

WM9E8-15 Strategy and Finance for Engineering Organisations

22/23

Department

WMG

Level

Taught Postgraduate Level

Module leader

Ian Evans

Credit value

15

Module duration

2 weeks

Assessment

Multiple

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.
- Academic and company case studies.

Learning outcomes

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

- Demonstrate the relevance and significance of the fundamental principles, theories and concepts of strategy and finance for an Engineering Organisation.
- Critically evaluate key strategic decisions areas, capabilities and competitive positioning of an organisation in order to improve, or sustain, long-term competitive advantage.
- Critically assess and defend the calculation of the costs of production of goods, and budgets/projections associated to those costs.
- Critically evaluate the relationship between operational performance of an organisation and the financial measures of the organisation.
- Critically compare and appraise the tools and techniques used to manage and measure the implementation of strategy and finance for an engineering organisation.
- Demonstrate a sound skills base when assessing any 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	8 sessions of 1 hour 30 minutes (8%)
Seminars	8 sessions of 1 hour 30 minutes (8%)
Supervised practical classes	2 sessions of 1 hour 30 minutes (2%)
Online learning (scheduled sessions)	4 sessions of 1 hour 30 minutes (4%)
Online learning (independent)	57 sessions of 1 hour (38%)
Assessment	60 hours (40%)
Total	150 hours

Private study description

No private study requirements defined for this module.

Other activity description

Throughout the 2 weeks running of the module, the module leader will facilitate, in his own time, x8 30 minute drop-in Q&A drop-in sessions. These drop-in Q&A sessions are purely "optional" for all students to attend, and take place at the end of various days whereby questions will be discussed, debated and answered.

Costs

No further costs have been identified for this module.

Assessment

You must pass all assessment components to pass the module.

Assessment group A

	Weighting	Study time
Post-Module Assessment	70%	50 hours
PMA of an upper word limit of 2,800 words is worth 70 marks of the total 100 marks awarded for the overall Module Assessment - all PMA applicable learning outcomes to be met.		
In-Module Assessment	30%	10 hours
IMA (group presentation and online [time] MCQs) worth 30 marks of the total 100 marks awarded - combined individual and collective mark - all IMA applicable learning outcomes to be met.		

Assessment group R

	Weighting	Study time
PMA Resubmission	70%	
70 marks PMA - the resubmission IMA would be in the form of a written report with an upper word limit of 2,800 words - the reassessment PMA question will stay the same, all PMA applicable learning outcomes to be met - however, the case study organisation may change		
IMA Resubmission	30%	
30 marks IMA - the resubmission IMA would be in the form of a written report with an upper word limit of 1000 word written report - all IMA applicable learning outcomes to be met. This report will detail how the student/their IMA group developed and proposed an Operations Strategy for the/a case study organisation. To set a resit IMA presentation, finding/allocating an appropriate time would be impractical due to Masters courses running through the academic year.		

Feedback on assessment

Immediate oral feedback will be provided during/after all case study / practical seminar activities, as well as for the IMA (no marks awarded nor given at this point), which will be mapped against the learning outcomes for each specific case study / practical seminar session. Feedback will also be provided to questions that arise from students during any other "contact time" session.

Written feedback of approximately 150-250 words will be provided within four weeks, post-submission date, for the post-module assignment. Feedback will focus on the strengths of the submitted post-module assignment and mapped against the learning outcomes, and the post-module assignment marking guidelines for the module also. In addition, constructive suggestions for improvement will be provided.

Availability

Courses

This module is Core for:

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