

Course information 2025-26

EC3099 Industrial Economics

General information

MODULE LEVEL: 6

CREDIT: 30

NOTIONAL STUDY TIME: 300 hours

MODE: Locally Taught, Independent Learner Route and Online Taught

Summary

This course provides an introduction to current theory and empirical work in Industrial economics. It starts by examining the internal structure of firms. It then moves on to the analysis of various aspects of strategic interaction between firms and the determinants of industrial structure. Finally, it discusses the role of policy in the context of competition and industrial policies and regulation. The emphasis will be throughout on understanding how the theoretical tools can be used to analyse real world issues. The theory will be confronted against empirical evidence, and its implications for public policy and business strategy will be discussed.

Conditions

Please refer to the relevant programme structure in the EMFSS Programme Regulations to check:

- where this course can be placed on your degree structure; and
- details of prerequisites and corequisites for this course.

You should also refer to the Exclusions list in the EMFSS Programme Regulations to check if any exclusions apply for this course.

Aims and objectives

This course aims to:

- Provide students with the analytical skills required for understanding problems in industrial economics, including applications of game theory,
- Examine the key questions on the internal organisation of firms.
- Analyse various aspects of strategic interaction between firms and the determinants of industrial structure.
- Provide students with the ability to apply economic models of firm behaviour to analyse questions in business strategy, competition policy and regulation.

Learning outcomes

At the end of the course and having completed the essential reading and activities students should be able to:

- Model game-theoretical situations involving payoff interdependence and analyse static and dynamic games of complete information.
- Describe and explain the determinants of the size and structure of firms and the implications of the separation of ownership and control.
- Describe and explain the pricing behaviour by firms with market power and its welfare implications.
- Apply analytical models of firm behaviour and strategic interaction to evaluate various business practices, including tacit collusion, entry deterrence, product differentiation, price discrimination and vertical restraints.
- Recognise and explain the basic determinants of market structure and the key issues in competition policy and regulation.

Employability skills

Below are the three most relevant employability skills that students acquire by undertaking this course which can be conveyed to future prospective employers:

1. Complex problem-solving
2. Decision making
3. Adaptability and resilience

Essential reading

For full details please refer to the reading list.

Tirole, J. The Theory of Industrial Organization. (Cambridge, MA: MIT Press, 1998) first edition
Church, J.R. and R. Ware Industrial Organization: A Strategic Approach. (Irwin McGraw-Hill, 200) [ISBN 978-0071166454]

Sutton, J. Sunk Costs and Market Structure. (Cambridge, MA: MIT Press, 2007) first edition [ISBN 978- 0262693585]

Armstrong, M., S. Cowan and J.Vickers Regulatory Reform. (Cambridge, MA: MIT Press, 1994) first edition

Assessment

This course is assessed by a three-hour and fifteen-minute closed-book written examination.

Syllabus

Review of game theory:

Game theory is a formal approach to study the strategic behaviour of interacting rational decision makers. This part is intended to review and familiarise with the key aspects of noncooperative game theory that have proved most useful in industrial organisation.

Theory of the firm:

Size and structure of firms: the technological view of the firm; the transaction costs-property rights approach; investment specificity, incomplete contracts, and vertical integration; empirical evidence. Separation of ownership and control: separation of ownership and control; managerial incentives; the limits to managerial discretion; foundations of the profit-maximisation hypothesis.

Firm conduct and market structure:

Short-run price competition: the Bertrand model; Bertrand competition with capacity constraints; the Cournot model.

Dynamic price competition: repeated interaction; collusion and cartel stability; theories of price wars; empirical analysis of market power and collusive behaviour.

Entry deterrence and entry accommodation: first-mover advantages and the value of irreversible decisions; strategies to deter entry; strategic substitutability vs. complementarity; a taxonomy of business strategies; predation.

Product differentiation and non-price competition: horizontal product differentiation; brand proliferation and entry deterrence; vertical product differentiation; markets with asymmetric information.

Price discrimination: first-degree, second-degree, and third-degree price discrimination; nonlinear pricing; tie-in sales.

Vertical restraints: efficiency explanations for vertical restraints; vertical and horizontal externalities; vertical restraints as instruments that restrict competition; empirical evidence. The determinants of market structure: theory of market structure in exogenous and endogenous sunk cost industries; technology and market structure; empirical evidence.

Competition policy and regulation:

Competition and industrial policy: competition policy in the EU, the USA and Japan; current issues in competition policy; industrial policy towards R&D.

Regulation: regulation of firms with market power under symmetric information; regulation under asymmetric information; liberalisation and regulation; empirical evidence.