# Course Descriptions None 2025-2026

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| Course Title | Programming |
| Course Code | EBC2016 |
| ECTS Credits | 6,5 |
| Assessment | Whole/Half Grades |

Period

| Period | Start | End | Mon | Tue | Wed | Thu | Fri |
|---|---|---|---|---|---|---|---|
| 2 | 27-10-2025 | 12-12-2025 | X | X | | X | |

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| Level | Intermediate |
| Coordinator | Andre Berger For more information:a.berger@maastrichtuniversity.nl |
| Language of instruction | English |
| Goals | 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.<br><br>* Students understand the basic principles of computer programming and data structures.<br>* Students apply their programming skills to translate a verbal assignment into computer language.<br>* Students analyse the performance of their solutions through experimentation.<br>* Students select appropriate programming techniques for verbal assignments.<br>* Students explain the structure and methods of their programming solutions.<br>* Students develop programs and discuss these in teams, with the aim of improving programs in terms of clarity and efficiency. |
| Description | 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.<br><br>Formative assessment: Feedback by tutors on programming skills and assignments<br>Summative assessment: Exam and assignments<br>Instructional approach: Lectures, tutorials, and assignments |
| Literature | Recommended literature : introductory textbooks on Python Programming (examples listed in course manual). |
| Prerequisites | PREREQUISITES: Analysis I, Linear Algebra, Optimisation, strong mathematical skills. |
| Transitional Regulations | TRANSITIONAL REGULATIONS: This course has been cancelled within the bachelor Business Analytics. The following rule applies to bachelor Business Analytics students who started the programme prior to academic year 2023-2024. TRANSITIONAL REGULATION (EBC2016): Replace the course with EBC2198 Fundamentals of Programming See the Transitional Regulations section in the Bachelor Education and Examination Regulations for more information. |
| 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

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| Bachelor Business Analytics | Cancelled - Year 2 Compulsory Courses |
| Bachelor Econometrics and Operations Research | Year 2 Compulsory Courses |