

Module code	BTE504	Level	5
Module title	Product Development Lab	Credit value	20
Common/Core/ Elective	Core	ECTS Credits	10
		Notional learning hours	200
Courses on which the module is taught	BSc (Hons) in Business, Technology and Entrepreneurship	Teaching Period	Spring

1. Module description

This module provides an exciting opportunity for you to explore, business problem-solving and experimentation, in the field of innovation and new product/service development. You will learn the fundamentals of product development, planning and design - all shaped around business challenges which impact consumers and societies globally.

This interactive and action-oriented module is designed stimulate both creative thinking and critical debate around innovation and market needs. You will explore solutions - through creative thinking, the informed application of models, and experimental laboratory work. You will explore topics such as product architecture, business scoping, customer insights, market opportunities, prototyping, intellectual property, and product branding.

2. Learning outcomes

Upon successful completion of this module you will be able to:

Innovation (MLO2)

Analyse and develop digital value propositions, combining curiosity and creativity.

Decision Making (MLO 04)

Analyse and reflect on different ideas, including your own, to inform decision making when developing technical solutions.

Digital Tools and Data (MLO 06)

Analyse and use digital tools and data responsibly in unfamiliar, well defined environments for developing solutions and prototypes.

Discipline Skills (MLO 08)

Employ discipline specific knowledge, techniques and tools and apply them in a practical lab setting

3. Learning and teaching methods

This module is laboratory focused: challenge-based through an experimental, immersive experience, designed to combine theory and practice, which encourages a business and/or wider social problem, or indeed opportunity. Knowledge is acquired through a series of task-centric activities, with reflexivity and critical reflection. Throughout the term you will undertake a series of laboratory experiments and write-ups (i.e. pitch, brief, mapping etc.) enclosed around indicative module content topics.

This approach stimulates creativity through fact and value-based, critical thinking through experimentation and discovery. You will be encouraged to apply creative thinking and

practice within the field of technology. Content will be delivered in an interactive, 'blended-learning' environment. This will enable and catalyse a pragmatic lab-based approach in new product and/or service thinking, mapping and the planning for testing, in-line with real-world supplier-partner stakeholder commissioning and investor sourcing.

Varied learning and teaching methods are employed on this module, such as: workshop/ lab sessions, interactive tutorials, guided activities, self-directed exercises, and group discussions.

Learning hours	
Directed learning	48 hours
Workshops/Labs	48 hours
Guided/Self-guided learning	152 hours
Total	200 hours

4. Assessment, formative feedback and relative weightings

Assessment 1

Other: Video Presentation (Group Assessment)

Weight (%): 40%

Word Count or Equivalent: 10 minutes

Your group is required to create a video presentation on a digital product/service which solves a business and/or society problem. You will be evaluated on your ability to think, problem-solve through opportunity creativity, and the ability to design an innovation and showcase your collective entrepreneurial mindset.

Assessment 2

Report

Weight (%): 60%

Word Count or Equivalent: 2000 words

Drawing from your weekly lab notes, you will introduce your fully comprehensive product/service idea analysis and plan. As such, you will write an individual, critical reflection and analysis report on the product development. The report should demonstrate your sound knowledge and application of the frameworks/models covered during the module and other modules where appropriate, leading to a prototype (i.e. the results of the experiment, design and use of technology) of the proposed product/service.

Each summative assessment will be preceded by an opportunity of formative assessment accompanied by formative feedback.

Mapping of assessment tasks for the module

Assessment tasks	MLO2	MLO4	MLO6	MLO8
Video Presentation	✓	✓	✓	
Lab Report	✓	✓	✓	✓

5. Indicative resources

Aaboen, L and Aarikka-Stenroos, L. (2017) Start-ups initiating business relationships: process and asymmetry: IMP Journal, Vol. 11 Issue 2, p230-250.

Barringer, B.R. (2009) Preparing Effective Business Plans : Pearson, London.

Bennett, R. (2016) Factors contributing to the early failure of small new charity start-ups : Journal of Small Business and Enterprise Development, 2016, Vol. 23, Issue 2, pp. 333-348.
Meyer, M.H. & Crane, F.G. (2014) New Venture Creation, An Innovator's Guide to Entrepreneurship, 2nd Ed., SAGE, California, USA.

Mullins, J.F. (2013) The New Business Road Test : FT/Prentice Hall, London.

Otto, K. & Wood, K. (2001) Product Design, Pearson, USA. Reading and audio-visual.

<https://www.pearson.com/uk/educators/higher-education-educators/program/Otto-Product-Design/PGM415733.html?tab=overview>

Paradkar, A., Knight, J. & Hansen, P. (2015) Innovation in start-ups: Ideas filling the void or ideas devoid of resources and capabilities?: Technovation, Elsevier.

Trott, P. (2017) Innovation Management & New Product Development, 6th Edition. Pearson, London. Reading and audio-visual.

<https://www.pearson.com/uk/educators/higher-education-educators/program/Trott-Innovation-Management-and-New-Product-Development-6th-Edition/PGM1101395.html?tab=contents>

Academic Journals: Entrepreneurship Theory and Practice, Enterprise & Society, Frontiers of Entrepreneurship Research, Global Entrepreneurship Monitor, Journal of Entrepreneurship, Business and Economics, Journal of Small Business Management

Websites

Bplans – <http://www.bplans.co.uk/>

Dragons' Den (U.S. & U.K. search via YouTube, Google video, BBC iPlayer, etc.)

www.bizplani.com – contains a virtual business plan template with guide notes

www.entreworld.org is the Kauffman Center, USA - academic and practical

advicewww.sba.gov/smallbusinessplanner/index.html

www.entrepreneur.com/businessplan/