

# Course Descriptions Bachelor 2020-2021

Course Title Introduction to Business Engineering  
 Course Code BENC1001  
 ECTS Credits 5,0  
 Assessment Whole/Half Grades

| Period | Start     | End        | Mon | Tue | Wed | Thu | Fri |
|--------|-----------|------------|-----|-----|-----|-----|-----|
| 1      | 31-8-2020 | 16-10-2020 | X   |     | X   |     |     |

Level no level  
 Coordinator Lieven Quintens For more information: [l.quintens@maastrichtuniversity.nl](mailto:l.quintens@maastrichtuniversity.nl)  
 Language of instruction English

Goals In this course, students  
 \* demonstrate up-to-date academic knowledge that connects business to engineering and science  
 \* are aware of the ethical consequences of solutions to complex problems  
 \* connect business and engineering in solving complex problems  
 \* explain the complexity of contemporary management problems  
 \* understand and evaluate a complex business problem in the field of engineering  
 \* understand complexity of contemporary management problems and how these affect society  
 \* understand that a unity of knowledge beyond disciplines gives a better understanding of the present world

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.<br /><br />The aim of this course is to provide the foundation for business engineering. The student gets an overview of what it entails to become and to be a business engineer. Based on the societal needs of sustainability, big data/digitalisation and health/wellbeing, the course highlights the role of close cooperation between boardmen/women, scientists and engineers. The course will discuss the four fundamental functions of management: planning, organising, leading and controlling. In the course, students become familiar with the foundations of business engineering. This includes the relationship between engineering and management, planning and forecasting, managing research and development, managing engineering design, planning production activities, planning production operations, leadership as well as an introduction to marketing and cost calculations.

Literature \* Morse, L.C. and Babcock D.L. (2014). Managing engineering and technology, International Edition, Sixth Edition, Pearson, 512pp.

Prerequisites Not applicable.

Keywords Planning, organizing, engineering, process, marketing, costs, technology, sustainability

Teaching methods PBL / Presentation / Lecture / Assignment / Groupwork

Assessment methods Final Paper / 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 Course(s)