

Mechanical Engineering and Production Technology modules in Academic Year 2021-2022

Updated 15.6.2021

| | Module 1 (23.8.-15.10.2021) | Module 2 (15.10.-17.12.2021) | Module 3 (10.1.-11.3.2022) | Module 4 (14.3.-6.5.2022) |
|---|--|---|--|--|
| 60 ECTS 1st year BEMPP21A6 | Orientation to Engineering Studies BE00DL09-3001 Professional Growth 3 ECTS; KM00CV11-3009 Algebra 3 ECTS; BE00DL06-3002 Introduction to Technical Physics 3 ECTS; BE00DL07-3001 Basics of Mechanical Drawing 3 ECTS; KM00DE52-3001Finnish 1, 3 ECTS | Mechanics BE00DK26-3001 Statics 4 ECTS; BE00DK28-3001 Kinematics 4 ECTS; BE00DK30-3001 Mechanics Workshops 2 ECTS; KM00CV13-3003 Geometry and Linear Algebra 3 ECTS; KM00DE53-3001Finnish 2, 2 ECTS | Manufacturing BE00DK57-3001 Basics of Strength Theory 3 ECTS; BE00DK58-3001 Material Engineering 4 ECTS; KM00CV61-3003 Differential Calculus 2 ECTS; BE00DK59-3001 Manufacturing Methods 4 ECTS; KM00DE54-3001 Finnish 3, 2 ECTS | Design of a Beam Structure BE00DK60-3001 Strength Theory 2 ECTS; BE00DK61-3001 Welding Engineering 3 ECTS; KM00CV62-3003 Integral Calculus 2 ECTS; BE00DK62-3001 3D Design 5 ECTS; KM00DE55-3001 Finnish 4, 3 ECTS |
| 60 ECTS 2nd year BEMPP20A6 | BE00CW74-3001 Machine Design Strength Theory in Design 3 ECTS; Thermodynamics 3 ECTS; Machining 4 ECTS; Dynamics 3 ECTS; Technical English 2 ECTS | BE00CW75-3001 Machine Elements Selection of Machine Elements 6 ECTS; Tolerances and Fits 3 ECTS; Statistical Mathematics and Reliability Engineering 3 ECTS; Electrical Engineering 3 ECTS | BE00CW76-3001 Sheet Metal Structures Design of Sheet Metal Products 6 ECTS; Sheet Metal Work 3 ECTS; Coatings 3 ECTS; Technical English 2, 3 ECTS | BE00CW77-3001 Product Development Control Systems 3 ECTS; Product Design 9 ECTS; Entrepreneurship 3 ECTS |
| 60 ECTS 3rd year BEMPP19A6 | BE00CL46-3001 Manufacturing Automation in a Workshop NC Programming 6 ECTS; Robotics 6 ECTS; Modern Manufacturing Methods 3 ECTS | BE00CL52-3001 Structural Analysis Finite Element Methods 6 ECTS; Measuring Strength of Materials 3 ECTS; Structural Optimization 3 ECTS; Numerical Methods 3 ECTS | BE00CO99-3003 Robotics/ Optional Module | BE00CL50-3001 Design of Industrial Appliances Product Data Management 3 ECTS; Project Management 3 ECTS; Design Project 9 ECTS |
| 60 ECTS 4th year BEMPP18A6 | Optional Module | Optional Module | Final Thesis Work Placement Work Placement | |
| Optional studies: BE00CI14-3003 3D Engineering Academy (available throughout the academic year) | | | | |
| BE00CL54-3001 Advanced Mathematics (available throughout the academic year) | | | | |

Module extent is 15 ECTS

Core competence module

Profiling competence module

Profiling competence module/ optional module

NOTE! You can undertake Work Placement at any time of your studies