WM951-15 Technology Management

20/21

Department
    WMG
Level
    Taught Postgraduate Level
Module leader
    Angela Clarke
Credit value
    15
Module duration
    2 weeks
Assessment
    Multiple
Study location
    University of Warwick main campus, Coventry

Description

Introductory description

The module provides useful insights to help current and future managers and technologists consider the role of technology plays in supporting current and future business, and how to manage the technology from cradle to grave.

[Module web page](#)

Module aims

The module aims to provide an appreciation of the role that technology plays in business and industry, from both a local and international perspective.

It integrates knowledge and leading edge thinking on the topic and offers insights into how technology is managed in industry, with relevant case studies and simulations to embed the learning.

Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

- Technology definitions & classifications
- Technology strategy
- Technology management frameworks
- Technology tools & techniques, including technology road mapping
- Readiness assessments & competency frameworks
- Case studies
- Simulations
- Managed industrial visit

Learning outcomes

By the end of the module, students should be able to:

- Appraise how technology can best be integrated in pursuit of commercial success and how to influence decision makers when making a case for technology investment
- Critically examine the technological competence of a business
- Assess a business' technology needs, design an approach for accessing and implementing required technologies
- Evaluate and apply tools & techniques necessary to identify and deliver technological change at an acceptable risk.

Indicative reading list

Schilling, M - Strategic Management of Technological Innovation, McGraw Hill, 6th edition, 2020
Cetindamar, D., Phaal, R., Probert, D. - Technology Management, Activities & Tools, European Institute for Technology and Innovation Management, 2010

[View reading list on Talis Aspire](#)

Subject specific skills

technology decision making
technology strategy development & evaluation (incl roadmapping)
technology justification
technology management

Transferable skills

communication skills
team working
adaptability
decision making
critical thinking
problem solving
leadership
creativity & innovation
time management

Study

Study time

Type	Required	Optional
Lectures	22 sessions of 1 hour (15%)	
Tutorials	15 sessions of 1 hour (10%)	
External visits	8 sessions of 1 hour (5%)	
Online learning (scheduled sessions)	15 sessions of 1 hour (10%)	
Online learning (independent)	4 sessions of 5 hours (13%)	1 session of
Assessment	70 hours (47%)	
Total	150 hours	

Private study description

No private study requirements defined for this module.

Costs

No further costs have been identified for this module.

Assessment

You must pass all assessment components to pass the module.

Assessment group A2

	Weighting	Study time
Assessed work as specified by department	100%	70 hours

40% weight: PMA written assignment; One question from a choice of two; 2500 words & 40 hours prep/completion time. Eligible for self-certification (extension).

5% weight: multiple choice quiz; 20 multiple choice questions in 30 minutes; total prep/completion time of 2 hours. Not eligible for self-certification.

25% weight: in module case studies (total 13 hours prep/completion); not eligible for self-certification.

- 2 case study syndicate group work
- Alstom - 4 hours analysis and discussion, 1 x hour prep for presentation

	Weighting	Study time

- Rocado - 6 hours analysis and discussion, 2 x hours prep for presentation

20% weight: Uniformly Secure presentation (10 minutes with total 15 hours prep/completion time); not eligible for self-certification)

- Self-guided work using online resources, with some input from tutors. - Culminates in a short team-based presentation.
- 3 hours independent study
  10 hours group work analysis, discussion, peer review
- 2 hours presentation preparation

Assessment group R

	Weighting	Study time
PMA written assignment one question, no choice	100%	

Feedback on assessment

one consolidated mark out of 100% will be provided on the feedback sheet

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Availability

Post-requisite modules

If you pass this module, you can take:

- WM974-15 Technology Consultancy

Anti-requisite modules

If you take this module, you cannot also take:

- WM047-10 Service Support Technologies

Courses

This module is Core for:

- Year 1 of TWMS-H1S7 Postgraduate Taught International Technology Management (Full-time)

This module is Optional for:

- EWMS-H1X9 Postgraduate Taught Engineering Business Management (Degree Apprenticeship)
  - Year 2 of H1X9 Engineering Business Management (DA)
  - Year 2 of H1T3 WMG Engineering Business Management (Part-time)
- EWMS-H1B3 Postgraduate Taught Managing in Technology Based Industries (Degree Apprenticeship)
  - Year 2 of H1B4 Managing in Technology Based Industries
  - Year 2 of H1B4 Managing in Technology Based Industries
  - Year 2 of H1B3 Managing in Technology Based Industries (DA)
- Year 2 of EWMS-H7BJ Postgraduate Taught Supply Chain and Logistics Management (Degree Apprenticeship)