

Construction Engineering modules in Academic Year 2021-2022

	Module 1 (23.8.-15.10.2021)	Module 2 (25.10.-17.12.2021)	Module 3 (10.1.-11.3.2022)	Module 4 (14.3.-6.5.2022)
60 ECTS 1st year BECO21A3	Orientation to Engineering Studies HAMK Diili 3 ECTS; Algebra 3 ECTS; Introduction to Technical Physics 3 ECTS; Basics of Technical Drawings 3 ECTS; Finnish 1, 3 ECTS	Building Technology and Construction Materials Statics 4 ECTS; Geometry and Linear Algebra 3 ECTS; Building Chemistry 3 ECTS; Construction Materials 3 ECTS; Finnish 2, 2 ECTS	Planning and Implementation of a Building Project Basics of Geotechnics 4 ECTS; Surveying Techniques in Constructions Site 4 ECTS; Basics of Project Management 3 ECTS; Finnish 3, 2 ECTS, Differential Calculus 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 BECOP20A3	Fundamentals of Structural Design Conceptual Design of the Structures 3 ECTS; Technical English 1, 2 ECTS; Concrete Materials Technology 3 ECTS; Basics of Geotechnics 3 ECTS; Strength of Materials 4 ECTS	Structural Systems in Buildings Load Bearing Frames of Buildings and their Stability 5 ECTS; Timber Structures 4 ECTS; Foundation Engineering 3 ECTS; Technical English 2, 3 ECTS	Residential Buildings Building Physics 3 ECTS; Construction Management and Economics 2 ECTS; Structural Analysis 4 ECTS; Building Services Systems (HVAC) 3 ECTS; Building Condition Assessment Technics 2 ECTS	Concrete Structures Concrete Works 3 ECTS; Concrete Structures 5 ECTS; Advanced Mechanics 4 ECTS Advanced Timber Structures 4 ECTS
60 ECTS 3rd year BECOP19A3	Timber Structures Design of Timber Structures 6 ECTS; BIM in Design of Timber Structures 3 ECTS; Structural Analysis 5 ECTS; Reporting in English 3 ECTS	Renovation Building Physics related to Renovation 3 ECTS; Structures and their Damages 3 ECTS; BIM in Renovation Design 3 ECTS; Healthy Indoor Air 4 ECTS; Improvements in Energy Efficiency 2 ECTS	Design of Steel Structures Design of Steel Structures 1, 5 ECTS; Design of Steel Structures 2, 5 ECTS; Fundamentals in Finite Element Method 5 ECTS	Concrete Structures Structural Design of Reinforced Concrete 4 ECTS; Precast Concrete Structures 4 ECTS; BIM in Concrete Structures 2 ECTS; Mechanics 2, 3 ECTS; Meeting skills 2 ECTS
60 ECTS 4th year BECOP18A3	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