



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](#).

Managing and Improving Quality

Course Code	E_IBK3_MIQ
Credits	6
Period	P5
Course Level	300
Language Of Tuition	English
Faculty	School of Business and Economics
Course Coordinator	dr. ir. D. van Goubergen
Examiner	dr. ir. D. van Goubergen
Teaching Staff	dr. ir. D. van Goubergen, M. Karimi Mamaghan
Teaching method(s)	Seminar, Instruction course, Lecture

Course Objective

Academic and research skills

- Student is able to understand the role of quality management in organizations and how it can speed up introduction of new products, reduce quality costs, and engage all employees to deliver according to the customer requirements.
- Student can critically reflect on techniques and methods introduced in the literature of quality management.

Bridging theory and practice

- Student is able to analyse shortcomings in a process that may happen in different stages and investigate the main sources of such problems.
- Student can identify and describe quality issues of a production or service operation using standard methods.
- Student is able to identify and select appropriate quality measures and management techniques with regard to a quality issue in order to quantify, control, analyse, and improve the problem.

Social skills

- Student is able to take on different roles in a team, cooperate and interact with other students.
- Student can present and defend their analyses and findings of quality problems.

Course Content

Quality problems usually are the outcome of uncontrolled or excessive variability in product, process or service characteristics that are critical to the customer. Statistical tools and other analytical methods play an important role in solving these problems. However, these techniques need to be implemented within a management structure that will ensure success. We focus on both the management structure and the statistical and analytical tools. We focus on the following aspects in the course:

- Management aspects of quality
- Statistical process control
- Acceptance sampling
- Process Design
- Quality Function Deployment
- Design of experiments for improving quality
- Lean methodology

We furthermore aim to involve students in the process of performing a quality assessment and improvement cycle by studying a real-life case.

Additional Information Teaching Methods

Lectures Tutorials

Method of Assessment

Individual and group assessment

Literature

To be announced

Recommended background knowledge

For BK:

1.1 Bedrijfsprocessen; 1.2 Wiskunde voor Bedrijfskunde; 1.4 Statistiek voor Bedrijfskunde; 1.5 Supply Chain Management I; 2.4 Supply Chain Management II

For IBA:

1.1 Business Mathematics; 1.4 Global Supply Chain Management; 1.4 Business Statistics; 1.6 Business Processes; 2.5 SCM in Emerging Economies