ENGINEERING CONSTRUCTION TECHNOLOGY (ECT)

ECT 16 CADD and Digital Design Media Level I
4 Units (Degree Applicable)
Lecture: 54 Lab: 54

Computer Aided Design and Drafting (CADD) Level 1 and computer applications in building construction, engineering, and related fields, including spreadsheet and presentation applications. Field trips required.

ECT 17 Legal Aspects of Construction
3 Units (Degree Applicable, CSU)
(May be taken for option of letter grade or Pass/No Pass)
Lecture: 54
Advisory: *ECT 70 taken prior or concurrently*

Legal aspects of the construction industry involving the owner, contractor, builder or developer, and design professional. Includes codes, licensing, contracts, bonds, and lien laws. May include off-campus assignments.

ECT 26 Civil Engineering Technology and CADD
3 Units (Degree Applicable, CSU)
Lecture: 36 Lab: 71

Theory of civil engineering projects with hands-on instruction in civil drawings and Computer Aided Drafting and Design (CADD) applications. Layout, topography maps, grading plans, sections, street improvements, and interpretation of surveyor's data are covered. Set of CADD drawings produced for a final portfolio.

ECT 67 Reading Construction Drawings
3 Units (Degree Applicable, CSU)
Lecture: 54

Reading construction drawings as they apply to architecture, construction, interior design, and related fields. Off-campus assignments may be required.

ECT 70 Elements of Construction Management
3 Units (Degree Applicable, CSU)
Lecture: 36 Lab: 54

Construction processes, terminology, and procedures. Topics include construction careers, building systems, sustainability, quality control, management, and scheduling of resources (materials, equipment, time, personnel, and finance).

ECT 71 Construction Estimating
3 Units (Degree Applicable, CSU)
Lecture: 54

Construction estimating and bidding procedures using contract documents, construction drawings, and cost data. Estimating methods and use of estimating forms or software, including detailed quantity take-offs of building materials and labor required in building construction.

ECT 87 Fundamentals of Construction Inspection
3 Units (Degree Applicable, CSU)
Lecture: 54

Construction inspection of light frame wood construction and steel structures. Topics include vertical and horizontal loads, stress analysis, framing and structural standards of lumber and steel, metallurgy, and welding.