6.1 Module: 8 Entrepreneurial Innovation

Module title			
Entrepreneurial Innovation			
Module NFQ level	**Module number / reference**	**ECTS Value**	**Duration**
9	MSCIB-EI MBAIB-EI PDIBM-EI	**10**	**12 weeks**
Parent programme(s).		**Stage of parent programme**	**Semester No.**
Master of Science in International Business Management		1	2
Postgraduate Diploma in International Business Management		1	2
MBA in International Business		1	2
Teaching and Learning modes	**Proportion** (% of Total Directed Learning)		
Classroom / Face to Face	**100%**		
Workplace			
Online			
Other (Identify)			
Entry requirements (statement of knowledge, skill and competence)			
Learners must hold an honours primary degreed of at least H2.2. standard in business, management or a related discipline or an equivalent qualification from an approved tertiary or professional institution.			
Maximum number of learners per instance of the module	90		
Average (over the duration of the module) of the contact hours per week	6		
Pre-requisite module title(s) (if any)	International Strategy, Global Marketing		
Co-requisite module title(s) (if any)	N/A		
Is this a capstone module? (Yes or No)	No		
Module-specific physical resources and support required per centre (or instance of the module)			
Normal lecture room with internet access and good-quality audio-visual equipment. Flexible seating and tables for group work during classes.			
Specification of the qualifications (academic, pedagogical and professional/occupational) and experience required of staff working in this module.			
Role e.g. Tutor, Mentor etc	**Qualifications & experience required:**		**# of Staff with this profile (WTEs)**
Lecturer	Lecturing staff are required to hold at least a master's degree in Business, Engineering, Management or Leadership or an equivalent professional qualification. Industry experience is beneficial but not a requirement. Ideally, they would also hold a third-level teaching qualification (e.g. the Griffith College Certificate in Education, Learning and Development).		2

Analysis of required learning effort		
***Effort while in contact with staff**	**Minimum ratio teacher / learner**	**Hours**
Classroom and demonstrations	1:90	72
Mentoring and small-group teaching	1:30	
Other (workshops and presentations)		
Independent Learning		
Directed e-learning (hours)		28
Independent Learning (hours)		150
Other hours (specify) **Assignment Preparation/Peer Marking**		
Work-based learning hours of learning effort		
Total Effort (hours)		250

Allocation of Marks					
	Continuous Assessment	**Supervised Project**	**Proctored Practical Exam.**	**Proctored Written Exam**	**Total**
Percentage Contribution	100%				**100%**

6.1.1 Module aims and objectives

This module aims to provide learners with an understanding of the nature of entrepreneurship and innovation, and introduces learners to the roles of the entrepreneur and innovation manager. It is divided into two sections:

The entrepreneurship section of the module is delivered through a highly practice-led business simulation, aiming to facilitate learners in developing and testing their entrepreneurial mind-set. Learners gain an appreciation of the theory and basic principles of creation, analysis and development of business planning for start-ups and mature companies in an entrepreneurial or corporate setting. Learners gain insight into entrepreneurial characteristics and how to apply operational and strategic management principles. Learners work in teams and develop the knowledge, competencies and skills to leverage business information and apply business methods to make typical business decisions, while dealing with uncertainty and time constraints during the decision-making process. With the use of the simulation as an interactive method of learning, business theory and practical (simulated) experience is optimally combined.

The innovation section examines the topic from a management science perspective, enabling learners to know and understand how innovation managers contribute to the strategic management process of technological and business innovation. The module aims to develop learners' knowledge and understanding of the external environments and internal capabilities, resources and processes that underpin innovation, as a user, producer, advisor on or manager of, innovation. The innovation section develops learners' analytical skills to help them consider the impact and interaction of innovation nationally, on sectors, on firms, and individuals.

6.1.2 Minimum intended module learning outcomes

On successful completion of this module, learners are able to:

(i) Conduct systematic research of both primary and secondary nature in the context of generating and developing an innovative business idea.
(ii) Critically apply the theories, tools and techniques used in entrepreneurship for the process of launching a simulated business venture whilst assessing the challenges and opportunities around this venture.
(iii) Employ a critical awareness of current issues and/or new insights in international management and entrepreneurship using a balance of theory and practical skills to facilitate intellectual and professional development.
(iv) Critically reflect upon the nature and processes of organisational innovation, technology commercialisation and entrepreneurial venture creation.
(v) Strategically explore the use of technology and innovation in organisations and reflect how issues concerning sustainability and networks impact on technology innovation management strategies.
(vi) Critically analyse contemporary concepts, issues and theories related to technology and innovation management, and entrepreneurship.

6.1.3 Rationale for inclusion of the module in the programme and its contribution to the overall MIPLOs

Entrepreneurship and innovation are interrelated. Entrepreneurship is the capacity and willingness to develop, organise and manage a business venture, along with any of its risks, to make a profit. Entrepreneurial spirit is characterised by innovation and risk-taking, and is an essential part of a company's ability to succeed in an ever changing and increasingly competitive, global marketplace. The most obvious example of entrepreneurship is the starting of new businesses. Another way to become an entrepreneur is by taking over and developing an existing company. Through business simulation, this module produces graduates with the skills to do that.

Innovation is the process of designing, inventing, developing and implementing new or improved products, services, processes, systems and organisational/business models and structures for the purpose of creating new value for businesses, community, the region and the nation. Graduates require the critical thinking, analytical skills and creativity to explore and manage innovation: from recognising the need and desire to be creative and innovative; thorough analysis of theories and models in technology and innovation management and using imagination to add value to developing structures, systems and incentives that encourage and implement innovation.

Since the world is rapidly moving from the knowledge-based economy to the innovation economy, the discipline and practice of management needs to embrace both entrepreneurship and innovation. The module provides graduates with the knowledge, competencies, skills and confidence required for entrepreneurial innovation in the modern dynamic business environment.

In that context this module supports the achievements of MIPLOs: (i) (ii) (iii) (vii) and (viii).

6.1.4 Information provided to learners about the module

Learners enrolled on this module initially receive a copy of the module descriptor, assessment briefs and assessment strategy. These materials are given directly by the lecturer but also by the year head as part of the Semester Schedule Handbook for award stage modules of the programme. All content is provided on Moodle as well as access to additional content through the library and online resources.

In class, learners are provided with a PowerPoint pack, and extensive reading list, incorporating professional and academic and non-academic sources. Guest lectures will be introduced to ensure practical knowledge and real-life examples will keep the content relevant.

All learners have access to an extensive range of "actual" and "remote access" library resources. The library monitors and updates its resources on an ongoing basis, in line with the College's Library Acquisition Policy. Lecturers update reading lists for this programme on an annual basis as is the norm with all programmes run by Griffith College

6.1.5 Module content, organisation and structure

The Entrepreneurship and Innovation sections run concurrently i.e. in each week the learners attend Entrepreneurship and Innovation lectures on different days of the week and participate in other learning activities over the remaining days.

Entrepreneurship (50%)

Introduction to Entrepreneurship (3%)

- Basic principles of entrepreneurship and business planning
- The nature of entrepreneurship
- Entrepreneurship in Ireland
- Characteristics of an entrepreneur
- New business development versus business takeover

Business simulation and the simulated company (4%)

- Learning Entrepreneurship by doing Entrepreneurship
- What is a business simulation?

The simulated company COPYFIX Inc. (4%)

- Marketing & Sales
- Purchasing
- Research & Development
- Production
- Human Resources
- Finance & Accounting

Strategy development and entrepreneurial decision-making (4%)

- General strategic directions of the company
- Pricing strategies
- Departmental decisions
- The TOPSIM cloud for data entry of entrepreneurial decisions
- The importance of information (internal and external reports) for entrepreneurial decision-making

Entrepreneurial planning of assets, liabilities, revenues, costs, and cash flows (5%)

- Balance Sheet planning
- P&L planning (Income Statement)
- Cash flow planning
- Cash accounting
- Managerial accounting tools for cost planning
- Responses to Calls for Tenders

Mechanisms of successful entrepreneurial decision-making (4%)

- The entrepreneurial decision matrix
    - High complexity – high impact on success
    - High complexity – low impact on success
    - Low complexity – high impact on success
    - Low complexity – low impact on success

Business process optimisation and performance management (5%)

- Business process optimisation
- Investment in environmental parts
- The impact of motivation on business performance

Measuring performance (4%)

- The characteristics of key figures: Financial and Non-Financial Indicators
- KPI systems
- The Balanced Scorecard

Creating and sustaining value and what to do if it doesn't work out (4%)

- The magic triangle of profitability, liquidity, and continuity
- Shareholder value principles
- Value oriented KPIs
- Avoiding entrepreneurial failure
- Entrepreneurial failure in the simulated company
- Learning from entrepreneurial failure

Managing bottlenecks in production departments (4%)

- Production of and productivity planning for more than one product
- Make-or-Buy decisions.

A review of eight entrepreneurial business years (5%)

- Strategic and operational decisions during the simulated business project
- Presentation of lessons learned

Innovation (50%)

Introduction to Innovation and the Module (6%)

- Defining and describing innovation and why it matters
- Strategic advantage through innovation
- Innovation and entrepreneurship
- Scope/levels and types of innovation
- Innovation beyond new products – service, social, technological and digital innovation
- Systems, process and other views of innovation

Socio-technological Context to Innovation (6%)

- The Multi-Level Perspective (MLP) and analysis
- Environmental analysis frameworks, models, techniques and tools
- The importance of socio-technological (ST) contexts and regimes in innovation
- The technology-push concept
- Socio-technological innovation and strategic niche management

- Supportive, enabling, inclusive and sustainable innovation

Innovative Organisations (7%)

- Innovation organisations and networks
- Shared vision, leadership and ambition
- Innovation climate and culture
- Innovation and organisational structure
- Roles of teams and individuals in innovations
- Innovation Audit Framework: *Components of the Framework, Application of the Audit Analysing and Evaluating Audit Outcomes*

Innovation Strategy (6%)

- Corporate and innovation strategy
- Rationalist/Prescriptive v Emergent/Descriptive/Incrementalist approaches
- The Resource Based View
- Competencies and dynamic capabilities

Roadmapping (6%)

- Technology and Product/ Service Roadmapping
- Constructing a Roadmap.
- Using the Roadmap for Strategic Planning

Innovation Systems and Modelling (7%)

- Innovation as a core business system and process
- The Innovation Funnel
- Simplified Model of the Innovation Process
- Generations of Innovation Models
- Open Innovation Model and System

Search and Ideation (6%)

- External search including open innovation
- Internal ideation
- Business Model Innovation

Selection, Connection and Development (6%)

- Selection Processes
- Development of Open and Collaborative Innovations
- System Innovations and Strategic Niche Management

6.1.6 Module teaching and learning (including formative assessment) strategy

A mix of lecture, tutorials and directed e-learning activities focus on the concepts and theory of entrepreneurship and innovation. Case studies focus on how innovation occurs in the 'real world', and workshops help learners build the competencies and skillsets to be entrepreneurial and innovative in their future professional life. The module is structured in a blended learning format – with learners required to attend lectures, participate in a web-based management simulation, read recommended texts, case studies and notes, complete short activities, watch video clips, participate in team work, make presentations and draft weekly reports. Throughout the module, learners consider different aspects of entrepreneurial decision taking and innovation at personal (individual), team, organisation, industry/sector, community, society and national levels.

In Entrepreneurship, a business simulation general management game is used as an interactive teaching and learning system. Based on the principle of "learning business by doing business", the simulation game presents a realistic model of a company.

The Entrepreneurship and Innovation assessments run concurrently with formative activities each week informing the learning for the final summative assessment elements.

6.1.7 Work-based learning and practice-placement

There is no work based learning or practical placement in the module.

6.1.8 E-learning

Griffith College uses Moodle, a virtual learning environment, to support its delivery of e-learning activities in the form of peer-to-peer support based around activities where learners give and receive feedback, forums where learners must contribute, formative quizzes and video links.

6.1.9 Module physical resource requirements

Normal lecture room with internet access and good- quality audio-visual equipment is required, In addition, learners require access to the cloud-based management simulation in order to develop a business model and strategy. The chosen simulated business model is continuously updated in alignment with current economic and technological standards.

6.1.10 Reading lists and other information resources

Primary reading

Blackwell, E. (2017) 'How to Prepare a Business Plan: Your Guide to Creating an Excellent Strategy, Forecasting Your Finances and Producing a Persuasive Plan', London: Kogan Page.

Chesbrough, H. (2017) 'The future of open innovation: the future of open innovation is more extensive, more collaborative, and more engaged with a wider variety of participants', *Research-Technology Management*, 60(1), pp. 35–38.

Fitzsimons, P. and O'Gorman, C. (2022), 'Global Entrepreneurship Monitor (GEM) - The 2021 Survey of Entrepreneurship in Ireland', Enterprise Ireland with the support of the Department of Enterprise, Trade and Employment.

Geels, F.W. (2005) 'The dynamics of transitions in socio-technical systems: A multi-level analysis of the transition pathway from horse-drawn carriages to automobiles (1860-1930)', *Technology Analysis & Strategic Management*, 17(4), pp. 445–476.

Jenkins, A. (2022) 'Understanding Entrepreneurial Failure - Conceptualizing Failure, Taking Stock, and Broadening the Scope of Failure Research', Now Publishers

Phaal, R. (2015) 'Roadmapping for strategy and innovation', *Centre for Technology Management, Institute for Manufacturing, University of Cambridge* (unpublished).

Tidd, J. and Bessant, J.R. (2018) *Managing innovation: Integrating technological, market and organizational change*. 6th edn. Hoboken, Wiley.

Topsim GmbH (2024 or most current version), Mastering Business Operations, Participant Manual.

Secondary reading

Books:

Barringer, B. R. and Ireland, R. D. (2021) Entrepreneurship: Successfully Launching New Ventures. Updated Global Edition, Pearson.

Barrow, C., Barrow, P. and Brown, R. (2021) The Business Plan Workbook: A Step-By-Step Guide to Creating and Developing a Successful Business. 10th Edition, London New York New Dehli: Kogan Page.
Bygrave, W. D. and Zacharakis, A. (2014) Entrepreneurship. Hoboken: John Wiley & Sons.
Dodgson, M., Gann, D. M. and Salter, A. (2008) The Management of Technological Innovation, Oxford, Oxford University Press.
Goffin, K. and Mitchell, R. (2017) Innovation management: effective strategy and implementation. 3rd edn., London, Palgrave.
Kuratko, D. (2023) Entrepreneurship: Theory, Process, and Practice. 12th Edition, New York: South-Western College Publishing
Mintzberg, H., Ahlstrand, B. and Lampel, J.B. (2020) Strategy safari: the complete guide through the wilds of strategic management. 2nd edn. Harlow, Pearson Education.
Ries, E. (2017) The Startup Way: How Entrepreneurial Management Transforms Culture and Drives Growth, Portfolio Penguin

Papers:

Amabile, T. M. (1988) 'A model of creativity and innovation in organizations', Research in Organizational Behavior, 10, pp. 123–67.
Amit, R. and Zott, C. (2009) 'Business model design: an activity system perspective', Long Range Planning, 43 (2-3), pp. 216–26.
Barney, J.B (2001) 'Is the Resource-Based "View" a Useful Perspective for Strategic Management Research? Yes', The Academy of Management Review, 26(1), pp. 41–56.
Boons, F. and Ludeke-Freund, F. (2013) 'Business models for sustainable innovation: state-of-the-art and step towards a research agenda', Journal of Cleaner Production, 45, pp. 9–19.
Dobni, C.B. (2010) 'Achieving synergy between strategy and innovation: The key to value creation', International Journal of Business Science and Applied Management, 5(1), pp.49–59.
Teece, D. (2018) 'Business models and dynamic capabilities', Long range planning, 51(1), pp. 40–49.

E Resources

Central Statistics Office - Ireland (2022) *Innovation in Irish Enterprises 2020,* Available at: https://www.cso.ie/en/releasesandpublications/ep/p-iie/innovationinirishenterprises2020/ (Accessed: 4 January, 2024).

Cranfield University School of Management (2024) *Innovation Audit,* Available at: https://www.som.cranfield.ac.uk/apps/innovationaudit/ (Accessed: 5 January, 2024).

Enterprise Ireland (2024) *About Irish Innovation*, Available at: https://www.enterprise-ireland.com/en/global/about-irish-innovation (Accessed 8 January, 2024).

Hall, B. (2022), How To Effectively Use A Business Simulation In Today's Business Acumen Training, Available at: https://www.forbes.com/sites/forbescoachescouncil/2022/04/01/how-to-effectively-use-a-business-simulation-in-todays-business-acumen-training/
IDA Ireland (2024) Available at: https://www.idaireland.com/scale-with-ida/innovation (Accessed 10 January, 2024).

United Nations (UN) (2015) *Sustainable development goals*. Available at: http://www.un.org/sustainabledevelopment/sustainable-development-goals/ (Accessed: 4 January, 2024).

University of Cambridge/Institute for Manufacturing (2024) *Roadmapping,* Available at: https://engage.ifm.eng.cam.ac.uk/roadmapping/ (Accessed 6 January, 2024).

6.1.11 Specifications for module staffing requirements

Lecturing staff are required to hold at least a master's degree in Business, Engineering, Management or Leadership or an equivalent professional qualification. Industry experience is beneficial but not a requirement. Ideally, they would also hold a third-level teaching qualification (e.g. the Griffith College Certificate in Education, Learning and Development).

6.1.12 Module summative assessment strategy

The module is assessed in two parts. The Entrepreneurship element requires completion of the Entrepreneurship Business Simulation project. Within this project, learners will be required to rigorously defend the strategy and plans that they are advocating. The Innovation element requires completion of a team presentation and report based on the recommendations for their client company. In both assessments, learners are required to demonstrate excellent presentation skills, teamwork and critical understanding of issues and recommendations.

No	Description	MIMLOs	Weighting
1	Entrepreneurship Group Project	(ii) (iii) (iv) (vi)	50%
2	Innovation Group Project	(i) (iii) (iv) (v) (vi)	50%

Reassessment/Repeat assessment strategy: Griffith College regulations state that learners must pass all component elements of the module to be deemed to have passed the module.

- In the event of a learner failing components of / this module, they will be required to submit a new individual repeat assignment which will be made available on Moodle to learners, and which must be submitted as per faculty instructions.
- In the event of a learner failing the group assessment element of this module, a new individual repeat assignment will be made available on Moodle to learners which must be submitted as per faculty instructions.
- In the event of the learner failing the exam, learners will take the re-sit exam at the next available sitting, details of which will be made available to learners via Moodle.

6.1.13 Sample assessment materials

Please see sample assessment supplementary document