

Construction Engineering modules in Academic Year 2022 - 2023

	Module 1 (22.8.-14.10.2022)	Module 2 (24.10.-16.12.2022)	Module 3 (9.1.-10.3.2023)	Module 4 (13.3.-5.5.2023)
60 ECTS 1st year BECOP22A3	Orientation to Engineering Studies Basics of Technical Drawings, 3 ECTS; Introduction to Technical Physics, 3 ECTS Finnish 1, 3 ECTS Algebra, 3 ECTS HAMK Deal, 3 ECTS	Building Technology and Construction Materials Statics, 4 ECTS Geometry and Linear Algebra, 3 ECTS Building Chemistry, 3 ECTS Finnish 2, 2 ECTS Construction Materials, 3 ECTS	Planning and Implementation of Building Project Basics of Project Management, 3 ECTS; Differential Calculus, 2 ECTS; Surveying Techniques in Constructions Site, 4 ECTS; Basics of Geotechnics, 4 ECTS; Finnish 3, 2 ECTS	Sustainable and Healthy Buildings Sustainability and Housing Health, 3 ECTS; Energy Efficiency and Renewable Energy Solutions, 4 ECTS; Basics of Building Physics, 3 ECTS; Finnish 4, 3 ECTS; Integral Calculus, 2 ECTS
60 ECTS 2nd year BECOP21A3	Fundamentals of Structural Design Technical English 1, 2 ECTS Conceptual Design of the Structures, 3 ECTS; Concrete Materials Technology, 3 ECTS Strength of Materials, 4 ECTS Basics of Building Information Modelling (BIM), 3 ECTS	Structural Systems in Buildings Technical English 2, 3 ECTS Timber Structures 4 ECTS; Foundation Engineering 3 ECTS; Building Services Systems (HVAC) 3 ECTS; Construction Management and Economics, 2 ECTS	Residential Buildings Advanced Timber Structures, 5 ECTS Load Bearing Frames of Buildings and their Stability 5 ECTS; Structural Analysis, 5 ECTS	Concrete Structures Building Physics, 3 ECTS Concrete Works, 3 ECTS Concrete Structures, 5 ECTS Advanced Mechanics, 4 ECTS
60 ECTS 3rd year BECOP20A3	Steel Structures Basics of Structural Steel Design, 5 ECTS; Manufacturing of Steel Structures, 3 ECTS Advanced Building Information Modeling (BIM), 4 ECTS, Advanced Timber Structures, 4 ETC	Design of Concrete Structures Precast Concrete Structures, 3 ECTS Advanced Concrete Structures Design, 5 ECTS; Design of Foundation Structures, 4 ECTS; Industrial and Commercial Buildings, 3 ECTS	Design of Steel Structures Advanced Steel Structures Design, 4 ECTS Cold-Formed Steel Structures, 3 ECTS Structural Fire Design, 3 ECTS Finite Element Method, 5 ECTS	Life-Cycle Thinking in Building Technology Life Cycle of Buildings and Building Products, 5 ECTS Circular Economy in Construction Industry, 5 ECTS Project on Circular Economy, 5 ECTS Prestressed Concrete and Steel-Concrete Composite Structures, 3 ECTS
60 ECTS 4th year BECOP19A3	Professional Skills	Work Placement 1	Work Placement 2	Final Thesis

Module extent is 15 ECTS

Core competence module

Profiling competence module

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