

Quantitative methods, advanced level

Basic information of the minor

Code: BIZ41305

Extent: 24 ECTS

Language: English (some courses in Finnish)

Organizing department: Information and Service Management

Teachers in charge: Tomi Seppälä

Administrative contact: Elli Hämäläinen

Application procedure: The general application procedure for minors at Aalto University, see [Instructions for applying](#)

Degree students at Aalto School of Business do not need to separately apply for a study right for the minor.

Quotas and restrictions / Kiintiöt ja rajoitukset / Kvoter och begränsningar: Degree students at Aalto School of Business do not need to separately apply for a study right for the minor. During the academic year 2018-19, maximum of 5 students from other Aalto schools can be granted a study right for the minor. Of this quota, 4 places remain for the September 2018 application period. / Kauppakorkeakoulun tutkinto-opiskelijoiden ei tarvitse erikseen hakea opinto-oikeutta sivuaineeseen. Lukuvuonna 2018-2019, maksimissaan 5 opiskelijaa muista Aallon kouluista voidaan valita suorittamaan sivuainetta. Syyskuun hakua varten tästä kiintiöstä on jäljellä 4 paikkaa.

Content and structure of the minor

Nowadays large amounts of data are being automatically created through current IT technologies and database systems. As a result, the demand for specialists who are able to manage, analyse and model the rapidly growing supply of information has enormously increased over the last years and will continue to do so in the future. A minor in Quantitative Methods provides both theoretical and practical knowledge of mathematical and statistical tools that can be used to analyse data to support managerial decision making and economic policy. The aim is to effectively use modern managerial tools, such as quantitative models and information technology, in solving practical business problems. The main themes include statistical methods, simulation, optimization, management decision making, risk management, and econometric methods.

Structure of the minor

Choose four of the following courses:

Code	Name	ECTS	Period
27C01000	Business Decisions 1	6	II
30C00600	Tilastotieteen jatkokurssi (in Finnish)	6	III-IV
30C00200	Econometrics	6	III
30C00355	Business Mathematics II *)	6	V
30E00300	Productivity and Efficiency Analysis	6	V (2019-2020)
30E00400	Simulation	6	I-II
30E00800	Time Series Analysis	6	III-IV
30C02000	Negotiation Analytics	6	V
30E02000	Business Decisions 2	6	III
30E03000	Data Science for Business I	6	III
30E03500	Data Science for Business II	6	IV

27E01000 Decision Making and Choice Behavior

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Quantitative Methods studies at another Aalto School or university **) 6

*) Replaces course 30C00300 Mathematical Methods for Economists

**) Must be agreed in advance with the coordinator. Suitable courses can be found for example from Systems and Operations Research subject at the School of Science. Students can complement 5 credit courses with a 1-credit course. Please contact study coordinator for more information.