OKLAHOMA STATE UNIVERSITY - OKLAHOMA CITY

Architectural Technology A.A.S

— CAD-Architecture Emphasis

Program Description

This plan of study is designed to provide the student with the skills and knowledge required for employment in one of many areas of the largest industry in America. The technical content of the program is intended to supply a wide background in the diverse areas of applied architecture and construction.

Employment Information

Graduates of this program can expect to find employment in many areas of the architectural and building construction fields. Each area may require somewhat different abilities and specialized knowledge and skills for a successful career. Graduates are prepared to accept positions as architectural technicians, architectural drafters, estimators, planning technicians, inspectors, residential designers, sales representatives or any one of many jobs within the industry requiring specialization. The U.S. Department of Labor reports that employment opportunities for engineering technicians are expected to be excellent throughout the next decade.

Degree Awarded

Associate in Applied Science

For More Information Contact:

Dr. Jerry Nielsen

Division Head

Science and Engineering Technologies Division

Room 300

900 N. Portland Avenue

Oklahoma City, OK 73107

(405) 945-3220

Fax: (405) 945-9144

science.engineering@osuokc.edu

					Technical Occupational Specialty — 28 Credit Hours		Date	Institution
	ARCH	1223	Construction Drawing I	3				
	ARCH	1614	Computer-Aided Drafting I	4*				
	ARCH	2013	Construction Drawing II	3				
	ARCH	2273	Computer-Aided Drafting II	3				
	ARCH	2713	Advanced CAD Applications I	3				
	ARCH	2723	Advanced CAD Applications II	3				
	CONS	2333	Construction Practices and Procedures	3				
	INDD	2403	CAD 3D Modeling	3				
	INDD	2413	CAD 3D/Inventor	3				
			Support and Related Courses	**20 Credit Hours**				
	ARCH	1103	Plan Reading	3				
	ARCH	*2263*	Systems and Materials	3*				
	ARCH	*2322*	Construction Specifications	2				
	Select 12 additional credit hours			12*				
			General Education Courses	**19 Credit Hours**				
	ENGL	1113	English Composition I	3				
	ENGL	2333	Introduction to Technical Report Writing	3				
	HIST	1493	U.S. History Since 1865	3				
	MATH	1513	College Algebra	3				
	PHYS	1014	Descriptive Physics	4				
	POLS	1113	American Government	3				

**Department head approval required*

Total to Graduate — **67 Credit Hours**

Student Name: _____

CWID: _____

Counselor: _____

Catalog 2009-2010

ARCH 1223 CONSTRUCTION DRAWING I
Provides students with the functional knowledge and skills necessary to create a set of working drawings for residential construction. Includes a detailed study of architecture as a profession, drawing equipment and architecture nomenclature, light construction drawings, techniques of architectural drawings, methods of representing floor plan, elevations, plot plans, slab construction, roof plans, door and window schedules, and construction sections and details. Students learn to read and interpret light construction drawings and will be required to complete a set of residential drawings. Lab: four hours per week. Lecture: one hour.

***ARCH 1614 COMPUTER-AIDED DRAFTING I**
Introduction to computer-aided drafting (CAD) principles, using a "menu-driven" system to generate graphic output for engineering drafting applications. Problem solving skills in applied technical fields will be developed. Lab: four hours per week. Prerequisite or co-requisite: ARCH 1223 or equivalent. Same as INDD 1614.

ARCH 2013 CONSTRUCTION DRAWING II
Fundamentals of commercial construction drawings, preparation and interpretation of working drawings. Topics include architectural, civil and structural drawings. Lab: six hours per week. Prerequisite: ARCH 1223.

ARCH 2273 COMPUTER-AIDED DRAFTING II
A continuation of ARCH 1614 with emphasis on expanding skills gained to produce more complex 2D architectural layouts and drawings, using AutoCAD. Three lab hours per week. Prerequisites: ARCH 1614 or INDD 1614.

ARCH 2723 ADVANCED CAD APPLICATIONS II
A continuation of ARCH 2713 with emphasis on expanding skills gained to produce 2D and 3D architectural layouts and drawings of residential and commercial buildings including mechanical, electrical, plumbing, and structural, using cutting edge 3D architecture software. Prerequisite: ARCH 2713.

ARCH 2713 ADVANCED CAD APPLICATIONS I
A continuation of ARCH 2273 with emphasis on expanding skills gained to produce 2D and 3D architectural layouts and drawings of residential and commercial buildings, using cutting edge 3D architecture software. Prerequisite: ARCH 2273.

CONS 2333 CONSTRUCTION PRACTICES AND PROCEDURES
Light, heavy and industrial construction. Foundation layout, framing and finish work, site investigations, excavation, pre-cast concrete, tilt up, structural steel and metal building construction and project management.

***INDD 2403 CAD 3D MODELING**
Advanced CAD (computer-aided design) system operation applications with emphasis on wire frame and solid 3D CAD SYSTEM MODELS. Lab: three hours per week. Prerequisite: INDD 1614 or department head approval.

***INDD 2413 CAD 3D/INVENTOR**
A continuation of INDD 1614 with emphasis on expanding skills gained to produce parametric 3D mechanical models, and 2D/3D drawings, using AutoDesk Inventor. Lab three hours per week. Prerequisites: INDD 1614 or ARCH 1614