

RESIDENTIAL CONSTRUCTION (RESC)

RESC 106. Graphic Communications. (3 Credits)

An introduction to the graphic standards of construction working drawings wherein students learn to interpret and interpolate construction drawings, using judgment based on accepted building techniques and material usage. Functional design concepts for residential floor plans are introduced and incorporated into various residential design situations. "Chief Architect" design software is introduced in laboratory sessions giving students the ability to design homes and create complete working drawings using the latest technology. 3 credits (2 lecture hours, 3 laboratory hours), fall semester

RESC 125. Residential Electrification. (3 Credits)

Design, installation, and troubleshooting of alternating current circuits used in residential construction. Circuit planning and layout as per national electrical code is emphasized. A set of hand tools is required for this course. 3 credits (2 lecture hours, 2 laboratory hours), spring semester.

RESC 130. Light Framing. (3 Credits)

Light framing and layout work encountered in residential construction are introduced in lecture sessions and practiced in laboratory settings, dealing with the construction and modification of light home and agricultural structures. This course has an additional lab fee. 3 credits (2 lecture hours, 3 laboratory hours), fall semester

RESC 160. Intro Bldg Materials & Estim. (3 Credits)

A thorough introduction to the basics of platform framing and the major concepts of balloon construction, post and beam construction, and manufactured housing. Emphasis directed to understanding the advantages and limitations of contemporary building materials and methods and their impact on the construction industry. Laboratory experiences culminate with a take-off list of materials required for the proper construction of a residential structure Prerequisite: RESC 106 or permission of instructor 3 credits (2 lecture hours, 3 laboratory hours), spring semester

RESC 180. OSHA 30 Hour Construction Indu. (3 Credits)

The Construction Industry Training will provide a variety of training to workers with safety responsibility in the construction industry. It also provides a further understanding of OSHA standards and OSHA compliance. Training emphasizes hazard identification, avoidance, control, and prevention. A Lockout/tag-out safety program introduced within the woodshop for a live hands-on training. Students who complete the hour requirement and pass this course will receive their hard card. 3 credits (3 lecture hours), spring semester

RESC 190. Construction Internship. (6 Credits)

Work experience in the residential construction industry is detailed in a written report documenting and stratifying the various occupational tasks encountered. The candidate must receive prior approval from the department staff after submitting a detailed proposal in writing. Prerequisite: Approval of department staff 1-6 credits

RESC 201. Estimating And Planning. (3 Credits)

The estimating consideration involved with the cost of doing business, the control of those costs, and the professional presentation of the final estimate to the prospective customer. Workbook Instruction in the use of construction calculators included in course work. The assessment portion of the class directs the student's attention toward a rational evaluation of the overall quality of a product of building material and its propriety of use in a given circumstance. Guest lecturers from the industry and field trips to places of business enhance the student's understanding as to the variety of opportunities within the home-building industry. Prerequisite: RESC 160 3 credits (2 lecture hours, 2 laboratory hours), fall semester

RESC 211. Masonry And Foundations. (3 Credits)

An overview of the functional requirements of residential foundations, available systems to affect those requirements, and of the properties and uses of concrete and masonry products in residential construction. Laboratory sessions introduce the student to skills required to plan, place, and finish concrete, plus design, layout, and erect structures using masonry products. This course has an additional lab fee. 3 credits (2 lecture hours, 4 laboratory hours), fall semester

RESC 221. Plumbing. (3 Credits)

An overview of the plumbing trade including tools, skills, mathematics, nomenclature, science of fluids, cold and hot water distribution systems, and the drain-waste-vent system. The student will participate in the installation and testing of a residential plumbing system with special emphasis on setting of fixtures and trim work. 3 credits (2 lecture hours, 2 laboratory hours), fall semester

RESC 260. Heating And Energy Systems. (3 Credits)

The study of heat transfer in conventional building materials and construction techniques for reducing energy consumption. Subjects covered will also include residential hot water, hot air, and steam heating systems. Sizing of heating/ cooling systems and selecting of peripheral components will be covered. 3 credits (2 lecture hours, 2 laboratory hours), spring semester

RESC 270. Construction Planning & Mgt. (4 Credits)

A class for graduating Residential Construction majors that draws together features of all previous classes and introduces points directed toward effective planning and management of a construction project. The Senior Construction Project(s), a building activity completely organized, directed, and executed by the students, is the major concentration helping to prepare them for a management position in the home-building industry, Prerequisite: Senior Residential Construction majors only 4 credits (1 lecture hour, 6 laboratory hours), spring semester