



ASSOCIATE OF APPLIED SCIENCE

ENVIRONMENTAL WATER AND WASTEWATER TECHNOLOGY

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

2021 Catalog

Effective Summer 2020

4450

Engineering Technologies Division

Industrial Technology Department

TECHNICAL Course Numbers	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ENV121	Regulations and Compliance	3		
ENV123 or ENV165	OSHA 10-Hour General Industry Safety or OSHA 10-Hour Construction Safety	1 or 1		
PET210	Petroleum Process Controls	3		
MST221	Mechanical Drive Components	3		
ENV221	OSHA 40-Hour HAZWOPER	2		
ENV127	Water Certification Exam Preparation	2		
ENV128	Wastewater Certification Exam Preparation	2		
ENV163	Water/Wastewater Math and Chemistry	2		
PET132	Petroleum Instrumentation	3		
ENV224	Air Sampling, Analysis, and Control	3	(CHM121 or CHM141) and ENV121	
ENV225	Solid and Hazardous Waste Sampling, Analysis and Management	3	(CHM121 or CHM141) and ENV121	
ENV226	Water Sampling, Analysis, and Control	3	(CHM121 or CHM141) and ENV121 and ENV223	
TECHNICAL ELECTIVES: Choose two (2) credit hours minimum from the list below				
ENV125	Intro to Haz Mat and Waste Management	1		
ENV169	Radiation Safety	2		
ENV230	OSHA 8-Hour Refresher +++	1		
ENV231	OSHA 30-Hour General Industry	2		
	Total	32		
NON-TECH Course Numbers	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	Take first semester	
MTH107	Industrial Math^	3	(MTH021 or Proficiency) or Pre-Co-MTH007	
DET125	Basic AutoCAD	3		
MST125	Basic Pumps	3		
CHM121	General, Organic and Biological Chemistry I (lab)^▲	4	(CHM101 or Proficiency) or (MTH024 or MTH025 or Proficiency) or MTH105 or MTH107	
CHM122	General, Organic and Biological Chemistry II (lab)	4	CHM121	
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
AIT134	Preventive and Predictive Maintenance	3		
PET102	Intro to Supervisory Control and Data Acquisition (SCADA)	2		
	Select one (1) Arts & Humanities Elective from the list below. ¹	3	Check for prerequisites	
	Total	32		
TOTAL CREDIT HOURS		64		

[^]Based on SSC placement scores

^{^^}To promote student success, this course should be taken in the first semester

[▲]Because of strong emphasis on science, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

⁺⁺⁺ENV230 must be taken by students who wish to complete annual refreshers of their 40-Hour HAZWOPER training

¹Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

PART-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for part-time associate degree students who plan to finish in eight semesters.

<u>First Semester</u>		<u>Credit Hours</u>	<u>Pre- and Co-requisite</u>
SSC101	Student Success Seminar^^	1	
MTH107	Industrial Math^	3	(MTH021 or Proficiency) or Pre-Co-MTH007
ENG124	College Composition^	<u>3</u>	Co-ENG024 or Co-ENG011 or Proficiency
		7	
<u>Second Semester</u>			
PET102	Intro to Supervisory Control and Data Acquisition (SCADA)	2	
CHM121	Gen., Org., and Biological Chemistry I (lab)^▲	4	(CHM101 or Proficiency) or (MTH024 or MTH025 or Proficiency) or MTH105 or MTH107
ENV163	Water/Wastewater Math and Chemistry	2	
ENV123	OSHA 10-Hour General Industry Safety	1	
or	or	or	
ENV165	OSHA 10-Hour Construction Safety	<u>1</u>	
		9	
<u>Third Semester</u>			
CHM122	Gen., Org., and Biological Chemistry II (lab)	4	CHM121
MST221	Mechanical Drive Components	<u>3</u>	
		7	
<u>Fourth Semester</u>			
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency
ENV221	OSHA 40-Hour HAZWOPER	2	
ENV121	Regulations and Compliance	<u>3</u>	
		8	
<u>Fifth Semester</u>			
PET210	Petroleum Process Controls	3	
ENV127	Water Certification Exam Preparation	2	
ENV128	Wastewater Certification Exam Preparation	<u>2</u>	
		7	
<u>Sixth Semester</u>			
ENV224	Air Sampling, Analysis, and Control	3	(CHM121 or CHM141) and ENV121
DET125	Basic AutoCAD	3	
<i>Arts & Humanities Elective ¹</i>		<u>3</u>	<i>Check for prerequisites</i>
		9	
<u>Seventh Semester</u>			
MST125	Basic Pumps	3	
AIT134	Preventive and Predictive Maintenance	3	
ENV225	Solid and Hazardous Waste Sampling, Analysis and Management	<u>3</u>	(CHM121 or CHM141) and ENV121
		9	
<u>Eighth Semester</u>			
ENV226	Water Sampling, Analysis and Control	3	(CHM121 or CHM141) and ENV121 and ENV223
PET132	Petroleum Instrumentation	3	
<i>Technical Elective ²</i>		<u>2</u>	<i>Check for prerequisites</i>
		8	
TOTAL CREDITS		64	

[^]Based on SSC placement scores

^{^^}To promote student success, this course should be taken in the first semester

⁺⁺⁺ENV230 must be taken by students who wish to complete annual refreshers of their 40-Hour HAZWOPER training

[▲]Because of strong emphasis on science, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

¹Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

²Technical Electives: ENV125, ENV169, ENV230+++, ENV231

Additional courses available below for CDL Certificate:

Course Numbers	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CDL121	CDL Class A - Safe Operation & Control *	5	CDL122 and CDL123	
CDL122	CDL Class A - Advanced Operations and Maintenance	6	CDL121 and CDL123	
CDL123	Commercial Driver's License - Class A	1	CDL121 and CDL122	

*Participation in CDL121 requires a valid Ohio Driver's License with 2 years' driving experience. Must be 18 years of age and show proof of citizenship. Must meet Department of Transportation (DOT) vision and physical requirements and pass the DOT drug screen.

**Students must pass the Ohio CDL Class A Driver's License examination to receive their Class A CDL.
The examination is administered at the end of CDL123.**