

**Industrial Design Technology** (CIP 15.1301)

**281-756-3784**

**Associate of Applied Science Degree Program (A.A.S.)**

**Purpose:** The ACC Industrial Design Technology program provides extensive hands-on training. Courses within the program includes basic principles of engineering drafting and design and advanced specialized training in piping and mechanical design. Students may choose a general Industrial Design Technology degree to study the various disciplines that ACC has to offer. Also available are specialization degrees in Industrial Design Technology for piping and mechanical design. This well-rounded education provides students with many opportunities and the necessary qualifications as entry-level designers.

**Program Requirements:** Students of the Industrial Design Technology program require problem solving and critical thinking, manual dexterity, artistic interest, technical drawing skills, craftsmanship, computing skills, self-discipline, and conceptual vision.

<i>Course Number</i>	<i>Course Title</i>	<i>Credits</i>
<b>FIRST YEAR</b>		
<b>First Semester</b>		
DFTG 1409	Basic Computer-Aided Drafting	4
+ Creative Arts <b>or</b>	Select from Creative Arts Core Curriculum	3
+ Language, Philosophy & Culture	Select from Language, Philosophy & Culture Core Curriculum	
+ MATH 1314	College Algebra	3
POFI 1204	Computer Fundamentals	<u>2</u>
		<b>12</b>
<b>Second Semester</b>		
DFTG 1405	Technical Drafting	4
DFTG 2419	Intermediate Computer-Aided Drafting	4
DFTG 2440	Solid Modeling and Design	<u>4</u>
		<b>12</b>
<b>Third Semester</b>		
^ DFTG Specialization	Select from Mechanical, Piping, or General Specialization	<u>12</u>
		<b>12</b>
<b>SECOND YEAR</b>		
<b>First Semester</b>		
^ DFTG Specialization	Select from Mechanical, Piping, or General Specialization	4
+ Social & Behavioral Sciences	Select from Social & Behavioral Sciences Core Curriculum	3
+ SPCH 1315 <b>or</b> SPCH 1318, <b>or</b> SPCH 2335	Public Speaking <b>or</b> Interpersonal Communication <b>or</b> Argumentation & Debate	3
TECM 1317	Technical Trigonometry	<u>3</u>
		<b>13</b>
<b>Second Semester</b>		
^ DFTG Specialization	Select from Mechanical, Piping, or General Specialization	4
+ ENGL 1301	Composition I	3
ENTC 1423	Strength of Materials	<u>4</u>
		<b>11</b>
Total Credits Required for Industrial Design Technology Degree .....		<b>60</b>

^ Students must complete 20 credit hours in either the Mechanical, Piping, or General areas of specialization

**Mechanical Specialization**

- DFTG 1445 - Parametric Modeling & Design
- DFTG 1433 - Mechanical Drafting
- \* DFTG 2450 - Geometric Dimensioning & Tolerancing
- DFTG 2406 - Machine Design
- DFTG 2435 - Advanced Technologies in Mechanical Drafting & Design

**Piping Specialization**

- DFTG 2457 - Advanced Tech Pipe Design & Drafting
- DFTG 2423 - Pipe Drafting
- ARCE 1452 - Structural Drafting
- \* DFTG 2445 - Advanced Pipe Drafting
- DFTG 2430 - Civil Drafting

**General Specialization**

- DFTG 2423 - Pipe Drafting
- \* DFTG 2445 - Advanced Pipe Drafting
- DFTG 1433 - Mechanical Drafting
- DFTG 1445 - Parametric Modeling & Design
- \* DFTG 2406 - Machine Design

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

\* Capstone Course