



<b>Title:</b>	Technology Entrepreneurship <b>APPROVED</b>
<b>Long Title:</b>	Technology Entrepreneurship
<b>Module Code:</b>	MGMT8020
<b>Duration:</b>	1 Semester
<b>Credits:</b>	5
<b>NFQ Level:</b>	Advanced
<b>Field of Study:</b>	Business & Management
<b>Valid From:</b>	Semester 1 - 2016/17 ( September 2016 )
<b>Module Delivered in</b>	<a href="#">2 programme(s)</a>
<b>Module Coordinator:</b>	CAROLINE O REILLY
<b>Module Author:</b>	CAROLINE O REILLY
<b>Module Description:</b>	This module will provide learners from technology based programmes with the tools to maximise the probability of success for High Technology start up companies. The module will provide the needed business know how, to identify business opportunities, evaluate the commercial viability of a venture and the ability to clearly identify the legal issues associated with a new venture. Students are taught the skills and knowledge of entrepreneurship and get to practice the entrepreneurial process. The module will also afford students the opportunity to interact with other students on multidisciplinary teams where possible.
<b>Learning Outcomes</b>	
<i>On successful completion of this module the learner will be able to:</i>	
LO1	Examine the role and importance of technology entrepreneurship in society.
LO2	Identify the key issues involved in enterprise creation and apply criteria to identify and evaluate business opportunities.
LO3	Prepare a feasibility study plan.
LO4	Identify value in Intellectual Property and evaluate effective intellectual property rights solutions for technology based business proposals.
LO5	Prepare financial projections linked to feasibility study plans.
<b>Pre-requisite learning</b>	
<b>Incompatible Modules</b>	
<i>These are modules which have learning outcomes that are too similar to the learning outcomes of this module. You may not earn additional credit for the same learning and therefore you may not enrol in this module if you have successfully completed any modules in the incompatible list.</i>	
Entrepreneurship 1	
<b>Co-requisite Modules</b>	
No Co-requisite modules listed	
<b>Requirements</b>	
<i>This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed. You may not enrol on this module if you have not acquired the learning specified in this section.</i>	
None	
<b>Co-requisites</b>	
No Co Requisites listed	

**Module Content & Assessment**

**Indicative Content**

**The Entrepreneur**

The nature and importance of entrepreneurs, decisions, process, role in economic development, background and characteristics. Technology entrepreneurship and its contribution to society and economic development.

**Opportunity Recognition**

Creativity and the Business Idea. Sources of new ideas, methods for generating ideas and screening, creative problem solving, Disruptive technologies, network effect & Standardisation, Product development cycle. Innovation Process. Technology versus Business models.

**Feasibility Analysis: Testing the Business Concept**

The founding team, Analysing the industry and Market, Analyzing product/service risks and benefits. Outside People Resources, Financial Resources, analyzing financial risks and benefits. Moore's Crossing Chasm. Technology validation.

**The Feasibility Plan**

Definition, scope and value of feasibility, evaluation of feasibility plans, writing the feasibility plan, content of a business plan, using and implementing the business plan, why some businesses fail?

**Legal Issues and Intellectual Property Rights**

The legal form options of the new venture. Intellectual Property Rights; patents, trademarks, copyright protection and licensing agreements. Commercialisation issues. Licensing versus Spin-out.

**New Venture Financing and Financial Planning**

Financial requirements of the high technology venture over the development cycle. The costs and benefits of different types of business financing. Strategies for attracting venture capital. The components of the financial plan; cash flow projection, profit and loss account, balance sheet and break even analysis. Investment appraisal. R&D spend and payback.

**Entrepreneurship in Practice**

Case studies in Entrepreneurship and business proposals. Communicating the opportunity and making a presentation.

Assessment Breakdown	%
Course Work	100.00%

Course Work				
Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Essay	Technology Entrepreneurship and Idea generation	1,2	30.0	Week 5
Presentation	Group Idea Generation Exercise e.g elevator pitch format	1,2,3,4,5	20.0	Week 8
Written Report	Prepare a Feasibility Study Plan e.g. individual plans based on adoption of an idea from group idea generation exercise but not limited to this source.	2,3,4,5	50.0	Sem End

No End of Module Formal Examination

Reassessment Requirement
<p><b>Coursework Only</b> This module is reassessed solely on the basis of re-submitted coursework. There is no repeat written examination.</p>

The institute reserves the right to alter the nature and timings of assessment

**Module Workload**

<b>Workload: Full Time</b>				
<i>Workload Type</i>	<i>Workload Description</i>	<i>Hours</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
Lecture	Delivery of course material and involvement of guest lecturers	2.0	Every Week	2.00
Lab	Seminar/workshops: Discussion forum	1.0	Every Week	1.00
Independent & Directed Learning (Non-contact)	Learner self directed study	4.0	Every Week	4.00
Total Hours				7.00
Total Weekly Learner Workload				7.00
Total Weekly Contact Hours				3.00

<b>Workload: Part Time</b>				
<i>Workload Type</i>	<i>Workload Description</i>	<i>Hours</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
Lecture	Delivery of course material, involvement of guest lecturers and discussion.	2.0	Every Week	2.00
Directed Learning	Independent study and group work.	5.0	Every Week	5.00
Total Hours				7.00
Total Weekly Learner Workload				7.00
Total Weekly Contact Hours				2.00

## Module Resources

### Recommended Book Resources

- Robert Hisrich, Michael Peters, Dean Shepherd 2012, *Entrepreneurship*, 9th Ed., McGraw-Hill/Irwin [ISBN: 0078029198]

### Supplementary Book Resources

- Kathleen Allen 2015, *Launching New Ventures-An Entrepreneurial Approach*, 7th Ed., Cengage Learning [ISBN: 1305102507]
- Joe Tidd and John Bessant 2015, *Innovation and Entrepreneurship*, 3rd Ed., Wiley [ISBN: 9781118993095]
- Natasha Evers, James Cunningham, Thomas Hoholm 2014, *Technology Entrepreneurship*, 1st Ed., Palgrave Macmillan [ISBN: 9781137020109]
- Jack M. Kaplan, Anthony C. Warren 2010, *Patterns of Entrepreneurship Management*, 3rd Ed., Wiley [ISBN: 9780470169698]
- Geoffrey Moore 2014, *Crossing the Chasm;Marketing and Selling Disruptive Products to Mainstream Customers*, 3rd Ed., Collins Business Essentials
- Thomas Cooney 2010, *Entrepreneurship Cases*, Lambert Academic Publishing [ISBN: 9783838355641]
- Eric Ries 2011, *The Lean Start-Up;How constant innovation creates radically successful businesses*, 1st Ed.
- Brian O'Kane, *Starting a Business in Ireland*, 6th Ed., Oak Tree Press [ISBN: 9781904887379]
- Peggy A Lambing & Charles R. Kuehl 2014, *Entrepreneurship*, 4th Ed., Pearson UK [ISBN: 101292040009]
- Frank Wood & Alan Sangster 2015, *Business Accounting*, 13th Ed., Pearson UK [ISBN: 9781292084664]
- Ron Immick & Brian O Kane, *Steps to Entrepreneurship; Centre for Innovation and Partnerships*, Oak Tree Press
- Jeff Pert, *Tomorrow's Business - A simple and practical guide to stretch the performance of your business* [ISBN: 1-86076-257-3]
- Diane Mulcahy 2005, *Venturing Forward: A Practical Guide to Raising Equity Capital in Ireland*, 1st Ed., Oak Tree Press Ireland [ISBN: 1-904887-04- X]
- William Cornish, David Llewelyn, Tanya Alpin 2013, *Intellectual Property: Patents, Copyrights, Trademarks & Allied Rights (Classic Series)*, 8th Ed., Sweet & Maxwell UK

### Supplementary Article/Paper Resources

- *International Small Business Management*
- *Journal of Small Business Management*
- *Entrepreneurship Theory and Practice*
- *European Small Business Journal*
- *Journal of Business Venturing*
- *Research and Development Management*
- *Harvard Business Review*
- *Entrepreneurship and Personal Development*
- *Strategic Entrepreneurship Journal*

### Other Resources

- Website: [www.startingabusinessinireland.com](http://www.startingabusinessinireland.com)
- Website: [www.startingabusinessinBRITAIN.com](http://www.startingabusinessinBRITAIN.com)
- Website: [www.growingabusinessinireland.com](http://www.growingabusinessinireland.com)
- Website: [www.spotcheckonline.com](http://www.spotcheckonline.com)
- Website: Irish Investor Network <http://www.irishinvestmentnetwork.ie>
- Website: Irish Venture Capital Association <http://www.ivca.ie>
- Website: Patents Office <http://www.patentsoffice.ie>
- Website: European Patents office <http://www.epo.org>



**Module Delivered in**

<b>Programme Code</b>	<b>Programme</b>	<b>Semester</b>	<b>Delivery</b>
CR_EELES_8	<a href="#"><u>Bachelor of Engineering (Honours) in Electronic Engineering Sept 2020 transition schedule</u></a>	8	Mandatory
CR_ESENT_8	<a href="#"><u>Bachelor of Engineering (Honours) in Sustainable Energy Engineering</u></a>	7	Elective