

Construction Technology A.A.S

— Construction Techniques Option

Program Description

This option in construction is designed for the student whose immediate plans are to work in the construction industry. While this option is not designed for maximum transferability to the baccalaureate program, many of the courses will transfer. This option provides a very strong curriculum in the construction area.

Employment Information

Jobs of many types are available to graduates of the building construction program. This program directs students toward jobs such as estimators, first-time supervisory positions, sales representatives, expeditors and many other specifications.

Degree Awarded

Associate in Applied Science

For More Information Contact:

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Technical Occupational Specialty

				31 Credit Hours		
<input type="checkbox"/>	CONS	1214	Introduction to Construction	4		
<input type="checkbox"/>	CONS	1103	Blue Print Reading & Drafting for Construction	3		
<input type="checkbox"/>	ARCH	1614	Computer-Aided Drafting I	4		
<input type="checkbox"/>	ARCH	2322	Construction Specifications	2		
<input type="checkbox"/>	CONS	2113	Mechanical Equipment of Buildings	3		
<input type="checkbox"/>	CONS	2423	Construction Estimating I	3		
<input type="checkbox"/>	CONS	2233	Green Building Systems/Sustainable Construction	3		
<input type="checkbox"/>	CONS	2103	Introduction to Construction Management	3		
<input type="checkbox"/>	CONS	2333	Construction Practices and Procedures	3		
<input type="checkbox"/>	CONS	2003	OSHA for Commercial & Residential Construction	3		

Date	Institution

Support and Related Courses

12 Credit Hours

Select courses from ARCH, CONS, CSUR, GENT, INDD, MATH or SCI such as:

<input type="checkbox"/>	CONS	2343	Concrete and Asphalt Construction	3		
<input type="checkbox"/>	CONS	2623	Construction Estimating II	3		
<input type="checkbox"/>	GENT	2323	Statics	3		

Select 3 credit hours from the following:

<input type="checkbox"/>	CONS	2243	LEED Standards & Construction			
<input type="checkbox"/>	OR			3		
<input type="checkbox"/>	ARCH	2263	Systems and Materials			

General Education Courses

18 Credit Hours

<input type="checkbox"/>	ENGL	1113	English Composition I	3		
<input type="checkbox"/>	HIST	1483	U.S. History to 1865	3		
<input type="checkbox"/>	MATH	1513	College Algebra	3		
<input type="checkbox"/>	MATH	1613	Trigonometry	3		
<input type="checkbox"/>	POLS	1113	American Government	3		

Select 3 credit hours from the following:

<input type="checkbox"/>	ENGL	1213	English Composition II			
<input type="checkbox"/>	OR			3		
<input type="checkbox"/>	SPCH	1113	Introduction to Speech Communication II			

Total to Graduate

61 Credit Hours

Student Name:	_____
CWID:	_____
Counselor:	_____
	Catalog 2012-2013

CONSTRUCTION TECHNOLOGY AAS - CONSTRUCTION TECHNIQUES OPTION-COURSE DESCRIPTIONS

***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 2263 SYSTEMS AND MATERIAL

Architectural, structural, environmental control systems and materials in architecture. Lab: two hours.

ARCH 2322 CONSTRUCTION SPECIFICATIONS

Construction specifications and their significance as part of the contract documents. Specification language and style follows construction specification institute format. Prerequisites: ARCH 1223 and ARCH 2263.

CONS 1103 BLUE PRINT READING & DRAFTING FOR CONSTRUCTION

The course will provide an understanding of the visual plans and specification which are involved in the construction process along with an understanding of drafting skills which are needed within the construction industry. At the completion of the course, students will have the skills needed to interpret and use contract documents which are used during the construction process. Lecture hours: 2; lab hours: 3

CONS 1214 INTRODUCTION TO CONSTRUCTION

Overview of the entire construction industry with emphasis on construction materials, methods and systems. Introduction to both building and highway construction drawings and their interpretation. Lab: two hours. Lecture: two hours. Same as CSUR 1214.

CONS 2003 OSHA FOR RESIDENTIAL & COMMERCIAL CONSTRUCTION

The student will review occupational safety & health administration (OSHA) as they apply to the planning and construction of residential and commercial properties. Students will earn basic (10 hour) certification in OSHA safety standards. Lecture hours: 3

CONS 2103 INTRODUCTION TO CONSTRUCTION MANAGEMENT

A study of organization, management, economics and labor relations pertaining to projects during the construction phase. Prerequisite: advisor's approval.

CONS 2113 MECHANICAL EQUIPMENT OF BUILDINGS

Plumbing, heating and air conditioning as it pertains to residence and small commercial buildings. Design and working drawings on plumbing and heating problems

CONS 2233 GREENBUILDING SYSTEMS/SUSTAINABLE CONSTRUCTION

The purpose of the course is to provide an overview of the green building market within construction, with importance placed on high performance green building systems, renewable onsite energy, water efficiency and minimization of the building impact on the environment. An understanding of sustainability and green building systems will be gained at the completion of the course. Prerequisite: cons 1214; lecture hours: 3

CONS 2243 LEED STANDARDS & CONSTRUCTION

The course will provide an understanding of the U.S. green building council leadership in energy and environmental design (LEED version 3, 2009) and other green building rating programs in both residential and commercial construction. The course will cover the history, practice, implementation and benefits of green building programs. At the completion of the course, students will have an understanding of the different credits and prerequisites of LEED, along with an understanding of green building programs. Prerequisite: cons 2233; lecture hours

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.

CONS 2343 CONCRETE AND ASPHALT CONSTRUCTION

Production techniques for placing and finishing concrete. Design of concrete form work. Concrete testing techniques. Theory and techniques for placing masonry construction units, field and laboratory techniques and field procedures of asphalt construction. Lab: three hours per week. Prerequisite: ARCH 1313.

CONS 2423 CONSTRUCTION ESTIMATING I

Computing the quantities and cost of materials and labor involved in residential and light commercial construction. Includes bidding procedures and computer applications. Lab: two hours per week. Prerequisites: CONS 1214 and ARCH 1223.

CONS 2623 CONSTRUCTION ESTIMATING II

A continuation of Construction Estimating I, with emphasis on detailed quantities of materials and labor of building construction estimates. Topics include the preparation of an estimate and bidding procedures. Prerequisite: CONS 2423.

GENT 2323 STATICS

Force, distributed forces, reactions, free body diagrams, friction, internal forces and moments of inertia. Applications are emphasized. Prerequisites: PHYS 1114 and MATH 1613. (F, Sp)