

## 2121111 Equipment and Plant Design

(3 Credit hours, Prerequisite: 0404312 + 0404431)

Equipment design involving design of: pipes and pumping systems, tanks, pressure vessels, heat exchangers, plate and packed towers. Plant design involving : Process design development. General plant design considerations (safety, environmental factors, plant location, and plant layout). Computer Aided Design(CAD). Economic principles including cost estimation. Design optimization.