

Course Descriptions None 2019-2020

| Course Title | Analysis II | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|----------|-------|-----|-----|-----|-----|-----|-----|---|----------|----------|-----|--|-----|--|--|---|-----------|----------|-----|--|-----|--|--|
| Course Code | EBC1032 | | | | | | | | | | | | | | | | | | | | | | | | |
| ECTS Credits | 6,5 | | | | | | | | | | | | | | | | | | | | | | | | |
| Assessment | None | | | | | | | | | | | | | | | | | | | | | | | | |
| Period | <table border="1"> <thead> <tr> <th>Period</th> <th>Start</th> <th>End</th> <th>Mon</th> <th>Tue</th> <th>Wed</th> <th>Thu</th> <th>Fri</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>3-2-2020</td> <td>3-4-2020</td> <td>X/E</td> <td></td> <td>X/E</td> <td></td> <td></td> </tr> <tr> <td>5</td> <td>14-4-2020</td> <td>5-6-2020</td> <td>X/E</td> <td></td> <td>X/E</td> <td></td> <td></td> </tr> </tbody> </table> | 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 | | |
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| 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 | <ul style="list-style-type: none"> - Differential calculus for functions of one variable (as, for instance, in the course Analysis 1). - Elementary linear algebra (as, for instance, in the course Linear Algebra). <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) | | | | | | | | | | | | | | | | | | | | | | | | |