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

### Module 1 (23.8.-15.10.2021)
- **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;
  - KM00DE52-3001 Finnish 1, 3 ECTS

### Module 2 (15.10.-17.12.2021)
- **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;
  - KM00DE53-3001 Finnish 2, 2 ECTS

### Module 3 (10.1.-11.3.2022)
- **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

### Module 4 (14.3.-6.5.2022)
- **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

### 1st year (BEMPP21A6)
- **60 ECTS**
- **Profiling competence module**
  - BE00CW74-3001 Machine Design Strength Theory in Design 6 ECTS;
  - Thermodynamics 3 ECTS;
  - Machining 4 ECTS;
  - Dynamics 3 ECTS;
  - Technical English 2 ECTS

### 2nd year (BEMPP20A6)
- **60 ECTS**
- **Core competence module**
  - 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

### 3rd year (BEMPP19A6)
- **60 ECTS**
- **Profiling competence module/optional module**
  - BE00CL46-3001 Manufacturing Automation in a Workshop NC Programming 6 ECTS;
  - Robotics 6 ECTS;
  - Modern Manufacturing Methods 3 ECTS

### 4th year (BEMPP18A6)
- **60 ECTS**
- **Optional Module**
  - 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**

**Work Placement**

**Final Thesis**

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

**Updated 15.6.2021**