



EST 1892

**London
South Bank
University**

School of Engineering

Module Guide

Technology Evaluation and Commercialisation

EEB_7_713

Level 7

Table of Contents

1.	Module Details	3
2.	Short Description	4
3.	Aims of the Module	4
4.	Learning Outcomes	4
5.	Assessment of the Module.....	4
6.	Feedback	5
7.	Introduction to Studying the Module	5
7.1	Overview of the Main Content.....	5
7.2	Overview of Types of Classes	5
7.3	Importance of Student Self-Managed Learning Time	5
7.4	Employability	5
8.	The Programme of Teaching, Learning and Assessment.....	6
9.	Student Evaluation.....	6
10.	Learning Resources.....	6
10.1	Core Materials	6
	NOTES.....	8

1. MODULE DETAILS

Module Title:	Technology Evaluation and Commercialisation
Module Level:	7
Module Reference Number:	EEB_7_713
Credit Value:	20
Student Study Hours:	200 hours
Contact Hours:	36 hours
Private Study Hours:	164 hours
Pre-requisite Learning (If applicable):	None
Co-requisite Modules (If applicable):	None
Course(s):	Common to all MSc courses in Engineering Full-Time and Part-time
Year and Semester	Year 1 (MSc), Semester 2
Module Coordinator:	Prof. Simon Philbin
UC Contact Details (Tel, Email, Room)	Tel: 020 7815 7559/Email: philbins@lsbu.ac.uk /Rm: T816
Teaching Team & Contact Details (If applicable):	Prof. Simon Philbin
Subject Area:	Engineering
Summary of Assessment Method:	Coursework

2. SHORT DESCRIPTION

This guide tells you how the teaching will be structured and how you will be assessed. The main purpose is to enable you to organise your own time and efforts to obtain the most out of the module. Preparation and reading are essential to making progress and there will be little time for teacher led revision, until the end of the module.

In this module you will follow a prescribed algorithm in order to evaluate the business opportunity that can be created from a technology's unique advantages.

You will be guided towards identifying a technology project idea that you will evaluate for its business potential. To do this you will conduct detailed research and analysis following a prescribed algorithmic model, in order to evaluate the business potential of this technology idea. The outcomes from this will serve as the basis for implementation of the selected technology from a business perspective. Therefore, you will develop the appropriate commercialisation strategy and write the business plan for your high-tech start-up company.

3. AIMS OF THE MODULE

The aim of this module is to teach students how to use an algorithmic approach to enable them to evaluate the business opportunity that can be created from the technology's unique advantages.

4. LEARNING OUTCOMES

At the end of the module, students will be able to undertake the actions described in each of the four areas below.

Knowledge and understanding

- To use the tools, methods and processes of the algorithmic approach to assess the commercial potential of innovative products within a selected technology, assess and evaluate technology's unique advantages.
- Formulate appropriate product concepts, features, attributes and benefits.
- Research and evaluate product markets. Produce a business plan for their high technology enterprise.

Intellectual skills

- To be able to recognise the innovation process and its impact on enterprise and apply a systematic process to evaluate a selection of technologies for their commercialisation potential.

Practical skills

- Perform basic technical, organisational, legal, financial, market and operational assessments. Define and adhere to appropriate decision-making criteria.

Transferable skills

- To effectively communicate and critically evaluate observed results in a technical format, analyse the business potential of high technology projects using a systematic approach and contribute and work as part of a team.

5. ASSESSMENT OF THE MODULE

All coursework are summative, formal reports will contain formative feedback.

There are two parts:

1. Formal report evaluating technologies suitable for commercialisation in accordance with the algorithmic approach used (**50%**).
2. Formal report to include a business plan and strategic analysis of the commercialisation of the technology identified in part 1 (**50%**).

6. FEEDBACK

The coursework feedback will be given in two weeks after the submission deadline.

7. INTRODUCTION TO STUDYING THE MODULE

The course sequence relies on team meetings with students to work on real commercialisation projects. The module runs on Wednesdays from 9am to 12 noon.

The class meets in 12, three-hour sessions. A typical session includes 1-2 hours of lecture with the remaining time used for discussions and project work.

This module is designed with the aim to commercialise a high technology idea and therefore each student has a responsibility to establish and maintain communication with their team members.

During class each week, an instructor will present a topic and assignment to facilitate development of the technology evaluations, business opportunity, and eventually the business plan. Many of these assignments require technology and market research that involves contacting appropriate industry and technical experts for information.

7.1 Overview of the Main Content (Indicative)

Weeks 1, 2, 3	Research product idea assessment
Weeks 4, 5, 6	Product definition and value proposition
Weeks 7, 8	Market research and assessment
Weeks 9, 10	Functional assessments of product concepts
Weeks 11, 12	Strategic assessment of commercial viability

7.2 Overview of Types of Classes

The teaching will consist of lectures and tutorial sessions. All the main points of the subject matter will be covered in the lectures.

7.3 Importance of Student Self-Managed Learning Time

This module focuses on developing those skills that are needed by those practicing in the field of high-technology enterprise. Therefore, students are expected to devote their self-study time towards identifying any obstacles to their technology commercialisation idea. The worksheets that are provided in the class are a good starting point for students to identify aspects about their idea that merits further investigation.

Consequently, independent research into available tools and methods is an important aspect of the module.

7.4 Employability

Students who successfully complete this module will be able to work in the area of industry and commerce that specialises in evaluating prospects of unknown technologies.

8. THE PROGRAMME OF TEACHING, LEARNING AND ASSESSMENT

Teaching will consist of 13 three-hour sessions (lectures intermixed with tutorials). Lectures will be classroom based and typically a lecture would last one-two hours with the remaining time dedicated to tutorial work in groups.

It should be clear to you that you will need to spend some additional time on each during self-study mode. All the sessions will be held in BR-253 (Borough Road).

Week 1	Wed 29 th Jan	Session 1: Lecture and TEC Algorithm
Week 2	Wed 5 th Feb	Session 2: Lecture and TEC Algorithm
Week 3	Wed 12 th Feb	Session 3: Lecture and TEC Algorithm
Week 4	Wed 19 th Feb	Session 4: Lecture and TEC Algorithm
Week 5	Wed 26 th Feb	Session 5: Lecture and TEC Algorithm
Week 6	Wed 4 ^h Mar	Session 6: Lecture and TEC Algorithm
Week 7	Wed 11 th Mar	Session 7: Lecture and TEC Algorithm
Week 8	Wed 18 th Mar	Session 8: Lecture and TEC Algorithm
Week 9	Wed 25 th Mar	Session 9: Lecture and TEC Algorithm
Week 10	Wed 1 st Apr	Session 10: Lecture and TEC Algorithm & Report submission
Week 11	Wed 29 th Apr	Session 11: TEC Algorithm
Week 12	Wed 6 th May	Session 12: TEC Algorithm
Week 13	Wed 13 th May	Session 13: TEC Algorithm & Business plan submission

This module is assessed by 100% coursework in the shape of a portfolio assignment. When do you have to produce the portfolio?

Submission Deadline for Formal Report (Assignment 1): 3pm Wed 1st April 2020

Submission Deadline for Business Plan (Assignment 2): 3pm Wed 13th May 2020

Please ensure the team member submitting the work does so well in advance of the deadline time of 3pm since late submissions FOR ANY REASON will be heavily capped affecting the grades of everybody in the team.

Both of the reports should be submitted via Turnitin on Moodle in the Assignment submissions folder.

Late submission should conform to university regulations and will require a late submission form.

Marks will be capped at 50% deducted for late submission of work, unless special circumstances prevail to delay submission.

9. STUDENT EVALUATION

Student evaluation helps to improve the quality of the module and we are always keen to receive feedback on the module from students.

10. LEARNING RESOURCES

10.1 Core Materials

The TEC Algorithm is not published in any textbook. It was developed at North Carolina State University in the late 1990s and has been disseminated through personal involvement of researchers rather than through publications.

As such there is no core text and all of the lecture notes will be provided in the class and via the VLE. However, the following textbooks would be useful as optional reading material:

- Day, G. S., Schoemaker, P. J., & Gunther, R. E. (Eds.). (2004). *Wharton on managing emerging technologies*. John Wiley & Sons.
- Mullins, J. (2012). *The new business road test: What entrepreneurs and executives should do before writing a business plan*. Pearson UK.
- Bezanov, G. (2009). *Research planning and management*, MIG Consulting Ltd, London.

Innovation Charter

This Innovation Charter is a commitment to you, your group members and all relevant stakeholders in the module. The following structure might be helpful but there is no set format.

Team ID/Name: _____

1. Scope of the project – state your personal goals then put together one or two sentences summarising the ultimate goals of the team.
2. Time commitment of each member over the course of the module.
3. Work Plan – set down the action required to achieve the stated goals.
4. Other obligations – list specifically for each member, other commitments, responsibilities or confidentiality obligations that may pose a conflict of interest to the activities of the group.
5. Signatures and contact details for each team member.