

Module code	BTE403	Level	4
Module title	Technology Bootcamp	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 embraces a 'bootcamp' ethos – an intense, immersive experience, designed to combine theory and practice in a condensed format, which encourages a learning environment where knowledge is shared with reflexivity and actionable outcomes.

You will focus on the practical application of key technological concepts, whilst being immersed in a technologically oriented environment through intensive and authentic skills-based learning sessions. In this module, you will appraise and analyse key technologies such as artificial intelligence (AI), machine learning, data analytics, metaverse applications, and immersive technologies (VR & AR). By manipulating and experimenting with these technologies in practice, you will have the opportunity to identify opportunities for innovation and examine in-depth the technological eco-system. You will learn to identify the opportunities and challenges for these new digital technologies within business and society, whilst also reflecting on the ethical and moral implications of them.

2. Learning outcomes

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

Innovation (MLO 02)

Define and compare design value propositions, combining technology-focused curiosity and creativity

Digital Tools and Data (MLO 06)

Use digital tools and data and in the context of technology-focused design and analysis

Discipline Knowledge (MLO 07)

Explain theories, concepts and facts in the field of technology relevant to the expected tasks

Human and Environmental Impact (MLO 10)

Explore the impact of digital architectures and technology on people and the environment

3. Learning and teaching methods

You will undertake a series of bootcamps of varying lengths and formats, wrapped around indicative module content topics. The aim is to immerse you in a technologically focused environment through the provision of intensive and authentic skills-based learning sessions. There is a strong emphasis on learning through applied experience.

Varied learning and teaching methods are employed on this module, such as: workshop/ lab sessions, self-directed practical exercises, case study work, and group discussions. Each week, you will gain hands-on knowledge of a variety of key technologies that underpin the fabric of

business and society and have the impact to shape the future, such as artificial intelligence, machine learning, data analytics, virtual and augmented reality, and the metaverse. You will explore connections between technologies as part of larger digital ecosystem, whilst having the opportunity to consider the moral, ethical and societal implications of such technologies.

Each workshop will provide you with an immersive experience of applied experimentation and discovery. You will experiment with technologies in practice whilst reflecting on how to address real-world problems through them. You will be invited to produce weekly outputs, using a range of methods to analyse, organise and communicate insights.

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

Online assessment

Weight (%): 40%

Word Count or Equivalent: 200 words each entry

Working individually, you will be required to produce a series of weekly blogs which reflect on the main learnings for the specified week. Reflections can include (but are not limited to) how the technologies explored work, the potential of such technologies, challenges for deployment/ implementation, business and societal impacts, etc. Weekly posts can either be in a written format or adopting other technical-visual tools (video, voice recordings, newspaper clippings, etc).

Assessment 2

Presentation (Group Assessment)

Weight (%): 60%

Word Count or Equivalent: 10 minutes

Drawing inspiration from your weekly blog and classroom activities, you should propose a digital/ technological solution for a business customer. Your group will be presented with a live business brief, meaning you will not only be given a set of written requirements, but you will also have the opportunity to ask your potential customer questions. You will then have to propose a practical design, justifying why this would work and reflecting on its impact. You will be evaluated primarily on how you justify your ideas rather than on technical accuracy. The final design can include any of the technologies discussed in class.

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	MLO6	MLO7	ML10
Online assessment		✓	✓	✓
Presentation	✓	✓	✓	✓

5. Indicative resources

Boczkowski, P.J.; Mitchlstein, E. (2021) *The Digital Environment: How We Live, Learn Work, and Play Now*, MIT Press.

Diamandis, P.H.; Kotler, S. (2020) *The Future is Faster than You Think: How Converging Technologies Are Transforming Business, Industries, and Our Lives*, Simon & Schuster.

Greengard, S. (2019) *Virtual Reality*, MIT Press.

Lin, P. et al. (2017) *Robot Ethics 2.0: from Autonomous Cars to Artificial Intelligence*. Oxford: Oxford University Press

Sandler, R.L. (2014) *Ethics and Emerging Technologies*, Palgrave Macmillan.

Theobald, O. (2019) *Data Analytics for Absolute Beginners: A Deconstructed Guide to Data Literacy*, 2nd Edition.