



ASSOCIATE OF APPLIED SCIENCE
PETROLEUM INDUSTRIAL MECHANICS
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.

2021-22 Catalog

Effective Summer 2021

4313

Engineering Technologies Division

Oil and Gas Technology Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
EST230	Electrical Circuits and Devices [^]	4	(MTH025 or Proficiency) or MTH107	
MST221	Mechanical Drive Components	3		
PET131	Corrosion Basics	3		
PET132	Petroleum Instrumentation	3		
AIT134	Preventive and Predictive Maintenance	3	MST221 and MST125	
MST127	Principles of Welding	3	Co-MST128	
MST128	Welding Laboratory	3	Co-MST127	
MST134	Hydraulic and Pneumatic Systems [^]	4	MTH022 or MTH023 or Proficiency	
MST125	Basic Pumps	3		
AIT124	Principles of Rigging	2		
Total		31		
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar ^{^^}	1	Take first semester	
PET101	Introduction to the Petroleum Industry	3		
ITD122	Computer Applications for Professionals [^]	3	ITD100 or Proficiency	
CHM101	Introduction to Chemistry ^{^▲}	4	(MTH022 or MTH023 or Proficiency) or MTH105 or MTH107	
MTH107 or MTH125	Industrial Math [^] or College Algebra ^{^Ω}	3 or 4	Check for prerequisites	
ENG124	College Composition [^]	3	Co-ENG024 or Co-ENG011 or Proficiency	
ENV221	OSHA 40-Hour HAZWOPER	2		
COM121 or COM122 or COM123	Effective Speaking or Interpersonal Communication or Small Group Communication [^]	3 or 3 or 3	IDS102 or Proficiency	
MST121 or DET125	Blueprint Reading or Basic AutoCAD	2 or 3		
ARL234	Gas Compression and Flow Dynamics	3		
	Select one (1) Social and Behavioral Sciences elective or Arts and Humanities elective ^l	3	Check for prerequisites	
Total		30-32		
TOTAL CREDIT HOURS		61-63		

[^]Based on SSC placement scores

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

^ΩMTH125 should be taken by students planning to transfer to a four-year institution

[▲] Because of strong emphasis on science in this major, 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.

^lSocial & Behavioral Sciences or Arts & Humanities electives: BUS122, BUS221, BUS222, ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, HIS221, HIS222, PHL122 (recommended), PSC121, PSY121, PSY123, PSY124, PSY220, PSY221, SOC121, SOC122, SOC123, SOC221, SOC225

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FULL-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 full-time associate degree students who plan to finish in two years.

<u>First Semester</u>		<u>Credit Hours</u>	<u>Pre and Co-requisites</u>
SSC101	Student Success Seminar^^	1	<i>Take first semester</i>
ARL234	Gas Compression and Flow Dynamics	3	
PET101	Introduction to the Petroleum Industry	3	
MST127	Principles of Welding	3	Co-MST128
MST128	Welding Laboratory	3	Co-MST127
MTH107	Industrial Math^	3	
or	or	or	
MTH125	College Algebra^ Ω	4	<i>Check for prerequisites</i>
		16-17	
<u>Second Semester</u>			
MST125	Basic Pumps	3	
EST230	Electrical Circuits and Devices^	4	(MTH025 or Proficiency) or MTH107
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
AIT124	Principles of Rigging	2	
MST121	Blueprint Reading	2	
or	or	or	
DET125	Basic AutoCAD	3	
		14-15	
<u>Third Semester</u>			
PET131	Corrosion Basics	3	
PET132	Petroleum Instrumentation	3	
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency
MST134	Hydraulic and Pneumatic Systems^	4	MTH022 or MTH023 or Proficiency
MST221	Mechanical Drive Components	3	
		16	
<u>Fourth Semester</u>			
AIT134	Preventive and Predictive Maintenance	3	MST221 and MST125
ENV221	OSHA 40-Hour HAZWOPER	2	
CHM101	Introduction to Chemistry^▲	4	(MTH022 or MTH023 or Proficiency) or MTH105 or MTH107
COM121	Effective Speaking	3	
or	or	or	
COM122	Interpersonal Communication	3	
or	or	or	
COM123	Small Group Communication^	3	IDS102 or Proficiency
	<i>Select one (1) Social and Behavioral Sciences elective or Arts and Humanities elective¹</i>	3	<i>Check for prerequisites</i>
		15	
	TOTAL CREDITS	61-63	

[^]Based on SSC placement scores

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

^ΩMTH125 should be taken by students planning to transfer to a four-year institution

[▲]Because of strong emphasis on science in this major, 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.

¹Social & Behavioral Sciences or Arts & Humanities electives: BUS122, BUS221, BUS222, ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, HIS221, HIS222, PHL122 (recommended), PSC121, PSY121, PSY123, PSY124, PSY220, PSY221, SOC121, SOC122, SOC123, SOC221, SOC225