Course information 2024-25
EC3099 Industrial economics

General information

MODULE LEVEL: 6

CREDIT: 30

NOTIONAL STUDY TIME: 300 hours

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

Prerequisites: If taken as part of a BSc degree, the following course(s) must be attempted before you can register on this course.

- MN2028 Managerial economics **OR**
- EC2066 Microeconomics.

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.

Please consult the current EMFSS Programme Regulations for further information on the availability of a course, where it can be placed on your programme's structure, and other important details.

Learning outcomes

At the end of this course and having competed 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 outcomes

Below are the three most relevant skill outcomes for students 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.

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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 familiarize with the key aspects of noncooperative game theory that have proved most useful in industrial organization.

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; non-linear 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.