

PROCESS TECHNOLOGY, ASSOCIATE OF APPLIED SCIENCE (AAS)

Locations: Gonzales, Reserve, St. Charles, Westside

The Process Technology (PTEC) program at RPCC is a 60-credit hour program that prepares individuals to become refinery, chemical, and other industry related operators. The curriculum leading to the Process Technology Associate of Applied Science (AAS) was developed in collaboration with local industry. It is a rigorous study of the common operating processes found in industrial plants that will prepare students for high skill, high wage jobs needed in the manufacturing industry.

Upon graduation from the program, students are prepared to enter the employment market as entry-level process operators. Certificates and Diplomas are also available as the student progresses through the program. All courses applied to the degree must be passed with a "C" or better. Developmental courses will not be applied to the degree.

Specialized Accreditation

The Instrumentation and Electrical Technology Program is accredited by the Association of Technology, Management, and Applied Engineering (ATMAE). This prestigious accreditation affirms that the program meets rigorous academic and industry standards, ensuring students are well-prepared for successful careers in the field.

Curriculum

Course	Title	Hours
First Semester		
CPTR 1013	Intro to Computer Technology	3
General Education, Natural Science - MATH 1203		3
PTEC 1013	Intro to Process Technology	3
PTEC 2033	Plant Health, Safety, & Enviro	3
SPCH 2013	Techniques of Speech	3
Hours		15
Second Semester		
PTEC 1312	Process Instrumentation	2
PTEC 1322	Process Instrumentation Lab	2
PTEC 1612	Plant Equipment	2
PTEC 1622	Plant Equipment Lab	2
ENGL 1013	English Composition I ^{Fulfills General Education English requirement}	3
General Education, Natural Science Select one of the following:		3
PHSC 1023	Physical Science I	
PHYS 2113	General Physics I	
Choose lab according to General Education Natural Science course chosen		1
PHSC 1021	Physical Science Lab I	
PHYS 2111	General Physics Lab I	
Hours		15
Third Semester		
PTEC 2073	Process Quality Control	3
PTEC 2323	Process Systems	3
PTEC 2321	Process Systems Lab	1
PTEC 2633	Fluid Mechanics	3
CHEM 1123	Chemistry I	3
CHEM 1121	Chemistry Laboratory I	1

General Education, Humanities - Select three hours from HIST, PHIL (except PHIL 2113), or RELS 3

Hours		17
Fourth Semester		
General Education, Social Science Select one of the following:		3
ECON 2213	Macroeconomics	
ECON 2223	Microeconomics	
PTEC 2443	Process Troubleshooting	3
PTEC 2412	Unit Operations	2
PTEC 2422	Unit Operations Lab	2
PTEC 2993	External Capstone	3
or PTEC 2913	or Internal Capstone	
Hours		13
Total Hours		60

Additional Academic Awards in Process Technology Process Technology Plant Safety, Career and Technical Certificate (CTC)

Code	Title	Hours
PTEC 1013	Intro to Process Technology	3
PTEC 2033	Plant Health, Safety, & Enviro ¹	3
Total Hours		6

¹ Students are eligible for the OSHA 10-Hour General Industry Safety Industry-Based Certification upon completion of this course.

Process Technology Support Technician, Certificate of Technical Studies (CTS)

Code	Title	Hours
CPTR 1013	Intro to Computer Technology	3
PTEC 1013	Intro to Process Technology	3
PTEC 2033	Plant Health, Safety, & Enviro	3
PTEC 1312	Process Instrumentation	2
PTEC 1322	Process Instrumentation Lab	2
PTEC 1612	Plant Equipment	2
PTEC 1622	Plant Equipment Lab	2
PTEC 2073	Process Quality Control	3
Total Hours		20

Process Technology, Technical Diploma (TD)

Code	Title	Hours
CPTR 1013	Intro to Computer Technology	3
MATH 1203	Applied Algebra ^{Fulfills General Education, Mathematics/Analytical Reasoning Requirement}	3
PTEC 1013	Intro to Process Technology	3
PTEC 2033	Plant Health, Safety, & Enviro	3
PTEC 1312	Process Instrumentation	2
PTEC 1322	Process Instrumentation Lab	2
PTEC 1612	Plant Equipment	2
PTEC 1622	Plant Equipment Lab	2
PHSC 1023	Physical Science I	3
or PHYS 2113	General Physics I	
PHSC 1031	Physical Science Lab II ^{Choose lab according to General Education Natural Science course chosen}	1
or PHYS 2111	General Physics Lab I	
PTEC 2073	Process Quality Control	3

PTEC 2323	Process Systems	3
PTEC 2321	Process Systems Lab	1
PTEC 2633	Fluid Mechanics	3
CHEM 1123	Chemistry I	3
CHEM 1121	Chemistry Laboratory I	1
PTEC 2443	Process Troubleshooting	3
PTEC 2412	Unit Operations	2
PTEC 2422	Unit Operations Lab	2
PTEC 2993	External Capstone	3
or PTEC 2913	Internal Capstone	
Total Hours		48

Upon successful completion of the program, the graduate will be able to:

1. Describe the importance of adherence to standards for plant safety, health, and environment, and preventative measures for hazard avoidance.
2. Describe the instruments, equipment, systems, and units operated by process technicians/operators and the significance of quality and consistency in their operation.
3. Perform assigned analyses, troubleshooting, and processing operations to industry specifications independently and collaboratively, when applicable.
4. Demonstrate professionalism, communications skills, ethical standards, and teamwork appropriate to entry-level process technicians.
5. Operate process technology instruments, equipment, units, and systems as a process technician/operator.

For additional career-related information and resources, visit the RPCC Career Success webpage (<https://www.rpcc.edu/workforce-training/career-success-center/career-success-center/>).