

WM9E8-15 Strategy and Finance for Engineering Organisations

24/25

Department

WMG

Level

Taught Postgraduate Level

Module leader

Philip Cullen

Credit value

15

Module duration

4 weeks

Assessment

100% coursework

Study location

University of Warwick main campus, Coventry

Description

Introductory description

The existence of a properly formulated and explicit strategy is essential to ensure the development and success of any business. In engineering organisations, both the business strategy and operations strategy are key elements. Engineering organisations are in a unique and dynamic situation offering various products and services with different market requirements and order winning criteria. The underpinning philosophy and methodology of this module is to present a variety of concepts, models and frameworks, methods and examples of how a strategy for managing an engineering organisation can be formulated and implemented in the engineering industry.

Module aims

To provide the student with an advanced knowledge and comprehension of strategy and finance for managing an engineering organisation and the underpinning key decision areas; part of this aim is to develop the student's capability to apply the strategy formulation process in an engineering organisational context, via various simulations and an In-Module Assessment during the module, and a Post-Module Assessment at the end.

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.

- Evolution of engineering organisations and the journey to World Class.
- Development of a strategy for managing an engineering organisation and the integration of key strategic decision areas.
- Strategy formulation processes for managing an engineering business
- Tools & techniques for integrating key strategic decision areas.
- Finance strategy as a key strategic decision area.
- International engineering/manufacturing/operations.
- Continuous improvement of operational processes for engineering organisations.
- Performance measurement in an engineering organisation environment.
- Implementation, improvement, risk and recovery issues.
- Practical examples of strategy formulation.

Learning outcomes

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

- Critically evaluate key strategic decisions areas, capabilities and competitive positioning of an organisation in order to improve, or sustain, long-term competitive advantage.
- Calculate and interpret the costs of production of goods, budgets and projections
- Critically apply and appraise the tools and techniques used to manage and measure the implementation and development of strategy and finance for an engineering organisation.
- Assess real world strategy and finance for an engineering organisation issue through applying learned models, frameworks, methodologies and techniques.

Indicative reading list

"Operations Strategy", Slack N & Lewis M, Pearson, 2020

"Accounting for Non-Accounting Students", Dyson J & Franklin E, Pearson, 2017

"Strategic Marketing Management", Chernev A, Crebellum Press, 2014

"Operations Management", Slack N & Brandon-Jones A, Pearson, 2019

"Operations and Process Management: principles and practices for strategic impact", Slack N & Brandon-Jones A, Pearson, 2021

"Operations Strategy; Design, Implementation & Delivery", Hill, A, Palgrave, 2018

"Essential Operations Management", Hill, A, Palgrave, 2018

"Manufacturing Strategy: How to Formulate and Implement a Winning Plan", John Miltenburg, Productivity Press, Second Edition, 2005

"The Balanced Scorecard", Kaplan, R.S. and Norton, D P, Harvard Business School Press, 1996.

"Operations, Strategy & Technology; Pursuing the Competitive Edge", Hayes R, Pisano G, Upton D & Wheelwright S, Wiley, 2005

"New Wave Manufacturing Strategies", J Storey (Editor), Paul Chapman Publishing, 1994

"Competitive Manufacturing: A Practical Approach to the Development of a Manufacturing Strategy", DTI, IFS, Bedford, 1988.

“Manufacturing: the Formidable Competitive Weapon”, Skinner W, Wiley, 1985.

"The Machine that Changed the World", Womack J P, Jones ,D T, Roos D, Rawson Associates, 2007

“Strategy Safari: The Complete Guide Through the Wilds of Strategic Management”, Henry Mintzberg, Bruce Ahlstrand, Joseph Lampel, Financial Times Publishing, 2009

[View reading list on Talis Aspire](#)

Subject specific skills

Knowledge of strategy for managing an engineering organisation and key strategic decision areas (Finance is one key area of strategic decision making); formulation and practical applications of said strategy and capabilities (strategic and operational); tools and techniques for the formulation, implementation, monitoring and controlling of said strategy and key strategic decision areas.

Transferable skills

Critical thinking, reflection, problem-solving, self-awareness, verbal and written communication, information/terminology literacy, presentation and organisational awareness.

Study

Study time

| Type | Required |
|--------------------------------------|-----------------------------|
| Lectures | 15 sessions of 1 hour (10%) |
| Seminars | 15 sessions of 1 hour (10%) |
| Online learning (scheduled sessions) | 30 sessions of 1 hour (20%) |
| Online learning (independent) | 30 sessions of 1 hour (20%) |
| Assessment | 60 hours (40%) |
| 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 |
|--|------------------|-------------------|
| Post-Module Assessment | 80% | 50 hours |
| PMA of an upper word limit of 3200 words is worth 80 marks awarded for the overall Module Assessment - all PMA applicable learning outcomes to be met. | | |
| Finance In-class test | 20% | 10 hours |
| A multiple choice test on the finance component of the module syllabus | | |

Feedback on assessment

A series of formatively assessed activities designed around a case study organisation will be provided to the students during the first 3 weeks of the 4-week teaching block with verbal and written feedback provided (no marks awarded nor given at this point) to aid the writing of the PMA. These will be mapped against the learning outcomes for the module.

Availability

Courses

This module is Core for:

- Year 1 of TWMS-H1S3 Postgraduate Taught Engineering Business Management (Full-time)