Construction Trades

Program Description
Construction Trades offers a series of carpentry courses. Beginning Construction (CT 110), the introductory course, is open to all students. The advanced Construction Trades carpentry courses—Framing, Beginning Finish Carpentry, Blueprint Reading, and Measuring and Calculating—are designed for students who have completed CT 110 or those with a minimum of one year of carpentry experience. Work Experience in Construction (CT 290) combines on-the-job training with classroom instruction.

Santa Barbara City College (Division of Apprenticeship Standards, Electricians Certification Unit Approved School #138) offers four Electrician Trainee courses as a “partial” General Electrician curriculum. The courses—Blueprint Reading for Electricians, Electrical Mathematics, Introduction to National Electrical Code, and Construction Jobsite Management—are designed for students working as electricians who want to prepare for the state certification exam and those required to be enrolled in order to continue working for a C-10 electrical contractor.

For further information concerning the carpentry courses, contact Patrick Foster at 965-0581, ext. 6677, or the Occupational Education Office at 965-0581, ext. 2721. For additional information concerning the Electrician Trainee courses, contact Betty Pazich at 965-0581, ext. 3044.

Course Descriptions

**CT 110 — Beginning Construction**
(4.7) F — CSU
*Skills Advisories: None*

Introductory course in construction skills and concepts with an emphasis on residential wood construction. Designed for entry-level students interested in a career in the building trades. Topics include safety, planning, foundations, floors, walls, roofs, plumbing, electrical and insulation.

**CT 112 — Framing**
(2.3) F, S — CSU
*Course Advisories: Eligibility for ENG 100*

Intermediate-level class in rough framing skills and concepts in residential wood construction. Designed for continuing students who have taken CT 110 and for carpenters with some experience in residential framing. Topics include safety, foundations, framing hardware, exterior siding, special wall construction, stairs, hip roofs, roof coverings, truss construction and cornice treatments.

**CT 114 — Beginning Finish Carpentry**
(2.3) F, S — CSU
*Course Advisories: Eligibility for ENG 100*

Introduction to finish carpentry, with emphasis on residential wood construction. Designed for students who have already taken CT 110 or who have some prior experience in carpentry or construction. Topics include safety, tool care, door hanging, trim, molding, flooring, built-ins, railings and cabinets.

**CT 116 — Blueprint Reading**
(2.3) F, S — CSU
*Course Advisories: Eligibility for ENG 100*

Introduction to blueprint reading in residential wood construction. Designed for students who have already taken CT 110 or who have some prior experience in carpentry or construction. Topics include understanding the uses of blueprints, types of plans, drafting conventions, contents of plans, focus on floor plans, elevations and sections, using the architectural scale, drafting simple plans, and shop drawings from plans.

**CT 118 — Measuring and Calculating**
(3) F, S — CSU
*Skills Advisories: MATH 1*

Introduction to measuring and calculating used in residential wood construction. Designed for students who have already taken CT 110 or who have some prior experience in carpentry or construction. Topics include working with common and decimal fractions, using the standard tape measure, using a calculator for construction, estimating material, understanding the special triangles used in roof rafter calculations, rafter length calculation, and stair stringer calculation.
CT 121 — Blueprint Reading for Electricians  
(3) F, S — CSU  
*Skills Advisories: Eligibility for ENG 100 and ENG 103.*  
Overview of blueprints, plans and specifications;  
symbols used in electrical-related trades; preparation  
and use of as-built drawings, wiring and line diagrams,  
schematics and ladder diagrams.

CT 153 — Electrical Mathematics  
(3) F, S  
*Skills Advisories: MATH 1*  
Basic mathematics and its application to electrical  
and other technologies. Topics in arithmetic, common  
fractions, decimal fractions, percentages, graphs,  
measurement and introduction to algebra are covered.

CT 194 — Intro to National Electrical Code  
(3) F, S  
*Skills Advisories: Eligibility for ENG 100 and ENG 103.*  
Layout and content of the *National Electric Code.*  
Purpose, intent and scope of electrical codes, as well  
as utilization and application. Also includes use of the  
Code for calculations and hazardous locations.

CT 196 — Construction Jobsite Management  
(3) F, S — CSU  
*Skills Advisories: Eligibility for ENG 100 and ENG 103.*  
Introduction to jobsite supervision in the construction  
industry. Includes industry organization, documentation  
and record keeping, personnel and financial  
management, as well as job planning and safety.

CT 290 — Work Experience in Construction  
(1 – 4) F, S — CSU  
*Skills Advisories: None*  
Work experience on a construction job or project plus  
attending one orientation plus a monthly meeting.  
Students perform assigned responsibilities as an  
employee, follow employer’s rules, regulations, and  
policies, write learning objectives, keep a record of  
time worked an a student data sheet, and secure  
employer’s evaluation at the end of the semester.