Effective Fall 2015 **Last Updated: 6/23/2015**

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

A completed Associate of Applied Science Degree in Construction Engineering Technology is a requirement of the Construction Engineering Technology Bachelor of Science Degree. Please refer to the Construction Engineering Technology, Associate of Applied Science Curriculum Guide for further information.

The following information has official approval of the **College of Applied Science and Technology**, but is intended only as a guide. Official degree requirements are established at the time of transfer and admission to the degree-granting college. *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. http://www.uakron.edu/advising/docs/General_Education_Guide.pdf

3rd Year	**Fall Semester**		
	Humanities Requirement	3	3400:210 or 3400:221
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		**14**	

3rd Year	**Spring Semester**		
2990:371	Green & Sustainable Building Pract. (Note b.)	3	
2990:356	Safety in Construction (Note b.)	3	
2990:358	Advanced Estimating (Note b.)	3	2990:245 or permission
3400:210 **or** 3400:221	*Humanities in the Western Tradition* ***-OR-*** *Humanities in the World Since 1300*	4	32 credits & 3300:112 or equivalent 32 credits & 3300:112 or equivalent
6200:201 **or** 2420:211	Accounting Principles I ***-OR-*** Basic Accounting I	3	24 credits completed
Total		**16**	

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	
2030:356	Technical Calculus II	3	2030:255 or equivalent with grade of C- or better or appropriate placement by Advisor
xxx:xxx	Technical Elective (Note c.)	3	
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	2	Prerequisite: Admission to BSCET program or permission
Total		**16**	

4th Year	Spring Semester		
	Area Studies/Cultural Diversity Requirement	2	
	Humanities Requirement	3	3400:210 or 3400:221
2990:453	Legal Aspects of Construction (Note b.)	2	Prerequisite: 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 Degree	**121**	TOTAL CREDITS = 61 (3rd & 4th Year Req.) Associate Degree = 60 credits

POLICY ALERT: 1) 1) 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 cumulative GPA of 2.0 to graduate with this degree.

Note a. Fall course offering only
Note b. Spring course offering only
Note c. Technical Electives Subject to enrollment demands and classroom schedules.

Technical Electives

2870:332	Management of Technology Based Operations	3	
2880:232	Labor Management Relations	3	Prerequisite: 2880:100
2940:250	Architectural Drafting	3	Prerequisite: 2940:121
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.
2990:359	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
2990:455	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-	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

Contact Information: Program Director, Marcia C. Belcher, P.E., Schrank Hall South 221J, 330-972-2055 or mcbelcher@uakron.edu

Program Description:

The B.S. in Construction Engineering Technology degree program is an upper-level degree program 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.

Career Opportunities Available:

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.

Requirements for Admission:

Applicants for the Construction Engineering Technology program must hold an associate degree in Construction Engineering Technology from an accredited program or provide evidence of an equivalent academic background. The applicant must have a minimum cumulative grade-point average of 2.0 out of a possible 4.0.

Applicants with an associate degree in a discipline other than Construction Engineering Technology will be required to complete a specific formal set of courses as specified at the time of admission. Final approval for admission is based upon recommendations from the Director of the Construction Engineering Technology Program.

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 full-time, 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 requirements of the general education program as outlined in this Bulletin.
- Completion of the requirements for the associate degree in Construction Engineering Technology at The University of Akron or an approved associate degree program
- Successful completion of a minimum of 121 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)
2990:352	Field Management & Scheduling (2.0)
2990:354	Foundation Construction Methods (3.0)
2990:356	Safety in Construction (3.0)
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)

TRANSFER TO THE COLLEGE OF APPLIED SCIENCE AND TECHNOLOGY: To be admitted to the college, a student must have a 2.0 or better overall GPA. A student in University College can complete this transfer process through an appointment with an Academic Advisor, the Academic Advisement Center, Student Union 211, 330-972-7430. Students in other Colleges can complete this transfer process by meeting with an Academic Advisor in the College in which they reside.

(Approved M. Belcher 2/18/15)