

## MODULE DESCRIPTOR

### Module Title

Technology Innovation and Commercialisation

Reference	BSM833	Version	5
Created	May 2021	SCQF Level	SCQF 11
Approved	July 2017	SCQF Points	15
Amended	August 2021	ECTS Points	7.5

### Aims of Module

This module will equip students with a clear understanding of the importance of technology in wealth creation and economic growth. The module will demonstrate that an effective technology strategy is essential in the development and growth of enterprises. Technology development and commercialisation strategy will be comprehensively compared and contrasted in the context of new business start-up and in the existing enterprise. At the end of the module the students will be able to develop an effective strategy for new technology exploitation-either as a business plan for new company or in a fully costed stage gate project proposal for an existing firm to use emerging technology(ies) to increase profit.

### Learning Outcomes for Module

On completion of this module, students are expected to be able to:

- 1 Critically appraise the impact of technological change, technology adoption/diffusion and the key sources of innovation in modern business, particularly in the context of different innovation frameworks and the digitalisation agenda.
- 2 Critically evaluate an innovation project, define and articulate customer needs and develop a coherent product development strategy to exploit an emerging technology.
- 3 Critically formulate an appropriate intellectual property rights (IPR) strategy to protect and secure the proposed innovation.
- 4 Critically appraise a robust stage-gate project proposal to develop the technology and translate it into a viable economic return within an existing enterprise or in a start-up or spin-out setting.

### Indicative Module Content

Lecture content will be drawn from the latest leading texts and cover the key components of developing and executing a technology strategy. Lectures will be complemented by case material and entrepreneur master-classes to ensure that academic theory is complemented with practical examples. The module will cover the following themes, 1. Recognising emerging opportunities and utilise new technology(ies) to create & sustain business growth. 2. Conducting a market assessment, technology feasibility analysis, industry & competitor analysis and an effective business model to exploit the new technology. 3. Protecting technology and securing investment via effective IPR strategies. 4. Writing a stage-gate project proposal or business plan for new technology venture.

### Module Delivery

This module places a real business opportunity at the centre of the learning. Students will work in a project-based environment supplemented with interactive workshops primarily used to develop, direct and manage the project. Students will have two options for their project: Option 1. Working with a company to help them develop and define a technology strategy to grow their existing business. Option 2. Develop a business plan to commercialise a new technology. Students will prepare a fully costed and resourced stage-gate project proposal up to the proof of concept stage for option 1, for option 2 they will prepare a comprehensive business plan.

### Indicative Student Workload

	Full Time	Part Time
Contact Hours	36	36
Non-Contact Hours	114	114
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	150
<i>Actual Placement hours for professional, statutory or regulatory body</i>		

### ASSESSMENT PLAN

*If a major/minor model is used and box is ticked, % weightings below are indicative only.*

#### Component 1

Type:	Coursework	Weighting:	100%	Outcomes Assessed:	1, 2, 3, 4
Description:	Individual assignment				

**MODULE PERFORMANCE DESCRIPTOR****Explanatory Text**

Component 1 comprises 100% of the module grade. To pass the module, a D grade is required.

Module Grade	Minimum Requirements to achieve Module Grade:
<b>A</b>	A
<b>B</b>	B
<b>C</b>	C
<b>D</b>	D
<b>E</b>	E
<b>F</b>	F
<b>NS</b>	Non-submission of work by published deadline or non-attendance for examination

**Module Requirements**

Prerequisites for Module	None.
Corequisites for module	None.
Precluded Modules	None.

**INDICATIVE BIBLIOGRAPHY**

- 1 BARRINGER, B.R. and IRELAND R.D., 2022. *Entrepreneurship : successfully launching new ventures*. 6th ed. NJ : Pearson Prentice Hall.
- 2 COOPER, R.G., 2017. *Winning at new products: creating value through innovation*. 5th ed. New York: Perseus. *ebook*
- 3 SHANE, S.A., 2014. *Technology strategy for managers and entrepreneurs*. Pearson/Prentice Hall.
- 4 TROTT, P. 2020. *Innovation management and new product development* . Pearson Education.