



SCIENCE, TECHNOLOGY,  
ENGINEERING & MATHEMATICS

# PROCESS TECHNOLOGY

A.A.S. DEGREE/CERTIFICATE



**ACC**  
ALVIN COMMUNITY COLLEGE

## Get the Specialized Training You Need to Become a Process Technician

Process technology is at the center of all industries that produce consumer goods from raw materials (including chemicals, fuels, and plastics) and involves the ability to understand, operate, shutdown, analyze and troubleshoot industrial processes.

If you have strong math skills, are curious about how things work, like to troubleshoot and solve problems, work as part of a team, and have a great attitude then a career as a process technician may be right for you.

### Career Opportunities

Process Technicians are in great demand in the Gulf Coast region, across the U.S. and in many other countries. Texas ranks second in the nation for the employment of Process Technicians. The average salary for process operators in the Gulf Coast region is over \$68K per year with excellent benefits.

Alvin Community College graduates have close to a 100% job placement rate and many students are hired before graduation.

Process technicians are responsible for the safe and reliable operation and maintenance of refineries and petrochemical plants. At ACC, you will train to become a process technician in the refining, petrochemical, power generation, oil and gas production, food, metals, minerals, and other process industries. You will gain technical knowledge and skills in areas such as operating equipment, instrumentation systems, process systems, process troubleshooting and computer applications.

### What Will I Study?

The Study of Process Technology involves learning how industrial process work. Students 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.

#### For More Information:

**Website:** [www.alvincollege.edu/process-technology](http://www.alvincollege.edu/process-technology)

**Phone:** 281.756.3744

**Email:** [processtech@alvincollege.edu](mailto:processtech@alvincollege.edu)

**Your College**  **Right Now**

## PROCESS TECHNOLOGY

Associate of Applied Science – 60 credit hours

FIRST YEAR - FIRST SEMESTER	CREDITS
*ENGL 1301 - Composition I	3
PTAC 1302 - Introduction to Process Technology	3
PTAC 1308 - Safety, Health & Environment	3
TECM 1303 - Technical Calculations	3
SECOND SEMESTER	
CTEC 1401 - Applied Petrochemical Technology	4
<sup>†</sup> MATH 1332 - Contemporary Mathematics <b>or</b> *MATH 1314 - College Algebra	3
PTAC 1310 - Process Technology I (Equipment)	3
PTAC 1332 - Process Instrumentation I	3
THIRD SEMESTER	
<sup>‡</sup> Select from Creative Arts Core Curriculum <b>or</b> <sup>‡</sup> Select from Language, Philosophy & Culture Core Curriculum	3
PTAC 2314 - Quality, Statistical Process Control & Economics	3
PTAC 2420 - Process Technology II (Systems)	4
SECOND YEAR - FIRST SEMESTER	
PTAC 2436 - Process Instrumentation II	4
PTAC 2446 - Process Troubleshooting	4
<sup>§</sup> SCIT 1414 - Applied General Chemistry <b>or</b> CHEM 1411 - General Chemistry I	4
SECOND SEMESTER	
<sup>¶</sup> CTEC 2333 - Comprehensive Studies in Chemical Technology <b>or</b> <sup>**</sup> PTAC 2386 - Internship - Process Technology/Technician	3
PTAC 2438 - Process Technology III (Operations)	4
<sup>†</sup> Select from Social & Behavioral Sciences Core Curriculum	3
<sup>†</sup> SPCH 1315 - Public Speaking <b>or</b> <sup>†</sup> SPCH 1318 - Interpersonal Communications	3
<b>PROCESS TECHNOLOGY (A.A.S.) DEGREE</b>	<b>60</b>

\*Denotes core requirement. Speak with Department Chair or Academic Advisor for proper course selection.

\*\*Requires Department Chair Approval

<sup>†</sup>Capstone Course

<sup>§</sup>Consult with Advisor – Students desiring to obtain a baccalaureate degree should take suggested course(s)

## PROCESS TECHNOLOGY (CERT 2)

Certificate – 45 credit hours

FIRST YEAR - FIRST SEMESTER	CREDITS
PTAC 1302 - Introduction to Process Technology	3
PTAC 1308 - Safety, Health & Environment	3
TECM 1303 - Technical Calculations	3
SECOND SEMESTER	
CTEC 1401 - Applied Petrochemical Technology (Physics)	4
PTAC 1310 - Process Technology I (Equipment)	3
PTAC 1332 - Process Instrumentation I	3
THIRD SEMESTER	
PTAC 2420 - Process Technology II (Systems)	4
PTAC 2314 - Quality, Statistical Process Control & Economics	3
SECOND YEAR - FIRST SEMESTER	
PTAC 2436 - Process Instrumentation II	4
PTAC 2446 - Process Troubleshooting	4
SCIT 1414 - Applied General Chemistry <b>or</b> <sup>†</sup> CHEM 1411 - General Chemistry	4
SECOND SEMESTER	
PTAC 2438 - Process Technology III (Operations)	4
<sup>¶</sup> CTEC 2333 - Comprehensive Studies in Process Technology <b>or</b> <sup>**</sup> PTAC 2386 - Internship - Process Technology	3
<b>PROCESS TECHNOLOGY CERTIFICATE</b>	<b>45</b>

## PROCESS TECHNOLOGY (CERT 1)

Certificate – 38 credit hours

FIRST YEAR - FIRST SEMESTER	CREDITS
PTAC 1302 - Introduction to Process Technology	3
PTAC 1308 - Safety, Health & Environment	3
TECM 1303 - Technical Calculations	3
SECOND SEMESTER	
CTEC 1401 - Applied Petrochemical Technology (Physics)	4
PTAC 1310 - Process Technology I (Equipment)	3
PTAC 1332 - Process Instrumentation I	3
THIRD SEMESTER	
PTAC 2420 - Process Technology II (Systems)	4
PTAC 2314 - Quality, Statistical Process Control & Economics	3
SECOND YEAR - FIRST SEMESTER	
PTAC 2438 - Process Technology III (Operations)	4
PTAC 2446 - Process Troubleshooting	4
SCIT 1414 - Applied General Chemistry	4
<b>PROCESS TECHNOLOGY CERTIFICATE</b>	<b>38</b>

## \*PROGRAM COSTS

Approximate costs for the A.A.S. Degree programs are \$4,200 for in-district students and \$6,600 for those out-of-district. This includes tuition and fees. Additional fees for books and supplies will vary.

Approximate costs for the Certificate program are \$2,600 for in-district students and \$4,200 for those out-of-district. This includes tuition and fees. Additional fees for books and supplies will vary.

*\*Alvin Community College may change tuition rates and other fees without notice or when directed by the Board of Regents.*

## ACCREDITATION

ACC is a fully accredited college and certified by the Southern Association of Colleges and Universities. The Process Technology program is:

- Fully endorsed by the Industry and Education Group of the North America Process Technology Alliance
- Endorsed as an Exemplary Program by the Texas Higher Education Coordinating Board
- Recognized by the Texas Workforce Investment Council (TWIC)

*Alvin Community College is an equal opportunity institution. If you have a disability and need assistance or require special accommodations contact the Office of Disability Services at 281-756-3533 or ods@alvincollege.edu.*