



## 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.*

**1920 Catalog**

Effective Summer 2019

# 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 <sup>^</sup>	4	[(MTH093 and MTH094) or Proficiency] <b>or</b> MTH107	
MST221	Mechanical Drive Components	3		
PET132	Petroleum Instrumentation	3	EST230 <b>and</b> (CHM101 or ARL234)	
AIT134	Preventive and Predictive Maintenance	3	MST221 <b>and</b> MST125	
MST127	Principles of Welding	3	Co-MST128	
MST128	Welding Laboratory	3	Co-MST127	
MST134	Hydraulic and Pneumatic Systems <sup>^</sup>	6	(MTH091 and MTH092) <b>or</b> Proficiency	
MST125	Basic Pumps	3		
AIT124	Principles of Rigging	2		
<b>Total</b>		<b>30</b>		
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar <sup>^^</sup>	1	<i>Take first semester</i>	
PET101	Introduction to the Petroleum Industry	3		
ITD122	Computer Applications for Professionals <sup>^</sup>	3	ITD100 <b>or</b> Proficiency	
CHM101	Introduction to Chemistry <sup>^</sup> <sup>▲</sup>	4	(MTH093 <b>or</b> MTH025 <b>or</b> Proficiency) <b>or</b> MTH105 <b>or</b> MTH106 <b>or</b> MTH107	
MTH107 <b>or</b> MTH125	Industrial Math <sup>^</sup> <b>or</b> College Algebra <sup>^</sup> <sup>Ω</sup>	3 <b>or</b> 4	<i>Check for prerequisites</i>	
ENG124	College Composition <sup>^</sup>	3	Co-ENG024 <b>or</b> Co-ENG011 <b>or</b> Proficiency	
ENV221	OSHA 40-Hour HAZWOPER	2		
COM121 <b>or</b> COM122 <b>or</b> COM123	Effective Speaking <b>or</b> Interpersonal Communication <b>or</b> Small Group Communication <sup>^</sup>	3 <b>or</b> 3 <b>or</b> 3	IDS102 <b>or</b> Proficiency	
MST121 <b>or</b> DET125	Blueprint Reading <b>or</b> Basic AutoCAD	2 <b>or</b> 3		
ARL234	Gas Compression and Flow Dynamics	3		
	<i>Select one (1) Social and Behavioral Sciences elective or Arts and Humanities elective<sup>1</sup></i>	3	<i>Check for prerequisites</i>	
<b>Total</b>		<b>30-32</b>		
<b>TOTAL CREDIT HOURS</b>		<b>60-62</b>		

<sup>^</sup>Based on SSC placement scores

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>Ω</sup>MTH125 should be taken by students planning to transfer to a four-year institution

<sup>▲</sup>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.

<sup>1</sup>Social & 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

1920 Catalog Effective Summer 2019	<b>PETROLEUM INDUSTRIAL MECHANICS TECHNOLOGY</b>	<b>4313</b>
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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	
MST134	Hydraulic and Pneumatic Systems^	6	(MTH091 and MTH092) <b>or</b> Proficiency
MST221	Mechanical Drive Components	<u>3</u>	
		<b>16</b>	
<u>Second Semester</u>			
MST125	Basic Pumps	3	
EST230	Electrical Circuits and Devices^	4	[(MTH093 and MTH094) or Proficiency] <b>or</b> MTH107
ENG124	College Composition^	3	Co-ENG024 <b>or</b> Co-ENG011 <b>or</b> Proficiency
AIT124	Principles of Rigging	2	
MST121	Blueprint Reading	2	
<b>or</b>	<b>or</b>	<b>or</b>	
DET125	Basic AutoCAD	<u>3</u>	
		<b>14-15</b>	
<u>Third Semester</u>			
PET132	Petroleum Instrumentation	3	EST230 <b>and</b> (CHM101 or ARL234)
AIT134	Preventive and Predictive Maintenance	3	MST221 <b>and</b> MST125
MTH107	Industrial Math^	3	
<b>or</b>	<b>or</b>	<b>or</b>	<i>Check for prerequisites</i>
MTH125	College Algebra^ Ω	4	
MST127	Principles of Welding	3	Co-MST128
MST128	Welding Laboratory	<u>3</u>	Co-MST127
		<b>15-16</b>	
<u>Fourth Semester</u>			
ITD122	Computer Applications for Professionals^	3	ITD100 <b>or</b> Proficiency
ENV221	OSHA 40-Hour HAZWOPER	2	
CHM101	Introduction to Chemistry^ ▲	4	(MTH093 <b>or</b> MTH025 <b>or</b> Proficiency) <b>or</b> MTH105 <b>or</b> MTH106 <b>or</b> MTH107
COM121	Effective Speaking	3	
<b>or</b>	<b>or</b>	<b>or</b>	
COM122	Interpersonal Communication	3	
<b>or</b>	<b>or</b>	<b>or</b>	
COM123	Small Group Communication^	3	IDS102 <b>or</b> Proficiency
	<i>Select one (1) Social and Behavioral Sciences elective or Arts and Humanities elective<sup>1</sup></i>	<u>3</u>	<i>Check for prerequisites</i>
		<b>15</b>	
	<b>TOTAL CREDITS</b>	<b>60-62</b>	

^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.

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