CONSTRUCTION FIELD OPERATIONS, AAS

Associate of Applied Science in Construction Field Operations (299111AAS)

Program Information

The AAS in Construction Field Operations Technology program includes classroom and laboratory experiences which prepare students for careers in the construction industry as field superintendents, foremen, project management assistants, inspectors and other allied industrial positions.

Career Information

Individuals working in the area of construction field operations technology use knowledge of construction methods and materials, supervision, inspection, and fundamental management skills necessary to support construction projects. They work on residential and commercial buildings, bridges, roads, 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.
- **Construction Superintendent** – runs day-to-day field operations on the construction site and controls the short-term schedule. The superintendent's role also includes quality control and subcontractor coordination responsibilities.
- **Construction Foreman** – the foreman is the tradesman with specialist's knowledge of a given trade and is focused on the overall management of that particular trade on the job site.
- **Field Engineer's Assistant** – Monitors activities at construction sites and reports to Project Engineer and/or Owner's Representative. Contributes to the maintaining of the project schedule and budget, as well as ensuring compliance with the contract specifications.

Bachelor Degree Program

Upon completion of the Associate of Applied Science in Construction Field Operations, a student may bridge to the Bachelor of Science in Construction Engineering Technology (299103BS). There are a series of bridgework courses in math and science that must first be completed. Please contact the program director for further information.

The following information has official approval of the **Department of Civil Engineering** 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.

Requirements Summary

Code	Title	Hours
General Education Requirements (https://bulletin.uakron.edu/undergraduate/general-education/) *		9
Program-Specific General Education		7-9
Writing Beyond General Education		3
Surveying Courses		6
Construction Engineering Technology Courses		29
Technical Electives		6
Total Hours		**60-62**

* Several courses required for the major also satisfy General Education requirements. The University minimum of 15 credits are required for General Education and credit for these courses will apply to both.

General Education for Applied Associate Degree Programs

Students in applied associate degree programs must complete the following 15 credit-hour set of General Education coursework. Some courses are covered by program-specific general education requirements further below.

Code	Title	Hours
Academic Foundations		**9**
Mathematics, Statistics and Logic: 3 credit hours		
Speaking: 3 credit hours		
Writing: 3 credit hours		
Breadth of Knowledge		**6**
Natural Science: 3 credit hours		
Social Science: 3 credit hours [1]		
Review the General Education Requirements page for detailed course listings.		
Total Hours		**15**

[1] Students are encouraged to choose General Education courses that are part of Ohio Transfer 36. They are also encouraged to choose a Social Science course that also meets a Global Diversity or Domestic Diversity General Education requirement for bachelor's degrees.

Program-Specific General Education

Code	Title	Hours
MATH:143	Technical Algebra and Trigonometry 1 - Expanded	4-5
or MATH:144	Technical Algebra and Trigonometry 1	
Select one of the following: [1]		*3-4*
GEOL:101	Introductory Physical Geology	
	GEOL:xxx	
Total Hours		**7-9**

[1] The program recommends that students complete their Natural Science requirement with GEOL:101 Introductory Physical Geology; however, students may substitute another Geology (GEOL) course that meets General Education requirements for Natural Science (without lab). At least three credits of Geology are required.

Writing Beyond General Education

Code	Title	Hours
ENGL:222	Technical Report Writing [1]	3
Total Hours		**3**

[1] Students who place directly in a second writing course and use ENGL:222 Technical Report Writing to meet their AAS General Education Writing requirement will need an additional three credits of coursework. Any class listed as meeting the General Education Writing Second Course Requirement for bachelor degree programs is an acceptable substitute for ENGL:222 Technical Report Writing .

Surveying Courses

Code	Title	Hours
SURV:101	Basic Surveying	3
SURV:222	Construction Surveying	3
Total Hours		**6**

Construction Engineering Technology Courses

Code	Title	Hours
COET:129	Professional Topics in Construction [1]	3
COET:131	Building Construction [1]	2
COET:150	Plan Reading [2]	2
COET:226	Construction Supervision [1]	3
COET:235	Construction Inspection	3
COET:237	Materials Testing I [1]	2
COET:238	Materials Testing II [2]	2
COET:246	Site Engineering [1]	3
COET:254	Building Codes	3
COET:310	Residential Building Construction	3
COET:356	Safety in Construction [2]	3
Total Hours		**29**

[1] Typically offered only in Fall.
[2] Typically offered only in Spring.

Technical Electives

Code	Title	Hours
Students must complete six credits of technical electives from the following list:		**6**
COET:239	Construction Geomechanics	
COET:361	Construction Formwork	
COET:422	Leveraging Technology in Construction	
COET:442	Lean Building Science	
COET:453	Legal Aspects of Construction	
COET:489	Special Topics in Construction	
COET:490	Workshop in Construction	
COET:498	Independent Study in Construction	
Total Hours		**6**

Recommended Sequence

1st Year		
Fall Semester		**Hours**
MATH:143 or MATH:144	Technical Algebra and Trigonometry 1 - Expanded or Technical Algebra and Trigonometry 1	4-5
COET:129	Professional Topics in Construction [1]	3
COET:131	Building Construction [1]	2
SURV:101	Basic Surveying [1]	3
	Writing Requirement	3
	Hours	**15-16**
Spring Semester		
COET:150	Plan Reading [2]	2
COET:254	Building Codes	3
ENGL:222	Technical Report Writing	3
	Speaking Requirement	3
Select one of the following:		3-4
GEOL:101	Introductory Physical Geology (recommended)	
GEOL:xxx	Natural Science Requirement without Lab	
	Hours	**14-15**
2nd Year		
Fall Semester		
COET:226	Construction Supervision [1]	3
COET:246	Site Engineering [1]	3
COET:237	Materials Testing I [1]	2
COET:310	Residential Building Construction	3
SURV:222	Construction Surveying	3
	Hours	**14**
Spring Semester		
COET:235	Construction Inspection	3
COET:238	Materials Testing II [2]	2
COET:356	Safety in Construction [2]	3
	Social Science Requirement	3
	Technical Elective	3
	Technical Elective	3
	Hours	**17**
	Total Hours	**60-62**

[1] Typically offered only in Fall.
[2] Typically offered only in Spring.

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