

## Course Descriptions None 2020-2021

Course Title Software Skills

Course Code BENS1002

ECTS Credits 5,0

Assessment Whole/Half Grades

Period	Start	End	Mon	Tue	Wed	Thu	Fri
4	1-2-2021	26-3-2021					X
5	6-4-2021	28-5-2021					X

Level no level

Coordinator Enrique Hortal Quesada For more information:enrique.hortal@maastrichtuniversity.nl

Language of instruction English

Goals The aim of this course is to ensure that students are able to use a wide range of software tools encountered in the work of a business engineer. After the course, students will be able to decide on different solutions depending on the nature of the problem and to combine them to accomplish engineering projects.

Description PLEASE NOTE THAT THE INFORMATION ABOUT THE TEACHING AND ASSESSMENT METHOD(S) USED IN THIS COURSE IS WITH RESERVATION. THE INFORMATION PROVIDED HERE IS BASED ON THE COURSE SETUP PRIOR TO THE CORONAVIRUS CRISIS. AS A CONSEQUENCE OF THE CRISIS, COURSE COORDINATORS MAY BE FORCED TO CHANGE THE TEACHING AND ASSESSMENT METHODS USED. THE MOST UP-TO-DATE INFORMATION ABOUT THE TEACHING/ASSESSMENT METHOD(S) WILL BE AVAILABLE IN THE COURSE SYLLABUS. The skill "Software Skills" is the second skill of the BSc Business Engineering programme. It covers a variety of foundational software skills which every business engineer should have in his/her repertoire.

In this course, students will become acquainted with a wide range of software tools that will be encountered repeatedly during course and project work. They learn the basics of the writing of SQL queries (in Microsoft Access). This serves as a prelude to skills that will be further developed in the Computer Science skills in Year 2. Students will also learn to write scientific papers by using the typesetting system LaTeX. A selection of project management tools are presented to the students for collaboration, communication, scheduling and so forth, building on the foundations provided by the Academic Skills and Project Management skill.

Mathematical software tools encountered in the courses (MATLAB and R) receive further attention to anchor the skills learned in those courses. Moreover, an introduction to 3D modelling will be offered in order to get acquaintance with this skill and some of the potential applications in business engineering.

Teaching methods:

The course will alternate lectures where different tools will be presented and hands-on tutorials to put into practice the knowledge gained. The course will include, but not limited to, statistics for Business Engineering, numerical computing environments, collaborative tools, project management software and 3D modelling.

Assessment methods

1. Graded exercises: In the tutorials/laboratory sessions, students are presented with a list of exercises that help the student to gain practical experience in the material presented in the previous lecture. These exercises will typically require more time to complete than available in the tutorial/lab. They are completed at home and are submitted for grading.

2. Attendance requirement: The course consists of lectures and hands-on tutorials. Both lectures and tutorials cover important skills. Participation is therefore fundamental to an individual's success. Therefore, attendance of tutorial/lab meetings and the lectures is required. Missing 4 or more of the 14 meetings (tutorial group meetings or lectures) will lead to a FAIL for attendance.

Literature Given the many different software tools presented in this course, literature will be provided on a week-by-week basis.

Prerequisites No prerequisites are required.

Keywords Mathematical software, project management, scientific writing, SQL, 3D modelling

Teaching methods Lecture / Assignment

Assessment methods Final Paper / Attendance / Oral 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

Bachelor Business Engineering

Year 1 Compulsory Skill(s)