

MSc Cybersecurity Risk Management

Programme Handbook 2025-26



OLLSCOIL NA
GAILLIMH
UNIVERSITY
OF GALWAY

Scoil Ghnó agus
Eacnamaíochta J.E. Cairnes
J.E. Cairnes School of
Business and Economics

Table of Contents

Welcome.....	3
Programme Objectives	4
Programme Structure	4
Marks and Standards.....	4
Award of Honours	4
Conferring.....	4
Semester and Exam Dates 2025-26.....	5
Semester 1.....	5
Semester 2.....	5
Holidays.....	5
Module Weightings.....	5
Teaching Staff.....	5
Centre for Excellence in Teaching & Learning (CELT) Materials	7
Library	7
Academic Writing Centre (AWC).....	7
Computer Facilities (ISS).....	7
Canvas	7
Career Development Centre	8
J.E. Cairnes School of Business Student Support Officer	8
Academic and Wellness Support.....	8
Parking and Bicycles.....	8
International Students	9
Before you arrive	9
Orientation	11
Course Syllabi and Descriptions	12
What is Plagiarism and how is it defined in the University?.....	14
Generative AI.....	14
Examples of plagiarism	14
Examples of plagiarism from published sources	15
Citation and Referencing.....	15
Resources	15
MSc Cybersecurity Risk Management.....	17
Semester I Timetable 2025/26.....	17

Welcome

We would like to welcome you to the MSc Cybersecurity Risk Management here in the J.E. Cairnes School of Business and Economics at University Galway and we hope your time here will be enjoyable.

This handbook should cover any queries you may have in regard to issues pertaining to the programme as well as giving guidance on other related issues in the university.

Our contact details are as follows:

Name: Dr Mona Isazad Mashinchi

Email: mona.isazadmashinchi@universityofgalway.ie

Name: Ms Melissa O'Hea

Email: Melissa.ohea@universityofgalway.ie

Yours sincerely

A handwritten signature in black ink, appearing to read 'Mona Isazad'.

Dr Mona Isazad Mashinchi
Programme Director
MSc Cybersecurity Risk Management

A handwritten signature in blue ink, appearing to read 'Melissa O'Hea'.

Ms Melissa O'Hea
Programme Administrator
MSc Cybersecurity Risk Management

Programme Objectives

The MSc Cybersecurity Risk Management focuses on the strategic deployment and implementation of cybersecurity within an organisation. Our aim is to develop strategic thinkers who can understand the threat, manage resources, implement solutions, and can effectively communicate these to senior decision makers in order to support the strategic growth of a business.

On successful completion of the programme you will be able to: Identify, analyse, and solve business, public policy and societal problems within a global context; Make a positive societal impact through critical thinking, innovation, and collaboration; Analyse complex information about cybersecurity threats and vulnerabilities from a variety of sources; Communicate effectively to employees, managers and the general public about cybersecurity risks; Be committed to professional codes of conduct and ethics, and will have an appreciation of their responsibility to serve society as good corporate and national citizens.

Programme Structure

The programme is offered on a full-time basis over one academic year. The programme comprises lectures, practical classes, seminars, projects, and a summer school.

Marks and Standards

To be eligible for the award of the MSc Cybersecurity Risk Management, candidates must successfully complete modules to a total of 90 ECTS. Students must pass all modules. The pass mark in each module is 40%.

Award of Honours

Honours are awarded only on completion of the programme according to the following scheme:

- H1 70% on the aggregate
- H2.1 60% on the aggregate
- H2.2 50% on the aggregate
- H3 40% on the aggregate

Honours are awarded only on the aggregate performance at Examination as a whole. Honours are not awarded on the basis of results obtained in individual modules.

Conferring

Conferring is managed by the University's [Conferring Office](#) and all questions in relation to dates, etc should be addressed directly to conferring@universityofgalway.ie. The MSc Cybersecurity Risk Management is conferred at the Winter Conferring ceremony, which takes place in November each year.

Semester and Exam Dates 2025-26

Semester 1	Date From	Date To
Teaching	Monday 8 th September 2025	Friday 28 th November 2025
Study Week	Monday 1 st December 2025	Friday 5 th December 2025
Semester 1 Exams	Monday 8 th December 2025	Friday 19 th December 2025
Semester 2	Date From	Date To
Teaching	Monday 12 th January 2026	Thursday 2 nd April 2026
Field Trips	Tuesday 7 th April 2026	Friday 10 th April 2026
Study Week	Monday 13 th April 2026	Friday 17 th April 2026
Semester 2 Exams	Tuesday 21 st April 2026	Friday 8 th May 2026
Autumn Repeat Exams	Tuesday 4 th August 2026	Friday 14 th August 2026
Holidays		
Easter	Good Friday – 3 rd April 2026	Easter Monday – 6 th April 2026
Bank Holidays	Monday 27 th October 2025 / Monday 2 nd February 2026 / Tuesday 17 th March 2026	

<https://www.universityofgalway.ie/media/registrationoffice/files/Academic-Year-Calendar-2025-2026.pdf>

Module Weightings

Semester 1		ECTS
MS5107	Business Modelling & Analytics	5
MS5125	Cybersecurity Risk Management	10
MS807	Information Systems Management	5
Elective Modules - Choose two (subject to availability)		
LW383	Information Technology Law	5
MG557	Strategic Management	5
MS804	Systems Development & Project Management	5
MS805	Database Systems	5
MS806	Business Applications Programming	5

Semester 2		ECTS
MS5118	Cloud Computing	5
MS5126	Philosophy of Information and Information Ethics	5
MS5130	Applied Analytics in Business and Society	5
MS5134	Cybersecurity Risk Management 2	10
Elective Modules - Choose one (subject to availability)		
MS5114	Advanced Programming for Business Analytics	5
MS5129	Storytelling Through Data Visualisation	5
MS803	Business Data Communications	5

Year Long		ECTS
MS5127	Major Cybersecurity Project	30

Teaching Staff

Below are the names and contact details of your lecturers throughout the year: this list is subject to change.

Module Code	Module	Lecturer	Email
LW383	Information Technology Law	Dr Ronan Kennedy	ronan.m.kennedy@universityofgalway.ie
MG557	Strategic Management	Dr Vanessa Bretas	vanessa.bretas@universityofgalway.ie
MS5107	Business Modelling and Analytics	Dr Anatoli Nachev	anatoli.nachev@universityofgalway.ie

MS5114	Advanced Programming for Business Analytics	Dr Umair ul Hassan	umair.ulhassan@universityofgalway.ie
MS5118	Cloud Computing	Dr Pierangelo Rosati Dr Mona Isazad Mashinchi	pierangelo.rosati@universityofgalway.ie mona.isazadmashinchi@universityofgalway.ie
MS5125	Cybersecurity Risk Management	Prof Tom Acton	thomas.acton@universityofgalway.ie
MS5126	Philosophy of Information and Information Ethics	Dr David Kreps	david.kreps@universityofgalway.ie
MS5127	Major Cybersecurity Project	Dr Mahya Ostovar	mahya.ostovar@universityofgalway.ie
MS5129	Storytelling Through Data Visualisation	Prof Eoin Whelan	eoin.whelan@universityofgalway.ie
MS5130	Applied Analytics in Business and Society	Prof Eoin Whelan	eoin.whelan@universityofgalway.ie
MS5134	Cybersecurity Risk Management 2	Prof Tom Acton Dr Mona Isazad Mashinchi	Thomas.acton@universityofgalway.ie Mona.isazadmashinchi@universityofgalway.ie
MS803	Business Data Communications	Dr Anatoli Nachev	anatoli.nachev@universityofgalway.ie
MS804	Systems Development and Project Management	Dr Sharon Coyle Prof Lorraine Morgan	sharon.coyle@universityofgalway.ie Lorraine.morgan@universityofgalway.ie
MS805	Database Systems	Dr Blair Wang	blair.wang@universityofgalway.ie
MS806	Business Applications Programming	Mr Neil Keane	neil.keane@universityofgalway.ie
MS807	Information Systems Management	Mr Martin Hughes Dr Mahya Ostovar	lmartin.hughes@universityofgalway.ie Mahya.ostovar@universityofgalway.ie

Centre for Excellence in Teaching & Learning (CELT) Materials

From the beginning of your program, you should make use of the following materials which are recommended by the University's Centre for Excellence in Learning & Teaching (CELT) <https://www.universityofgalway.ie/celt/>

- A basic introduction to learning online: <https://www.allaboardhe.ie>
- Tools for learning (not solely in an online environment):
https://www.allaboardhe.ie/AAlessons/learningtools/story_html5.html?lms=1
- Virtual learning environments (VLEs) / Learning management systems (LMSs):
https://www.allaboardhe.ie/AAlessons/VLEstudent/story_html5.html

Library

The library provides a variety of study spaces for staff, students, and researchers of the University. These range from individual study spaces for quiet study and group study rooms where students can work together on projects, to our popular reading area aimed at providing a place to take a break from serious study. Information on accessing the library can be found at <https://library.universityofgalway.ie>

The username and password for your Library account is the same as the username and password for your campus account, i.e., what you use to log on to the University network and for your email. For further information on the library, please visit <https://library.universityofgalway.ie>. Training sessions on a variety of topics all designed to help you gain the skills of finding, evaluating, and using information more efficiently are conducted in the library in Semester 1.

Find out how to use the library <https://library.universityofgalway.ie/studying/>

Academic Writing Centre (AWC)

The AWC provides virtual one-on-one tutorials and email consultations on essay writing. These are free and available to everyone, regardless of level of experience or grade average. More information is available at <https://library.universityofgalway.ie/studying/awc/>

Computer Facilities (ISS)

The MSc Cybersecurity Risk Management class has access to a shared computer suite located in the Cairnes building (CA244). Access is gained to this suite by swiping your student card and your Programme Administrator will arrange this for all registered students within the first two weeks of the semester. You will receive an email from your Programme Administrator advising of when/where to go to have your student ID card activated.

The Information Solutions and Services Department provides a comprehensive range of ICT services for students. Please visit <https://www.universityofgalway.ie/information-solutions-services/services-for-students/> for further information on services such as activating your campus account, wifi, email, software, printing, pc suites, etc.

Canvas

Canvas is the Virtual Learning Environment (VLE) used in the University of Galway. All course materials, timetables, lectures and tutorials, tutorial groups, course outlines, assignments, announcements and discussion groups will be made available through Canvas. An introduction to Canvas can be found at <https://www.universityofgalway.ie/information-solutions-services/services-for-students/canvas/students/>

FAQs can be seen at <https://www.universityofgalway.ie/information-solutions-services/services-for-students/canvas/faq/>

Career Development Centre

The [Career Development Centre](#) (CDC) aims to provide students of the University of Galway with a quality career guidance and information service focused on facilitating and empowering you to manage your own career development and make effective career transitions. Support is provided on **Employability, Guidance and Opportunities**.

A large number of [events](#) are held each semester and have many graduate employers on campus. Students and recent graduates can use [Careers Connect](#) to view events, job/internship/funding opportunities and students can also use it to book an appointment with a member of the CDC team at <https://www.universityofgalway.ie/career-development-centre/careersconnect/>.

J.E. Cairnes School of Business Student Support Officer

Ms. Teresa Lydon the [Student Support Officer](#) for J.E. Cairnes School of Business and Economics, provides support for students during their time at university. The role of the Student Support Officer is to provide confidential, non-judgmental support and an empathetic space for students to share their concerns. In addition, a Student Support Officer can offer personal support and advice on topics such as study planning, time management and any personal challenges that may compromise their ability to study.

Teresa is available to students for in person/online meetings and telephone from Monday to Thursday, 9am-1.30pm. It is a confidential service. Teresa's contact number is 086-0836646 and email is: businessstudentadvisor@universityofgalway.ie.

Academic and Wellness Support

Being involved in a society, club or in volunteer programmes is a fun and interesting way to meet new people and build friendships. Having a sense of belonging and connection with others is a proven way to help you mentally and physically in your learning journey. You will find some key University of Galway student support services at the links below:

- Student Services: <https://www.universityofgalway.ie/student-services/>
- Student's Union: Welfare and Equality Officer, 086 3853659 / suwelfare@universityofgalway.ie

Parking and Bicycles

If you are driving to campus, it is essential that you get a temporary parking permit and/or permanent student permit before you park in the university grounds. Without the permit you will be clamped and will be required to pay a release fee. **The parking management company makes no exceptions.** A 'Park & Ride' facility is available from the Dangan car park.

You will find all details on parking in the University on this link <https://www.universityofgalway.ie/buildings/service-helpdesk/parking-get-to-around/>.

Bicycle racks are located at the back of the Cairnes Building.

The [secure bicycle compound](#) is located to the west of the Arts Science Building. Anyone with a valid in-date student /staff University ID card can access the compound. You must also swipe out. As part of ongoing improvements to cycle facilities additional covered bicycle racks have been installed in several places around campus.

E-scooters, e-bikes or other e-powered personal vehicles may not be taken inside university buildings, nor may they be charged on university property.

International Students

Before you arrive

University of Galway looks forward to welcoming all International Students to Galway. These are the steps to take to ensure that your arrival goes as smoothly as possible:

Pre-Arrival Checklist	
1. Accept your offer	Refer to your offer letter for instructions on how to accept your offer. If you are not sure about how to accept your offer, email postgradadmissions@universityofgalway.ie for postgraduate queries.
2. Pay your deposit or tuition fee	Refer to your offer letter for instructions on how to pay any deposit that may be required by the University. The rules regarding payment and deposits may vary depending on the programme you have been accepted to. Your initial deposit will be deducted from your tuition fee, which unless otherwise stated in your letter of offer, is to be paid in full before you can register as a student. Please see the tuition fees section for more information.
3. Purchase Health Insurance	All students who don't hold a European Passport are required to have medical cover for registration with immigration. Policies from your home country are accepted, but you must be a named policyholder, and it should include hospitalisation. Follow this link for more information.
4. Prepare your immigration/travel documents	Do you need a Visa? It's important to be aware if you are required to obtain a visa before planning your trip. For more information, visit our immigration webpage
5. Review your Pre-Arrival Guide	Download the International Guide here , it has all the information you might need as you transition into life at University of Galway.
6. Book your accommodation	Once you have paid your fees and confirmed your place, we strongly encourage you to begin your search for accommodation without delay. Before you arrive, you can research locations, transport and the variety of housing types available. We suggest considering which type of housing is best suited to your individual needs. <u>Options include:</u> <ul style="list-style-type: none"> • University Student Residences • Self-catering Accommodation with Owner or "Digs" • Private Rented Accommodation Visit the Accommodation Advisory Service website for more information and advice.
7. Make travel arrangements	Check the Academic Calendar for your term dates and How to Find Us for information and advice on getting to Galway.
8. Pack your things	Check out the list of useful items to pack for Galway. The most important thing to remember is to pack light. Make a list of things you will actually need to see you through the first few weeks in Galway and discard everything else.
9. Plan your budget	It's important to prepare yourself financially for the cost of living during your time at university; small costs can quickly add up. Visit the University's webpage on Cost of Living for a sense of what to expect. There, you will also find other useful resources and links for money management and budgeting.
10. What to Expect on Arrival into Ireland	At the port of entry, immigration officers will want to ensure you meet the entry requirements as an international student. Despite being already granted your visa (if applicable), you need the following documents in your hand luggage: <ul style="list-style-type: none"> • Photocopies of your passport • Plane tickets • Two copies of your acceptance letters and, where applicable, two copies of your offer letter • Copy of health insurance policy Note: The key to having a smooth transition into Ireland is having all your paperwork in order. The Irish Government travel guidelines may vary at the time of your departure. Please ensure you are up to date on requirements. https://www.irishimmigration.ie/

11. Getting to Galway	<p>The two main airports we recommend are Dublin and Shannon Airports. If possible, try to organise flights into Dublin Airport as onward travel to Galway is generally more frequent.</p> <p>Dublin Airport direct to Galway by bus</p> <p>Getting to Galway from Dublin Airport is relatively easy. Buses depart from Dublin Airport to Galway every hour. The journey is approximately 3 hours long and usually costs €13 - €25.</p> <p>The main service providers are:</p> <p>Citylink Bus - citylink.ie - Zone 11</p> <p>Bus Éireann - buseireann.ie - Zone 13</p> <p>Dublin City to Galway by train</p> <p>There is a train service to Galway that departs from Heuston Train Station in Dublin City. Prices range from €17 - €25. The journey takes 2hr and 25 minutes. See here for more information - irishrail.ie</p> <p>Dublin Airport to Dublin City by bus</p> <p>In case you are interested in visiting Dublin City before you travel to Galway, or are getting the train, you can take an Airlink bus which departs directly from Terminal One Airport to Dublin City every 10 - 15 minutes. Tickets are approximately €10.</p> <p>Terminal 1 pick-up for both routes 782 and 784 - location</p> <p>Terminal 2 pick-up for both routes 782 & 784 - location</p> <p>For more information, visit https://airlinkexpress.ie/</p> <p>Shannon Airport to Galway by bus</p> <p>Bus Éireann Expressway operate an hourly service* from Shannon Airport (stop B) to Gaway city – route 51.</p> <p>The journey is approximately 1 hour and 45 minutes long and usually costs €15. Tickets can be purchased online or on board with cash. For more information and the full timetable, visit the Bus Éireann website https://www.expressway.ie/route/51/cork-to-galway-via-limerick/ 2025-07-15</p> <p>*Note this service is not 24-hour; refer to the timetable for more information.</p>
12. Banking	<p>There are a number of banks operating in Ireland:</p> <ul style="list-style-type: none"> • Bank of Ireland – <i>branch on campus</i> • AIB (Allied Irish Banks) • Educational Building Society (EBS) • Permanent TSB (PTSB) • An Post • Revolut <p>A map of Galway bank branches can be found here.</p> <p>When opening a bank account, you will need the following documents:</p> <ol style="list-style-type: none"> 1. Passport 2. Registration Statement with your Galway address. You can print this from your student account once registered <p>Additional documentation may be required. The bank will discuss this with you.</p> <p>Note: Some privately owned ATMs, especially those located in shops, nightclubs, or kiosks, may charge fees for withdrawals. Usually, ATMs owned by the major Irish banks listed above do not charge fees, but you could face foreign transaction fees when using an ATM in Ireland with a card from another country.</p>
13. Mobile Sim Cards	<p>Ireland has a number of mobile phone providers. SIM-only plans are generally the cheapest options for students.</p> <p>SIM Only is a contract that includes an allocation of minutes, texts and data which vary depending on the plan you choose. With a SIM-only contract, you receive just the SIM card and no mobile phone.</p> <p>The main service providers are:</p> <p>Vodafone</p> <p>Three Ireland</p> <p>Tesco Mobile</p> <p>Eir Mobile</p> <p>GoMO</p> <p>48</p> <p>Clear Mobile</p> <p>Lyca Mobile</p> <p>Virgin Mobile</p> <p>Offer: Vodafone have an exclusive offer for international students - get an Irish Vodafone SIM card with €5 preloaded onto it and when you top it up by €20, you will get another €20 for free! Available from Global Galway's reception. Terms & conditions apply.</p> <p>If you want to use your phone from home, it will need to be unlocked to ensure it's compatible with an international SIM card. To check if your phone is already unlocked, simply insert another SIM card and see if the network works on your phone.</p> <p>To get your phone unlocked, you can either:</p> <ul style="list-style-type: none"> • Bring your phone to a phone shop that will charge a service fee. • Contact your network and ask them to unlock it. <p>Whatever option you go with, there are plenty of phone shops across Galway city that can help. See Map</p>

14. Immigration Service Delivery (ISD)	If you are from a country outside the European Union, UK, or Switzerland and have come to Ireland to study for more than 90 days, you must register with the Immigration Service Delivery (ISD) in the Department of Justice. Visit this webpage for more information.
15. Life as a student in Galway	Find out about our student's experience of life and learning at University of Galway through our Global Student Platform .

Orientation

University orientation for international students will take place prior to starting your programme. Updates on dates and locations will be available at <https://www.universityofgalway.ie/global-galway/offerholders/orientation/>

Course Syllabi and Descriptions

LW383 – *Information Technology Law*

The objective of this course is to examine how computers and information and communications technology impact on the law and its administration, and how the law itself has developed new rules to deal with issues raised by these technologies.

MG557 - *Strategic Management*

This module provides rigorous exposure to the concepts, theories, and techniques on which strategic management in the business sector is based. It explores the application of strategic management concepts, theories and techniques in a wide range of business settings. It examines the design, implementation, and maintenance of strategic planning systems and strategic thinking.

MS803 - *Business Data Communications*

The objective of this course is to develop in students an understanding of the fundamentals of modern data communication technologies and to combine them with applications and practices related to a business environment. Topics may include: network concepts; transmission media; OSI and TCP/IP; LAN technologies; network and Internet connectivity; Internet communication model and application layer services; hosting solutions; IP addresses and domain name system; network security technologies – problems and solutions.

MS804 – *Systems Development and Project Management*

The objective of this course is to develop in students an understanding of the fundamentals of project management within the context of information systems development. Topics include the systems development life cycle, project integration, requirements analysis and scope management, time management, cost management, risk management, communications management etc. In addition, different IS development methods will be covered (Waterfall, SDLC, RAD, and Agile methods) as well as business process modelling techniques (e.g. DFDs).

MS805 - *Database Systems*

This module covers foundational topics of significance to database systems, notably: relational database design, data modelling, normalisation, and the use of Structured Query Language (SQL). It approaches these topics from a sociotechnical perspective, i.e., taking into consideration both social and technical aspects.

MS806 - *Business Applications Programming*

The objective of the course is to develop your knowledge and competence in object-oriented programming for the business environment using visual C# programming language.

MS807 - *Information Systems Management*

The objective of this module is to develop students' understanding of the management of information systems in organisations. Topics may include: Information Systems (IS) concepts and challenges; information management and governance; the impact of IS on organisations; roles of IS in changing competitive environments; managing the IT capability; how IS/IT delivers new ways of doing business; funding IS; IS and business value; trends in IS deployment; and current issues in the management of the information systems resource.

MS5107 - *Business Modelling & Analytics*

The objective of this course is to develop students understanding of the role of business analytics in decision making and equip them with solutions used to create scenarios, understand realities, and predict future states. The course focuses on three types of business analytics: descriptive analytics used to gain insight from historical data; predictive analytics used to forecast future business performance; and prescriptive analytics used to recommend decisions using optimisation, simulation etc. Students are introduced to core concepts and technologies of business analytics, such as modelling, analysis, optimisation; data exploration and data mining; forecasting models; decision trees; neural networks; clustering techniques; etc. The course uses real business cases, to illustrate the application and interpretation of these methods. An important feature of the course is the use of MS Excel, an environment familiar to business analysts. All discussed models are provided by the Excel add-ins Analytic Solver Platform and XLMiner plus illustrative examples.

MS5114 - *Advanced Programming for Business Analytics*

Understanding key computational models and concepts for business analytics is important in today's data-driven business environment. In this module, learners will be introduced to computational thinking, experimental methodologies, and empirical methods for training, validation, and testing models within an analytics context. This module will provide learners with a working knowledge of how to prepare datasets, present data visualisations, and support decision-making using data analysis programming.

MS5118 - *Cloud Computing*

The objectives of this course are to develop an understanding of cloud computing in the overall strategy of businesses, and to examine the impacts of cloud computing for individuals and society. Topics may include: salient issues in cloud computing; cloud business models, management & governance; cloud service models; cloud security, privacy and

identity; data storage in the cloud; mobile cloud; virtualisation; app development for the cloud; transitioning business to the cloud; impacts of cloud computing; Ethics, Responsibility and Sustainability in cloud computing; emerging topics in cloud computing.

MS5125 – Cybersecurity Risk Management

The objective of this module is to provide the base knowledge and understanding of core cybersecurity concepts needed for cybersecurity risk management in organisations. The module is structurally aligned with the curriculum of the internationally-recognised CompTIA Security+ professional certification.

MS5126 – Philosophy of Information and Information Ethics

The objective of this course is to develop in students an introductory understanding of philosophy (especially ethics) underpinning Information Systems (IS) research and practice, theory as it is developed and applied in IS, and Research Methods used in IS practice, all whilst learning how to find, read, cite and reference academic papers.

MS5127 – Major Cybersecurity Project

The Major Cybersecurity Project involves individual and team-based activities to apply and refine skills and competencies necessary for a solid foundation for careers in Cybersecurity Risk Management. The Major Cybersecurity Project involves input from globally-leading academic and industry experts in cybersecurity. Activity begins in semester 1 and runs through semester 2.

MS5129 – Storytelling Through Data Visualisation

We live in a world increasingly dominated by data. Data are used to make important decisions, to shape business and political policy, and to understand the fundamental workings of nature. But data can be complicated, mysterious, and difficult to understand. It is more important than ever to be able to communicate data in a way that is comprehensible and memorable. This is the essence of data storytelling. Data storytelling is a skill, and the goal of this course is to help you improve this skill. This is a programming-free module taught using different data analysis and visualisation tools.

MS5130 – Applied Analytics in Business and Society

MS5130 takes an applied approach to data analytics topics, including the processing of various kinds of data, quantitative and qualitative data analysis and interpretation, graphical depiction of data, and the careful and logical documentation of analytics projects. MS5130 approaches these topics from a sociotechnical perspective, i.e., taking into consideration both social and technical aspects. Social aspects are covered through the discussion and application of relevant theories and concepts; technical aspects are covered through the use of the RStudio software tool (including related software packages such as Tidyverse and Quarto).

MS5134 – Cybersecurity Risk Management 2

The objective of this module is to understand cyberhacking approaches; and to refine and apply the skills and knowledge needed to apply risk management frameworks to organisational cybersecurity scenarios and threats.

What is Plagiarism and how is it defined in the University?

****A session on plagiarism will be scheduled early in the semester. Attendance is obligatory****

Plagiarism is taking the credit for someone else's ideas and making out that you thought of these ideas yourself. This is a form of intellectual theft. In third level colleges, plagiarism is a serious offence. It merits a severe penalty. In some colleges, the student loses the entire marks for that assignment. In other colleges, the student is brought before the disciplinary committee. You need to be aware of how serious an offence plagiarism is, and take care to avoid it in your assignments, and particularly in a thesis.

Generative AI

You should not present the output of generative AI tools as your own work in any assignment: [QA220 Academic Integrity Policy](#) identifies this as misconduct. In some circumstances, your instructor may permit a limited use of generative AI tools for certain aspects of preparing for your assignment, as long as you do not present generated outputs as your own work. If you are unsure about what is and is not permitted in a given assignment, speak to your instructor.

Plagiarism is defined by the Academic Council of the University as follows:

1. Plagiarism is the act of copying, including or directly quoting from, the work of another without adequate acknowledgement. The submission of plagiarised materials for assessment purposes is fraudulent and all suspected cases will be investigated and dealt with appropriately by the University following the procedures outlined here [University of Galway Code of Practice for Dealing with Plagiarism located at <https://www.universityofgalway.ie/registrar/policies-forms/#tab2>] and with reference to the Disciplinary Code.
2. All work submitted by students for assessment purposes is accepted on the understanding that it is their own work and written in their own words except where explicitly referenced using the accepted norms and formats of the appropriate academic discipline.
3. Whilst some cases of plagiarism can arise through poor academic practice with no deliberate intent to cheat, this still constitutes a breach of acceptable practice and will be appropriately investigated and acted upon (See University of Galway Code of Practice for Dealing with Plagiarism at <https://www.universityofgalway.ie/registrar/policies-forms/#tab2>).

The J. E. Cairnes School of Business & Economics has two plagiarism advisors, Dr Anatoli Nachev and Ms Mairéad Hogan, who are responsible for dealing with suspected and reported cases of plagiarism and acting in accordance with the University's Code of Practice for Dealing with Plagiarism. Please see <https://www.universityofgalway.ie/registrar/policies-forms/#tab2> for further details.

Examples of plagiarism

- Submitting work as your own for assessment, which has, in fact, been done in whole or in part by someone else or submitting work which has been created artificially, e.g., by a machine or through artificial intelligence. This may be work completed for a learner by a peer, family member or friend or which has been produced, commercially or otherwise, by a third party for a pre-agreed fee (contracted); it may be work in which the learner has included unreferenced material taken from another source(s) (plagiarism); it may be use of a ghost writer to carry out assessed work which is then submitted as the learner's own work; it may be using a previous assignment as submitted by a peer claiming it to be your work; it may be that references have been falsified to give credibility to the assignment and to show evidence of research; it may be a claim for authorship which is false
- Cheating in exams (e.g., crib notes, copying, using disallowed tools, impersonation)
- Cheating in projects (e.g., collusion; using 'essay mills' to carry out the allocated part of the project)
- Selling or simply providing previously completed assignments to other learners
- Misrepresenting research (e.g., data fabrication, data falsification, misinterpretation)
- Bribery, i.e., the offering, promising, giving, accepting or soliciting of an advantage as an inducement for an action
- Falsification of documents
- Improper use of technology, laboratories, or other equipment
- Helping a peer to do their assignment which develops into the helper doing some or all of the assignment
- Sharing or selling staff or institutional intellectual property (IP) with third parties without permission
- Getting someone else to write your essay, report, assignment or thesis.
- Taking material written by someone else, putting your own name to it, and handing it in as your own work.
- Copying bits and pieces out of the work of another student/author and including them in your own essay, report or thesis without acknowledging the source.
- Taking ideas, theories, direct quotations, diagrams, statistics, tables, photographs, graphs from a published

source or the Internet, and including them in your assignment without stating a source.

- Allowing another student to copy your work is also considered to be plagiarism and both students are subject to penalty.
- Plagiarised work in group assignments or projects can be caused by the contribution of a single student, but the group submits and is therefore fully responsible for that. The penalty affects all students in the group.

Examples of plagiarism from published sources

- Direct quotation: Using the exact words of another person without giving them credit for it. Please note that if you use the exact words, you **MUST** enclose them in quotation marks **AND** cite the source using the appropriate style. Citing the source on its own is not sufficient.
- Paraphrasing: Putting someone else's ideas into your own words without giving them credit by citing the source for the ideas.
- Using statistics, tables or a graphic (diagram, figure, picture and so on) without citing a source.
- Summarising material from a source without acknowledging where the ideas came from.

Fair use: Remember, you cannot base your thesis on chunks of material "borrowed" from your reading materials. Instead, you must form your own opinions about the thesis topic and use your reading materials fairly to support your own ideas, making sure to cite the sources of everything you use.

To avoid plagiarism, you must give credit whenever you use: another person's idea, opinion, or theory; any facts, statistics, graphs, drawings - any pieces of information whatsoever that are not common knowledge; quotations of another person's actual spoken or written words; or paraphrase of another person's spoken or written words

Common Knowledge: A lot of information is considered "common knowledge", so you do not have to quote a source for it. For example, Galileo discovered that the earth goes around the sun. Up until his discovery, everyone thought that the sun circled the earth. Even though this new idea was thought up by Galileo, we do not need to cite him as the source - this information (fact) has become common knowledge, something that "everyone knows". As a rule of thumb, any fact that you would be able to find in ten different books, you do not need to cite a source for it. Such facts are "common knowledge".

You must, however, cite a source for any new facts; say for example recent information about the impact of global warming on the climate of Ireland. It is only facts that have become common knowledge that you can use without citing a source.

You must always cite a source for opinions - someone's personal point of view about a fact.

For example, if you are doing an assignment/report/thesis on a social issue, like equality in the workplace, you will probably draw facts from a range of published works, use ideas drawn from your own experiences, and may carry out some primary research like a survey based on a questionnaire. You will need to cite sources for all the opinions and facts taken from your reading materials and explain clearly what information comes from your survey.

Citation and Referencing

Remember, everything you write must be verifiable. If you cite no source for content in your assignment/report/thesis, this means you are claiming you thought of the ideas yourself. But, fresh ideas are rare. Most of our ideas have already been thought of by someone else, or they are based on the ideas of someone else. You need to acknowledge that by citing a source for any ideas you find in your reading materials. You do this by in-text citation linked to a List of Works Cited, or a Reference List placed at the end of your thesis, essay or report.

Each academic discipline has its own method for citing sources. You do not have to know all these different styles. Just be aware that they exist.

The following texts are useful for citing and referencing and are available in the University library and the University bookshop:

Pears, R. and Shields, G. (2004) "Cite them right: referencing made easy", Northumbria University, Newcastle upon Tyne, England ISBN: 1-904794-02-5

Pears, R. and Shields, G. (2005) "Cite them right: the essential guide to referencing and plagiarism", Northumbria University, Newcastle upon Tyne, England ISBN: 0-955121-60-4

Resources

The library has a series of guides on academic integrity, including information on what plagiarism is, how to avoid it and

good practice for citing and referencing. You are advised to familiarise yourself with these.
<https://libguides.library.universityofgalway.ie/CitingReferencing>

You can earn a digital badge from All Aboard by completing this short online course on Referencing, citations and Publications.
<https://www.allaboardhe.ie/referencing/>

MSc Cybersecurity Risk Management Semester I Timetable 2025/26

Time	Monday	Tuesday	Wednesday	Thursday	Friday
09.00-10.00		MS807 Information Systems Management <i>CA111</i>	MS5107 Business Modelling and Analytics <i>ENG-G047</i>		
10.00-11.00		MS807 Information Systems Management <i>CA111</i>	MS5107 Business Modelling and Analytics <i>ENG-G047</i>		
11.00-12.00	Programme Induction Monday, 8 th September 11.30-12.30 Venue: <i>CA243</i>			MS806 Business Applications Programming (Lecture) <i>CA111</i>	
12.00-13.00				MS806 Business Applications Programming (Lecture) <i>CA111</i>	
13.00-14.00	MS804 Systems Development and Project Management <i>AMB-1022 Fottrell Theatre</i>				
14.00-15.00	MS804 Systems Development and Project Management <i>AMB-1022 Fottrell Theatre</i>	**Plagiarism Workshop Tuesday, 23rd September Venue: MY129		LW383 Information Technology Law <i>AC215</i>	MS5125 Cybersecurity Risk Management <i>AMB-1023 Mairtin O Tnuthail Theatre</i>
15.00-16.00			MS805 Database Systems <i>CA111</i>	LW383 Information Technology Law <i>AC215</i>	MS5125 Cybersecurity Risk Management <i>AMB-1023 Mairtin O Tnuthail Theatre</i>
16.00-17.00			MS805 Database Systems <i>CA111</i>		MG557 Strategic Management <i>Emily Anderson Theatre</i>
17.00-18.00					MG557 Strategic Management <i>Emily Anderson Theatre</i>
18.00-19.00					

Notes on Timetable

MS5127 Cybersecurity Risk Management Project – Scheduled online sessions will be delivered once the semester begins. Times will be determined by the project coordinator and will be communicated through Canvas.

****Plagiarism Workshop** – Attendance at this workshop is mandatory.

Additional workshops will be scheduled throughout the semester. Attendance at these is mandatory.