

Associate of Applied Science in Process Piping Design – PPD2

The Process Pipe Design Program is designed to provide the student with a foundation of theoretical and practical knowledge of the engineering technology field of piping design and the applied skills necessary to begin careers in the industry or to transfer to a university program. This program provides a learning environment where students can interact with state-of-the-art technological equipment and software to gain experience in the application of computer-aided drafting and design software to create, design, and analyze piping systems. Students pursuing the AAS in Process Pipe Design will be prepared for entry-level employment and transfer to a university program. All students will be prepared for life-long learning in the engineering technology field.

The Texas Gulf Coast Workforce Board has designated Pipe Drafters as a High Skill, High Growth Occupation as of July 2008. Pipe drafters are also a targeted job, by Texas Workforce Commission in the Gulf Coast area with projected employment in 2014 to be equal to or greater than the average for all occupations in the region and a projected growth rate equal to or greater than the average in the region. Median hourly wages are equal to or greater than the median for all occupations in the region with a designated minimum education requirement of a post secondary degree or certificate, long-term on the job training, or experience in a related occupation.

FIRST SEMESTER	SCH
— DFTG 1409 Basic Computer - Aided Drafting	4
— ENGR 1304 Engineering Design Graphics	
or	
— DFTG 1405 Technical Drafting	3/4
— TECM 1349 Technical Math Applications	3
— PTAC 1410 Process Technology I - Equipment	4
— ENGL 1301 English Composition I	3
	17/18
SECOND SEMESTER	
— PFPB 2449 Field Measuring, Sketching & Layout	4
— DFTG 2419 Intermediate CAD	4
— DFTG 2408 Instrumentation Drafting	4
— PHYS 1405 General Physics	4
	16
THIRD SEMESTER	
— DFTG 2423 Pipe Drafting - 3D	4
— DFTG 2432 Advanced CAD - 3D	4
— ENGT 2307 Engineering Materials I	3
— ENTC 1343 Statics	3
— SPCH - - - - Oral communication	3
	17
FOURTH SEMESTER	
— DFTG 2442 Advanced Pipe Drafting - 3D	4
— DFTG 2371 Advanced Technology Process Plant Design I	3
—●DFTG 2438 Final Project - Advanced Drafting	
or	
—●DFTG 2486 Drafting Internship	4
— - - - - - - - - Humanities/Fine Arts	3
— - - - - - - - - Social/Behavioral Science	3
	17
Total Semester Credit Hours for Degree	67/68

Certificate of Completion in Process Instrumentation and Electrical Design – PIED1

The Process Instrumentation and Electrical Design Certificate is designed to provide the student with a foundation of computer-aided drafting and design (CADD) skills in tandem with practical field knowledge of process instrumentation and electrical applications. In addition to the classroom activities, this program provides hands-on interaction with process instrumentation and electrical equipment in the field as a foundation for application of drafting and design projects in the classroom. Students pursuing the Certificate of Completion in Process Instrumentation and Electrical Design will be prepared for entry-level employment in I&E design and have a foundation of courses to apply toward the AAS in CADD Engineering Technology.

FIRST SEMESTER	SCH
—●DFTG 1409 Basic Computer - Aided Drafting	4
— DFTG 1405 Technical Drafting	4
— CETT 1302 Electricity Principles	3
— INTC 1312 Instrumentation & Safety	3
	14
SECOND SEMESTER	
— DFTG 2419 Intermediate CAD	4
— DFTG 2408 Instrumentation Drafting	4
— DFTG 2407 Electrical Drafting	4
— PTAC 1332 Process Instrumentation I	3
	15
Total Semester Credit Hours for Certificate	29