

# Design

The Design program offers courses in architecture, drafting, and engineering for students who wish to transfer to a four-year institution or gain employment in the fields of architecture, computer-aided design, mechanical design, and engineering. The program also offers courses for those who may not be pursuing a career in design but who have an interest in or need to understand graphic communication.

The engineering coursework includes engineering design graphics courses for students majoring in aerospace, civil, environmental, industrial, mechanical, and structural engineering. Careers in engineering, some of which require an undergraduate degree, include CAD drafter, civil engineer, industrial designer, structural engineer, and mechanical engineer.

The architectural coursework gives students a working knowledge of the practices and technical aspects of architectural design and drawing. Careers in architecture, some of which require an undergraduate degree, include architect, designer, urban planner, surveyor, draftsman, building inspector, and technical illustrator.

Employers for students obtaining certificates and associate degrees include federal, state, and local land use planning agencies; building and transportation agencies; private architectural, contract, and construction companies; and for-profit industrial and manufacturing companies in life science, defense, sport/recreation equipment, and various other industries.

Graduates of the program have been hired by local companies such as General Atomics, Calloway Golf, LaCantina Doors, Forecast 3D, NASA, Boeing, and Illumina. Graduates of the program have also been accepted to universities such as SDSU, Cal Poly, NewSchool, Woodbury, USC, UCSD, UCLA, and UC Berkeley. Graduates have been awarded the Bridges Scholarship and the prestigious Jack Kent Cooke undergraduate transfer scholarship.

## Academic and Career Pathway

Business and Technology (<https://www.miracosta.edu/academics/degree-and-certificate-programs/business-and-technology/>)

## Contact Information

**Chair:** Paul Clarke

**Dean:** Al Taccone

<https://www.miracosta.edu/academics/degree-and-certificate-programs/business-and-technology/design/index.html> (<https://www.miracosta.edu/academics/degree-and-certificate-programs/business-and-technology/design/>)

**Department:** Design

**Office:** San Elijo, Building SAN1100, 760.795.6807

## Full-Time Faculty

Paul Clarke  
David Parker

## Associate Degrees

### Associate in Arts Degrees

#### Architectural Design

#### Computer-Aided Drafting

#### Computer-Aided Drafting and Design

#### Mechanical Design

### Associate in Science Degrees

#### Engineering Technology

Students may earn one of the above-named associate degrees by completing a certificate of achievement and the general education courses required for MiraCosta College's Associate in Arts or Associate in Science degree (see Associate Degrees (<http://catalog.miracosta.edu/degreecertificate-transferinfo/requirements/>)). Students should meet with a MiraCosta counselor to identify required courses and to develop a written educational plan for their chosen degree or certificate.

## Certificates

### Certificate of Achievement

#### Architectural Design

This certificate program gives students a working knowledge of the practices and technical aspects of architectural design and drawing. Students complete the required core courses and choose two elective courses that relates to their own career objective. Completion of this certificate provides students with a foundation in architectural design, construction materials, computer-aided drafting, and building-information modeling, and it enables students to qualify for entry-level positions in detailing, revisions, design update, and general office practice.

### Program Student Learning Outcome

Upon completion of this program, the student will be able to design and create graphical representations of the built environment based on industry standards.

### Course Requirements

Required courses:		
DESN 100	Fundamentals of Design	3
DESN 101	Computer-Aided Design and Drafting	4
DESN 102	Architectural Drawing	3
DESN 103	Architectural Communications	3
DESN 105	Construction Materials	3
DESN 200	Architectural Design I	3
DESN 201	Advanced AutoCAD Computer-Aided Design and Drafting	3
DESN 207	Revit Building Information Modeling	3
DESN 290	Portfolio and Presentation	1
	or DESN 292 Internship Studies	
	or DESN 299 Occupational Work Experience Education	
Select at least 6 elective units from the following:		6
BUS 133	Project Management	

DESN 107	History of Western Architecture-A Sustainable Perspective
DESN 108	World Architecture
DESN 204	Modeling, Prototyping, and Manufacturing
HORT 127	Landscape Design
MAT 110	Digital Imaging 1: Adobe Photoshop

**Total Units** **32**

## Certificate of Achievement

### Computer-Aided Drafting

This certificate provides a solid foundation in computer-aided drafting (CAD). In addition to the common core of required courses, students choose an area of emphasis (architecture, engineering, or landscape) and complete all the courses from that emphasis. Completion of this program prepares students for entry level support positions in a variety of local industries or for continuing their education. Typical job titles of students completing this certificate include drafter, CAD operator, AutoCAD technician, and architectural and civil drafter.

This certificate consists of 18 units of required core courses and 6-7 units of elective courses from one area of emphasis: architecture, engineering, or landscape. Students should select an emphasis area and complete both courses in that emphasis.

### Program Student Learning Outcome

Upon completion of this program, the student will be able to design and create graphical representations of the built environment based on industry standards.

### Course Requirements

Required courses:	
DESN 101	Computer-Aided Design and Drafting 4
DESN 110	Graphics Communication 3
DESN 201	Advanced AutoCAD Computer-Aided Design and Drafting 3
DESN 203	Solid Modeling 3
DESN 204	Modeling, Prototyping, and Manufacturing 3
DESN 286	Professional Certification Preparation 1
DESN 290	Portfolio and Presentation 1
or DESN 292	Internship Studies
or DESN 299	Occupational Work Experience Education
Select an area of emphasis in either Architecture, Engineering or Landscape from below:	4-6
Emphasis in Architecture (6 units):	
DESN 102	Architectural Drawing
DESN 207	Revit Building Information Modeling
Emphasis in Engineering (4 units):	
DESN 111	Engineering Design Graphics
Emphasis in Landscape (6 units):	
HORT 127	Landscape Design

HORT 220	Computer-Aided Landscape Design Applications
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**Total Units** **22-24**

## Certificate of Achievement

### Computer-Aided Drafting and Design

This certificate provides a solid foundation in computer-aided drafting and design (CADD). In addition to the common core of required courses, students choose an area of emphasis (architecture, engineering, or landscape) and complete at least 11 elective units from that emphasis. Completion of this program prepares students for entry-level support positions in a variety of local industries or for continuing their education. Typical job titles of students completing this certificate include designer, CAD technician, design drafter, and architectural and civil designer.

This certificate consists of 18 units of required core courses and at least 11 units of elective courses from one area of emphasis: architecture, engineering, or landscape.

### Program Student Learning Outcome

Upon completion of this program, the student will be able to design and create graphical representations of the built environment based on industry standards.

### Course Requirements

Required courses:	
DESN 101	Computer-Aided Design and Drafting 4
DESN 110	Graphics Communication 3
DESN 201	Advanced AutoCAD Computer-Aided Design and Drafting 3
DESN 203	Solid Modeling 3
DESN 204	Modeling, Prototyping, and Manufacturing 3
DESN 286	Professional Certification Preparation 1
DESN 290	Portfolio and Presentation 1
or DESN 292	Internship Studies
or DESN 299	Occupational Work Experience Education
Select at least 11 units from one of the three areas of emphasis (Architecture, Engineering, or Landscape):	11
Architecture Emphasis	
DESN 100	Fundamentals of Design
DESN 102	Architectural Drawing
DESN 105	Construction Materials
DESN 200	Architectural Design I
DESN 207	Revit Building Information Modeling
Engineering Emphasis	
BUS 133	Project Management
DESN 109	Introduction to Engineering and Design
DESN 111	Engineering Design Graphics
DESN 120	Manufacturing Processes
Landscape Emphasis	
DESN 102	Architectural Drawing

HORT 117	Plant Identification: Trees, Shrubs, and Vines	
HORT 126	Irrigation and Water Management	
HORT 127	Landscape Design	
HORT 220	Computer-Aided Landscape Design Applications	
<b>Total Units</b>		<b>29</b>

## Certificate of Achievement Engineering Technology

This certificate provides students with a background for employment in an engineering, manufacturing, or product development firm in support of and under the direction of an engineering professional. Employment opportunities exist in private manufacturing industries, such as aerospace, medical, industrial, or information technology, as an engineering assistant, engineering technologist, or engineering technician. Most of the course requirements are applicable to lower-division preparation leading to a bachelor's degree in engineering technology at a four-year institution. The support courses allow students to select two courses that will strengthen their preparation for the required core courses. Students should select the support courses based on their previous academic record, their future academic goals, and with input from a counselor or discipline faculty member.

### Program Student Learning

Upon completion of this program students will be able to demonstrate engineering and design skills necessary for entry level engineering positions and further academic study in engineering and/or design.

### Course Requirements

Required courses:		
CSIT 110	Computer Applications	3
CS 150	C++ Programming	3
DESN 101	Computer-Aided Design and Drafting	4
DESN 109	Introduction to Engineering and Design	1
DESN 111	Engineering Design Graphics	4
DESN 120	Manufacturing Processes	3
DESN 203	Solid Modeling	3
MATH 131	Pre-Calculus II: Trigonometry and Analytic Geometry	4-5
or MATH 150	Calculus and Analytic Geometry I	
or MATH 150H	Calculus and Analytic Geometry I (Honors)	
DESN 286	Professional Certification Preparation	1
or DESN 292	Internship Studies	
or DESN 299	Occupational Work Experience Education	
Support Courses: Select two courses.		6-8
CHEM 140	Preparation for General Chemistry: For Science Majors	
CS 101	Introduction to Computer Science Principles	
DESN 110	Graphics Communication	
MATH 126	Pre-Calculus I: College Algebra	
PHYS 111	Introductory Physics I	

or PHYS 151 Principles of Physics I

**Total Units** **32-35**

## Certificate of Achievement Mechanical Design

This certificate prepares individuals for entry-level jobs with companies and agencies involved in the design and/or manufacture of mechanical objects, devices, and equipment. Students develop the knowledge and skills needed to take design ideas from concept sketches to digital models, physical prototypes, detail drawings, and subsequent manufacture and production. Job titles of students completing this certificate include drafter, designer, mechanical designer, and engineering assistant. The certificate also equips employed and transfer students with expertise using the latest industry-standard design tools required for job promotions, advanced study, and professional practice.

### Program Student Learning Outcome

Upon completion of this program, the student will be able to design and create graphical representations of the built environment based on industry standards.

### Course Requirements

Required courses:		
DESN 101	Computer-Aided Design and Drafting	4
DESN 109	Introduction to Engineering and Design	1
DESN 110	Graphics Communication	3
DESN 111	Engineering Design Graphics	4
DESN 120	Manufacturing Processes	3
DESN 203	Solid Modeling	3
DESN 204	Modeling, Prototyping, and Manufacturing	3
DESN 286	Professional Certification Preparation	1
Select one unit from the following list of courses:		1
DESN 290	Portfolio and Presentation	
DESN 292	Internship Studies	
DESN 299	Occupational Work Experience Education	
<b>Total Units</b>		<b>23</b>

## Certificate of Proficiency Applied Design

This certificate prepares individuals with skills fundamental to careers in professional interior and industrial design. It is designed for students who desire to secure entry-level positions or who plan to continue their education at a college of design. Job titles typical of students completing this certificate include design assistant or interior design assistant.

## Program Student Learning Outcome

Upon completion of this program students will be able to apply the standard Design Process to generate solutions across multiple industries.

### Course Requirements

Required courses:		
DESN 100	Fundamentals of Design	3
DESN 101	Computer-Aided Design and Drafting	4
Select an area of emphasis in Interior Design or Industrial Design from below:		6
Emphasis in Design (6 units)		
DESN 102	Architectural Drawing	
DESN 107	History of Western Architecture-A Sustainable Perspective	
DESN 200	Architectural Design I	
Emphasis in Industrial Design (6 units)		
DESN 110	Graphics Communication	
DESN 203	Solid Modeling	
DESN 204	Modeling, Prototyping, and Manufacturing	
<b>Total Units</b>		<b>13</b>

## Certificate of Proficiency

### AutoCAD Certified User

This certificate offers students credit college courses in solid modeling that transfer to local universities and prepare students to take the AutoCAD certification exam and become a certified user. Beginning students who complete this certificate are on a path toward completing an associate degree in computer aided drafting and transferring to a four-year university. The certificate is also valuable to industry professionals seeking to upgrade their skills and obtain certification.

### Program Student Learning Outcome

At the end of the program students will be able to demonstrate knowledge of the certification exam schedules and be able to apply success skills and strategies to prepare for certification exams.

### Course Requirements

Required courses:		
DESN 101	Computer-Aided Design and Drafting	4
DESN 201	Advanced AutoCAD Computer-Aided Design and Drafting	3
DESN 286	Professional Certification Preparation	1
<b>Total Units</b>		<b>8</b>

## Certificate of Proficiency

### Engineering Design Graphics

This certificate provides students an opportunity to explore and become proficient with the graphic tools used by designers and engineers to take ideas from design concept to prototype and physical product. Students who complete this certificate are encouraged to then pursue the Mechanical Design or CADD

Certificate of Achievement and continue their engineering education.

## Program Student Learning Outcome

Upon completion of this program students will be able to critically analyze the needs of the audience or end user of the model and select the optimal model media and presentation style (multi-view, shading, dimensioning, etc.) based on the often conflicting demands of user needs, time and budget constraints, and available technology (plotters, projectors, RP machines, etc.).

### Course Requirements

Required courses:		
DESN 101	Computer-Aided Design and Drafting	4
DESN 109	Introduction to Engineering and Design	1
DESN 111	Engineering Design Graphics	4
DESN 120	Manufacturing Processes	3
DESN 203	Solid Modeling	3
<b>Total Units</b>		<b>15</b>

## Certificate of Proficiency

### Drafting Fundamentals

This certificate introduces and provides an overview of the issues and skills involved in drafting education or a career in drafting. A graphics communication course covering sketching, visualization, and projection is combined with a computer-aided drafting and architectural drawing course to help students develop skills using the board and AutoCAD. These courses provide a foundation for work or study related to drafting.

### Program Student Learning Outcome

Upon successful completion of the program, students will be able to create, present, and evaluate a CAD design project that solves design problems typical in industry and/or the community.

### Course Requirements

Required courses:		
DESN 101	Computer-Aided Design and Drafting	4
DESN 102	Architectural Drawing	3
DESN 110	Graphics Communication	3
<b>Total Units</b>		<b>10</b>

## Certificate of Proficiency

### SolidWorks Certified User

This certificate offers students credit college courses in solid modeling that transfer to local universities and prepare students to take the SOLIDWORKS certification exam and become a certified user. Beginning students who complete this certificate are on a path toward completing an associate degree in CADD or mechanical design and transferring to a four-year university. The certificate is also valuable to industry professionals seeking to upgrade their skills and obtain certification.

### Program Student Learning Outcome

At the end of the program students will be able to demonstrate knowledge of the certification exam schedules and be able to apply success skills and strategies to prepare for certification exams.

### Course Requirements

Required courses:		
DESN 111	Engineering Design Graphics	4
DESN 203	Solid Modeling	3
DESN 286	Professional Certification Preparation	1
<b>Total Units</b>		<b>8</b>

### Certificate of Proficiency

#### 3D Modeling and Prototyping

This certificate of proficiency will prepare students for opportunities in the emerging fields of 3D Printing (3DP), Rapid Prototyping (RP), and Additive Manufacturing (AM). Students develop skills in producing digital 3D models that are used to print, fabricate, and/or manufacture physical prototypes in a rapid manner.

### Program Student Learning Outcome

Upon completion of this program, students will be able to design and create graphical representations of the built environment based on industry standards.

### Course Requirements

Required courses:		
DESN 120	Manufacturing Processes	3
DESN 201	Advanced AutoCAD Computer-Aided Design and Drafting	3
DESN 203	Solid Modeling	3
DESN 204	Modeling, Prototyping, and Manufacturing	3
DESN 286	Professional Certification Preparation	1
<b>Total Units</b>		<b>13</b>

## Courses

### DESN 100: Fundamentals of Design

Units: 3

Prerequisites: None

Acceptable for Credit: CSU, UC

Lecture 2 hours, laboratory 3 hours.

Course Typically Offered: Fall, Spring

This course introduces the fundamentals of the design process as students develop and apply design skills using visual elements and principles of two- and three-dimensional design. It includes solving visual problems and creating authentic designs using black and white and color media in both two- and three-dimensions. Students also study design in historical, social, and multicultural contexts.

### DESN 101: Computer-Aided Design and Drafting

Units: 4

Prerequisites: None

Acceptable for Credit: CSU, UC

Lecture 2 hours, laboratory 6 hours.

Course Typically Offered: Fall, Spring, and Summer

This course introduces students to the fundamentals of computer graphics and two and three-dimensional modeling on computer-aided design and drafting systems. Students use AutoCAD and other software and online computer systems to design and display various objects. Students learn principles and techniques that enable them to create, modify, annotate, scale, and output two- and three-dimensional drawings, renderings, and models.

### DESN 102: Architectural Drawing

Units: 3

Prerequisites: None

Acceptable for Credit: CSU, UC

Lecture 2 hours, laboratory 3 hours.

Course Typically Offered: Fall, Spring

This course provides the methods and techniques required for architectural drawing. It covers freehand sketching, line work, lettering, geometric constructions, orthographic and isometric projections, and construction drawings, which include floor plans, elevations, sections, and details.

### DESN 103: Architectural Communications

Units: 3

Prerequisites: None

Advisory: DESN 102

Acceptable for Credit: CSU, UC

Lecture 2 hours, laboratory 3 hours.

Course Typically Offered: Fall

This course provides students the fundamentals of architectural presentation, rendering, and model making. It introduces standards and applications of design language, color theory, pen and ink, freehand drawing, two-point perspective, and model making technique.

### DESN 105: Construction Materials

Units: 3

Prerequisites: None

Acceptable for Credit: CSU, UC

Lecture 2.50 hours, laboratory 1.50 hours.

Course Typically Offered: Spring

This course provides an overview of the processes and materials used in construction. Topics include elements of planning, designing, and contracting of the work. The course emphasizes site preparation and the materials used in residential and commercial projects, including wood, concrete, steel, glazing, and masonry as applied to the interiors and exteriors of buildings.



## **DESN 107: History of Western Architecture-A Sustainable Perspective**

Units: 3

Prerequisites: None

Acceptable for Credit: CSU, UC

Lecture 3 hours.

Course Typically Offered: Fall, Summer

This course introduces the history of Western architecture from the ancient Near East to the present day with an emphasis on the timeless principles of sustainable design. It examines selected significant historical works of architecture to shed light on the technological, religious, and social forces that shaped these works. Students are introduced to important buildings as they examine past exemplars of architectural design through the lens of present day sustainability guidelines.

## **DESN 108: World Architecture**

Units: 3

Prerequisites: None

Acceptable for Credit: CSU, UC

Lecture 3 hours.

Course Typically Offered: Fall, Spring

This survey of non-Western architectural history examines how non-Western building traditions evolved during and after Western and Islamic colonialism. The course focuses on the cultural conditions and forces that shaped the indigenous architecture of the pre-Columbian Americas, the Islamic empires, India, China, South-East Asia, and Japan.

## **DESN 109: Introduction to Engineering and Design**

Units: 1

Prerequisites: None

Acceptable for Credit: CSU, UC

Lecture 0.50 hour, laboratory 1.50 hours.

Course Typically Offered: Fall

This course introduces students to engineering and design. Students learn about engineering as a field of study and profession. Through tours, guest speakers, text reading, and group discussions, students learn about the campus resources, organizations, academic planning, time management, and study skills necessary for success in engineering. Students develop a plan to achieve their own academic, personal, and professional goals as well as an understanding of design through a project- and team-based learning experience.

## **DESN 110: Graphics Communication**

Units: 3

Prerequisites: None

Acceptable for Credit: CSU, UC

Lecture 2 hours, laboratory 3 hours.

Course Typically Offered: Fall

This course introduces graphics as a fundamental means of communicating technical information for product design, manufacturing, and construction. Students develop an understanding of graphics communication in the design process and gain hands-on experience using computer-aided design software to produce models, assemblies, and drawings according to industry standards.

## **DESN 111: Engineering Design Graphics**

Units: 4

Prerequisites: None

Advisory: DESN 101 or DESN 110

Acceptable for Credit: CSU, UC

Lecture 3 hours, laboratory 3 hours.

Course Typically Offered: Spring

This course prepares engineering and design students to use the graphic communication tools used by engineers in industry. Students develop an advanced understanding of these tools in the engineering design process and gain hands-on experience using modern computer-aided solid modeling software to produce complex part models, assemblies, and drawings.

## **DESN 120: Manufacturing Processes**

Units: 3

Prerequisites: None

Acceptable for Credit: CSU

Lecture 2.50 hours, laboratory 1.50 hours.

Course Typically Offered: Fall

This course provides students a basic understanding of the properties of materials and how these materials, including plastics, metals, ceramics, and composites, are transformed into finished products. Students study basic and advanced manufacturing processes, including material removal, joining, assembly, casting, surfacing, and finishing. Other topics include numerical control, rapid prototyping, measurement and gaging, geometric dimensions and tolerancing, and statistical methods

## **DESN 200: Architectural Design I**

Units: 3

Prerequisites: DESN 102.

Enrollment Limitation: Concurrent enrollment in DESN 102 if prerequisite not met.

Acceptable for Credit: CSU, UC

Lecture 2 hours, laboratory 3 hours.

Course Typically Offered: Spring

This course introduces the basics of architectural design. Students learn and apply fundamental form and space concepts to a design project using visual communication, spatial communications, and creative problem solving.

## **DESN 201: Advanced AutoCAD Computer-Aided Design and Drafting**

Units: 3

Prerequisites: DESN 101.

Enrollment Limitation: Concurrent enrollment in DESN 101 if prerequisite not met.

Acceptable for Credit: CSU

Lecture 2 hours, laboratory 3 hours.

Course Typically Offered: Spring

This course focuses on applying advanced AutoCAD skills in the design process to create models, drawings, and related documentation for a variety of applications and industries. Topics include blocks, attributes, external references, solid, mesh, and surface modeling, presentation, and photorealistic rendering. Students develop and apply skills in visualizing, creating, and editing 3D shapes for modeling, testing, rapid prototyping, and marketing. The course emphasizes improving productivity and developing modeling and presentation skills.

**DESN 203: Solid Modeling**

Units: 3

Prerequisites: None

Advisory: DESN 101 and DESN 110

Acceptable for Credit: CSU, UC

Lecture 1.50 hours, laboratory 4.50 hours.

Course Typically Offered: Spring

This course introduces engineering and design students to 3D parametric solid modeling, including basic and intermediate parts, assemblies, and drawings. From their models, students produce CAD drawings to include orthographic, pictorial, section, and detail views. The course also covers dimensioning, dimensional tolerancing, and thread notation per ASME Y14.5M-2009 and uses SolidWorks software.

**DESN 204: Modeling, Prototyping, and Manufacturing**

Units: 3

Prerequisites: None

Advisory: DESN 101

Acceptable for Credit: CSU, UC

Lecture 2 hours, laboratory 3 hours.

Course Typically Offered: Fall

This course provides theory and hands-on application of the design process, 3D modeling, prototyping, and manufacturing to beginning and intermediate design students. Building upon drafting fundamentals, students develop skill in computer-aided solid modeling, Autodesk Fusion, additive manufacturing, and conventional manufacturing processes. Students develop and refine modeling skills, produce prototypes, enhance presentation models, and use simulation and 3D printing tools to solve design problems individually and in teams. Additional topics include problem identification, concept generation, project management, risk reduction, file translation, virtual/augmented reality (VR/AR), AI, Geometric dimensioning and tolerancing (GD&T), and quality control.

**DESN 207: Revit Building Information Modeling**

Units: 3

Prerequisites: None

Advisory: DESN 101 and DESN 102

Acceptable for Credit: CSU, UC

Lecture 2 hours, laboratory 3 hours.

Course Typically Offered: Fall

This course prepares intermediate design students to create, detail, and present CAD models of the built environment using Revit building information modeling software. Students create and modify building models, produce presentations including renderings and animated walk-throughs, manipulate parametric objects, create schedules and details from the data base, and generate construction documents from the model. The course is intended for students pursuing careers in architecture, engineering, construction, drafting, and landscape and interior design.

**DESN 286: Professional Certification Preparation**

Units: 1

Prerequisites: None

Acceptable for Credit: CSU

Lecture 1 hour.

Course Typically Offered: Fall

Attaining a professional certification can help employers further validate a student's MiraCosta degree, certificate, or course work. This course provides an overview of industry-based third-party professional certifications, credentials, and licenses specific to a student's discipline of study. Topics include goal setting, a survey of professional certifications relevant to the discipline, industry trends and certification value assessment, exam preparation and exam strategies, practice exams, resolving any skill deficiencies, and life-long learning. Under the instruction of a faculty-mentor, students reflect on their prior course work and career aspirations to produce and execute a plan that outlines the necessary steps to attain the professional certification of their choice. Although students are encouraged to do so, signing up for and/or passing a certification exam is not required to pass the course.

**DESN 290: Portfolio and Presentation**

Units: 1

Prerequisites: None

Acceptable for Credit: CSU

Lecture 0.50 hour, laboratory 1.50 hours.

Course Typically Offered: Spring

Students develop a professional portfolio using their best work from previously completed architecture and drafting courses to highlight their design and drawing achievements. The course also covers how students can market themselves for the workforce through resume writing, job search strategies, and presentation and interview skills.

**DESN 292: Internship Studies**

Units: 0.5-14

Prerequisites: None

Corequisite: Complete 54 hours of work per unit, paid or unpaid.

Enrollment Limitation: Instructor, dept chair, and Career Center approval. Fourteen unit maximum in any combination of work experience education and/or internship studies per semester.

Acceptable for Credit: CSU

Course Typically Offered: Fall, Spring, and Summer

This course provides students the opportunity to apply the theories and techniques of their discipline in an internship position in a professional setting under the instruction of a faculty-mentor and site supervisor. It introduces students to aspects of the roles and responsibilities of professionals employed in the field of study. Topics include goal-setting, employability skills development, and examination of the world of work as it relates to the student's career plans. Students must develop new learning objectives and/or work/intern at a new site upon each enrollment.

## Design

### **DESN 296: Topics in Design**

Units: 1-3

Prerequisites: None

Acceptable for Credit: CSU

Lecture 1 hour.

Lecture 2 hours.

Lecture 3 hours.

Course Typically Offered: To be arranged

This course gives students an opportunity to study topics in Design that are not included in regular course offerings. Each Topics course is announced, described, and given its own title and 296 number designation in the class schedule.

### **DESN 299: Occupational Work Experience Education**

Units: 0.5-14

Prerequisites: None

Corequisite: Complete 54 hours of work per unit, paid or unpaid.

Enrollment Limitation: Career Center approval. Fourteen unit maximum in any combination of work experience education and/or internship studies per semester.

Acceptable for Credit: CSU

Course Typically Offered: Fall, Spring, and Summer

This course is intended for students who are employed in a job directly related to their major or career area of interest. It allows such students the opportunity to apply the theories and skills of their discipline to their position and to undertake new responsibilities and learn new skills at work. Topics include goal-setting, employability skills development, and examination of the world of work as it relates to the student's career plans. Students must develop new learning objectives and/or work/intern at a new site upon each enrollment.