Course Descriptions None 2019-2020

Course Title	Introduction to Software in Econometrics, Operations Research and Actuarial Science
Course Code	EBS2043
ECTS Credits	4,0
Assessment	None

Period

Period	Start	End	Mon	Tue	Wed	Thu	Fri
3	13-1-2020	24-1-2020	C				

Level	Advanced
Coordinator	Nalan Bastürk, Célia Paquay For more information:n.basturk@maastrichtuniversity.nl; c.paquay@maastrichtuniversity.nl
Language of instruction	English
Goals	Development of software skills for Econometrics and Operations Research methods.
Description	In this skills course students will acquire the necessary skills in order to use computer software to solve problems in Econometrics & Operations Research. These skills are needed for many Bachelor thesis topics. Students can choose to work on either the Econometrics or the Operations Research part. Econometrics part: Students will be trained to use the software R. Applications using the software R will be based on Bayesian inference of a set of standard econometric models. Special attention will be given to the development of computational algorithms such as Markov chain Monte Carlo. Operations Research part: Students will acquire the skills to model optimization problems as (integer) linear programs and to solve such programs using the software package CPLEX as a Java library. Being able to model business and economics problems as linear programs and being able to solve them efficiently is essential in business and research.
Literature	Lecture notes.
Prerequisites	Optimisation (EBC2105), Operations Research (EBC2106), Econometric Methods 1 (EBC2111).
Teaching methods	Lecture / Assignment / Papers / Groupwork
Assessment methods	Final Paper
Evaluation in previous academic year	For the complete evaluation of this course please click http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM

This course belongs to the following programme / specialisation

Bachelor Econometrics and Operations Research	Year 3 Compulsory Skill(s)