

CONSTRUCTION ENGINEERING TECHNOLOGY, AAS

Associate of Applied Science in Construction Engineering Technology (299103AAS)

More on the Construction Engineering Technology major (<https://www.uakron.edu/engineering/CE/undergraduate/construction-tech/>)

Program Contact

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Program Information

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

Courses completed for this degree are transferable to the related Bachelor of Science degree within the program, which is accredited by the Engineering Technology Accreditation Commission of ABET, <http://www.abet.org>. Please consult the Program Director or Advising for more information.

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 (<http://www.bls.gov>) or the Career Center at Student Union 211. <http://www.uakron.edu/career> (<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.

The following information has official approval of the **Department of Engineering and Science Technology** and **The College of Engineering and Polymer Science**, but is intended only as a supplemental guide. Official degree requirements are established at the time of transfer and admission to the degree-granting college. Students should refer to the Degree Progress Report (DPR) which is definitive for graduation requirements. *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.* The transfer process is completed through an appointment with your academic advisor.

Transfer students should consult their Advisor to identify courses that are equivalent.

1st Year

| Fall Semester | | Hours |
|---------------|---|-------|
| 2020:121 | English | 3 |
| 2030:154 | Technical Mathematics IV | 3 |
| 2990:129 | Computer Applications in Construction (Sch. Lab) ¹ | 3 |
| 2990:131 | Building Construction ¹ | 2 |
| 3650:160 | Technical Physics: Mechanics | 4 |
| | Hours | 15 |

Spring Semester

| | | |
|----------|---|----|
| 2020:222 | Technical Report Writing | 3 |
| 2030:255 | Technical Calculus I | 3 |
| 2420:263 | Professional Communications and Presentations | 3 |
| 2990:125 | Statics | 3 |
| 2990:150 | Plan Reading ² | 2 |
| | Hours | 14 |

2nd Year

| Fall Semester | | |
|-------------------------|---|---|
| 2990:225 | Strength of Materials | 3 |
| 2990:237 | Materials Testing I (Sch. Lab) ¹ | 2 |
| 2990:246 or 2980:101 | Site Engineering ¹ or Basic Surveying | 3 |
| 3650:163 | Technical Physics: Electricity & Magnetism (Sch. Lab) | 2 |
| 3650:164 | Technical Physics: Heat & Light (Sch. Lab) | 2 |

| | | |
|------------------------|--------------------------------------|----|
| 2990:xxx | Technical Elective | 3 |
| | Hours | 15 |
| Spring Semester | | |
| 2040:242 | American Urban Society | 3 |
| 2990:234 | Elements of Structures ² | 3 |
| 2990:238 | Materials Testing II ² | 2 |
| 2990:245 | Construction Estimating ² | 3 |
| 2990:xxx | Technical Elective ³ | 6 |
| | Hours | 17 |
| | Total Hours | 61 |

¹ Traditionally Fall only (See Program Contact).

² Traditionally Spring only (See Program Contact).

³ Technical Electives are subject to enrollment demands and classroom schedules. See the list below.

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.

Technical Electives

| Code | Title | Hours |
|----------|---|-------|
| 2870:332 | Management of Technology Based Operations | 3 |
| 2980:xxx | Select 2980 Courses | |
| 2990:254 | Building Codes | 3 |
| 2990:310 | Residential Building Construction | 3 |
| 2990:312 | Neighborhood Revitalization Project | 3 |
| 2990:359 | Construction Cost Control | 3 |
| 2990:361 | Construction Formwork | 3 |
| 2990:362 | Advanced Elements of Structures | 3 |
| 2990:465 | Heavy Construction Estimating | 3 |
| 2990:471 | Understanding LEED Guidelines | 3 |
| 2990:489 | Special Topics in Construction | 1-3 |
| 2990:490 | Workshop in Construction | 1-3 |
| 2990:498 | Independent Study in Construction | 1-3 |