

Course Descriptions Bachelor 2019-2020

Course Title	Analysis II							
Course Code	EBC1032							
ECTS Credits	6,5							
Assessment	None							
Period	Period	Start	End	Mon	Tue	Wed	Thu	Fri
	4	3-2-2020	3-4-2020	X/E		X/E		
	5	14-4-2020	5-6-2020	X/E		X/E		
Level	Intermediate							
Coordinator	Dries Vermeulen For more information:d.vermeulen@maastrichtuniversity.nl							
Language of instruction	English							
Goals	<p>Learn the concepts and techniques in the field of integral calculus that are prerequisite for 'probability theory', '(applied) statistics', 'mathematical economics' and 'operations research'.</p> <p>Can check the topological properties of a subset of the plane.</p> <p>Know how to prove that a function of two variables is continuous.</p> <p>Be able to apply the Implicit Function of Theorem.</p> <p>Know how to prove that a function of two variables has a directional derivative or is (totally) differentiable.</p> <p>Learn to solve constrained and unconstrained optimisation problems.</p>							
Description	Functions of more than one variable, series, multiple integrals, integral calculus of functions of one variable.							
Literature	Syllabus.							
Prerequisites	<p>- Differential calculus for functions of one variable (as, for instance, in the course Analysis 1).</p> <p>- Elementary linear algebra (as, for instance, in the course Linear Algebra).</p> <p>An advanced level of English.</p>							
Teaching methods	Lecture / Assignment							
Assessment methods	Written Exam							
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 1 Compulsory Course(s)			