Effective: Fall 2012 **Last Updated: 7/1/14**

College of Applied Science and Technology
CONSTRUCTION ENGINEERING TECHNOLOGY
299103BS

Bachelor of Science Degree
www.uakron.edu/summitcollege/engineering_tech/construction-engineering-tech
Accredited by the Engineering Technology Accreditation Commission of ABET, http://www.abet.org

Course work from an accredited institution in Construction Engineering Technology or in a related program is a requirement to pursue the Construction Engineering Technology Bachelor of Science Degree. An Associate of Applied Science in Construction Engineering Technology is required prior to completing the baccalaureate. Please refer to the Construction Engineering Technology, Associate of Applied Science Curriculum Guide for further information.

The following is intended only as a guide to be used in conjunction with your advisor. Official degree requirements are established at the time of transfer and admission to the **College of Applied Science & Technology**. *Completion of this degree within the identified time frame below is contingent upon many factors, including but not limited to: class availability, total number of required credits, work schedule, finances, family, course drops/withdrawals, successfully passing courses, prerequisites, among others.*

Italicized courses fulfill General Education requirements. Unless a course is specified, refer to the General Education guide at http://www.uakron.edu/advising/docs/General_Education_Guide.pdf

3rd Year	**Fall Semester**		
	Humanities Requirement	3	3400:210 or 3400:221
2870:332	Mgt of Technology Based Operations (Note a.)	3	
2990:352	Field Management & Scheduling (Sch. lab) (Note a.)	2	2990:245 or permission
2990:354	Foundation Construction Methods (Note a.)	3	2990:234
3300:112	*English Composition II*	3	3300:111 or equivalent
	Natural Science Requirement	3	
Total		**17**	

3rd Year	**Spring Semester**		
2990:371	Intro to Green Building. (Note b.)	3	
2990:356	Safety in Construction (Note b.)	2	
2990:358	Advanced Estimating (Note b.)	3	2990:245 or permission
3400:210	*Humanities in the Western Tradition*	4	32 credits & 3300:112 or equivalent
6200:201 **or** 2420:211	Accounting Principles I ***-OR-*** Basic Accounting I	3	24 credits completed
xxx:xxx	Technical Elective (Note c.)	3	
Total		**18**	

3rd Year	**Summer Semester**
Cooperative Work Study (15 Weeks) (Must have a minimum of 64 credits completed)	

4th Year	**Fall Semester**		
	Area Studies/Cultural Diversity Requirement	2	2020:121 or equivalent
2030:356	Technical Calculus II	3	2030:255 or equivalent with grade of C- or better or placement by Advisor
2420:243	Survey of Finance	3	2420:170, 211 or permission
2990:462	Mechanical Service Systems	3	
2990:468	Construction Management (Note a.)	3	2990:352, 358, Senior level standing
2990:469	Construction Contracts and Specifications (Note a.)	2	Admission to BSCET program or permission
Total		**16**	

4th Year	Spring Semester		
	Area Studies/Cultural Diversity Requirement	2	2020:121 or equivalent
	Humanities Requirement	3	3400:210 or 3400:221
2990:453	Legal Aspects of Construction (Note b.)	2	Admission into the BCET program or permission of instructor.
2990:463	Electrical Service Systems	3	
2990:466	Hydraulics (Note b.)	3	2030:255
5550:211	*First Aid & Cardiopulmonary Resuscitation Physical Education/Wellness Requirement*	2	
Total		**15**	

	Total Credits for 3rd and 4th years	**66**	Total Credits for BS 132

POLICY ALERT: By the end of your first 48 credit hours attempted, you must have completed your REQUIRED General Education English, Math, and Communications (Speech) requirements.

YOU MUST HAVE A MINIMUM CUMULATIIVE GPA OF 2.0 TO GRADUATE WITH THIS DEGREE

NOTES
Note a. Traditionally Fall only (See Program Contact)
Note b. Traditionally Spring only (See Program Contact)
Note c. Technical Electives: availability dependent on enrollment demands and classroom availability.

2880:232	Labor Management Relations	3	Prerequisite: 2880:100
2940:250	Architectural Drafting	3	Prerequisite: 2940:121
2980:xxx	Select 2980 courses upon approval of Program Director	3	
2990:310	Residential Building Construction	3	
2990:312	Neighborhood Revitalization Project	3	
2990:320	Advanced Materials Testing	3	Prerequisite: 2990:241.
2990:351	Construction Quality Control	2	Admission into the BCT program or permission of instructor.
2990:355	Computer Applications in Construction	3	Admission into the BCT program or permission of instructor.
2990:359	Construction Cost Control	3	6200:201or permission of instructor
2990:361	Construction Formwork	3	2990:234 or permission
2990:362	Advanced Elements of Structures	3	2990:234
2990:420	Hydrology & Groundwater	3	2030:154
2990:455	Computerized Precision Estimating	3	2990:245
2990:465	Heavy Construction Methods	3	2990:245
2990:471	LEED Guidelines	3	2990:371 or permission of instructor.
2990:479	CPC Seminar	3	
2990:489	Special Topics in Construction	1-3	Permission of Instructor
2990:490	Workshop in Construction	1-3	
2990:497	Honor's Project	1-3	Department Consent Required
2990:498	Independent Study in Construction	1-3	Department Consent Required

PROGRAM CONTACT
Program Director, Mrs. Marcia Belcher, P.E., M.S.C.E., Shrank Hall South 221J, 330-972-2055 or mcbelcher@uakron.edu

PROGRAM INFORMATION
Program Description: The B.S. in Construction Engineering Technology is designed to provide the student with additional education beyond the AAS degree in Construction Engineering Technology. This degree is also designed to meet the formal education requirements for registration as a Professional Engineer in the State of Ohio.

This degree program is defined as follows:

- The first two years are completed as an AAS degree in Construction Engineering Technology or similarly based program.
- Two years of additional prescribed coursework.
- A cooperative work experience in the construction field. The student normally enters the co-op segment between the junior and senior years.

The B.S. in Construction Engineering Technology degree program includes classroom, laboratory and industry experiences which prepares students for careers in the construction industry and other allied industries.

Requirements for Admission:
Applicants to the Bachelor of Science program in Construction Engineering Technology either must hold an associate degree in Construction Engineering Technology from UA, or another accredited program, or provide evidence of an equivalent academic background with a minimum cumulative GPA of 2.0.

Applicants with or without an associate degree in a discipline other than Construction Engineering Technology will be required to complete a defined set of courses identified at the time of admission. Final approval for admission is determined by the Program Director of Construction Engineering Technology.

Cooperative Work Study Requirement:
The required cooperative work study experience of the Construction Engineering Technology program may begin after the student has completed 64 hours of course work in the Construction Engineering Technology program. This requirement may be satisfied by one of the following options:

A. One semester* co-op registered with the Center for Career Management.
B. 120 service hours with a credible construction organization.**
C. One calendar year of fulltime, continuous, and ongoing employment in a construction management related position.**

** Summer I and II combined count as one semester for the co-op.*
*** For options B and C, a portfolio of work must be submitted to and approved by the Program Director. The portfolio will include but not be limited to a description of the various work, evidence of work such as supervisor letters or certificates, and a technical paper addressing a relevant topic associated with the work.*

Requirements for Graduation:

- Compliance with the general education requirements of UA.
- Completion of the associate degree requirements for Construction Engineering Technology at.
- Successful completion of 132 credits in the B.S. in Construction Engineering Technology Program including the associate degree program, the general education courses, co-op/work study, and the following course requirements:

Third and Fourth Year Requirements:

2030:356	Technical Calculus II (3.0)
2420:243	Survey of Finance (3.0)
2870:332	Management of Technology Based Operations (3.0)
2990:352	Field Management & Scheduling (2.0)
2990:354	Foundation Construction Methods (3.0)
2990:356	Safety in Construction (2.0)
2990:358	Advanced Estimating (3.0)
2990:371	Green & Sustainable Building Practices (3.0)
2990:453	Legal Aspects of Construction (2.0)
2990:462	Mechanical Service Systems (3.0)
2990:463	Electrical Service Systems (3.0)
2990:466	Hydraulics (3.0)
2990:468	Construction Management (3.0)
2990:469	Construction Contracts & Specifications (2.0)
3300:112	English Composition II (3.0)
3400:210	Humanities in the Western Tradition (4.0)
5550:211	First Aid and Cardiopulmonary Resuscitating (2.0)
6200:201	Accounting Concepts and Principles for Business (3.0) **OR**
2420:211	Basic Accounting I (3.0)
xxxx:xxx	Area Studies and Cultural Diversity (4.0)
xxxx:xxx	Humanities Requirement (6.0)
xxxx:xxx	Technical Electives (3.0)
	Natural Science Elective (3.0)

CAREER INFORMATION
Individuals working in the field of construction engineering technologies use knowledge of construction methods, business operations and management skills to support construction projects. They work on residential or commercial buildings, bridges, roads, dams, wastewater treatment systems, or other similar projects. Common jobs assumed by graduates of this program include:

- Field Engineer - Monitors activities at construction sites. Works to ensure construction progresses as scheduled and contract specifications are adhered to. Inspects construction site daily and works with contractors to complete scope items.
- Project Engineer - Under the supervision of the Project Manager, provides technical support to construction staff. Reviews plans and other technical documents, answers questions regarding the scope and/or timing of the project, and monitors costs and project progress.
- Construction Manager - plan, organize, direct and coordinate building projects. Often called project managers, constructors, construction superintendents, project engineers, construction supervisors, or general contractors.
- Construction Inspector - ensure that construction, alteration, or repair complies with building codes and ordinances, zoning regulations, and contract specifications
- Construction Coordinator - coordinates construction scheduling and communication and acts as a liaison to project management concerning bids, subcontracting, progress and delays.
- Cost Estimator or Cost Engineer - responsible for creating the budget for a project to bid on it or aid in the project's management. Monitors and analyzes project cost estimates, expenditures, and forecasts.
- Scheduler - planning and scheduling of construction work and work crew. Gathers and analyzes information to prepare reports on the progress of projects.
- Engineering Technician - use the principles and theories of science, engineering, and mathematics to solve technical problems in research and development, manufacturing, sales, construction, inspection, and maintenance.

For additional information regarding career opportunities in the Construction Engineering Technology field, please visit the Bureau of Labor Statistics at www.bls.gov or the Career Center at the Student Union, room 211, (330-972-7747) http://www.uakron.edu/career

TRANSFER
A student can complete the transfer process by meeting with an Academic Advisor in the College in which they reside.

(Thorman/Belcher)