

Course Descriptions None 2026-2027

Course Title	Programming																
Course Code	EBC2016																
ECTS Credits	6,5																
Assessment	Whole/Half Grades																
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>2</td> <td>26-10-2026</td> <td>11-12-2026</td> <td>X</td> <td>X</td> <td></td> <td>X</td> <td></td> </tr> </tbody> </table>	Period	Start	End	Mon	Tue	Wed	Thu	Fri	2	26-10-2026	11-12-2026	X	X		X	
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2	26-10-2026	11-12-2026	X	X		X											
Level	Intermediate																
Coordinator	Andre Berger For more information:a.berger@maastrichtuniversity.nl																
Language of instruction	English																
Goals	<p>This course will introduce you to the fundamentals of computer programming. It is designed for students with no prior programming experience. The goals of the course are to learn how to use the fundamental building blocks of a programming language and to get practice in the several steps of algorithm and software development. By the end of the course you should have a strong understanding of the fundamentals of Computer Science and the Python programming language.</p> <ul style="list-style-type: none"> * Students understand the basic principles of computer programming and data structures. * Students apply their programming skills to translate a verbal assignment into computer language. * Students analyse the performance of their solutions through experimentation. * Students select appropriate programming techniques for verbal assignments. * Students explain the structure and methods of their programming solutions. * Students develop programs and discuss these in teams, with the aim of improving programs in terms of clarity and efficiency. 																
Description	<p>You will first learn the basic principles of programming: data types, variables, statements, assignments, control statements, loops, file input/output, arrays, methods, objects, classes, etc. We will use Python, a high level, cross-platform, and well-constructed computer programming language to demonstrate those principles. Further, you will acquire skills and get practice in the several steps of basic algorithm and software development: from a description of the problem, to an idea about an approach and justified data structures, and finally the translation of the approach into an implemented programme.</p> <p>Formative assessment: Feedback by tutors on programming skills and assignments Summative assessment: Exam and assignments Instructional approach: Lectures, tutorials, and assignments</p>																
Literature	Recommended literature : introductory textbooks on Python Programming (examples listed in course manual).																
Prerequisites	Analysis I, Linear Algebra, Optimisation, strong mathematical skills.																
Transitional Regulations	<div class="trreg"> <ul class="trcohorts" style="list-style-type: none"> Bachelor Business Analytics [2022-2023 and earlier] </div> <p>From 2023-2024 onwards, the course is cancelled.</p> <p>Note that from 2023-2024 onwards, EBC2198 "Fundamentals of Programming" is offered as a replacement course.</p> <table border="1"> <thead> <tr> <th>Academic Year</th> <th>Education</th> <th>Exam/Resit</th> <th>Replacement(s)</th> </tr> </thead> <tbody> <tr> <td>2023-2024 onwards</td> <td></td> <td></td> <td>EBC2198 "Fundamentals of Programming"</td> </tr> </tbody> </table>	Academic Year	Education	Exam/Resit	Replacement(s)	2023-2024 onwards			EBC2198 "Fundamentals of Programming"								
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Teaching methods	PBL / Lecture / Assignment / Groupwork																
Assessment methods	Attendance / Participation / Written Exam / Assignment																
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	<table border="1"> <tbody> <tr> <td>Bachelor Business Analytics</td> <td>Cancelled - Year 2 Compulsory Courses</td> </tr> <tr> <td>Bachelor Econometrics and Operations Research</td> <td>Year 2 Compulsory Courses</td> </tr> </tbody> </table>	Bachelor Business Analytics	Cancelled - Year 2 Compulsory Courses	Bachelor Econometrics and Operations Research	Year 2 Compulsory Courses												
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