Process Technology

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The field of process technology appeals to people who enjoy the challenges involved in using advanced computer technology and instrumentation to operate a variety of equipment systems and industrial processes. Process technology is defined as the study and application of the scientific principles associated with the operation and maintenance of the chemical processing industry (CPI).

Process technicians gather information using instruments that monitor process conditions such as pressure, temperature, level, and flow rates. They operate lab equipment to keep their plants running safely and efficiently, along with ensuring the efficient production of products that meet customer specifications.

As a process technician or operator, you may work both indoors and outdoors alongside chemical engineers, maintenance personnel, and other professionals. You will be expected to use your knowledge of computers, math, physics, and chemistry to monitor and troubleshoot plant operations. Strong communications skill are also required, as you will need the ability to write, give oral presentations, and exercise effective listening skills in order to succeed as a process technician.

What Will I Learn?

The Study of Process Technology involves learning how the industrial process works. You will learn about process equipment such as pumps, compressors, reactors, and distillation columns. Technical knowledge and skills are gained in areas such as operating equipment, controlling instrumentation systems, monitoring process systems, and troubleshooting those systems. These courses prepare students for entry-level employment as process technicians in the processing industries.

View Program Learning Outcomes

"What Can I Do With This Course of Study?"

Graduates of the Lee College Chemical Process Technology program have the opportunity to work as:

- Refinery technician or board operator
- Chemical technician or console operator
- Research technicians Laboratory technician
- Power generation technician
- Pharmaceutical technician
- Food processing and distribution technician
- Paper and pulp processing technician
- Process training coordinator
- Engineering specialist
- Quality control technician First line supervisor Second line supervisor

AAS: Process Technology

Foundations: These are the courses students need in order to progress in their career/college pathway, as they either provide a certificate or lay the groundwork for moving to the next set of courses.

Course	Course Title	Counts Toward Certificate
PTAC 1302	Introduction to Process Technology	PT1
PTAC 1410	Process Technology I: Equipment	PT1
PTAC 1332	Process Instrumentation I	PT1
Applied Math General or Mathematics	Recommended: TECM 1341 Other options: any TECM or MATH Core course Math 1314 is recommended for students also pursuing MAET2	PT1
SCIT 1414	Applied General Chemistry I	PT1
PTAC 1308	Safety, Health, and Environment I	PT1
PTAC 2420	Process Technology II: Systems	PT1
PTAC 2314	Principles of Quality	PT1
PTAC 2346	Process Troubleshooting	PT1
PTAC 2438	Process Technology III: Operations	PT1

Knowledge Building: These courses further the students' knowledge in the area of study and increase their preparation for the degree completion.

Course	Course Title	Counts Toward Certificate
CTEC 2445	Unit Operations	
ENGT 2310	Introduction to Manufacturing Processes	
PHYS 14xx	Physics Elective; Recommended: PHYS 1405; Other options: any 4-credit PHYS core course PHYS 1401 is recommended for students also pursuing MAET2	

Core Communication or ENGL 1301T (Technical Communication)	Core Communication or ENGL 1301T (Technical Communication)
SBS/HIST/GOVT	Recommended: HIST 1301 Other options: any SBS/ HIST/GOVT core course

Completion: These are the courses the student needs in order to complete the degree plan and prepare to enter the workforce.

Course	Course Title	Counts Toward Certificate
Oral Communication	Recommended: SPCH 1315 Other options: any SPCH core course	
Creative Arts/Language, Philosophy and Culture	Recommended: ARTS 1301, MUSI 1306 Other options: any Creative Arts/LPC core course	
ELECTIVE	Recommended: PSYC 2301 or HIST 2301 Other options: any course	

PT1: Certificate of Completion — Process Technology

Foundations: These are the courses students need in order to progress in their career/college pathway, as they either provide a certificate or lay the groundwork for moving to the next set of courses. *NOTE: This is a level-two certificate and is subject to Texas Success Initiative (TSI) college readiness. Per Texas Administrative Code, Title 19, Part 1, Chapter 4, Subchapter C, §4.54.a.7*

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CAREERS IN PROCESS TECH.
My Next Move

Live Chat

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Contact an Advisor/Counselor