

GLOBAL ENERGY - COE 2018-2019

GLOBAL ENERGY

ELECTRONICS ENGINEERING TECHNOLOGY

Biomedical Electronics Specialization - AAS	2
Computer Engineering Technology Specialization - AAS.	3
Basic Electronics - Certificate: Level II.	4
Computer Servicing/Networks - Certificate: Level I.	5

INSTRUMENTATION & CONTROLS ENGINEERING TECHNOLOGY

Instrumentation & Controls Engineering Technology - AAS	6
Instrumentation & Controls Engineering Technology - Certificate: Level II	7

PETROLEUM ENGINEERING TECHNOLOGY

Petroleum Engineering Technology - AAS	8
Petroleum Engineering Technology - Certificate: Level II	9

PROCESS TECHNOLOGY

Process Technology - AAS.	10
Process Technology - Process Operator - Certificate: Level II	11

Workforce Degrees and Certificates 2018-2019

Electronics Engineering Technology

ELECTRONICS ENGINEERING TECHNOLOGY - BIOMEDICAL ELECTRONICS SPECIALIZATION

Associate of Applied Science

FIRST YEAR

First Semester - Fall

			SCH
EDUC	1300	Learning Framework	3
MATH	1314	College Algebra	3
CETT	1321	Electronic Fabrication	3
CPMT	1449	Computer Networking Technology	4
Semester Total			13

Second Semester - Spring

CETT	1403	DC Circuits	4
CETT	1425	Digital Fundamentals	4
MATH	1316	Plane Trigonometry	3
XXXX	#3## ¹	Social/Behavioral Sciences Elective	3
Semester Total			14

Third Semester - Summer

PHYS	1401	College Physics I (Lecture & Lab)	4
XXXX	#3## ¹	Humanities/Fine Arts Elective	3
Semester Total			7

SECOND YEAR

First Semester - Fall

			SCH
CETT	1405	AC Circuits	4
CETT	1429	Solid State Devices	4
BIOM	1309	Applied Biomedical Equipment Technology	3
CETT	1431	Programming for Discrete Electronic Devices	4
Semester Total			15

Second Semester - Spring

BIOM	2331	Biomedical Clinical Instrumentation	3
HPRS	1206	Essentials of Medical Terminology	2
BIOM	2389	Internship - Biomedical Technology/Technician	3
CETT	1357	Linear Integrated Circuits (Capstone)	3
Semester Total			11

Total Minimum Credits for the AAS Degree **60**

¹ A list of electives appears in the Core Curriculum section of this catalog.

Workforce Degrees and Certificates 2018-2019

ELECTRONICS ENGINEERING TECHNOLOGY - COMPUTER ENGINEERING SPECIALIZATION

Associate of Applied Science

FIRST YEAR

First Semester - Fall

EDUC	1300	Learning Framework	3
ENGL	1301	Composition I	3
MATH	1314	College Algebra	3
CETT	1321	Electronic Fabrication	3
CPMT	1449	Computer Networking Technology	4
Semester Total			16

Second Semester - Spring

CETT	1403	DC Circuits	4
CETT	1425	Digital Fundamentals	4
MATH	1316	Plane Trigonometry	3
XXXX	#3## ¹	Social/Behavioral Sciences Elective	3
Semester Total			14

Third Semester - Summer

PHYS	1401	College Physics I (Lecture & Lab)	4
Semester Total			4

SECOND YEAR

First Semester - Fall

CETT	1405	AC Circuits	4
CETT	1429	Solid State Devices	4
CETT	1431	Programming for Discrete Electronic Devices	4
XXXX	#3## ¹	Humanities/Fine Arts Elective	3
Semester Total			15

Second Semester - Spring

XXXX	#4## ²	Program Approved Elective	4
XXXX	#4## ²	Program Approved Elective	4
CETT	1357	Linear Integrated Circuits (Capstone)	3
Semester Total			11

Total Minimum Credits for the AAS Degree **60**

¹ A list of electives appears in the Core Curriculum section of this catalog.

² Any CETT or CPMT elective.

Workforce Degrees and Certificates 2018-2019

ELECTRONICS ENGINEERING TECHNOLOGY - BASIC ELECTRONICS

Certificate - Level 2

First Semester - Fall			SCH
EDUC	1300	Learning Framework	3
MATH	1314	College Algebra	
CETT	1321	Electronic Fabrication	3
CPMT	1449	Computer Networking Technology	4
Semester Total			13
Second Semester - Spring			
CETT	1403	DC Circuits	4
CETT	1425	Digital Fundamentals	4
MATH	1316	Plane Trigonometry	3
Semester Total			11
Third Semester - Summer			
CETT	1405	AC Circuits	4
CETT	1429	Solid State Devices (Capstone)	4
CPMT	1303	Introduction to Computer Technology	3
XXXX	#4## ¹	Program Approved Elective	4
XXXX	#4## ¹	Program Approved Elective	4
Semester Total			19
Total Minimum Credits for the Level 2 Certificate			43

¹ Any CETT or CPMT elective; TECM 1301 or 1303.

Workforce Degrees and Certificates 2018-2019

ELECTRONICS ENGINEERING TECHNOLOGY - COMPUTER SERVICING/NETWORKS

Certificate - Level 1

First Semester - Fall

			SCH
CPMT	1303	Introduction to Computer Technology	3
CPMT	1411	Introduction to Computer Maintenance OR	4
XXXX	#4## ¹	Program Approved Elective	
Semester Total			7

Second Semester - Spring

CETT	1321	Electronic Fabrication	3
XXXX	#3## ¹	Program Approved Elective	3
TECM	1301	Industrial Mathematics OR	
CPMT	1449	Computer Networking Technology	4
Semester Total			10

Total Minimum Credits for the Level 1 Certificate

17

¹ Any CETT or CPMT elective; or TECM 1303.

Workforce Degrees and Certificates 2018-2019

Instrumentation & Controls Engineering Technology

INSTRUMENTATION & CONTROLS ENGINEERING TECHNOLOGY

Associate of Applied Science

FIRST YEAR

First Semester - Fall

EDUC	1300	Learning Framework	3	SCH
PTAC	1302	Introduction To Process Technology	3	
PTAC	1308	Safety, Health, & Environment I	3	
ENGL	1301	Composition I	3	
MATH	1314	College Algebra	3	
Semester Total			15	

Second Semester - Spring

INTC	1356	Instrumentation Calibration	3	
CETT	1403	DC Circuits	4	
MATH	1316	Plane Trigonometry	3	
CETT	1425	Digital Fundamentals	4	
CPMT	1449	Computer Networking Technology	4	
Semester Total			18	

SECOND YEAR

First Semester - Fall

INTC	1441	Principles of Automatic Control	4	SCH
INTC	1343	Application of Industrial Automatic Controls	3	
CETT	1405	AC Circuits	4	
PHYS	1401	College Physics I (Lecture & Lab)	4	
Semester Total			15	

Second Semester - Spring

XXXX	#3## ¹	Humanities/Fine Arts Elective	3	
XXXX	#3## ¹	Social/Behavioral Sciences Elective	3	
RBTC	1301	Programmable Logic Controllers	3	
INTC	2330	Instrumentation Systems Troubleshooting OR		
INTC	2336	Distributed Control & Programmable Logic (Capstone)	3	
Semester Total			12	

Total Minimum Credits for the AAS Degree **60**

¹ A list of electives appears in the Core Curriculum section of this catalog.

Workforce Degrees and Certificates 2018-2019

INSTRUMENTATION & CONTROLS ENGINEERING TECHNOLOGY

Certificate - Level 2

First Semester - Fall

			SCH
EDUC	1300	Learning Framework	3
PTAC	1302	Introduction To Process Technology	3
PTAC	1308	Safety, Health, & Environment I	3
MATH	1314	College Algebra	3
INTC	1356	Instrumentation Calibration	3
Semester Total			15

Second Semester - Spring

INTC	1441	Principles of Automatic Control	4
MATH	1316	Plane Trigonometry	3
CETT	1425	Digital Fundamentals	4
CETT	1403	DC Circuits	4
Semester Total			15

Third Semester - Summer

INTC	1343	Application of Industrial Automatic Controls	3
RBTC	1301	Programmable Logic Controllers	3
INTC	2330	Instrumentation Systems Troubleshooting (Capstone)	3
XXXX	#4## ¹	Program Approved Elective	4
Semester Total			13

Total Minimum Credits for the Level 2 Certificate **43**

¹Consult with an advisor to determine the appropriate elective

Workforce Degrees and Certificates 2018-2019

Petroleum Engineering Technology

PETROLEUM ENGINEERING TECHNOLOGY

Associate of Applied Science

FIRST YEAR

First Semester - Fall SCH

EDUC	1300	Learning Framework	3
PTRT	1301	Introduction to Petroleum Industry	3
MATH	1314	College Algebra	3
CPMT	1303	Introduction to Computer Technology	3
Semester Total			12

Second Semester - Spring

PTRT	1470	Petroleum Data Management I - Exploration	4
PTRT	1370	Petroleum Geology	3
ENGL	1301	Composition I	3
PTRT	1313	Industrial Safety	3
Semester Total			13

Third Semester - Summer

PTRT	1472	Petroleum Data Management II - Drilling & Production	4
Semester Total			4

SECOND YEAR

First Semester - Fall SCH

PTRT	1473	Exploration & Production II	4
MATH	1325	Calculus for Business & Social Sciences	3
PTRT	2370	Petroleum Operations	3
XXXX	#2## ¹	Program Approved Elective	2
Semester Total			12

Second Semester - Spring

PTRT	2331	Well Completions	3
XXXX	#3## ²	Social/Behavioral Sciences Elective	3
PTRT	2323	Natural Gas Production	3
XXXX	#3## ²	Humanities/ Fine Arts Elective	3
Semester Total			12

Third Semester - Summer

PTRT	2372	Internship-Petroleum Technology/Technician	3
PTRT	2470	Petroleum Data Management III - Facilities & Performance (Capstone)	4
Semester Total			7

Total Minimum Credits for the AAS Degree 60

¹ Consult with an advisor to determine the appropriate elective.

² A list of electives appears in the Core Curriculum section of this catalog.

Workforce Degrees and Certificates 2018-2019

PETROLEUM ENGINEERING TECHNOLOGY

Certificate - Level 2

First Semester - Fall

			SCH
EDUC	1300	Learning Framework	3
PTRT	1301	Introduction to Petroleum Industry	3
MATH	1314	College Algebra	3
PTRT	1313	Industrial Safety	3
CPMT	1303	Introduction to Computer Technology	3
Semester Total			15

Second Semester - Spring

ENGL	1301	Composition I	3
PTRT	1470	Petroleum Data Management I - Exploration	4
MATH	1325	Calculus for Business & Social Sciences	3
PTRT	1471	Exploration & Production I	4
PTRT	1370	Petroleum Geology	3
Semester Total			17

Third Semester - Summer

PTRT	1473	Exploration & Production II	4
PTRT	1472	Petroleum Data Management II - Drilling & Production	4
PTRT	2370	Petroleum Operations (Capstone)	3
Semester Total			11

Total Minimum Credits for the Level 2 Certificate **43**

Workforce Degrees and Certificates 2018-2019

Process Technology

PROCESS TECHNOLOGY

Associate of Applied Science

FIRST YEAR

First Semester - Fall

			SCH
EDUC	1300	Learning Framework	3
PTAC	1302	Introduction To Process Technology	3
ENGL	1301	Composition I	3
MATH	1314	College Algebra	3
PTAC	1308	Safety, Health, & Environment I	3
XXXX	#3## ¹	Social/Behavioral Sciences Elective	3
Semester Total			18

Second Semester - Spring

SCIT	1418	Applied Physics OR	
PHYS	1401	College Physics I (Lecture & Lab)	4
SCIT	1414	Applied General Chemistry I OR	
CHEM	1311	General Chemistry I (Lecture)	3
CHEM	1111	General Chemistry I (Lab)	1
PTAC	1410	Process Technology I - Equipment	4
PTAC	1332	Process Instrumentation I	3
Semester Total			15

SECOND YEAR

First Semester - Fall

SPCH	1311	Introduction to Speech Communication	3
PTAC	2314	Principles of Quality	3
PTAC	2420	Process Technology II - Systems	4
PTAC	1354	Industrial Processes	3
Semester Total			13

Second Semester - Spring

PTAC	2438	Process Technology III - Operations (Capstone)	4
PTAC	1350	Industrial Economics	3
XXXX	#3## ¹	Humanities/Fine Arts Elective	3
PTAC	2446	Process Troubleshooting	4
Semester Total			14

Total Minimum Credits for the AAS Degree **60**

¹ A list of electives appears in the Core Curriculum section of this catalog.

Workforce Degrees and Certificates 2018-2019

PROCESS TECHNOLOGY - PROCESS OPERATOR

Certificate - Level 2

First Semester - Fall			SCH
EDUC	1300	Learning Framework	3
PTAC	1302	Introduction To Process Technology	3
PTAC	1308	Safety, Health, & Environment I	3
MATH	1314	College Algebra	3
Semester Total			12
Second Semester - Spring			
PTAC	1410	Process Technology I - Equipment	4
PTAC	1332	Process Instrumentation I	3
PTAC	1354	Industrial Processes	3
SCIT	1414	Applied General Chemistry I OR	
CHEM	1311	General Chemistry I (Lecture)	3
CHEM	1111	General Chemistry I (Lab)	1
Semester Total			14
Third Semester - Summer			
PTAC	2420	Process Technology II - Systems (Capstone)	4
PTAC	1350	Industrial Economics	3
PTAC	2314	Principles of Quality	3
SCIT	1418	Applied Physics OR	
PHYS	1401	College Physics I (Lecture & Lab)	4
Semester Total			14
Total Minimum Credits for the Level 2 Certificate			40