



Exchange programme Vrije Universiteit Amsterdam

Vrije Universiteit Amsterdam - Exchange programme Vrije Universiteit Amsterdam - 2024-2025

Exchange

Vrije Universiteit Amsterdam offers many English-taught courses in a variety of subjects, ranging from arts & culture and social sciences, neurosciences and computer science, to economics and business administration.

The International Office is responsible for course approval and course registration for exchange students. For details about course registration, requirements, credits, semesters and so on, please [visit the exchange programmes webpages](#).

Procurement and Supply Management

Course Code	E_IBK3_PSM
Credits	6
Period	P4
Course Level	300
Language Of Tuition	English
Faculty	School of Business and Economics
Course Coordinator	dr. A.S. Eruguz
Examiner	dr. A.S. Eruguz
Teaching Staff	dr. A.S. Eruguz, prof. dr. J.N. van Ommeren, prof. dr. E.T. Verhoef
Teaching method(s)	Instruction course, Lecture, Seminar

Course Objective

All organisations need inputs of goods or services from external suppliers or service providers. In this course, we aim to discuss the management of purchasing, supply, and transport activities. Examples of topics we will address are supplier and procurement management, supplier selection, cost models, and freight transport demand.

Building upon the knowledge you acquired previously in your bachelor through the first and second-year courses (e.g., Business Mathematics, Business Processes, Supply Chain Management, ...), we will analyze the most crucial and difficult to solve problems arising in the procurement activities of a company, we will mathematically formulate the decision making problems encountered in supply management, and draw and defend managerial recommendations accordingly.

We will also investigate the strategic role of procurement in a company, learn how to differentiate among different suppliers, explore how to design an innovative supply base to make a company successful.

To understand the market forces faced by transport and supply chain firms, and to grasp why policymakers try to regulate these markets, we also focus on transport economics. Hence, we discuss the main concepts in transport economics, explore the economics issues encountered in different types of freight markets – including the maritime, inland shipping, and airline market – and address them by using basic statistical tools.

All topics will be addressed with a special emphasis on their practical aspects.

After successfully completing the course, students are able to:

Bridging Theory and Practice - Knowledge

- Discuss the main functioning of transport markets from an economic perspective
- Discuss the fundamentals of freight markets from an economic perspective

Bridging Theory and Practice - Application

- Apply basic statistical tools to analyse transport issues
- Discuss the main activities, goals, and steps in the procurement function, and apply network planning tools to analyse a procurement project
- Discuss and apply cost models (i.e., break-even, make-or-buy decision, total cost of ownership, and probabilistic cost models)
- Develop learning-curve and quantity discount analysis, and apply AHP models to supplier selection problems

Course Content

In this course, we aim at discussing the management of purchasing, transport and supply activities. In particular, we aim at lecturing the following topics:

- economics of transport markets: external effects
- economics of transport markets: market power
- the structure of freight transport cost
- freight transport demand
- urban transport systems: congestion and reliability
- procurement activities
- management of the sourcing function

- make-or-buy decisions
- break-even analysis
- total cost of ownership
- learning-curve models
- quantity discount analysis
- supplier scoring, assessment, and selection

Additional Information Teaching Methods

Lectures Tutorials

Method of Assessment

Individual and group assessment

Literature

Literature: papers and book chapters communicated via Canvas

Recommended background knowledge

For BK:

Bedrijfsprocessen; Wiskunde voor Bedrijfskunde; Supply Chain Management I

For IBA:

Business Mathematics; Global Supply Chain Management; Business Processes