland).

#### PROGRAMME STRUCTURE

The Bachelor of Nursing Science Programme is a four-year academic programme, which is delivered over two semesters for the first three years. Year four of the programme comprises of clinical/theory instruction in semester one and a clinical internship which occurs in year four, semester two, to run over 36 weeks.

Students are required to be in clinical practice for 39 hours per week over the internship period. Students are paid a salary during their clinical internship. In total, students will complete 24 theoretical modules and 6 clinical modules. Clinical modules will require students to complete clinical placement throughout the Health Service Executive West. While on clinical internship students will be supervised by a named preceptor, who is a Registered Nurse. Clinical modules require students to be in clinical practice for 35 hours per week. Students are supernumerary while on placement, that is, when not on clinical internship.

## PROGRAMME CONTENT

Theoretical content aims to provide students with the knowledge necessary to underpin their professional practice. The following key themes will be addressed:

- Biological Sciences, providing students with a basis for understanding the structure and function of the human body in health and ill-health.
- Social Sciences, introducing students to the disciplines of sociology, psychology, philosophy and law as applied to nursing practice. The overall aim is to provide students with an understanding of what influences behaviour in both personal and professional contexts
- Nursing practice, including an exploration of the nature and goals of mental health nursing, the nursing management of the mentally ill person and preparation for practice. Later in the programme the focus is on enabling students to make the transition from student nurse to registered practitioner.
- Research / Informatics, introducing students to the concepts and principles of research and its use in clinical practice. Students will also have an opportunity to develop competency in basic I.T. skills.
- Mental health promotion, introducing students to the principles and skills of promoting mental health.
- Leadership in mental health nursing practice, students will examine factors that affect the management of care and develop an understanding of theories of leadership and management of change.
- Clinical modules provide students with the opportunity to develop their nursing skills in the reality of practice.

## ASSESSMENT AND REGULATIONS

Each year both the theoretical and clinical components of the programme will be assessed. Modules are assessed through a combination of written examinations and coursework; this includes both theoretical and clinical modules. Students' clinical performance/progress is assessed on an on-going basis while on placements to determine competency. To be deemed competent students must attain the level specified in the Assessment of Competency Tool, based on the Domains of Competency identified by Bord Altranais agus Cnáimhseachais na hÉireann (Nursing and Midwifery Board of Ireland). Students must pass both theoretical, clinical and competency assessments to be deemed to have passed the year. Students will not be permitted to proceed to the next year of the programme until they have met all the requirements specified in the Marks and Standards. Students who fail to proceed must pass within one further year or they will be required to withdraw from the programme. To pass the programme overall students must pass the required theoretical, practice and competency assessments. In addition, to be awarded the degree and to register as a psychiatric nurse, students must meet the requirements for registration identified by Bord Altranais agus Cnáimhseachais na hÉireann (Nursing and Midwifery Board of Ireland). The calculation of the overall degree results awarded, including the calculation of Honours (if any), will be based on 30% of the aggregate mark obtained at the 3<sup>rd</sup> Year examinations, and 70% of the aggregate obtained at the 4<sup>th</sup> year examinations. A full account of programme regulations, compensation and credits is provided in the Marks and Standards.

## ENTRY CRITERIA

Applicants must meet the following criteria to be eligible for admission to the Bachelor of Nursing Science (Mental Health) programme.

- Applicants must be at least 17 years of age on 15 January of the year of entry onto the programme
- The minimum educational requirements for admission to the programme is a pass in the Leaving Certificate examination, having obtained a minimum of grade C3 in higher level papers in any two of the subjects listed below and a minimum of grade D3 in ordinary or higher level papers in the other four subjects.
- Irish (not Foundation Level)
- English
- Mathematics (not Foundation Level)
- A laboratory science subject (Chemistry, Physics, Biology, Physics and Chemistry (joint), Agricultural Science)
- Any other two subjects acceptable for matriculation registration purposes OR
- Have second level education qualifications equivalent to the above

An applicant who does not meet the education requirements and who is 23 years of age or over on 15 January in the year of application may apply as a mature student. A separate pathway is available for mature students.

Successful applicants must be of good mental and physical health and free from any defect or abnormality which would interfere with the efficient performance of their role as nurse. All applicants must undertake a medical and be deemed fit to undertake this role.

#### SELECTION CRITERIA

Selection of applicants meeting the minimal educational requirements is on the basis of points obtained in the Leaving Certificate (or equivalent). Applicants apply through the CAO. A separate pathway applies to mature applicants, that is, those who are applying on the grounds of mature years only and not on the basis of educational achievement. Further details are available from the Nursing Careers Centre, Bord Altranais agus Cnáimhseachais na hÉireann (Nursing and Midwifery Board of Ireland).

UG Mental Health Module I	List					
Year 1 Modules						
Module Title	Module Code	ECTs	Mental Health or Shared	Semester		
Health and Applied Biosciences 1	NU1107	10	Shared	Sem. 1		
Introduction to Mental Health Nursing	NU1116	5	Mental H.	Sem. 1		
Foundations of Mental Health Nursing	NU1111	10	Mental H.	Sem 1		
Research and Evidence for Practice 1	NU1112	5	Shared	Sem. 2		
Mental Health Nursing 1	NU1118	10	Mental H	Sem 2		
Communication and Intrapersonal Skills	NU1114	5	Shared	Sem. 2		
Clinical Practice 1 & 2	NU1119	15	Mental H	Sem. 1 & 2		
	NU138 &			Sem. 1 & 2		
Practice Assessments	NU1106	0	Mental H			
Year 2 Modules	1	I	-	I		
Module Title	Module Code	ECTs	Mental Health or Shared	Semester		
Health and Applied Biosciences 2	NU2200	10	Shared	Sem. 1		
Mental Health Nursing 2	NU2214	10	Mental H	Sem 1		
Mental Health Nursing 3	NU2215	5	Mental H.	Sem 2		
Mental Health Nursing 4	NU2217	5	Mental H	Sem 2		
Applied Psychology for Nursing and Midwifery	NU2204	5	Shared	Sem 2		
Research and Evidence for Practice 2	NU2202	5	Shared	Sem 2		

Sociology of Health and	SP2118	5	Shared	Sem 2
Healthcare				
Clinical Practice 3 and 4	NU2307	15	Mental	Sem 1 &2
			Health	
	NU225		Mental	Sem1 & 2
Practice Assessments		0	Health	
Year 3 Modules				
Module Title		ECTs	Mental	
			Health or	
			shared	
Mental Health Nursing 5	NU3108	10	Mental H.	Sem 1
Mental Health Promotion &	NU3109	5	Mental H.	Sem 1
Recovery				
Mental Health 6	NU3110	5	Mental H	Sem 1
Elective Option	NU314	5	Shared	Sem. 2
Medicines and Clinical	NU3105	10	Shared	Sem. 2
Practice				
Law and Ethics	NU3104	5	Shared	Sem. 2
Mental Health Nursing 7	NU3111	5	Mental H.	Sem 2
Clinical Practice 5 and 6	NU3112	10	Mental H	Sem. 1&2
	NU337/			Sem. 1&2
Practice Assessments	NU348	0	Mental H	
Year 4 Modules				
Module Title	Module	ECTs	Mental	
	Code		Health or	
			Shared	
10Research Project	NU4110	20	Shared	Sem. 1 &2
Leading and developing	NU4106	10	Shared	Sem. 1
Practice				
Clinical Practice 7	NU4107	10	Mental H	Sem. 1

Transition to Practice	NU4108	5	Mental H.	Sem. 2
Clinical Internship	NU4109	15	Mental H.	Sem. 2
	NU486,	15	Mental H.	Sem. 1&2
	NU480, NU487,		Mental II.	Sem. 1&2
	NU488,			
	NU489,			
Practice Assessments	NU470	0		

#### Bachelor of Midwifery Science

# Refer to General regulations for the Undergraduate Degrees in Nursing & Midwifery (NFQ Level 8 Ref; <u>https://www.qqi.ie/</u>)

On completion of this programme students are awarded the Bachelor of Midwifery Science and are eligible to apply to register as a midwife with Bord Altranais agus Cnáimhseachais na hÉireann (Nursing and Midwifery Board of Ireland). The programme is offered in partnership with the. Saolta University Health Care Group.

#### PROGRAMME CONTENT

Theoretical content aims to provide students with the knowledge necessary to underpin their professional practice. The following key themes are addressed: Biological Sciences: Provides students with a basis to understand the structure and functioning of the human body, with a specific emphasis on the knowledge necessary to underpin midwifery practice.

Social Sciences: Introduces students to psychology, sociology, and philosophy and its application to midwifery practice. The overall aim is to give students an understanding of what influences behaviour in both personal and professional contexts.

Midwifery Skills: Focuses on the different skills required to practice as a midwife.

Midwifery Studies: Provides students with the knowledge of how to care for a woman and her baby experiencing a normal pregnancy, childbirth and puerperium and the woman and her baby experiencing complications during pregnancy, childbirth and the puerperium.

Health Promotion: Introduces students to the principles of health and health promotion in relation to midwifery practice.

Research: Gives students an in-depth understanding of research methods and its application to midwifery practice. Students will also become competent in basic IT skills with an emphasis on electronic information retrieval.

Becoming a Midwife – focuses on exploring the transition from student midwife to that of registered practitioner, further developing student's skills in care provision.

Personal & Professional Development for Midwifery examines issues around leadership, management and clinical governance in relation to factors that affect the quality of care for clients.

Clinical modules provide students with the opportunity to develop their midwifery skills in the reality of practice.

## ASSESSMENT AND REGULATIONS

Each year both the theoretical and clinical components of the programme are assessed. Modules are assessed by means of a combination of written examinations and coursework; this includes both theoretical and clinical modules. Students' clinical performance/progress is assessed on an on-going basis while on placements to determine competency. To be deemed competent students must attain the level specified in the Competency Assessment Tool, based on the Domains of Competence identified by Bord Altranais agus Cnáimhseachais na hÉireann (Nursing and Midwifery Board of Ireland). Students must pass both the theoretical, clinical and competency assessments to be deemed to have passed the year. Students will not be permitted to proceed to the next year of the programme until they have met all the requirements specified in the Marks and Standards for the programme. Students who fail to proceed must pass within one further year or they will be required to withdraw from the programme.

To pass the programme overall, students must pass the required theoretical, practice and competency assessments. In addition, to be awarded the degree and to apply to register as a midwife, students must complete the minimum clinical practice experience requirements and minimum number of clinical hours required by Bord Altranais agus Cnáimhseachais na hÉireann (Nursing and Midwifery Board of Ireland). The final calculation of marks is based on 30% of the aggregate mark obtained at the 3<sup>rd</sup> Year examinations, and 70% of the aggregate obtained at the 4<sup>th</sup> year examinations. A full account of programme regulations, compensation and credits is provided in the Marks and Standards.

# ENTRY CRITERIA

Applicants must meet the following criteria to be eligible for admission to the Bachelor of Midwifery Science programme.

Applicants must be at least 17 years of age on 15 January of the year of entry onto the programme.

The minimum educational requirements for admission to the programme is a pass in the Leaving Certificate examination, having obtained a minimum of grade C3 in higher level papers in any two of the subjects listed below and a minimum of grade D3 in ordinary or higher-level papers in the other four subjects.

- Irish (not Foundation Level)
- English
- Mathematics (not Foundation Level)
- A laboratory science subject (Chemistry, Physics, Biology, Physics and Chemistry (joint), Agricultural Science)
- Any other two subjects acceptable for matriculation registration purposes. Or
- Have second level education qualifications equivalent to the above
- An applicant who does not meet the education requirements and who is 23 years of age or over on the 1<sup>st</sup> January in the year of application may apply as a mature student. A separate pathway is available for mature students.

Successful applicants must be of good mental and physical health and free from any defect or abnormality which would interfere with the efficient performance of their role as midwife. Al l applicants must undertake medical screening and be deemed fit to undertake this role. In addition each student must undergo Garda Vetting.

#### SELECTION CRITERIA

Selection of applicants meeting the minimal educational requirements is on the basis of points obtained in the Leaving Certificate (or equivalent). Applicants apply through the CAO. A separate pathway applies to mature applicants, that is, those who are applying on the grounds of mature years only and not on the basis of educational achievement. Further details are available from the Nursing Careers Centre, Bord Altranais agus Cnáimhseachais na hÉireann (Nursing and Midwifery Board of Ireland).

UG Midwifery Module List						
Year 1 Modules						
Module Title	Module	ECTs	Midwifery	Semester		
	code		or Shared			
Health and Applied	NU1107	10	Shared	Sem. 1		
Biosciences 1						
An Introduction to the		5	Midwifery	Sem. 1		
Profession of Midwifery	NU1120					
Foundations of	NU1110	10	Shared	Sem. 1		
Midwifery Practice						
Anatomy, Physiology	NU1121	5	Midwifery	Sem. 1		
and Applied Skills for						
Midwifery Practice						
Research and Evidence	NU1112	5	Shared	Sem. 2		
for Practice 1						
Adaptations to Childbirth	NU1122	10	Midwifery	Sem. 2		
and Midwifery Care						
Communication and	NU1114	5	Shared	Sem. 2		
Intrapersonal Skills						
Clinical Midwifery	NU1123	10	Midwifery	Sem. 1 & 2		
Practice 1 & 2						
Practice Assessments	NU114	0	Midwifery	Sem. 1 & 2		
	Year 2	Module	S			
Module Title		ECTs	Midwifery			
			or Shared			
Health and Applied	NU2200	10	Shared	Sem. 1		
Biosciences 2						
Supporting Women	NU2208	10	Midwifery	Sem. 1		
Experiencing Normal						
Childbirth						
Care of the Well	NU2210	5	Midwifery	Sem. 1		
Newborn						

Midwifery and the	SP2119	5	Midwifery	Sem. 2
Sociology of Childbirth				
Applied Psychology for	NU2204	5	Shared	Sem. 2
Nursing and Midwifery				
Research and Evidence	NU2202	5	Shared	Sem. 2
for Practice 2				
Infant Nutrition	NU2211	5	Midwifery	Sem. 2
Promoting and	NU2212	5	Midwifery	Sem. 2
Supporting Health and				
Wellbeing				
Clinical Midwifery	NU2207	10	Midwifery	Sem. 1 & 2
Practice 3 and 4				
Practice Assessments	NU243	0	Midwifery	Sem. 1 & 2
	Year 3	Modules	5	
Module Title		ECTs	Midwifery	
			or shared	
Women with Complex	NU3113	10	Midwifery	Sem. 1
Needs During Childbirth				
I				
Clinical Governance and	NU3114	5	Midwifery	Sem. 1
Midwifery Practice				
Women with Complex	NU3115	10	Shared	Sem. 1
Needs During Childbirth				
II		-		~ ~ ~
Elective Option	NU314	5	Shared	Sem. 2
Medicines and Clinical	NU3105	10	Shared	Sem. 2
Practice				
Law and Ethics	NU3104	5	Shared	Sem. 2
The Newborn With	NU3116	5	Midwifery	Sem. 2
Complex Needs				
Clinical Midwifery	NU3117	10	Midwifery	Sem. 1 & 2
Practice 5 and 6				
Practice Assessments	NU193	0	Midwifery	Sem. 1 & 2

Year 4 Modules						
Module Title		ECTs	Midwifery or Shared			
Research Project	NU4101	20	Shared	Sem. 1 & 2		
Personal and Professional Development for Midwifery	NU4102	10	Midwifery & Shared	Sem. 1		
Clinical Midwifery Practice 7	NU4103	10	Midwifery	Sem. 1		
Becoming a Midwife	NU4104	5	Midwifery	Sem. 2		
Internship	NU4105	15	Midwifery	Sem. 2		
Practice & Internship Assessments	NU470, NU489, NU487, NU488, NU489, NU490, NU491	0	Midwifery	Sem. 1 & 2		

# Taught Postgraduate Certificate, Diploma and Master's Programmes

(NFQ level 9 awards; *ref.* <u>https://www.qqi.ie/</u>)

# PLEASE NOTE THIS INFORMATION IS SUBJECT TO CHANGE AND CANDIDATES ARE ADVISED TO VISIT THE POSTGRADUATE APPLICATION WEBSITE AT THE TIME OF APPLICATION

## Certificate in Nursing (Nurse/Midwife Prescribing)

This programme's development is in response to a need for nurses and midwives to prescribe, in order to support high quality person-centered care. Nurses and midwives prescribe within the confines of robust legislation and professional regulation and their scope of practice. Improving client care is core to this extended role.

#### PROGRAMME DURATION AND STRUCTURE

The programme is delivered over a six-month period. The modules are delivered in a blended learning format using a combination of Canvas and workshops in college. In addition, students will be mentored in their practice setting for the duration of the programme which will include 12 days of direct supervision of the prescriptive process by a designated medical practitioner.

## PROGRAMME CONTENT

The programme is comprised of three theory/practice modules and a clinical competency assessment in prescribing:

- Physical assessment skills.
- Professional, Ethical & Legal Issues of Nurse and Midwife Prescribing.
- Drugs. Patients and illness.
- Clinical competency Prescribing.

## ENTRY CRITERIA

- Registered as a nurse or midwife on the live register of An Bord Altranais.
- Currently employed as a nurse or midwife.
- Minimum of three years recent post registration clinical experience in nursing or midwifery (within the last five years) with the equivalent of one-year full-time experience in the specific area of practice in which prescribing is proposed.
- Possession of the competencies recognised at level 8 of the National Framework of Qualifications.
- Evidence of undertaking continuing professional education.

• Support from employer to undertake the programme as evidenced by a completed *Site Declaration Form*.

Confirmation of a designated nurse/midwife/medical mentor as evidenced by a completed *Site Declaration Form*.

# Masters/Postgraduate Diploma in Health Sciences (Emergency Care)

Compensation is not permitted between modules.

#### PROGRAMME DURATION AND STRUCTURE

The programme is delivered over two years using a blended learning format, combing online learning and face-to-face workshops. On completion of Year 1 students have the option of being awarded a Postgraduate Diploma or progress onto the second year to attain a Master of Health Sciences.

The programme is comprised of six theory/practice modules of which three are generic/core and three are specialist and related to emergency nursing. Core modules and some aspects of specialist modules are taken in conjunction with students undertaking other Masters/Postgraduate Diplomas. It will be delivered using a blended learning format, combining online learning and face-to-face workshops including simulation. Blended learning means that teaching/learning will be delivered online through Canvas, an interactive learning system which connects directly to the University from any home computer. Students are required to attend face to face workshops for total of 10 -12days across the programme. Workshops will employ a variety of teaching strategies including, problem focused lectures, skills teaching, and simulated patient scenario-based exercises, student-led seminars, small group learning and experiential learning. Case studies will be used to help students test out what they would do in different situations. Students will simultaneously work in the clinical setting (usually their own workplace) for the duration of the programme and will have to pass two clinical competencies and complete a minimum of 500 hours in an emergency care setting and will be supported by their unit manager and named preceptor.

Online Module titles are as follows:

- NU611Medical Emergencies (10 credits—specialist);
- NU612Major Trauma and Surgical Emergencies (10 credits—specialist);
- NU613Specialist populations (10 credits—specialist);
- NU6439 Service Improvement (10 credits—core);
- NU623 Clinical Governance: Supporting Safe Practice (10 credits—core);
- NU502 Advanced Research Methods (10 credits—core);
- NU921 Clinical Assessment 1;
- NU922 Clinical Assessment 2.

## ENTRY CRITERIA

All applicants must meet the following entry requirements:

Hold a Bachelor degree at NFQ Level 8 in Nursing or a comparable qualification.
a) Determining equivalence: This is a Level 9 programme. Applicants who do not hold an Honours degree or Higher Diploma (Level 8) may apply but must clearly demonstrate their capacity to complete a programme at this level. Registration as a General nurse on the live register of An Bord Altranais agus Cnáimhseachais na hÉireann.

- 2. Currently employed as a nurse in an Emergency Department. The applicants must have a minimum of six months experience in this setting over the past two years.
- 3. Written evidence of support for the applicant from their Director of Nursing and Clinical Unit Manager. Academic and/or professional qualifications and standards required, together with any equivalence that may apply.

Students must work in the clinical area for the duration of the programme. Clinical requirements for completion of the programme are to pass two clinical competencies and complete a minimum of 500 hours in an Emergency Department or equivalent setting as deemed by the Programme Director.

## SELECTION CRITERIA

All students that meet the entry criteria stipulated above will be eligible for acceptance on the programme. Students will spend the majority of the placement in their own work setting. Its suitability in terms of equivalence will be assessed by the Programme Director in consultation with the Clinical Facilitator and Unit Manager from the Emergency Department UCHG before the student starts the programme. Any deficits in learning opportunities identified (in terms of capacity to meet the programme learning outcomes) may require the student taking an additional practice placement in a clinical setting outside their own workplace to meet these outcomes. An audit of each clinical unit will be undertaken prior to students commencing their programme to determine its suitability and identify deficits that may impact on students achieving the programme learning outcomes.

## ASSESSMENT

In order to be eligible for the award of the Masters/ Post graduate Diploma in Health Sciences (Emergency Care) students must

- pass each theoretical component at 40%
- pass two clinical assessments

Students must have completed a minimum of 500 clinical practice hours over the duration of the programme. Compensation is not permitted. A maximum of 40% can only be obtained in a module on repeat. The standard for progression to year two is a mark of at least 60% at the end of year one. Students must have completed a minimum of 500 clinical practice hours over the duration of the course.

#### Additional Issues:

Students must complete the programme within two years of commencement for the full-time option, and within four years of commencement for the part time programme.

Students who achieve an aggregate mark of 60% will be entitled to progress to the second year of the programme where they submit a thesis for the award of Masters.

Master/Postgraduate Diploma in Health Sciences (Advances Practice with Prescribing)

This is a full-time programme running over one calendar year. Taught programme content is delivered over two trimesters and is offered in blended mode, workshops and on-line.

### **PROGRAMME CONTENT**

Specialist practice modules address the context of advanced practice, physical assessment skills, pathophysiology, pharmacology and clinical decision making. Submission of a portfolio demonstrating competencies pertaining to advanced practice is required. Substantive hours of clinical practice at an advanced practice level and supervised by appropriate healthcare professionals is also integral to the programme.

#### ASSESSMENT

Each module is assessed independently. Strategies for assessment include essays, reflective practice assignments, presentations, clinical competency assessments and dissertation.

#### MINIMUM ENTRY CRITERIA:

- Master in Health Sciences (Nursing/Midwifery) or equivalent.
- Be on the active Register as a nurse/midwife.
- Have practiced as a nurse/midwife for a minimum of five (5) years post registration three (3) of which are in the specialist area.
- Letters from the Director of Nursing and the appropriate health care professional Clinical Supervisor in support of the application.

## Postgraduate Diploma in Nursing (Education)

This programme is aimed at master prepared graduates who wish to gain a teaching qualification. Broadly the programme aims to develop nurses/midwives' expertise and understanding of teaching in higher education and clinical settings.

## PROGRAMME DURATION AND STRUCTURE

The programme is facilitated online and students attend for three-day workshops in semester 1 and two half days and one full day workshops in 2<sup>nd</sup> semester. A one-day introduction to the programme is offered the week prior to the programme commencing.

The programme is comprised of three taught modules and three competency assessments. To support learners' skill development, they are expected to complete 100 hours of teaching/facilitation during the programme. Learners are also expected to gain expertise in a wide range of teaching methods including lecturing, clinical teaching in both laboratory and clinical settings, and working with small groups using experimental approaches. Students are required to provide evidence of having completed:

- 30 hours experience of formal classroom-based lecturing.
- 25 hours of clinical focused teaching which should comprise of both classroom-based skills teaching and teaching in the clinical setting.
- 25 hours of small group work with a focus on experiential approaches, for example, seminars, workshops.
- hours at the discretion of the student.
- hours that demonstrate engagement and adoption of an innovative teaching methodology or technology.

#### **PROGRAMME CONTENT**

The programme is comprised of three taught modules, and three teaching assessments and the completion of an E-Portfolio. The modules are as follows:

Student-centred teaching and learning – active engagement strategies. Designing for Learning. Teaching Competency Assessment 1, 2, and 3. Electronic Teaching Portfolio (e-Portfolio).

### ASSESSMENT

The programme is assessed by means of continuous assessment. In order to be eligible for the award of the Postgraduate Diploma in Nursing (Education) students must pass each module at 40% to be deemed to have passed the theoretical component and three teaching assessments to be deemed to have passed the practice component. Students must complete the required 100 hours of teaching practice in the areas specified. Compensation is not permitted. The standard for the award of a distinction is the attainment of 65% on the aggregate. Normally, a Distinction may be awarded only when the assessment is passed at the first attempt.

## MINIMUM ENTRY CRITERIA:

Candidates must have successfully completed a Master in Nursing/Midwifery or its equivalent; be a registered nurse/midwife on the Register maintained by the Nursing and Midwifery Board of Ireland (NMBI); have practiced as a nurse/midwife for a minimum of three years post registration (exclusive of post-registration/educational programmes); have negotiated a placement in a Centre of Nurse/Midwifery Education which will provide them with the opportunity to meet the practice requirements of this programme.

#### SELECTION CRITERIA

Selection is based on applicant's academic and professional qualifications (as above). In order to register as a nurse tutor students must meet any requirements for registration identified by the NMBI.

## Master/Postgraduate Diploma in Health Sciences (Gerontology)

The Master/Postgraduate Diploma in Health Sciences (Gerontology) offered in partnership with the Health Service Executive West, is Major Award, at Level (9) on the National Framework of Qualifications. It has been designed for registered nurses who wish to pursue a specialist programme in caring for older people and their families working in a variety of clinical settings. The overall goal of the programme is to further enhance nurses' ability to provide effective, appropriate, high quality nursing care for older people. On successful completion of this programme, students will hold a Master/Postgraduate Diploma in Health Sciences (Gerontology) and will be eligible to work as a gerontological nurse in a variety of older person care settings.

The programme is offered full time over two calendar years. Students can exit at the end of year one with a Postgraduate Diploma in Health Sciences (Gerontology). While undertaking the programme students will continue to work in an approved older person care setting. It is comprised of theoretical and clinical components, commencing in September of each year. Taught programme content is delivered over two trimesters.

#### **PROGRAMME CONTENT**

The programme is comprised of six theory modules (three specialists, two core, and a Service Improvement module) and two practice assessments. In all modules there is an emphasis on exploring the relevance of module content to practice. A blended learning approach is adopted in the delivery of this programme. Students continue to work in their own practice setting while undertaking the programme.

#### Modules:

#### **Core Modules:**

- Clinical Governance: Supporting Safe Practice (core)
- Advanced Research Methods (core)
- Research Dissertation (core) Year Two

#### **Specialist Modules:**

• Ageing and Older People: Biopsychosocial Perspectives; Contemporary Issues in Gerontological Nursing; Dementia Care: Transforming Practice; Service Improvement

#### **Clinical Competencies:**

- Clinical Competence 1
- Clinical Competence 2

# ENTRY CRITERIA

All applicants must meet the following entry criteria:

- Be a registered nurse on the General, Mental Health, or Learning Disability Nurse divisions of the Register maintained by An Bord Altranais agus Cnáimhseachais na hÉireann;
- Hold an active general nursing registration.
- Have a minimum of one year's post-registration experience
- be currently working in a setting in Ireland which requires him/her to care for older people and have as a minimum six months clinical experience in caring for older people within the previous two years.
- Hold an honours degree or a Bachelor Degree at NFQ Level 8 in Nursing or a comparable qualification. Applicants who do not hold an honours degree or a Postgraduate Diploma are required to successfully complete at least one 10ECTS Professional Credit Award module prior to applying for this course. Please consult the professional credit awards at Level 9 at School of Nursing webpage <u>Professional Credit Award - University of Galway</u>
- Satisfy the selection panel that they have the ability to complete the programme.

## SELECTION CRITERIA

Selection will be made, by the Programme Director on the basis of applicants' written application. To be considered for admission to the programme applicants must meet the admission criteria outlined above. Applications will be evaluated on the following:

- A. Meet the entry criteria.
- B. Demonstrate an understanding of the demands of the programme and the motivation to complete the programme.
- C. Undergo a clinical audit of the learning environment and provide the written support of the Director of Nursing in each area that students will be supported to meet clinical learning outcomes.
- D. Be able to demonstrate application of theory to practice in an approved older person care setting.
- E. Obtain a letter from their Director of Nursing guaranteeing practice placements in the older person care setting for the duration of the programme.

## ASSESSMENT

Modules are assessed by means of continuous assessment and MCQ examinations only. Clinical competence must be demonstrated by:

Students passing all the competencies at the specified level of competence for each clinical assessment.

Two clinical assessments must be completed and passed to successfully complete the programme.

In order to be eligible for the award of the Master/Postgraduate Diploma in Health Sciences (Gerontology) students must pass each theoretical component at 40% and pass two clinical assessments.

Students must have completed a minimum of 500 clinical practice hours over the duration of the programme.

Compensation is not permitted. A maximum of 40% can only be obtained in a module on repeat. Only those students who achieve an aggregate mark of 60% at the end of year 1 will be entitled to progress to the second year of the programme where they submit a thesis for the award of Masters.

## Master/Postgraduate Diploma in Health Sciences (Intensive Care)

The Masters/Postgraduate Diploma in Health Sciences (Intensive Care) has been designed for registered nurses, who wish to pursue a specialist course in Intensive Care. The Masters/Postgraduate Diploma is offered in partnership with the Health Service Executive.

## PROGRAMME DURATION AND STRUCTURE

The aim of the programme is to develop knowledgeable sensitive practitioners who have a high level of specialist skills.

The programme is offered full-time over one calendar year. Taught components of the programme are delivered in a blended learning format and classroom teaching. Blended learning is an innovative teaching strategy which involves a combination of face-to- face and on-line learning. This means that learning/teaching will be delivered on-line through Canvas, an interactive learning system which connects directly to the University from your own home computer. Students are required to attend face to face workshops for a total of 12 days across the programme (in blocks of 2 days at a time). The programme is comprised of seven theory/practice modules. In all modules there is an emphasis on exploring the relevance of module content to practice, similarly, practice placements allow students to explore "new" knowledge in practice, enabling them an opportunity to integrate theory and practice. Students are required to undertake their clinical practice in an approved clinical practice setting within Ireland normally within the students' own work setting. Students are required to complete a minimum of 1,000 clinical hours within the specialist area before completing this programme.

## ENTRY CRITERIA

All applicants must meet the following entry requirements:

- Be a registered nurse on the General Nurse division of the Register maintained by an Bord Altranais.
- Hold an active nursing registration.
- Have a minimum of two years post-registration experience (exclusive of post-registration courses).
- Be currently working in the required specialist area, i.e., Intensive Care, and have as a minimum six months clinical experience in this specialist area.
- Hold an Honours degree or hold a Bachelor Degree at NFQ Level 8 in Nursing or a comparable qualification.

- Applicants who do not currently hold an honours degree or Higher Diploma (Level 8) must demonstrate that they have successfully completed (in the previous two years) a module at Level 9. Please consult the professional credit awards at Level 9 at School of Nursing's webpage <u>Professional Credit Award -</u> <u>University of Galway</u>
- Applicants for this programme who have undertaken the National Foundation Education Module in Intensive Care Nursing at UCD or UCC may apply for exemption for the Specialist Module 1 on the Masters/ Postgraduate Diploma in Health Sciences (Intensive Care) in the University of Galway.

To be considered an applicant must:

- Meet the entry criteria.
- Obtain a letter from the candidate's Director of Nursing guaranteeing practice placements within Ireland, in the appropriate specialism for the duration of the programme, within the candidate's current place of work. Where the environment does not provide sufficient opportunities to meet the learning outcomes of the programme addition placements will be required by the student in sites which will provide the experience needed.

## PROGRAMME CONTENT

The programme comprises of six modules of which three are generic/core and three are specialist exclusive to Intensive Care Nursing. Core modules and some aspects of specialist modules are taken in conjunction with students undertaking other Postgraduate Diplomas. Students will also undertake two practice assessments and a service improvement project.

The six programme modules are listed below:

#### **Core Modules:**

- Clinical Governance: Supporting Safe Practice (core) 10 ECTS Semester 1
- Advanced Research Methods (core) 10ECTS Semester 2
- Service Improvement Project 10 ECTS Semester 1 &2

#### **Specialist Modules:**

- Intensive Care Nursing 1 10 ECTS Semester 1
- Intensive Care Nursing 2 10 ECTS Semester 1
- Intensive Care Nursing 3 10 ECTS Semester 2

## ASSESSMENT

The modules are assessed by means of continuous assessment and examinations. In order to be eligible for the award of the Post Graduate Diploma in Health Sciences (Intensive Care) students must pass each of the modules of the programme with a minimum of 40%.

Compensation is not permitted between modules.

Repeat coursework and examinations are capped. 40% can only be obtained in a module on repeat.

Clinical competence must be demonstrated by:

- Students passing all performance criteria within each of the six domains of the clinical assessment.
- Students reaching the specified level of competence in the assessment overall.
- Two clinical assessments must be completed and passed to successfully complete the course.

Students must have completed a minimum of 500 clinical practice hours over the duration of the course.

Students may progress to take the Master of Health Sciences in Year Two provided they have attained 60% on the aggregate on the Postgraduate Diploma element. Students must progress to year 2 of the programme on completion of the Postgraduate Diploma.

Students may exit the programme on completion of year 1 with a Postgraduate Diploma in Health Sciences (Intensive Care).

### Master/Postgraduate Diploma in Health Sciences (Acute Medicine )

The Masters/Postgraduate Diploma in Health Sciences (Acute Medicine) aspires to meet the needs of registered nurses working in Hold an Honours degree or hold a Bachelor's Degree at NFQ Level 8 in Nursing or a comparable qualification.

#### Clinical competence must be demonstrated by:

Students passing all performance criteria within each of the acute medical settings with evidence-based knowledge and training so that they can expertly recognise, intervene, and manage acute changes in the complex conditions of patient-care environments. The focus will be on consolidating and expanding their knowledge and skills in response to the need for early detailed assessment and development of initial treatment plans. The programmes are offered in partnership with the Health Service Executive.

#### PROGRAMME DURATION AND STRUCTURE

The programme is delivered over two years using a blended learning format, combining online learning and face-to-face workshops. On completion of Year 1 students have the option of being awarded a Postgraduate Diploma or progress onto the second year to attain a MSc.

The programme is comprised of six theory/practice modules of which three are generic/core and three are specialist and related to acute medical nursing. Core modules and some aspects of specialist modules are taken in conjunction with students undertaking other Master/Postgraduate Diploma's. It will be delivered using a blended learning format, combining online learning and face-to-face workshops. This means that teaching/learning will be delivered online through Canvas, an interactive learning system which connects directly to the University from any home computer. Students are required to attend face to face workshops for approximately 10-11 days across the programme. Workshops will employ a variety of teaching strategies including, problem focused lectures, skills teaching, simulated patient scenario-based exercises, student-led seminars, small group learning and experiential learning. Case studies will be used to help students 'test' out what they would do in different situations. Students will simultaneously work in the clinical setting (usually their own workplace) for the duration of the programme and will have to pass two clinical competencies and complete a minimum of 500 hours in an acute medical unit or equivalent setting.

Student learning in the clinical setting will be supported by their unit manager and named preceptor.

Online Module titles are as follows:

- Recognising and responding to client deterioration (10 credits—specialist);
- Principles and practice of acute medical nursing (10 credits—specialist);
- Advanced Health Assessment (10 credits—specialist);
- Service Improvement (10 credits—core);
- ٠ Clinical Governance: Supporting Safe Practice (10 credits—core);
- Advanced Research Methods (10 credits—core):
- Clinical Assessment 1: Clinical Assessment 2.

# ENTRY CRITERIA

1. An Honours Bachelor's Degree at NFQ Level 8 in nursing or a comparable qualification. Determining Equivalence: This is a level 9 programme. Applicants who do not hold an Honours degree or higher diploma (Level 8) may apply but must clearly demonstrate their capacity to complete a programme at this level. In addition to the other requirements outlined above, these applicants are required to submit a 1000-word literature- based essay. To be considered for admission, this essay must be at the level expected of an Honours degree candidate (Level 8).

Click here for more information on this essay.

- 2. Currently employed as a nurse in an Acute Medical Unit (AMUs), Acute Medical Assessment Unit (AMAUs) or Medical Assessment Unit (MAUs), Short Stays Unit (SSU), or an equivalent clinical setting that has a remit for caring for patients in the acute stages of their medical illness. The applicants must have a minimum of six months experience in this setting over the past two years. Registration as a General nurse on the live register of An Bord Altranais agus Cnáimhseachais na hÉireann.
- 3. Written evidence of support for the applicant from their Director of Nursing and Clinical Unit Manager.
- 4. Minimum academic and/or professional qualifications and standards required, together with any equivalence that may apply.
- 5. Students must work in the clinical area for the duration of the programme. Clinical requirements for completion of the programme are to pass two clinical competencies and complete a minimum of 500 hours in an acute medical unit or equivalent setting as deemed by the Programme Director.
- 6. Registration as a General Nurse on the Live Register of An Bord Altranais agus Cnáimhseachais na hÉireann.

## SELECTION CRITERIA

All students that meet the entry criteria stipulated above will be eligible for acceptance onto the programme. Students will spend the majority of the placement in their own work setting. Its suitability in terms of equivalence i.e. a recognised acute medical unit (AMU, AMAU, MAU) for the programme will be assessed by the Programme Director in consultation with the Unit Manager from the Acute Medical Unit of UCHG before the student starts the programme. Any deficits in learning opportunities identified (in terms of capacity to meet the programme learning outcomes) may require the student taking an additional practice placement in a recognised AMU to meet these outcomes. An audit of each clinical unit will be undertaken prior to students commencing their programme to determine its suitability and identify deficits that may impact on students achieving the programme learning outcomes.

## ASSESSMENT

In order to be eligible for the awards of Masters/Postgraduate Diploma in Health Sciences (Acute Medicine) students must:

- pass each theoretical component at 40%
- pass two clinical assessments

Students must have completed a minimum of 500 clinical practice hours over the duration of the programme.

Compensations is not permitted. A maximum of 40% can only be obtained in a module on repeat. The standard for progression to year two is a mark of at least 60% at the end of year one.

Master/Postgraduate Diploma in Health Sciences (Oncology & Haematology)

The Master of Health Sciences /Postgraduate Diploma in Health Sciences (Oncology and Haematology), Major Award, is at Level (9) on the National Framework of Qualifications. The programme is offered in partnership with the Health Service Executive. This programme is aimed at nurses working in oncology settings who are registered with the Nursing and Midwifery Board of Ireland. It aims to provide students with the necessary in-depth evidence-based knowledge, skills and competencies to provide quality care to patients/clients living with a diagnosis of cancer. On successful completion of this programme, students will hold a MHSc/Postgraduate Diploma in Health Science (Oncology and Haematology).

# PROGRAMME DURATION AND STRUCTURE

The programme is offered full-time for over two years. In all modules, there is an emphasis on exploring the relevance of module content to practice. Students are required to undertake their clinical practice in an approved clinical practice setting within Ireland normally within the student's work setting. Students are required to complete a minimum of 500 clinical hours within the specialist area before completing this programme.

Students can exit at the end of year one with a Postgraduate Diploma.

#### PROGRAMME CONTENT

The programme comprises of six modules of which three are generic/core and three are specialist exclusive to oncology and haematology. Core modules and some aspects of specialist modules are taken in conjunction with students undertaking other Master's/PGD's. Students must also undertake two practice assessments and a service improvement project.

#### Modules:

#### **Core Modules:**

- Advanced Research Methods (10 ECTS. Semester two)
- Clinical Governance Supporting Safe Practice (10 ECTS Semester one)
- Service Improvement (10 ECTS Semester one and two)

#### Specialist Modules:

• Nursing management of patients living with a diagnosis of cancer (10 ECTS Semester one)

- Nursing management of patients living with a haematological condition (10 ECTS Semester one)
- Living with and beyond cancer (10 ECTS Semester two)

All applicants must meet the following entry requirements:

- Be a registered nurse on the General Nurse division of the Register maintained by the Nursing and Midwifery Board of Ireland.
- Hold an active nursing registration. Have a minimum of one year of post-registration experience.
- Be currently working in the required specialist area, i.e., Oncology, and have a minimum six months of clinical experience in an oncology care setting.
- Hold an Honours degree or hold a bachelor's degree at NFQ Level 8 in Nursing or a comparable qualification.
- Applicants who do not hold an honours degree or Higher Diploma (Level 8) must demonstrate that they have successfully completed (in the previous two years) a module at Level 9 (Professional Credit Award).

To be considered an applicant must:

- Meet the entry criteria.
- Obtain a letter from the candidate's Director of Nursing/CNM3 guaranteeing practice placements within Ireland, in the appropriate specialism for the duration of the programme, within the candidate's current place of work. Where the environment does not provide sufficient opportunities to meet the learning outcomes of the programme, additional placements will be required by the student in sites which will provide the experience needed.

The Programme Director, based on applicants' meeting the criteria above, will make the final selection.

#### ASSESSMENT

The modules are assessed by means of continuous assessment and MCQ examinations. In order to be eligible for the award of the Post Graduate Diploma in Health Sciences (Oncology and Haematology) students must pass each of the modules of the programme with a minimum of 40%.

Compensation is not permitted between modules.

• Repeat coursework and examinations are capped. 40% can only be obtained in a module on repeat.

Clinical competence must be demonstrated by:

- Students passing all performance criteria within each of the six domains of the clinical portfolio
- Students reaching the specified level of competence in the assessment overall.

Students must have completed a minimum of 500 clinical practice hours over the duration of the course.

Students may progress to take the Master of Health Sciences in Year Two provided they have attained 60% on the aggregate on the Postgraduate Diploma element (year one). Students may exit the programme on completion of year 1 with a Postgraduate Diploma in Health Sciences (Oncology and Haematology).

# Master/Postgraduate Diploma in Health Sciences (Children's Palliative/Complex Care)

The Master / Postgraduate Diploma in Health Sciences (Children's Palliative / Complex Care) is designed for registered General, Mental Health, Intellectual Disability, Children's nurses or Midwives working with children and adolescents with complex or life limiting conditions. Each module is designed to provide students with a theoretical framework from which they can explore and integrate theory & practice. This programme aims to:

- 1 Provide students with the necessary in-depth evidence-based knowledge, skills and competencies to provide quality care to highly dependent clients as they live with life- limiting illness and face end-of-life.
- 2 Prepare nurse practitioners for entry to specialist nursing / midwifery practice in their registered discipline.

## PROGRAMME STRUCTURE AND DESIGN

The programme is comprised of six theory/practice modules. Core modules and some aspects of specialist modules are taken in conjunction with students undertaking other Masters / Postgraduate Diplomas. Modules are listed below:

- Clinical Governance: Supporting Safe Practice (Core)
- Advanced Research Practice (Core)
- Specialist Understanding of Complex Care for Children (Specialist)
- Quality of Life and Symptom Management in Children's Palliative / Complex Care (Specialist)
- Care of the Child and Family with Palliative / Complex Needs (Specialist)
- Service Improvement (Core)

#### THEORETICAL INSTRUCTION

The content of this programme is delivered over two semesters, comprising of lectures, workshops, seminars, the reading and preparation of assignments and clinical practice in the specialist area. The programme is offered full-time over one academic year. Taught components of the programme are delivered in a blended learning format and classroom teaching. Blended learning is an innovative teaching strategy which involves a combination of face-to-face and on-line learning. This means that learning/teaching will be delivered on- line through Canvas, an interactive learning system which connects directly to the university from your own home computer. Students are required to attend face to face workshops for a total of 12 days across the programme. In addition to

clinical experience gained in the students' own work setting, all students undertake two alternative clinical placements as part of the programme.

# DURATION

The programme is delivered on a full-time basis commencing in September of each year.

# INTAKE

There is one intake per year.

## ENTRY CRITERIA

All applicants must meet the following entry requirements:

- Be a registered nurse on the General, Mental Health, Intellectual Disability, Children's Nurse or Midwifery division of the Register maintained by an Bord Altranais.
- Hold an active nursing registration.
- Be currently working in the required specialist area and have as a minimum six months clinical experience in this specialist area.
- Hold an Honours degree or hold a Bachelor Degree at NFQ Level 8 in Nursing or a comparable qualification.
- Determining Equivalence: This is a level 9 programme. Applicants who do not hold an Honours degree or higher diploma (Level 8) may apply but must clearly demonstrate their capacity to complete a programme at this level. In addition to the other requirements outlined above, these applicants are required to submit a 1000- word literature-based essay. To be considered for admission, this essay must be at the level expected of an Honours degree candidate (Level 8). Click <u>here</u> for more information on this essay.

## SELECTION CRITERIA

To be considered an applicant must:

- Meet the entry criteria
- Obtain a letter from the candidate's Director of Nursing guaranteeing practice placements within Ireland, in the appropriate specialism for the duration of the programme, within the candidate's current place of work. Or, where necessary, additional appropriate clinical placements in order to meet clinical learning requirements.

## ASSESSMENT

All modules are assessed through continuous assessment, written coursework and examination.

## SELECTION CRITERIA

To be considered an applicant must:

- Meet the entry criteria.
- Obtain a letter from the candidate's Director of Nursing guaranteeing practice placements within Ireland, in the appropriate specialism for the duration of the programme, within the candidate's current place of work. Or, where necessary, additional appropriate clinical placements in order to meet clinical learning requirements.

## ASSESSMENT

All modules are assessed through continuous assessment, written coursework and examination. In order to be eligible for the award of a Masters / Postgraduate Diploma in Health Sciences (Children's Palliative / Complex Care) students must pass each theoretical component at 40% and pass two clinical assessments.

Compensation is not permitted between modules.

A maximum of 40% can only be obtained in a module on repeat. The standard for progression to year two is a mark of at least 60% at the end of year one.

Clinical competence must be demonstrated by:

- Students passing all performance criteria within each of the ten domains of the clinical assessment and students reaching the specified level of competence in the assessment overall.
- Two clinical assessments must be completed and passed to successfully complete the course
- Students must have completed a minimum of 500 clinical practice hours over the duration of the course.

## Master/Postgraduate Diploma in Health Sciences (Perioperative)

The Master / Postgraduate Diploma in Health Sciences (Perioperative) Major Award is at Level (9) on the National Framework of Qualifications. The programme has been designed for registered nurses, who wish to pursue a specialist course in Perioperative Nursing. The programme is offered in partnership with the Health Service Executive. The programme is offered full-time over two academic years. Students can exit at the end of year one with a Postgraduate Diploma. While undertaking the programme, students will continue to work in an approved perioperative care setting. Students are required to complete a minimum of 1,000 clinical hours before completing the programme.

## **PROGRAMME CONTENT**

The programme comprises of seven theory modules of which three are core and three are specialist exclusive to Perioperative Nursing and a Service Improvement Module). In all modules there is an emphasis on exploring the relevance of module content to practice. A blended learning approach is adopted in the delivery of this programme. Students continue to work in their own practice setting while undertaking the programme. The seven programme modules are listed below:

## **Core Modules:**

- Clinical Governance: Supporting Safe Practice (core)
- Advanced Research Methods (core)
- Research Dissertation (core)
- Service Improvement

## **Specialist Modules:**

- Perioperative Nursing 1: Physiological Effects of Surgery and Promotion of Safety.
- Perioperative Nursing 2: Prevention of Anaesthetic Complications.
- Perioperative Nursing 3: Prevention of Surgical Complications In order to be considered for entry to the programme, applicants must meet the following entry requirements:
- Be a registered general nurse.
- Have a minimum of one year's post-registration experience (exclusive of post-registration courses).
- Be currently working in the required specialist area, i.e., perioperative department, and have as a minimum six months clinical experience in this specialist area.

Determining Equivalence: This is a level 9 programme. Applicants who do not hold an Honours degree or postgraduate diploma (Level 9) may apply but must clearly demonstrate their capacity to complete a programme at this level. In addition to the other requirements outlined above, these applicants are required to submit a 1000-word literature-based essay. To be considered for admission, this essay must be at the level expected of an Honours degree candidate (Level 8) for more information click here.

## SELECTION CRITERIA

Selection will be made by the Programme Director in consultation with the Head of School on the basis of the applicants' written application. To be considered for admission to the programme applicants must meet the admission criteria outlined above. Applicants will be evaluated on the following:

- Be able to demonstrate application of theory to practice in an approved peri operative setting for the duration of the programme.
- Be working in the required specialist area i.e., peri operative care setting for the duration of the programme.
- Undergo a clinical audit of the learning environment and provide written support of the Director of Nursing in each area that students will be supported to meet clinical learning outcomes.
- Undertake additional placement(s) in the areas of peri operative settings if deemed necessary by the Programme Director before completion of the peri operative programme.

Modules are assessed by means of continuous assessment only. Clinical competence must be demonstrated by:

Students passing all the competencies at the specified level of competence for each clinical assessment.

Two clinical assessments must be completed and passed to successfully complete the programme.

• Students must have completed a minimum of 500 clinical practice hours over the duration of the course.

In order to be eligible for the award of Post graduate Diploma/Master of Health Science (Nursing) students must

- Pass the theoretical component at 40%.
- Pass two clinical assessments.

Students must have completed a minimum of 500 clinical practice hours over the duration of the programme.

Compensation is not permitted. A maximum of 40% can only be obtained in a module on repeat. The standard for progression to year 2 is a mark of at least 60% at the end of year one.

#### Additional Issues:

- Students must complete the programme within two years of commencement of the programme.
- Students may progress to take the Master of Health Sciences in *Year Two* provided they have attained 60% on the aggregate on the Postgraduate Diploma element.

## Master/Postgraduate Diploma in Health Sciences (Public Health Nursing)

The Masters/Postgraduate Diploma in Health Sciences (Public Health Nursing) programme is aimed at nurses who wish to work in the community setting as a public health nurse. The experience of health is both socially and culturally determined with the achievement of maximum health potential influenced by the wider determinants of health. The Public Health Nurse has a unique role in recognising the wider realms of what impacts and determines community health and in facilitating maximum health potential. Nursing in the community involves the consideration and enablement of health care needs which demands both a clinical and public health focus of care. In considering this multifaceted function and the fact that primary health care and targeting population health is integral to community nursing practice, this programme aims to prepare students to competently meet the complex health care needs of the community as client.

The Master/Postgraduate Diploma in Health Sciences (Public Health Nursing) is run over two academic years. Candidates registering for this programme will complete the Postgraduate Diploma in Health Sciences (Public Health Nursing) in one year and upon successful completion can register with the NMBI as a public health nurse.

The first year of this programme is offered by the School of Nursing and Midwifery, University of Galway, and the Health Service Executive. To successfully complete the Postgraduate Diploma students must complete modules totalling 60 ECTS. Students **may opt** to progress on to the Master of Health Sciences (Public Health Nursing) totalling 30 ECTS in the second year. Entry to the master's programme is subject to the student achieving 60% on the aggregate of the Postgraduate Diploma modules undertaken in year one. Students who are eligible for the award of Postgraduate Diploma may progress to undertake the master's within four years of first entering the programme.

For year one of the programme in partnership with the relevant third level institutions the Health Services Executive Areas run a centralised funding application process for candidates. Sponsorship is offered by the Health Areas of the Health Service Executive. Sponsorship must be secured by the candidate prior to commencement on the programme. Year two of this programme is offered by the School of Nursing and Midwifery, University of Galway, and is not sponsored by the Health Services Executive.

# PROGRAMME DURATION AND STRUCTURE

Year One - Postgraduate Diploma of Health Sciences (Public Health Nursing) The Postgraduate Diploma in Health Sciences (Public Health Nursing), totalling 60 ECTS is delivered in one academic year. The theoretical component of the programme is comprised of six modules (if a registered midwife) and seven modules (if not a registered midwife). Students will complete two clinical practicum competency assessments within the community setting comprising of practicum one (1, 2, 3 professional assessments) and practicum two (4 and 5 professional assessments). For students who are not registered midwives, one clinical skills assessment in the maternity unit is also undertaken.

Modules (Year One)

- Clinical Governance Supporting Safe Practice
- Advanced Research Methods
- Service Improvement A (non-midwife cohort)
- Service Improvement B (midwife-cohort)
- Promoting Population Health Across the Lifespan
- Public Health Nursing Praxis
- Child Health Surveillance, Welfare and Protection
- Child and Maternal Health (non-midwives only)
- Practicum One (Professional Practice 1,2,3)
- Practicum Two (Professional Practice 4,5)
- Practicum One (Child and Maternal) (non-midwives only)

## Master of Health Sciences (Public Health Nursing) – Year Two

On successful completion of the Postgraduate Diploma in Health Science s (Public Health Nursing) students can opt to undertake the Master of Health Sciences (Public Health Nursing).

Entry to the Master of Health Sciences (Public Health Nursing) programme is subject to students achieving 60% on the aggregate of the Postgraduate Diploma modules. In Year 2, students complete a research dissertation (30 ECTS) on a topic of relevance to public health nursing.

Note: Year two of this programme is not sponsored by the Health Services Executive.

All candidates must meet the following entry requirements:

- Be a registered nurse on the General Division of the Register of Nurses maintained by Nursing and Midwifery Board of Ireland (NMBI).
- Candidates must be a registered nurse (RGN) and have a minimum of 3 years post- registration experience as an RGN or applicants should be registered in the General Nursing Division and another Division of the Register, including Registered Midwife (RM), Registered Children's Nurse (RCN), Registered Nurse Intellectual Disability (RNID), or Registered Psychiatric Nurse (RPN) or entitled to be so registered; AND have a minimum of 18 months post-registration general nursing experience as an RGN, and 18 months post-registration experience as an RM or RCN or RNID or RPN.
- Unless the candidate's name is registered in the Midwives division of the Register maintained by the Nursing and Midwifery Board of Ireland (NMBI), the candidate must complete a Nursing and Midwifery Board of Ireland (NMBI) (2005) approved module of study on Child and Maternal Health as part of the programme.
- Hold an NQAI level 8 qualification (honours degree or higher diploma) or proof of equivalency.
- Fluency in English or evidence of level 7.0 as per the IELTS academic test. Applicants must satisfy the selection/admission committee that they have the ability to complete the programme.
- Applicants must demonstrate that they have undertaken a programme of study at National Qualification Framework, academic Level 8. The academic transcript provided will be used as evidence to demonstrate this, and it should be for the highest level award.
- To be eligible for the award of the Postgraduate Diploma in Nursing (Public Health Nursing), candidates must meet the full requirements for registration specified by the Nursing and Midwifery Board of Ireland (NMBI).

Successful candidates must have secured Health Service Executive sponsorship prior to commencement on the programme.

To be considered an applicant must:

- Meet the entry criteria.
- A. Demonstrate his/her potential to cope with the academic standards required.
- B. Confirmation of placement on the programme is subject to the candidate confirming sponsorship and clinical placement for the duration of the programme from their relevant Director of Public Health Nursing.

#### ASSESSMENT

This programme is assessed by means of a combination of coursework, examination and competency assessment. In order to be eligible for the award of the Postgraduate Diploma in Health Sciences (Public Health Nursing) in year one of the programme students must pass each component at 40%. The Professional Practice component requires students to attain identified competencies; to pass overall the student must pass all the practice assessments. Practicum One must be completed in order to progress to Practicum Two in the programme. Compensation between modules is not permitted. For students who opt to undertake the Master of Health Sciences (Public Health Nursing), entry to Year Two of the programme is subject to achieving 60% on the aggregate of the Postgraduate Diploma modules. In order to register as a Public Health Nurse, students must meet any requirements for registration identified by the Nursing and Midwifery Board of Ireland (NMBI).

## Higher Diploma in Midwifery

The Higher Diploma in Midwifery is for registered nurses, who wish to.pursue a career in midwifery. The programme builds on students' prior professional, academic and personal experiences. Following successful completion of the programme, students are competent to fulfil the role of the midwife as outlined by the International

Confederation of Midwives and are eligible to apply to register as a midwife with the Nursing and Midwifery Board of Ireland. The Higher Diploma in Midwifery is offered in partnership with University Hospital Galway, Saolta Group.

## PROGRAMME STRUCTURE AND DURATION

The duration of the Higher Diploma in Midwifery is 80 weeks full time, consisting of theoretical and clinical components. There are twenty-six weeks of theory which is organized in planned study blocks. Students undertake 12 theory modules over the course of the programme. The modules focus on; anatomy and physiology applied to midwifery, normal midwifery care, social sciences (Sociology and Psychology), research, caring for the woman experiencing complications during pregnancy and childbirth, caring for the well neonate and the neonate requiring special care, and professional issues and an elective practice placement.

Clinical placements are undertaken throughout the programme-at University Hospital Galway, under the supervision of a preceptor.

Students are salaried employees of University Hospital Galway for the duration of the programme.

#### ASSESSMENT

Theory and clinical practice modules are assessed by a combination of coursework and written examinations. In addition, students' clinical competency is assessed on an on-going basis while on placements using the National Clinical Competency Assessment tool. Students must pass both the theoretical and clinical assessments to be deemed to have passed the programme.

In order for a student to apply to register as a Midwife with the NMBI, the student must complete the minimum clinical practice experience and minimum number of clinical hours required by the NMBI.

All candidates must be registered in the General Division of the Register of Nurses maintained by the Nursing and Midwifery Board of Ireland (NMBI) or entitled to be registered.

Candidates must have at least six months relevant post-regulation experience as a general nurse within the past three years, working a minimum of 78 hours per month.

The next intake of students is planned for February 2024.

Applications for the Higher Diploma in Midwifery programme are made to the Health Service Executive.

## Master/Postgraduate Diploma in Health Sciences (Wound Healing & Tissue Repair)

The Master of Health Sciences /Postgraduate Diploma in Health Sciences (Wound Healing and Tissue Repair), Major Award, is at Level (9) on the National Framework of Qualifications. This programme is aimed at all health care professionals working in a variety of settings registered with their national body including Nursing and Midwifery Board of Ireland. It aims to provide students with the necessary in-depth evidence-based knowledge, skills and competencies to provide quality care to patients/clients with wounds or at risk of a wound. On successful completion of this programme, students will hold an MSc/Postgraduate Diploma in Health Science (Wound Healing and Tissue Repair).

## PROGRAMME DURATION AND STRUCTURE

The programme is offered full time over two years. Students can exit at the end of year one with a Postgraduate Diploma. While undertaking the programme students will continue to work in an area where patients/clients with wounds or at risk of a wound are cared for.

## CONTENT

The programme is comprised of six theory/practice modules. Module content is viewed as interconnected and interdependent. In all modules there is an emphasis on exploring the relevance of module content to practice.

#### Modules:

#### **Core Modules:**

- Advanced Research Methods
- Clinical Governance Supporting Safe Practice
- Service Improvement

#### **Specialist Modules:**

- Management of diabetic foot disease
- Advanced wound care management
- Management of venous leg ulceration
- Vascular disease

In order to be considered for entry to the programme applicants must meet the following criteria:

- Hold an Honours Bachelor Degree at NFQ Level 8 in a healthcare profession. Applicants who do not hold an honours degree or Higher Diploma (Level 8) must demonstrate that they have successfully completed (in the previous two years) a module at Level 9.
- Hold current registration with their relevant governing body, for example NMBI, CORU, IMC.
- Be currently employed in healthcare.
- Have a minimum of 6 months clinical experience in an appropriate setting since qualification.
- Students taking the Venous Leg Ulceration module [NU6104] must be in a position to work with clinicians providing care for patients with venous leg ulceration in a hospital or community setting, including the application of compression therapy and recording of Doppler ultrasound.
- As programmes are delivered through blended learning it is expected that applicants have a basic level of computer literacy to enable them to fully participate in the programme.

The Programme Director, based on applicants' meeting the criteria above, will make the final selection.

#### ASSESSMENT

Modules are assessed by a variety of methods including:

- E-tivities
- MCQs
- Written assignment
- OSCE.

In order to be eligible for the award of MSc/Post Graduate Diploma of Health Sciences (Wound Healing and Tissue Repair) students must:

- pass each theoretical component at 40%.
- pass the OSCE.

Compensation is not permitted. A maximum of 40% can only be obtained in a module on repeat. The standard for progression to year two is a mark of at least 60% at the end of year one.

## Master in Health Sciences (Nursing Education)

The Master of Health Sciences (Nursing/Midwifery Education), Major Award, is at Level 9 on the National Framework of Qualifications. This two-year programme is aimed at nurses and midwives working in the public, voluntary or private sectors and it also aims to prepare nurses and midwives to be able to teach competently & confidently. Students are required to gain 100 hours of teaching experience over the two years. To increase programme accessibility, the programme will be delivered using blended learning. Blended learning will combine face-to-face teaching and facilitated on-line learning. Face-to-face learning/teaching takes the form of 2 or 3 workshops (depending on the module) each semester. Students will therefore attend for 2 or 3 days a semester, plus and orientation day prior to the commencement of the first year.

#### **PROGRAMME CONTENT**

The programme comprises of seven taught modules, three specialist modules, four core modules of which one includes a research dissertation. Taught modules are subdivided into core (across all programmes at Masters Level and specialist modules (unique to nursing/midwifery education). An e-Portfolio and three teaching competency assessments across the two years are also included.

100 hours of teaching practice is completed over the two years and is an integral part of the programme. To experience teaching at different levels it is expected that students gain experience of teaching at undergraduate/ postgraduate levels and in their work place.

The 100 hours are subdivided as follows:

- 30 hours experience of formal classroom-based lecturing.
- 25 hours of clinical focused teaching which should comprise of both classroom-based skills teaching and teaching in the clinical setting.
- 25 hours of small group work with a focus on experiential approaches, for example, seminars, workshops.
- hours at the discretion of the student.
- hour that demonstrates engagement and adoption of an innovative teaching methodology or technology.

#### ASSESSMENT

Each module is assessed independently. Strategies for assessment include essays, reflective practice assignments, presentations, competency assessment of teaching practice and dissertation.

- Upper 2<sup>nd</sup> class degree in nursing or Nursing Studies at H2.1 or at H2.2 with appropriate experience; or Higher Diploma in Nursing Studies with appropriate experience
- Be on the active Register as a nurse/midwife
- Have practiced as a nurse/midwife for a minimum of three (3) years post registration
- A letter indicating that teaching practice has been negotiated in an educational establishment

#### AWARD

On successful completion of the programme students will be awarded A Master of Health Sciences (Nursing/Midwifery Education). In order to be eligible for this award, the student must pass each module at 40%. Compensation is not permitted between modules. The student must pass the competency element of the programme to successfully complete the programme. To be eligible to register candidates must meet in full the requirements for registration specified by Nursing and Midwifery Board of Ireland (NMBI).

## MHSc/PDipHSc (Diabetes) Nursing

Diabetes is a global health emergency with over 600 million people expected to have the condition by 2030, representing 10% of the world's population. Therefore, the World Health Organisation (WHO) has classed diabetes as an epidemic requiring urgent action for both prevention and management. This has been echoed in Irelands Health Service Executive national policy and clinical strategy for diabetes. It is a chronic metabolic condition that can cause significant cardiovascular morbidity and mortality if not managed correctly. Central to this management is controlling key physiological indices such as blood sugar, blood pressure and blood lipid levels, as well as promoting health behaviours such as regular exercise, healthy eating and not smoking. Unfortunately achieving these biological targets and lifestyle goals is extremely challenging. Therefore, given its growing prevalence and resulting impact on health care resources, there is an urgent need to provide specialist training in diabetes for clinicians and in particular nurses who are an integral part of the Diabetes Multidisciplinary Team.

This programme aims to prepare nurses to effectively contribute to diabetes nursing practice. The essence of diabetes nursing is the provision of individualised care to patients with diabetes. Caring for patients with diabetes requires nurses to have specialist knowledge and skills that meet the physical, psychological, mental and social needs of patients and their relatives. The multi-faceted nature of nursing in diabetes care settings encompasses the whole spectrum of care, from prevention to diagnosis to treatment and chronic disease management and this course encompasses that ethos.

The course is delivered through blended learning (online content and face to face workshops), with an attendance requirement of approximately 10 days per 4-month semester (please note some workshops may be scheduled at weekends).

## PROGRAMME DURATION AND STRUCTURE

The programme is offered full time over two years. Students can exit at the end of year one with a Postgraduate Diploma.

## **PROGRAMME CONTENT**

#### Learning outcomes

- Demonstrate ethically sound decision making in relation to the care of patients living with diabetes
- Demonstrate evidence-based knowledge and skills in the care of patients with diabetes
- Demonstrate the ability to contribute to the professional body of knowledge related to diabetes
- Advocate with other health care professionals for patients with diabetes
- Assess risk and promote a safe environment and quality patient care
- Contribute to multidisciplinary team planning
- Contribute to the multidisciplinary team in the delivery of quality care for patients with diabetes
- Year 1 is theoretical-/clinical-based and represents 60 ECTS credits which is equivalent to a Postgraduate Diploma Diabetes at completion (which students can exit with, if they wish, at the end of Year 1). Year 2 is research thesis based which builds on the knowledge and skills learned in Year 1 and represents 30 ECTS credits, thus providing a total of 90 ECTS (Year 1 & 2) which is the requirement for the awarding of a Masters Health Sciences Diabetes.

#### Semester 1

GPN10: Diabetes (10 ECTS) NU623: Clinical Governance: Supporting Safe Practice (10 ECTS) NU605: Recognising & Responding to Client Deterioration (10 ECTS) NU921: Clinical Competence 1 (0 ECTS)

#### Semester 2

NU502: Advanced Research Methods (10 ECTS) NU6439: Service Improvement (10 ECTS) PO5101: Management of Diabetic Foot disease NU922: Clinical Competence 2 (0 ECTS)

#### ASSESSMENT

Each module is assessed independently. Strategies for assessment include essays, reflective practice assignments, presentations, competency assessment of teaching practice and dissertation.

Compensation is not permitted. A maximum of 40% can only be obtained in a module on repeat. The standard for progression to year two is a mark of at least 60% at the end of year one.

Students' clinical competency will be assessed by a practice portfolio (submitted end of Year 1 Semester 2). Students also complete practice focused assignments throughout the whole of Year 1 programme [September to June]. In order to be eligible for the award of the Postgraduate Diploma in Nursing (Diabetes) students must pass each module at 40% and pass the clinical practice portfolio. The clinical practice component forms an integral part of the programme. Students are required to attain at least 500 hours specialist practice experience of working and caring for patients with diabetes in a variety of environments over the programme. This includes consolidating the experiences and opportunities that are available in their own clinical environments. The student will be expected to engage in the assessment, planning, delivery and evaluation of care to patients with diabetes with the support of designated preceptor agreed on with the programme director. To successfully meet the requirements of 500 hours of practice, the student will be required to work, for the duration of the first year of the programme, within practice settings that manage care for diabetes patients. If required, it may be possible to arrange clinical placements with the Diabetes Service at the University Hospital Galway which will cover the full spectrum of Diabetes Care.

# MSc in Evidence Based Future Healthcare

The MSc in Evidence-Based Future Healthcare is an exciting new fully online interprofessional postgraduate course designed for busy healthcare workers seeking to transform their current practice, optimise healthcare outcomes and advance their careers in a rapidly evolving field. Our future-facing programme aims to equip healthcare workers from all backgrounds with the skills and knowledge to tackle current and emerging healthcare challenges by utilising cutting-edge approaches to evidence identification, appraisal, and implementation.

The programme will be delivered by experts in evidence-based healthcare from the University of Galway, with guest contributions from international experts. This programme is also closely linked with the **internationally-recognised centres of excellence** of Evidence Synthesis Ireland, Cochrane Ireland and the HRB Trials Methodology Research Network.

## **Entry Requirements**

A 1.1 (or equivalent) or 2.1 (or equivalent) Bachelor's honours degree in a healthcare-related field\*

- a. Applicants should have relevant work experience in healthcare, including direct care for individuals or communities in clinical settings, non-clinical roles in healthcare administration, policy, or research and community service focused on healthcare.
- b. Applicants from diverse backgrounds with a variety of healthcare experiences, including those such as health policy, public health etc, healthcare management etc., are welcomed
- c. A minimum overall score of 7.0 IELTS, with no less than 6.5 in any one band for international applicants

\*Applicants from non-healthcare-related degrees will be considered (minimum requirement of 2nd Class Honours, Grade 1) on a case-by-case basis at the discretion of the coordinators.

Module Name	Module Aim	ECTS
1. Introduction to Evidence-Based Healthcare: Principles and Practice	This module aims to provide students with an in-depth understanding of evidence-based healthcare, its relevance for contemporary healthcare and how to apply this knowledge to healthcare practice	10
2. Foundations of Research in Healthcare: Methods and Design	This module aims to provide students with a comprehensive understanding of various healthcare research methods and study designs and how to apply this knowledge to design relevant research studies.	10
3. Art and Science of Evidence-Based Healthcare: Searching, Synthesizing, and Appraising Evidence	This module aims to empower students with the advanced knowledge and skills needed to search, synthesise, and appraise healthcare research evidence effectively and efficiently.	10
4. Interpreting Statistical Tests in Healthcare: A Practical Approach	This module aims to equip students with the practical skills needed to effectively appraise and interpret statistical tests and apply these skills to decision-making within real-world healthcare scenarios.	10

5. Person-Centered Care and Shared Decision-Making	This module aims to equip students with the knowledge and skills to empower, encourage and incorporate the voice of the person receiving care and to engage in shared decision-making as a collaborative process.	10
6. Innovations in Healthcare: Exploring the Role of Digital Health and Technology	This module will explore the ways in which digital health and artificial intelligence can be used to improve healthcare outcomes. The module aims to provide students with an understanding of the latest technological innovations in health care and their potential impacts on healthcare delivery and outcomes for those receiving care and how to apply this within their practice.	10
7. Advancing Health Equity through Evidence Based Practice	This module will equip healthcare professionals with the knowledge and skills needed to address health disparities and promote health equity in various healthcare settings, including clinical and public health settings, thus helping shape healthcare's future towards better and greater equity and social justice.	10
8. APPLIED PROJECT: Interdisciplinary Healthcare Innovation: A Capstone Project	This module aims to facilitate students to showcase their learning in evidence- based healthcare and apply their knowledge, skills and training to solve real-world implementation challenges.	20

## Learning Outcomes

- 1. Demonstrate a thorough understanding of evidence-based healthcare, including key concepts, principles and application to emerging healthcare trends and challenges.
- 2. Identify and use appropriate research methods and designs for healthcare research and develop clear and answerable research questions.
- **3.** Master the advanced skills necessary to effectively search, synthesise, appraise, and apply research evidence in healthcare decision-making.
- 4. Demonstrate competence in interpreting and critically evaluating common statistical tests used in healthcare research
- 5. Apply evidence-based healthcare principles to clinical decision-making, taking into account patient preferences, values, and unique circumstances, and foster a culture of shared decision-making.
- 6. Develop an in-depth understanding of the latest technological innovations in healthcare and their potential impacts on healthcare delivery and outcomes.
- 7. Promote health equity and address health disparities in various healthcare settings by applying the concepts and principles of evidence-based practice.
- 8. Apply knowledge and skills gained in the program to real-world healthcare scenarios, demonstrating effective team-working, problem-solving, critical thinking, and communication skills.
- **9.** Contribute to developing evidence-based healthcare policy and practice, and make a meaningful impact on healthcare delivery by fostering a culture of knowledge translation and evidence-based practice

## Professional Credit Awards

These modules provide the opportunity for nurses and midwives to fulfil and support learning needs identified during their clinical practice and therefore allows for their ongoing education and professional development. These modules are mainly components of recognised Master's programmes offered by the School of Nursing and Midwifery, University of Galway. Each module is worth 10 ECTS which may be credited towards further academic study. A Student taking a stand-alone module is classed as an Occasional Student. These students, however, are not on a programme leading to a Degree, Diploma or any other award of this University. These modules are delivered via blended learning which involves a combination of face to face and online learning. Modules are delivered over one semester. The following modules are available:

Starting in September

NU438 Advanced Wound Care Management.

NU581 Best Practice in Cervical Smear Taking.

NU6444 Care of the Child and Family with Palliative/Complex Needs.

NU623 Clinical Governance: Supporting Safe Practice (Core).

NU6622 Clinical Supervision: Supporting Continuing Professional Development.

NU6123 Nursing Management of Patients with a Haematological Condition.

NU606 Principles and Practice of Acute Medical Nursing.

NU6446 Quality of Life and Symptom Management in Children's Palliative/Complex Care.

NU605 Recognising and Responding to Client Deterioration.

NU625 Teaching Effectively.

Starting in January

NU502 Advanced Research Methods (Core).

NU634 Dementia Care: Transforming Practice.

NU568 High Dependency Maternity Care.

PO5101Management of Diabetic Foot Disease, (offered jointly by Podiatric Medicine and Nursing & Midwifery).

NU6104 Management of Venous Leg Ulceration.

UCD\_NU6445 Specialist Understanding of Complex Care for Children, (offered jointly by School of Nursing, Midwifery & Health Systems UCD).

NU644 Student-centered Teaching & Learning: Active Engagement strategies.

PO5102 Vascular Disease (offered jointly by Podiatric Medicine and Nursing & Midwifery).

All applicants for Professional Credit Awards must be:

- (a) A Registered Nurse or Midwife on the Register held by The Nursing and Midwifery Board of Ireland
- (b) Hold an active nurse/midwife registration
- (c) Work in a clinical area where they are able to develop the clinical skills required to meet the learning outcomes of their chosen module.
- (d) Meet any other specified entry requirements.

## SELECTION CRITERIA

Occasional students are considered for admission on the basis of their application, and considering the following points:

- 1. Applicant's academic record.
- 2. Applicant's level of motivation and suitability based on their personal statement (submitted as part of the application).

Recommendation by the module leader in consultation with the Strand Leader, after reviewing the application. In the case where an applicant must have: (1) access to or care for a specific client group or (2) have the opportunity to practice specific skills to the learning outcomes of a module he/she must supply a letter from their Director of Nursing/Midwifery (or equivalent or appointed person) guaranteeing that the student will have opportunity to meet these requirements for the duration of the module content in the applicant's current place of work.