

The ELAC Architecture department also recommends completing the following courses to better prepare for transfer into the architecture major:

- ARC 110, 115, 121, 122, 152, 160, 161, 162, 171, 172, 173, 210, 211, 221, 223, 261, 262, 264, 271, 272

*This course has a prerequisite.

WOODBURY UNIVERSITY

The School of Architecture & Design at Woodbury University offers a five-year program leading to the Bachelor of Architecture. East Los Angeles College students completing the transfer course requirements fulfill most of the first- and second-year course requirements at Woodbury University and are eligible to transfer into the third year after fulfilling the application requirements. Design Studio placement will be based upon a review of the student's portfolio. A portfolio review is required of all students who have less than a 3.0 GPA in their architecture courses. Students must have a 3.0 GPA for entry into the Bachelor of Architecture program WITHOUT a portfolio review. If a student has completed most of the general education classes listed and is missing a few courses, the student is encouraged to submit an application and complete the few remaining courses while attending Woodbury University.

The following list of courses are recommended for transfer to Woodbury University.

SUBJECT & NO.	COURSE	UNITS
ARC 121	Freehand Drawing I . . . . .	.2
ARC 130	History of Architecture I . . . . .	.2
ARC 131	History of Architecture II . . . . .	.2
ARC 170	Beginning Architectural Drafting. . . . .	.2
ARC 172*	Architectural Drawing I . . . . .	.3
ARC 173*	Architectural Drawing II. . . . .	.3
ARC 201*	Architectural Design I . . . . .	.3
ARC 202*	Architectural Design II . . . . .	.3
ARC 210	Construction Estimating . . . . .	.3
ARC 262*	Computer-Aided Design for Architecture II . . . . .	.3
ARC 271*	Architectural Drawing III . . . . .	.3
ENV 101	Foundations of Design I . . . . .	.3
ENV 102*	Foundations of Design II. . . . .	.3
ART 111	History of Contemporary Art . . . . .	.3
HISTORY 86	Introduction to World Civilizations I . . . . .	.3
HISTORY 87	Introduction to World Civilizations II . . . . .	.3
MATH 241	Trigonometry with Vectors. . . . .	.4
PHYSICS 6	General Physics I . . . . .	.4
PHYSICS 7	General Physics II . . . . .	.4
SPEECH 101	Oral Communication I. . . . .	.3

IGETC or completion of Woodbury general education requirements. (Articulation agreement available in the Counseling Department).

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Department of Architecture Scholarships

SCHOLARSHIPS	AMOUNT
Alex S. Kosich Scholarship	\$.500
Architecture 152 Scholarship	\$.300
Beata Anaya Scholarship	\$.2,000
Delmar Beckhart Memorial Scholarship	\$.500
Dieterich-Post Scholarship	\$.500
D. Michael Hamner Architect Award	\$.300
East Los Angeles Freehand Drawing Prize	varies
Gen3 Entertainment Arts	varies
Hammel, Green & Abrahamson, Inc. Design Excellence Award.	\$.500
Metro Construction Scholarship	\$.1,000
Osborn Architects Design Excellence Award	\$.750
Quatro Group Design Award.	\$.1,000
Randall-Baylon Architects/RACAIA Scholarship	\$.1,000
Robert T. and Millie Weiss Scholarships	\$.1,000
Souders/Huey Book Grant	varies
Woodbury University Scholarship	varies

COURSE DESCRIPTIONS

Note: All Architecture and Architectural Technology students must see the Architectural Advisor in room E7-136 for program approval.

Architecture majors may take other classes in architecture when signing up for ARC 110, 130 or 131. Counseling by department chair is highly recommended prior to doing so.

See Architecture 170, 171, 172, 173, 271, 272, INT 201 and 202 for Drafting courses.

See Architecture 141, 142, 160, 161, 162, 164, 241, 242, 261, 262, 264, 341, and 342 for Computer-Aided Design courses.

ARCHITECTURAL INTERIORS (INT)

201 The Home - Design, Materials and Finishes I (2) CSU

Lecture, 1 hour; Laboratory, 3 hours.

This course presents the basic concepts of residential design with the emphasis placed on the design of improvements, additions and remodeling projects. Special emphasis is given to the qualities of furnishings, equipment and materials used in the home.

202 The Home - Design, Materials and Finishes II (2) CSU

Prerequisite: Architectural Interiors 201.

Lecture 1 hour; Laboratory, 3 hours.

This course expands the basic concepts of home improvements, additions and remodeling projects. Topics include: learning to design interior and exterior spaces; selecting materials and furnishings; and dealing with manufacturers and distributors in multiple residential and small commercial projects.

ARCHITECTURAL LANDSCAPE (LAN)

101 Landscape Architecture I (3) CSU

Lecture, 1 hour; Laboratory, 5 hours.

This course presents the basic concepts of landscape design. The environment, plants, inert materials, and societal relationships are studied, as well as the techniques and methods of making visual and oral presentations.

102 Landscape Architecture II (3) CSU

Prerequisite: Architectural Landscape 101.

Lecture, 2 hours; Laboratory, 4 hours.

This course presents the basic concepts of landscape design. The environment plants, inert materials, and societal relationships are studied as well as the techniques and methods of making visual and oral presentations.

ARCHITECTURE (ARC)**110 Introduction to Architecture (1) CSU RPT1**

Note: Open to all students. Satisfies 1 unit of General Education in Humanities requirements for graduation.

Lecture, 1 hour.

This is an introductory lecture course for all students majoring in architecture and related fields but open to all students. Emphasis is placed on awareness, critical thinking and observation of the built environment through basic architectural theory, conceptual and fictional representation, and professional knowledge of the field. Lectures are designed to acquaint students with the architectural field ideologies and professional experience - from theory to academic and professional possibilities.

115 Architectural Practice (2) CSU

Lecture, 2 hours.

This course presents a study of the architecture profession and the construction field with respect to education and registration; professional relations; office procedures; marketing; business; and legal aspects.

121 Freehand Drawing I (2) UC:CSU RPT1

Lecture, 1 hour; Laboratory, 3 hours.

This course involves the development of freehand graphic skills for visual communication, expression, and as a medium for perception of form and visual thinking. Developmental methods are explored through a variety of graphic media and tools applied to a wide variety of architectural subjects and design themes.

122 Architectural Perspective (2) UC:CSU

Lecture, 1 hour; Laboratory, 3 hours.

The various methods of making three-dimensional pictorial drawings are studied. Special emphasis is given to one and two point perspective procedures. Attention is also given to characteristics of building and landscape drawing. Shade and shadow techniques are also studied.

130 History of Architecture I (2) UC:CSU

Note: Open to all students. Satisfies 2 units of General Education in Humanities requirements for graduation.

Lecture, 2 hours.

The development of architecture from prehistoric times to the beginning of the Renaissance. The development of Architecture as influenced by geographical, geological, climatic, religious, social and historical forces.

131 History of Architecture II (2) UC:CSU

Note: Open to all students. Satisfies 2 units of General Education in Humanities requirements for graduation.

Lecture, 2 hours.

The course covers the development of architecture from the Renaissance to the present. The following influences are emphasized in the shaping of architecture: geographical, geological, climatic, religious, social, and historical.

141 Microstation I (3) CSU

Lecture 1 hour; Laboratory 5 hours.

This course introduces the concepts of CAD and the technical language of CAD using MicroStation as the software. Basic concepts involved in the creation of two dimensional drawings are presented.

142 Microstation II (3) CSU

Lecture 1 hour; Laboratory 5 hours.

This second course introduces a more in-depth use of MicroStation. Basic to advanced concepts in the creation and manipulation of two-dimensional drawings are presented with an emphasis on increasing productivity and accuracy. An introduction to three-dimensional drawings is also covered.

152 Equipment of Buildings (3) CSU

Lecture, 3 hours.

Essential considerations in design of Environmental Comfort Systems, selection of system components for houses, and energy-efficient design of building envelopes are presented in this course. Topics also include space heating, cooling and ventilating; lighting and power distribution; potable water supply and conditioning; waste disposal and recycling, sustainability, and total-energy systems.

160 Computers for Designers (3) CSU RPT1

Lecture, 1.5 hours; Laboratory, 4.5 hours.

This is an introductory course emphasizes how to optimize and understand the role of digital medium in today's design industry. Scanning, image manipulation, digital presentations, printing, Web publishing, imaging, and graphics software such as Photoshop are covered.

161 Introduction to Computer-Aided Architectural Design (2) CSU RPT1

Corequisite: Architecture 180.

Lecture, 1 hour; Laboratory, 2 hours.

This is an introductory course where students learn the necessary concepts involved in the production of CAD-generated architectural drawings using AutoCAD. Drawing setup, basic drawing and editing commands, layer control, text, dimensioning, hatching, and isometric drawings are covered.

162 Computer-Aided Design and Drafting (3) CSU RPT1

Corequisite: Architecture 180.

Lecture, 1 hour; Laboratory 5 hours.

This is the second course in a series of CAD classes using Auto-CAD. Advanced drawing and editing commands, blocks, attributes, image insertion, paper space and model space are covered. The semester ends with an introduction to 3D modeling.

164 Design Software for Architecture (2) CSU

Lecture, 1 hour; Laboratory, 3 hours.

This is a hands-on introduction to software used in the fields of architecture, interior design and construction. Through lectures, demonstrations and hands-on lab exercises, students learn the concepts of Building Information Modeling (BIM). Tools used for parametric building design and documentation are covered. By the end of the class, students are able to create an entire project, from schematic design through construction documentation and identify the benefits of BIM. Photorealistic rendering techniques and walkthroughs are also introduced.

170 Beginning Architectural Drafting (2) CSU

Lecture 1 hour; Laboratory, 3 hours.

This course is an introduction to graphics for students with no drafting knowledge, and for the person entering architecture, urban planning, landscape architecture, art, interior

design, and the allied fields. Training in developing multi-view drawings of building exteriors, interiors, floor plans, and furniture is emphasized.

171 Architectural Detailing (2) CSU

Lecture 1 hour; Laboratory, 3 hours.

Drafting skills as well as construction knowledge are developed by the study of specific aspects of construction. Specialized drawings are drafted of foundations, walls, ceilings, roofs, doors, windows, cabinets, etc. Some drawings are made "full-size" in order to illustrate joinery techniques. Scale models, freehand sketching of details, and metrics are explored.

172 Architectural Drawing I (3) CSU

Prerequisite: Architecture 170 or General Engineering 111.

Lecture, 2 hours; Laboratory, 4 hours.

This course covers the preparation of working drawings for a one-story, wood frame residence, and the study of construction methods, materials, and building ordinances. Includes graphic representation of site, foundation, floor and roof plans; schedules, cross-sections and details, interior and exterior elevations.

173 Architectural Drawing II (3) CSU

Prerequisite: Successful completion of Architecture 172.

Lecture, 2 hours; Laboratory, 4 hours.

This course covers the preparation of working drawings for two-story, wood frame residences; and the study of construction methods, materials, and building ordinances. Special considerations is given to solving problems involving two-story construction additions to existing one-story structures. Other topics include graphic representations on site, foundation, floor plans; schedules, cross sections and details, interior design, and interior and exterior elevations.

180 Computer-Aided Architectural Laboratory (1) CSU RPT3

Corequisites: Architecture 161, 162, 261, or 262.

Laboratory, 2 hours.

This course is designed to reinforce the lectures presented in each computer-aided architecture class. It gives the student needed practice in applying software programs to various class assignments.

201 Architectural Design I (3) UC:CSU

Prerequisite: Environmental Design 102.

Lecture, 1 hour; Laboratory, 5 hours.

Conceptualization and development of simple architectural design projects investigating the development of space and built form and the influences of functional/social programs and materiality/structure/construction systems situated within a limited site context. Emphasis is placed on internally driven forces and relationships as primary influences within the design process to generate architectural design solutions. Comprehensive analysis and research of significant architecture precedents and building types will additionally inform the design process.

202 Architectural Design II (3) UC:CSU

Prerequisite: Architecture 201.

Lecture, 1 hour; Laboratory, 5 hours.

Conceptualization and development of more complex architectural design projects investigating the development of space and built-form and the influences of the environ-

ment, including social and cultural environment, geography, climate, daylight and energy-efficiency strategies situated in urban and natural site environments. Emphasis is placed on externally driven forces and relationships that generate as primary influences within the design process to generate architectural design solutions.

210 Construction Estimating (3) CSU

Lecture, 3 hours.

The students are introduced to methods used in determining quantity take-offs and cost estimates of labor and materials in the construction industry. Topics include: excavation, concrete, masonry, wood framing, wet and dry walls systems, paints and wall coverings, hardware, and building equipment.

211 Introduction to Building Codes (3) CSU

Lecture, 3 hours.

This course is an introduction to building codes and ordinances regulating various types of occupancies and zoning regulations.

221 Architectural Rendering (2) UC:CSU

Lecture, 1 hour; Laboratory, 3 hours.

This course offers opportunities for the development of graphic techniques and the use of media for architectural renderings in a variety of two-dimensional formats and compositions. The methods employed in the selection of media, techniques and compositions are also studied in relation to the communication of architectural design and concepts.

223 Portfolio Development (1) CSU

Corequisite: Architecture 201 and 202.

Advisory: Environmental Design 101 and 102.

Laboratory, 2 hours.

This course is designed to assist students in the development and production of a design portfolio to present completed creative and graphic work. Topics presented include selection of subject matter, layout, storyboard development, typography, reprographic and photography methods.

241 MicroStation III (3) CSU

Prerequisite: Architecture 142.

Lecture, 1 hour; Laboratory, 5 hours.

This course builds on the skills learned in MicroStation I and II and goes further into the theory, tools and techniques of three-dimensional design. Students will learn how to use design visualization, renderings and walk-through. MicroStation, MicroStation Modeler, and Masterpiece are used.

242 MicroStation IV (3) CSU

Prerequisite: Architecture 241.

Lecture, 1 hour; Laboratory, 5 hours.

This course provides students with real world projects. Students are required to complete a project from start to finish. The class attempts to duplicate a traditional work environment.

261 Computer-Aided Design for Architecture I (3) CSU RPT1

Prerequisite: Architecture 162.

Corequisite: Architecture 180.

Lecture, 1 hour; Laboratory, 5 hours.

This is the third-semester course students learn three-dimensional concepts involved in making computer-aided drawings.

Drawings are constructed using a microcomputer with appropriate software such as AUTOCAD. Students use workstations with a micro-computer, monitor, disk drives, digitizer, printer and plotter.

262 Computer-Aided Design for Architecture II (3) CSU

Prerequisite: Architecture 261.

Corequisite: Architecture 180.

Lecture, 1 hour; Laboratory, 5 hours.

This is the last course in a series of CAD classes where students are introduced to modeling, rendering and animation using Autodesk VIZ or similar software. Complex 3D modeling, lighting, shadows, materials, cameras, realistic effects, animations, and walkthroughs are covered.

264 3D Modeling for Designers (3) CSU RPT1

Lecture, 3 hours.

Introduction to digital 3D Modeling using Sketch Up. Students learn modeling skills through projects that incrementally explore a wide range of modeling, lighting and rendering tools and culminate in the creation of a short virtual walk-through.

271 Architectural Drawing III (3) CSU

Prerequisite: Successful completion of Architecture 173.

Lecture, 1 hour; Laboratory, 5 hours.

This course covers the study of concrete block and/or brick buildings along with wood frame construction, especially long span beam techniques. It includes further study of construction materials and building ordinances; and an introduction to interior design colors, materials and furniture. Creative graphic representation on site and floor plans, and interior and exterior elevations are also considered.

272 Architectural Drawing IV (3) CSU

Prerequisite: Successful completion of Architecture 271.

Lecture, 1 hour; Laboratory, 5 hours.

The design and construction of concrete buildings are studied in working drawings with special emphasis on tilt-up concrete construction and wood frame, long span beam techniques. Further study is provided for construction materials, details and building ordinances; and interior design color board presentations in colors, materials and furniture selections. Working drawings, creative architectural design, and graphic presentation methods are stressed.

341 GIS Metropolitan Access Planning Systems I (3) CSU

Advisory: Architecture 172 and Architecture 141 or 161.

Lecture 2 hours; Laboratory 4 hours.

In this course, Geographic Information System technology and related digital technologies are used to explore intelligent drawings - drawings that have multiple types of information associated with them. The collection of data is used to evaluate the environmental conditions of a city.

342 GIS Metropolitan Access Planning Systems II (3) CSU

Advisory: Architecture 341.

Lecture 2 hours; Laboratory 4 hours.

This course is an advanced study in Geographic Information System. It provides opportunities to develop proficiency in Remote Sensing Network Analysis, Photogrammetry; Raster-Data Convergence, Dynamic Segmentation, Voxel Spaces and Spatial Analysis Tools. Information is collected

and integrated into a GIS and then structured for Internet connectivity.

185 Directed Study - Architecture (1) CSU

285 Directed Study - Architecture (2) CSU

385 Directed Study - Architecture (3) CSU

Conference 1 hour per week per unit.

The above courses allow students to pursue Directed Study projects in architecture. The courses are conducted on a contract basis under the direction of a supervising instructor.

Credit Limit: A maximum of 6 units in Directed Study may be taken for credit.

Note: UC does not grant credit for variable topics courses in Architecture because of credit restrictions in this area.

ENVIRONMENTAL DESIGN (ENV)

101 Foundations of Design I (3) UC:CSU

Lecture, 1 hour; Laboratory, 5 hours.

This course is a design studio introducing formal and spatial visual design concept and principles, strategies and systems related to the design of the built environment. Two- and three-dimensional problems are introduced, processes studied and solutions evaluated. Drawing and modeling techniques are developed as investigative tools, representational and expressive visual media.

102 Foundations of Design II (3) CSU

Prerequisite: Environmental Design 101.

Lecture, 1 hour; Laboratory, 5 hours.

Design studio introducing environmental, architectural and societal design considerations. Two- and three-dimensional problems are introduced, processes studied and solutions evaluated. Principles of how a process and solution to a design problem is derived and influenced by the physical laws of nature; derived by the physical materials and methods of working with those materials; human and natural environmental factors; and physical dimensions and activities with the human cultural, political and social environment.

TRANSPORTATION PLANNING (TRN)

101 Transportation Planning I (3) CSU

Lecture, 3 hours.

The purpose of this course is to introduce students to the overall elements involved in transportation planning. The course focuses on the role of transportation and land use planning in the overall city planning purpose. User characteristics, roadway design elements, transportation system modeling, system design and management techniques, and system capacity will be covered.

102 Transportation Planning II (3) CSU

Lecture, 3 hours.

This course relates the key issues of land use planning and transportation planning to show how interrelated they are and how they influence the overall shape of urban regions. The course demonstrates how transportation planning process is applied to urban planning problems from the regional to the neighborhood scale. The transportation planning process, transportation system modeling, and land use and transportation issues at the statewide, regional citywide and local levels are explored.