

Construction Engineering Technology

Associate of Applied Science Degree (299103AAS)

Accredited by the Engineering Technology Accreditation Commission of ABET, <http://www.abet.org>

The following information has official approval of The University of Akron's 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, and prerequisites, among others. The transfer process is completed through an appointment with your Academic Advisor.

Italicized courses fulfill General Education requirements. If a course is not specified, refer to the General Education webpage at <http://www.uakron.edu/cast/gened>. The College of Applied Science and Technology recommends that students take the General Education courses listed in this curriculum guide. Transfer students should consult their Advisor to identify courses that are equivalent.

Year 1 Fall	Prerequisite
2020:121 English (3)	Placement by Advisor
2030:154 Technical Mathematics IV (3)	2030:153 or equivalent with a C- or better or placement by Advisor
2990:129 Computer Applications in Construction (3) (Sch. Lab) (Note a)	
2820:160 Technical Physics: Mechanics with Lab (4)	2030:154 corequisite
2990:131 Building Construction (2) (Note a)	
Total Credits = 15	

Year 1 Spring	Prerequisite
2030:255 Technical Calculus I (3)	2030:154 or equivalent with C- or placement by Advisor
2020:222 Technical Report Writing (3)	2020:121 or 3300:111 or equivalent
2990:125 Statics (3)	2820:160, 2030:154
2990:150 Plan Reading (2) (Note b)	2990:131
2420:263 Professional Communications and Presentations (3)	Prerequisite or corequisite: 2020:121 or 3300:111
Total Credits = 14	

Year 2 Fall	Prerequisite
2990:xxx Technical Elective (3)	
2820:163 Technical Physics: Electricity and Magnetism (2) (Sch. Lab)	2820:160 prerequisite
2820:164 Technical Physics: Heat and Light (2) (Sch. Lab)	2820:160 prerequisite
2990:246 Site Engineering (3) (Note a) -OR- 2980:101 Basic Surveying (3)	2990:131 2030:153 corequisite or equivalent
2990:237 Materials Testing I (2) (Sch. Lab) (Note a)	2030:154
2990:225 Strength of Materials (3)	2990:125
Total Credits = 15	

Year 2 Spring	Prerequisite
2040:242 American Urban Society (3)	
2990:234 Elements of Structures (3) (Note b)	2990:125, 2990:225
2990:238 Materials Testing II (2) (Note b)	2030:154
2990:245 Construction Estimating (3) (Note b)	2990:150, 2030:154
2990:xxx Technical Electives (6) (Note c)	
Total Credits = 17	

Total Credits for Degree = 61

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

You must have a minimum cumulative GPA of a 2.0 to graduate with this degree.

Notes:

- Traditionally Fall only (See Program Contact)
- Traditionally Spring only (See Program Contact)
- Technical Electives: Subject to enrollment demands and classroom schedules

2870:332 Management of Technology Based Operations (3)	
2980:xxx Select 2980 Courses	Approval of program director
2990:254 Building Codes (3)	2990:131
2990:310 Residential Building Construction (3)	
2990:312 Neighborhood Revitalization Project (3)	
2990:359 Construction Cost Control (3)	6200:201 or instructor permission
2990:361 Construction Formwork (3)	2990:234 or permission
2990:362 Advanced Elements of Structures (3)	2990:234
2990:465 Heavy Construction Estimating (3)	2990:245
2990:471 Understanding LEED Guidelines (3)	2990:371 or permission
2990:489 Special Topics in Construction (1-3)	Permission of Instructor
2990:490 Workshop in Construction (1-3)	Department Consent Required
2990:498 Independent Study in Construction (1-3)	Department Consent Required

Program Contact

Program Director, Prof. Marcia Belcher, Schrank Hall South 221J, 330-972-2055 or mcbelcher@uakron.edu

Program Information

The A.A.S. in Construction Engineering Technology program includes classroom and laboratory experiences which prepare students for careers in the construction industry and other allied industries.

Career Information

Individuals working in the field of construction engineering technology use knowledge of construction methods, business operations, and management skills to support construction projects. They work on residential and commercial buildings, bridges, road dams, wastewater treatment systems, or other similar projects. Common jobs assumed by graduates of this program include but are not limited to:

- 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.
- Construction Inspector** - ensure that construction, alteration, or repair complies with building codes and ordinances, zoning regulations, and contract specifications.
- 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.
- 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.

For additional information visit the Bureau of Labor Statistics at www.bls.gov or the Career Center at Student Union 211. <http://www.uakron.edu/career>.

Bachelor Degree Programs

Upon completion of the Construction Engineering Technology Associate of Applied Science Degree, a student may enroll in the Construction Engineering Technology Bachelor of Science Degree. Please refer to the Construction Engineering Technology Bachelor of Science Degree Curriculum Guide for further information.

Transfer to the College of Applied Science and Technology

To be admitted to the College of Applied Science and Technology, a student must have a GPA of 2.0. A student can complete the transfer process through an appointment with an Academic Advisor in the college in which they reside.