

**MECHANICAL ENGINEERING AND PRODUCTION TECHNOLOGY - MODULE MAP 2024-2025**

GROUP	PERIOD 1	PERIOD 2	PERIOD 3	PERIOD 4
BEMPP24A6	Core competence <b>Introduction to Engineering Studies 15 ECTS</b> Professional Growth BE00DL09-3004 Introduction to Technical Physics BE00DL06-3007 Basics of Mechanical Drawing BE00DL07-3004 Geometry and Linear Algebra KM00CV13-3052 Finnish 1 KM00EI34-3004	Core competence <b>Mechanics 15 ECTS</b> Statics BE00DK26-3004 Mechanics Workshops BE00DK30-3004 Hydraulics BE00EB47-3002 Algebra KM00CV11-3062 Sustainable Development.Now VV00EH16-3012 Finnish 2 KM00EI35-3003	Core competence <b>Manufacturing 15 ECTS</b> Basics of Strength Theory BE00DK57-3004 Material Engineering BE00DK58-3004 Differential Calculus KM00CV61-3045 Manufacturing Methods BE00DK59-3004 Finnish 3 KM00EI36-3006	Core competence <b>Design of a Beam Structure 15 ECTS</b> Strength Theory BE00DK60-3004 Welding Engineering BE00DK61-3004 Integral Calculus KM00CV62-3045 3D Design BE00DK62-3004 Finnish 4 KM00EI37-3006
BEMPP23A6	Core competence <b>Machine Design 15 ECTS</b> Strength Theory in Design BE00DK63-3003 Machining BE00DK65-3003 Dynamics BE00DK66-3003 Machine Elements 1 BE00EB48-3001 Technical English 1 KM00EI27-3002	Core competence <b>Machine Elements 15 ECTS</b> Machine Elements 2 BE00EB50-3001 Tolerances and Fits BE00DK68-3003 Electrical Engineering BE00DK70-3003 Basics of Programming BE00EB49-3001 Machine Design Project BE00EB51-3001	Core competence <b>Sheet Metal Structures 15 ECTS</b> Design of Sheet Metal Products BE00DK74-3003 Sheet Metal Work BE00DK75-3003 Coatings BE00DM43-3004 Technical English 2 KM00EI28-3001	Core competence <b>Product Development 15 ECTS</b> Control Systems BE00DK76-3003 Product Design BE00DK77-3003 Entrepreneurship BE00DK80-3003
BEMPP22A6	Profiling competence <b>Structural Analysis 15 ECTS</b> Finite Element Methods BE00DK83-3002 Measuring Strength of Materials BE00DK84-3002 Structural Optimization BE00DK85-3002 Numerical Methods BE00DK86-3002	Profiling competence <b>Manufacturing Automation 15 ECTS</b> NC Programming BE00DK87-3002 Robotics BE00DK88-3002 New Manufacturing Methods BE00DK89-3002	Profiling competence <b>Robotics 15 ECTS</b> Collaborative Robotics BE00DL02-3002 Robot Programming BE00DL05-3002 Robot Kinematics BE00DL00-3002 Factory Simulation BE00DL01-3002 Robotics Project BE00DL03-3002	Profiling competence <b>Design of Industrial Appliances 15 ECTS</b> Product Data Management BE00DK90-3002 Project Management BE00DK91-3002 Design Project BE00DK94-3002
BEMPP22A6	<b>Work Placement 30 15 ECTS</b> NOTE! You can undertake Work Placement at any time of your studies			
BEMPP22A6	Profiling competence <b>Optional studies 15 ECTS</b>			
BEMPP21A6	<b>Thesis 15 ECTS</b>			