

Course Title	Introduction to Software in Econometrics, Operations Research and Actuarial Science							
Course Code	EBS2043							
ECTS Credits	4,0							
Assessment	Whole/Half Grades							
Period	Period	Start	End	Mon	Tue	Wed	Thu	Fri
	3	14-1-2019	25-1-2019	C				
Level	Advanced							
Coordinator	Nalan Bastürk For more information:n.basturk@maastrichtuniversity.nl							
Language of instruction	English							
Goals	Development of software skills for Econometrics and Operations Research methods.							
Description	<p>In this skills course students will acquire the necessary skills in order to use computer software to solve problems in Econometrics &amp; 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.</p> <p>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.</p> <p>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.</p>							
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 <a href="http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM">http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM</a>							
This course belongs to the following programme / specialisation	Bachelor Econometrics and Operations Research			Year 3 Compulsory Skills				