



University of Cyprus
Department of Civil and
Environmental Engineering

FALL SEMESTER 2019-2020

CEE 310 Construction Management I (5 ECTS: 3-0-6)

Selection, operational analysis, utilization and replacement of equipment for civil engineering works. Engineering economy. Project planning, scheduling and controlling. Budgeting, resource and cost allocation, cost control and time-cost trade off analysis of construction projects. CPM/PERT analysis. Health and safety measures during construction. Term project using specialised computer software for construction applications.

CEE 381 Introduction to Environmental Engineering (5 ECTS: 3-0-6)

Introduction to Environmental Engineering, technical calculations, Material Balances with a single material, Material Balances with reactions, Energy Fundamentals, Environmental Chemistry, Biogeochemical Cycles, Water Pollutants, Water and Wastewater Treatments, Solid Waste Management.

CEE 451 Engineering Geology (5 ECTS: 3-0-6)

Prerequisite: CEE 251 or CEE 253

Origin and composition of rocks. Geology of Cyprus. Geomorphology and Geological Structures. Engineering properties of rocks. Mechanical behavior of rocks discontinuities. Rock Mass Classification Systems. Mechanical behavior of rocks mass. Hoek & Brown failure criterion. Rock slope stability – landslides. Rock mass permeability. Permeability field testing. The role of Geology in the design and construction of dams and tunnels.

CEE 460 Transportation Engineering (5 ECTS: 3-0-6)

Application of physical laws of motion and energy as they relate to calculations of resistances to motion, power, and energy requirements. Acceleration-Deceleration Limits. Capacity of various Modes of Transportation. Techniques of analysis and planning for transportation services. Demand-supply interactions. Evaluation of transportation alternatives. Integrated Model Systems. Demand estimates for transportation system. Location, design, and operations of transportation facilities. People participation in decision making; proposal writing.