ATMAE Accredited Programs:

Drafting and Design Technology

Goals and Objectives:

- To provide the most up-to-date training for students who wish to enter the field of drafting and computer aided design,
- To give students an in-depth knowledge of the functions of the computer aided drafting software used currently in industry,
- To expose students to the different career fields in the industry, such as architectural drawing, piping, structural, electrical and to produce a student project in one specific area.

Program Outcomes:

- Graduates will have a working knowledge of CADD, 3D CADD and Plant 3D systems,
- And, will understand and apply the principles of project management to design projects as individuals or working in teams,
- As well as have a well developed set of critical thinking skills useful in working in industry.

Program of Study:

**SEMESTER 1**
ENGL 1010 English Composition
CSCI 1010 Introduction to Computer Technology
DRFT 1000 Fundamentals of Drafting & Design
CADD 1100 Introduction to CADD

**SEMESTER 2**
SPCH 1200 Intro to Public Speaking
MATH 1100 College Algebra
CADD 1200 Advanced CADD
PRNT 1000 Print Reading for Industry
JOBS 2450 Job Seeking Skills

**SEMESTER 3**
DRFT 1300 Introduction to Disciplines
CADD 1300 3-D CADD Concepts
PHSC 1010 Physical Science I
PHSC 1010L Physical Science Lab
*Elective
SEMESTER 4
DRFT 1500 Advanced Drafting Disciplines
*Elective
**CADD 17XX Special Projects
***Social Science Electives

*Elective Options
PTEC 2030 Plant Safety
PTEC 2070 Statistical Quality Control
PRMT 1000 Introduction to Project Management

**Special Projects
CADD 1710 Plant Design (Plant 3D)
CADD 1720 Construction Design (Revit)
CADD 1730 Product Design (Inventor)

***Social Science Electives
Psychology, Sociology, Economics, Geography or Political Science

Mission Statement:
The Drafting and Design Technology program is a two-year technical program designed to give the student essential knowledge and skills required for efficient and productive performance in the drafting field.

Drafting Statistics:
Average Grade Point Average (GPA) of graduates:

3.469

Placement Rate of graduates:

61%

Average Starting Salary:

$35,500

Average months to complete program:

26 months
Industrial Instrumentation

Goals and Objectives:

- To provide well trained graduates in the field of industrial instrumentation who will support the local and regional area industries,
- And who will demonstrate the ability to think critically and to solve problems related to their work as instrumentation techs.

Program Outcomes:

- The Instrumentation graduate will have knowledge of current industry practices, safety and skills related to industrial instrumentation,
- Demonstrate effective written and oral communication skills,
- Apply scientific, mathematical principles and computer application to solve technical problems according to industry standards.

Program of Study:

**Semester 1**
ETRN 1120 Fund of DC Circuits
ETRN 1130 Fund of AC Circuits
CSCI 1010 Computer Literacy
INST1110 Intro to Instrumentation
*Required General Education Class

**Semester 2**
ETRN 1220 Transistor Circuits
ETRN 1420 Digital Electronics
ETRN 1210 Fund of Semiconductors
JOBS 2450 Job Seeking Skills
*Required General Education Class
*Required General Education Class

**Semester 3**
INST 2620 Motor Controls, Circuitry
INST 2820 Principles of Process Controls
*Required General Education Class

**Semester 4**
INST 2630 Variable Speed Drives
INST 1330 Pressure and Level Measurement
INST 1410 Flow Measurement
INST 1420 Temperature Measurement
INST 1430 Final Elements

**Semester 5**
INST 2730 Analytical Measurements
INST 2735 Vibration Analysis
INST 2741 Programmable Logic Controllers
INST 2610 Controllers
INST 2841 Digital and Analog Control Systems
*Required General Education Class

**Required General Education Classes**
ENGL 1010 English Composition I
MATH 1100 College Algebra
SPCH 1200 Techniques of Speech
PHSC 1010 Physical Science I
PHSC 1010L Physical Science I Lab
*Social Science of your choice (Sociology, Psychology, Geography, Political Science)

**AAS Requirement:**
INST 2991 Special Projects I
INST 2999 Internship (for AAS students only)

**Mission Statement:**
The purpose of the Industrial Instrumentation program is to equip students with entry-level skills in the instrumentation craft and related career fields. The program also provides entry-level instrument technicians, meeting Louisiana’s industrial needs.

**Instrumentation Statistics:**
Average Grade Point Average (GPA) of graduates:

3.153

Placement Rate of graduates:

90%

Average Starting Salary:
$47,480

Average months to complete program:

26 months
Process Technology

Goals and Objectives:

➢ To equip Process Technology graduates with the knowledge and skills necessary to perform the duties of a Process Operator, and to
➢ Provide additional life skills that enable graduates of PTEC to find jobs in the local and regional areas as well as globally that provide a career path and lead to their economic success and stability

Program Outcomes:

➢ Graduates will have the ability to critically think, numerically reason, creatively problem solve and be able to communicate in writing and verbally.
➢ Graduates will have the ability to identify plant equipment, appropriately use plant equipment, follow process diagrams and describe process inputs, process transformation and outputs.
➢ Graduates will complete an industry based internship which meets or exceeds local industry employment requirements.

Program of Study:

Semester 1
CSCI 1010 Introduction to Computer Technology
MATH 1100 College Algebra
PTEC 1000 Mechanical Aptitude/Spatial Relations
PTEC 1010 Introduction to Process Technology
PTEC 2030 Plant Safety
ENGL 1010 English Composition I

Semester 2
PTEC 1310 Process Instrumentation I
CHEM 1010 General Chemistry
CHEM 1010L General Chemistry Lab
OR
CHEM 2220 Chemistry – Organic/Inorganic
CHEM 2220L Chemistry – Organic/Inorganic Lab
PTEC 1610 Plant Equipment
MATH 1110 Plane Trigonometry
OR
MATH 1410 Technical Mathematics
PTEC 2070 Statistical Quality Control
SPCH 1200  Techniques of Speech

**SEMESTER 3**
PTEC 1320  Process Instrumentation II
ENGL 1060  Technical Writing
PHYS 2010  Physics
PHYS 2010L  Physics Lab

OR

PHSC 1010  Physical Science I
PHSC 1010L  Physical Science Lab
PTEC 2420  Unit Operations (PT II Unit Ops)
JOBS 2450  Job Seeking Skills

**SEMESTER 4**
PTEC 2911*  Internship
ECON 2010  or 2020  Economics
PTEC 2440  Process Troubleshooting
PTEC 2630  Fluid Mechanics
PTEC 2430  Unit Operations (PT III Capstone Project)

**Mission Statement:**
The mission of the Process Technology program is to teach the student to monitor, operate, and maintain equipment used in the process of raw material into marketable chemical/petrochemical products, and to equip students with entry-level skills in the process operation and related career fields.

**Process Technology Statistics:**
Average Grade Point Average (GPA) of graduates:

3.162

Placement Rate of graduates:

75%

Average Starting Salary:

$52,800.00

Average months to complete program:

27 months