

6.7 Module 7: Entrepreneurial Innovation

6.7.1 Headline information about the module

Module title	Entrepreneurial Innovation
Module NFQ level (only if an NFQ level can be demonstrated)	9
Module number/reference	MIBL-EI
Parent programme(s) the plural arises if there are embedded programmes to be validated.	MSc in International Business Management
Stage of parent programme	1
Semester (semester1/semester2 if applicable)	2 (elective)
Module credit units (FET/HET/ECTS)	ECTS
Module credit number of units	10
List the teaching and learning modes	Full-time, part-time
Entry requirements (statement of knowledge, skill and competence)	Learners must hold an honours degree of at least a H22 standard in business or law or an equivalent qualification from an approved tertiary or professional institution.
Pre-requisite module titles	None
Co-requisite module titles	None
Is this a capstone module? (Yes or No)	No
Specification of the qualifications (academic, pedagogical and professional/occupational) and experience required of staff (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)	Qualified to at least masters level, preferably with a third level teaching qualification (e.g. Certificate in Training and Education).
Maximum number of learners per centre (or instance of the module)	60
Duration of the module	12 weeks
Average (over the duration of the module) of the contact hours per week (see * below)	6
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.

Analysis of required learning effort		
Effort while in contact with staff	Minimum ratio teacher / learner	Hours
Classroom and demonstrations	1:60	36
Monitoring and small-group teaching	1:30	21
Other (workshops and presentations)	1:15	15
Independent Learning		
Directed e-learning (hours)		
Independent Learning (hours)		122
Other hours (group project)		56
Work-based learning hours of learning effort		
Total Effort (hours)		250

Allocation of marks (within the module)					
	Continuous assessment	Supervised project	Proctored practical examination	Proctored written examination	Total
Percentage contribution	100				100%

6.7.2 Module aims and objectives

This module aims to provide learners with an understanding of the nature of enterprise and entrepreneurship and introduces the role of the entrepreneur, innovation and technology in the entrepreneurial process. It is divided in two parts.

The entrepreneurship part of the module is delivered through a highly practice-led business simulation aiming to facilitate learners in developing and testing their entrepreneurial mind-set. The business simulation is a representative model of an entire company with all relevant departments. Learners take over the leadership of the (virtual) company and experience first-hand typical conflicts of interest encountered in business management. They learn how to apply business methods by using many sources of information to make typical business decisions, as well as how to deal with uncertainty and time constraints within a team 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 theory sections provide learners with the basic principles of creation, analysis and development of business planning for start-ups and mature companies in an entrepreneurial or corporate setting. Lectures on entrepreneurial characteristics and how to apply operational and strategic management principles are given as well.

The second part examines innovation from a management science perspective, enabling learners to know and improve how they contribute to the strategic process of management of technological and business innovation. It aims to provide knowledge to help learners understand the external environments and internal capabilities, resources and processes that underpin innovation, whether their role is as a user, producer, advisor on or manager of innovation.

The module provides learners with analytical skills to help them consider the impact and interaction of innovation nationally, on sectors, on firms, and individuals. It develops cognitive skills to enable them to compare and contrast the core issues in the management of new technology and innovation by exploring the different concepts and theories associated with different technological and business innovation and management approaches.

Furthermore, evaluative skills in learning how organisations acquire and manage the resources and capabilities necessary for effective approaches to innovation are considered. Creative and systems thinking skills facilitate the use of frameworks and models, and maintenance of contexts, that support strategic action in innovation. Finally, learners gain synthesis skills in professional and practical actions that support researching and investigating current and future issues that are important to an organisation's performance, competitiveness and sustainability.

6.7.3 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 while assessing the challenges and opportunities around this venture
- (iii) employ a critical awareness of current issues and/or new insights in management and entrepreneurship using a balance of theory and practical skills to facilitate intellectual and professional development
- (iv) critically reflect upon nature and processes of organisational innovation, technology commercialisation and entrepreneurial venture creation
- (v) strategically explore the use of technology and innovation in organisations and think about how future issues around sustainability and networks impact on technology innovation management strategies
- (vi) critically analyse contemporary concepts, issues and theories related to technology and innovation management.

6.7.4 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 in order 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.

Innovation is the process of designing, inventing, developing and implementing new or improved products, services, processes, systems and organisational models and structures for the purpose of creating new value for businesses, community, the region and the nation. Technology and business innovation explores aspects of managing innovation: from recognising the need and desire to be creative and innovative; to 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. It examines what management of innovation is, and how technology and invention fuel different kinds of innovation.

Since the world is rapidly moving from the knowledge-based economy to the innovation economy the discipline and practice of management need to embrace both, entrepreneurship and innovation.

6.7.5 Information provided to learners about the module

This module introduces and improves your knowledge and understanding on the interrelationships of entrepreneurship and technology and business innovation. Within this module, aspects of managing a start-up or a mature enterprise as well as change and innovation are covered. From recognising the need and desire to be independent or self-employed, creative and innovative, to analysing different theories, concepts, approaches, frameworks and practice models in entrepreneurship, technology and innovation management. From using individual imagination and team creativity, to developing structures, systems and incentives that encourage and implement innovative ventures. We examine what entrepreneurial qualities, mind-set and management of innovation are, and how technology and invention can fuel different kinds of innovation.

The module is structured to help learners learn more about these topics through blended learning – by attending lectures, participating in a web-based management simulation, reading case studies and notes, completing short activities, watching video clips, preparing for assessment through group work in workshops, participating in team work, making presentations and writing reports.

Throughout, learners will consider different aspects of entrepreneurial decision taking and innovation at personal (individual), team, organisation, industry/sector, community, society and national levels.

There is a mix of lectures that focus on the concepts and theory of business management and innovation; case studies that focus on how innovation occurs in the ‘real world’; and workshops, which will help learners to learn how you can innovate in real life. In addition, there is a business simulation game on general management as an interactive teaching and learning system, which is based on the principle of “learning business by doing business” and which presents a realistic model of a company.

The workshops and the business simulation should also help learners to develop ideas for group and individual assignments that represent 100% of the assessment for the module.

6.7.6 Module content, organisation and structure

Entrepreneurship

Introduction and basic principles of entrepreneurship

- What is entrepreneurial spirit?
- Start-up versus acquisition
- How to create and describe a business idea and model
- What is a feasibility study?
- What do creativity and innovation have to do with entrepreneurship?
- What personal and professional characteristics does an entrepreneur have to have?
- How to learn entrepreneurship through a simulation game

External and internal analysis for business planning

- Economic and industrial development
- What to know about market requirements and target groups
- Vision, mission statement, and corporate identity
- How to choose the right location
- Important factors to be controlled in the first fiscal year (simulation period 1)

Goals and business strategies

- What is the right pricing strategy?
- Target costing
- Investment policy
- New market opportunities
- Product development
- Operational and strategic decision-making in simulation periods 2 and 3

Operational planning

- Profit and loss planning
- Balance sheet planning
- Cash flow planning
- Forms of financing
- Financial structuring
- Operational and strategic decision-making in simulation periods 4 and 5

Implementation and controlling

- Company structuring
- How to optimise business processes
- Evaluation of key performance indicators
- Risk management
- Operational and strategic decision-making in simulation periods 6 and 7

Value orientation

- How to manage value creation and growth
- Sustainability management
- Continuous business planning
- Special values in family businesses
- Operational and strategic decision-making in simulation period 8

Review and debriefing

- Five steps to self-employment
- From start-up to global enterprise
- Summary

Innovation – introduction and challenges

- What is innovation?
- Why innovation matters
- Old question, new context
- Exploring different aspects of innovation:
 - a process view of innovation
 - a creative view of innovation
- Introducing the iceberg of technical change diagram

Innovation in context

- Business environment
- Impact of technology
- The role of the innovation manager
- Success routines in innovation management
- Measuring innovation success

Innovation Processes I: idea generation and NPPD

- Innovation approaches and frameworks
- Innovation models
- Simplified innovation model
- Early-stage innovation techniques and tools

Innovation Processes II: traditional models of innovation

- Input-output models
- WDA model
- Majaro model
- Rothwell's 5G model
- Perri 6 social enterprise model
- Gregory process model
- Chesbrough Open Innovation model

Presentation preparation workshop

Culminating in presentations outlining an innovation strategy in a case-study company

Innovation Processes III: contemporary/alternative models

- Disruptive innovation
- Networked innovation
- Open innovation – old wine in new bottles?
- Knowledge management and technological transfer
- Eco-innovation
- Evolutionary
- Uncontested
- Adaptive

Innovation Processes IV: creativity and innovation

- Individual
- Team
- Leadership

Written report preparation workshop

Innovation processes V: middle stages of innovation

- Opportunity recognition
- Execution strategies
- Programme and project management

Innovation Processes VI: late stages of innovation

- Capture
- Different types of intellectual property
- Routes to utilising intellectual capita

Review and Summary

Culminating in the production of a written report summarising the innovation strategy in a case-study company and the learner's reflections on practical and professional learning from participation in the module.

6.7.7 Module teaching and learning strategy

The module is delivered through a mixture of lectures, workshops, case studies, group discussions (lecturer-led inside class and independently by learner groups outside class), a module set book of notes, additional online readings and activities, group-research and self-directed reflective development. Lectures cover the fundamentals of each topic and include contemporary perspectives on different aspects of entrepreneurship, technology, and innovation thought so that learners can learn a critical and constructive approach to existing and new ideas. In-class online and offline teamwork, group, and whole-class activities and discussions reinforce key learning points. In-class and take-home activities, coupled with research, help learners to 'build' the presentation and written report required for their continuous assessment assignment.

In-class cloud-based management simulation offers, through (virtual) experiences, a high degree of transferable knowledge and skills learners can utilise in their daily work. Extra-class case study and paper readings, viewing of video clips and individual activities concentrate on applying the theoretical aspects of development with practical examples. Action-research practices enable learners to learn and develop through reflection on professional and practical aspects of the module.

6.7.8 Work-based learning and practice-placement

There is no work-based learning or practice-placement within this module.

6.7.9 E-learning

The learner will be guided through in-class cloud-based management simulations in order to develop a business model. This tool expects the learner to reach a high degree of transferable knowledge and skills for their future workplace. The learner is given the opportunity to access, develop and implement more than 150 business simulations. These business models are continuously updated in alignment with current economic and technological standards. The learner must take the conditions for economic success in a dynamic competitive environment into account. The learners must also analyse business performance indicators and reports. Through this mode of delivery, the learner builds upon competencies expected at management level, like working in groups whereby they are faced with the challenge of making decisions effectively and finding a consensus. In addition, the learner is expected to also deepen their analytical thinking and problem-solving skills while been involved in such a task.

6.7.10 Module physical resource requirements

Normal lecture room with internet access and good-quality audio-visual equipment for the taught part of this module. Computer labs are required to complete simulation tasks.

6.7.11 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

Brooker, J. (2013) The Creative Gorilla: Innovate To Learn; Don't Learn To Innovate. St. Albans: Panoma Press Ltd

Tidd, J. and Bessant, J. (2018) Managing Innovation: Integrating Technological, Market and Organizational Change. Chichester: John Wiley & Sons 6th ed.

Secondary reading

Barringer, B. R. and Ireland, R. D. (2018) *Entrepreneurship: Successfully Launching New Ventures*. Pearson

Barrow, C., Barrow, P. and Brown, R. (2018) *The Business Plan Workbook*. London New York New Dehli: Kogan Page

Kuratko, D. (2019) *Entrepreneurship: Theory, Process, and Practice*. New York: South-Western College Publications, 11th ed

Ries, E. (2017) *The Startup Way: The Revolutionary Way of Working That Will Change How Companies Thrive and Grow*. London: Portfolio/Penguin

Spinelli, S. (2016) *New Venture Creation: Entrepreneurship for the 21st Century*. New York: McGraw-Hill Education.

6.7.12 Specifications for module staffing requirements

Lecturers qualified to at least masters level, preferably with a third level teaching qualification (e.g. Certificate in Training and Education).

6.7.13 Module summative assessment strategy

The module is assessed in two parts. The entrepreneurship element requires completion of the entrepreneurship business simulation plus report. Within this project, they 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 Project plus Report	(i) (ii) (iii)	50%
2	Innovation: Presentation and Report	(iv) (v) (vi)	50%

6.7.14 Sample assessments

Please see Sample Assessment Handbook.