Module Specification

Module Summary Information

1	**Module Title**	Technology in Context
2	**Module Credits**	20
3	**Module Level**	3
4	**Module Code**	CMP3011

5	Module Overview

This module will provide you with an introduction to the computing environment, different computing disciplines, and how they relate to each other. The module will consider how technology operates within their context, which will allow you to develop a broad approach to understanding how technology works and inform your future degree and career choice.

It will draw the attention towards the fundamental concepts surrounding technology, stem from the fact that technology has become one of the central determinants of economic success and the way we live and work. This module will use case studies to introduce and explore different issues and the assessment will require you to relate the topics covered to a real-world scenario.

Learning and Teaching

The module will be taught using combined interactive tutorial sessions. A case study approach to learning and teaching will be utilised throughout the module and assessment, using live case studies involving organisations where possible. During the module students will work individually and in groups to explore different ways to apply technology to a range of scenarios.

Flipped learning methods will be used throughout the module whereby you are expected to study the theoretical aspects in your own time and the practical learning takes place in class within an interactive dynamic environment.

Independent learning will be supported by a range of materials and activities delivered using Moodle. This will be supported by:

- Directed reading will be provided on Moodle before each interactive tutorial.
- Tutorial and case-based resources (such as videos, quizzes, online tutorials and example case studies).
- Recommended reading to broaden understanding of the theory and practice introduced in the module.
- Quizzes to check understanding of key theories and their practical application, providing immediate formative feedback.
- Guidance on how to approach the assessment and opportunities to submit draft work for formative feedback.

This module will be supported with 2hrs of extra module support session.

6	Indicative Content

This module will cover the following subject matter:
- Introduction to Computer Technology
- Database Technology
- Computers Systems
- Forensics Computing
- Digital Media Technology
- Sound Engineering
- Computer Games Technology

Pre-session Activities/Learning	Session Topic/s	Post-session Activity
Directed introductory reading via Moodle	Introduction to module and Computer Technology	Follow up reading and Moodle activities
Pre-reading and Moodle activities	Computer Systems	Follow up reading and Moodle activities
Directed reading into benefits and implications of Information Technology in organisations	Impact of IT on Business Systems	Group exercise: Researching the impact of IT on an organisation from the given scenarios
Directed reading into Technology Assessment	Principles of Technology Assessment	Group exercise: Suggesting suitable technologies to support organisations in the given scenarios
Pre-reading of a case study	Data and Database Technology	Follow up reading and Moodle activities
Individual research on the chosen technology area	Digital Media Technology	Further research on the company to be visited
Pre-reading and Moodle activities	A practical session accompanying this introduction to Games Technology where you will work on developing, with instruction, a game prototype within the Game Middleware Engine, Unity3D.	Follow up reading and Moodle activities
Pre-reading and Moodle activities	Sound Engineering and Technology	Follow up reading and Moodle activities
Review Moodle materials in preparation for sessions.	Lecture: CyberCrime vs. Forensics Practical Session: Forensic Imaging and File analysis	Complete the online Moodle quiz for CyberCrime and Forensics
Review Moodle materials in preparation for sessions.	Practical Session: Password Cracking Practical Session: Data Hiding and Steganography	Complete the online Moodle quiz for password cracking, data hiding and steganography.
Pre-reading of a case study	Introduction to Networks and Networks in Daily lives	Follow up reading and Moodle activities

Pre-reading on the chosen technology area	Communications in the LAN and building a home network	Write up key points learnt from the visit

7	Module Learning Outcomes **On successful completion of the module, students will be able to:**
	1	Identify different technologies and their use in business.
	2	Perform skills audit and assess the technology and skills required.
	3	Reflect on your chosen course using relevant information.

8	Module Assessment			
Learning Outcome				
	Coursework	**Exam**	**In-Person**
1-3	X		

9	**Breakdown Learning and Teaching Activities**	
Learning Activities	**Hours**
Scheduled Learning (SL) includes lectures, practical classes and workshops, peer group learning, Graduate+, as specified in timetable	72
Directed Learning (DL) includes placements, work-based learning, external visits, on-line activity, Graduate+, peer learning, as directed on VLE	68
Private Study (PS) includes preparation for exams	60
Total Study Hours:	200