Construction Technology A.A.S. (COT)

Prepares graduates to be employed in the building construction field. Graduates can obtain such positions as contractor, subcontractor, building inspector, project coordinator, and estimator.

Students are exposed to various aspects of residential and light commercial buildings. Courses within this program are structured so that students receive both the theory and technical aspects as well as a hands-on approach to solving construction projects. Topics included in this program are layout and design, construction techniques, cost estimation, safety, and construction materials.

Upon successful completion of this program, graduates will be able to:

- locate specific details from a drawing set, including plan, elevation, section, site, and detail drawings.
- produce architectural drawings that display all necessary views, notes, material lists, and schedules.
- explain the difference between various common manufacturing materials and demonstrate a knowledge of the process available to transform these materials into finished products.
- demonstrate the proper use of standard hand and power tools.
- identify the major components required for building construction as they pertain to foundations, framing, electrical, and interior/exterior finishing.
- demonstrate the proper setup and usage of typical surveying instruments used to prepare a site for future construction.
- utilize the necessary mathematics to formulate components, such as points, angles, areas, and elevations, to be used for survey drawings.
- demonstrate proper procedures for laying out and
- installing electrical systems and equipment for national electrical code specifications.
- organize and write technical reports based on data and specifications necessary for typical construction projects.
- demonstrate the procedures necessary for preparation and installation of concrete and masonry products used on construction projects.
- demonstrate the use of a computer-aided drafting workstation in creating architectural drawings.
- explain the importance of developing an accurate construction estimate before beginning construction projects.
- demonstrate the proper care and technique required for finishing a construction project.
- interpret Occupational Safety and Health Administration (OSHA) regulations and apply them to all construction areas, equipment, and employees.
- demonstrate a background in the liberal arts and social science areas so that their education is not too narrowly technical and lacking in aesthetics and consideration of social issues.
- communicate with others in a professional manner by means of verbal, written, and electronic media.
- develop a style of workmanship and collaboration that is necessary for a team environment.

First Semester		**Credits**
HAC 119	Construction Print Reading	3
MET 104	Manufacturing	3
MAT 130	Industrial Mathematics	3
ENG 105	Research and Composition	3
Elective	Social Science/Humanities	3
		15
Second Semester		
CON 104	Concrete/Masonry Principles	3
CON 102	Frame Construction Techniques	4
ENG 107	Writing in the Workplace	3
MET 111	Computer-Aided Drafting	4
Elective	Social Science/Humanities	3
		17
Third Semester		
CON 201	Surveying	3
HAC 160	Residential Wiring	3
PHY 110	Elements of Physics	4
CON 105	Architectural Computer Applications	2
CON 204	Construction Codes and Specifications	3
		15
Fourth Semester		
CON 103	Interior/Exterior Finishing	4
CON 202	Construction Estimating	3
ENG 111	Speech	3
CON 210	Construction Practicum	4
		14
	Credit Total	**61**

Prior Learning Assessment: Previous job training, certificates and work experience that may qualify for college credit *(see academic advisor)*.

Gateway Courses: Based on placement testing in reading, writing and math, these prerequisite courses may have to be taken before placement in College English or Mathematics beginning the first semester and concurrently.

RSS 099	Basic Skills Reading	3
RSS 100	Critical Reading	3
ENG 099	Basic Skills Writing	3
ENG 100	Fundamentals of Writing	3
MAT 090	Mathematical Literacy	6
ESL 251	English for Academic Purpose *(Required for ESL students only.)*	6

Please note, taking gateway courses will increase your time for completion.

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