### **Process Piping Design**

The field of process piping design involves moving substances that are used in industrial settings, either in production or in other processes. The field encompasses many different areas, including Computer-Aided Drafting and Design (CADD), electrical design, and plumbing.

#### 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.

### 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
- training coordinator
- **Engineering specialist**
- Quality control technician First line supervisor Second line supervisor



Contact us and get started today!

vmartinez@lee.edu jqueyquep@lee.edu jrangel@lee.edu

www.lee.edu/programs/ process-piping/



Associate of Applied Science Certificate of Completion







Lee College does not discriminate on the basis of gender, disability, race, color, age, religion, national origin or veteran status in its educational programs, activities, or employment practices as required by Title VII, Title IX, Section 504, ADA, or 34 C.F.R.





**Process piping** is a form of pipework used to transport materials used in industrial processes and manufacturing. It is specially designed for particular applications to ensure that it will meet health and safety standards, in addition to suiting the particular needs of a given manufacturing process.

Process piping can be installed by plumbers, as well as contractors who specialize in installing factory components, and like other fixed elements of a manufacturing facility, it is subject to inspection and approval by government regulators. This type of piping can be used in a wide variety of ways. In food manufacturing, for example, process piping can be used to transport food ingredients to various points on the assembly line. Chemical manufacturing facilities use process piping to transport components of their products along with materials like natural gas used in manufacturing. Refineries and similar facilities also utilize process piping to move chemical compounds.

Many different materials can be used to make process piping. An important consideration is the types of materials that will be transported, as there may be special needs like inert glass or ceramic piping, corrosion-resistant stainless steel that can be sterilized in a food manufacturing facility, or inexpensive plastics for transporting materials like water. The designer of the piping also has to consider issues like the amount of pressure the piping will be subjected to and the width of the piping when selecting an appropriate construction material.

## ASSOCIATE OF APPLIED SCIENCE - PPD2 PROCESS PIPING DESIGN

**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 Cert.
DFTG 1405	Technical Drafting	TP1, PPD1
DFTG 1409	Basic CAD	TP1, PPD1
DFTG 2417	Descriptive Geometry	TP1
DFTG 2419	Intermediate CAD	TP1, PPD1
<b>Knowledge Building</b> : These courses further the students'		
knowledge in the area of study and increase their preparation		
for the degree completion.		

Course	Course Title	Counts Toward Cert.
DFTG 2408	Instrumentation Drafting	PPD1
DFTG 2423	Pipe Drafting	PPD1
DFTG 2432	Advanced CAD	PPD1
DFTG 2445	Advanced Pipe Drafting	PPD1
DFTG 2457	Advanced Tech in PD & Dr	fg PPD1
PFPB 2449	Field Measuring, Sketchin	g, & Layout PPD1
DFTG 1433	Mechanical Drafting	
ENGL1301	English Composition 1	

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

complete the degree plan and prepare to effici the workforce.		
Course	Course Title	
Creative Arts/LPC	Suggested: ARCH 1311, HUMA 1301, SPAN 2311, Options: Any CA/LPC	
	course	
SBS/HIST/GOVT PS	Suggested: ECON 2301, PSYC 2301,	
	SOCI 1301. Options: Any SBS/HIST/	
	GOVT PS course.	
Life and Physical Sciences		
Suggested: BIOL 1406, BIOL 1407, GEOL 1403,		
GEOL 1404. Options: Any Life and Physical		

Suggested: SPCH 1321. Options any SPCH course

Sciences course.

SPCH

# PPD1 - CERTIFICATE OF COMPLETION - PROCESS PIPING

**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 Cert.
DFTG 1405	Technical Drafting	PPD1
DFTG 1409	Basic CAD	PPD1
DFTG 2419	Intermediate CAD	PPD1

**Knowledge Building**: These courses further the students' knowledge in the area of study and complete the certificate.

Course	Course Title	<b>Counts Toward Cert.</b>
DFTG 2408	Instrumentation Drafting	PPD1
DFTG 2423	Pipe Drafting	PPD1
DFTG 2432	Advanced CAD	PPD1
DFTG 2445	Advanced Pipe Drafting	PPD1
DFTG 2457	Advanced Tech in PD & Dr	tg PPD1
PFPB2449	Field Measuring, Sketchin	g, & Layout PPD1

#### TP1: CERTIFICATE OF COMPLETION - CADD

**Foundations**: These are the courses students need in order to progress in their career/college pathway, as they provide a certificate.

Course	Course Title	Counts Toward Cert.
DFTG 1405	Technical Drafting	TP1
DFTG 1409	Basic CAD	TP1
DFTG 2417	Descriptive Geometry	TP1
DFTG 2419	Intermediate CAD	TP1