

# ENGINEERING DESIGN GRAPHICS, LEVEL 2 CERTIFICATE



DFTG 2386 or DFTG 2338	Internship-Drafting and Design Technology/ Technician <sup>2</sup> or Final Project - Advanced Drafting	3
<b>Credits</b>		<b>15</b>
<b>Total Credits</b>		<b>51</b>

**Capstone Experience:** DFTG 2386 Internship-Drafting and Design Technology/Technician or DFTG 2338 Final Project - Advanced Drafting

- <sup>1</sup> Courses do not have to be taken in this order unless a course has a prerequisite.
- <sup>2</sup> The course selected to satisfy the Capstone Experience (DFTG 2386 Internship-Drafting and Design Technology/Technician or DFTG 2338 Final Project - Advanced Drafting) can only be taken during, or after, the term in which the last required engineering design graphics courses are completed.

Courses may be applied to earn the Certificate of Technology, then the Level 2 Certificate, and finally the Associate of Applied Science (AAS) degree .

For the four (4) semester credit hours of the Second Year/First Term, students follow one (1) of the three (3) specializations: Architectural/ Civil/Structural Specialization, Mechanical Specialization or Energy/ Industrial Specialization taking the courses listed under each specialization below this Plan of Study.

For the 12 semester credit hours of the Second Year/Second Term, students follow one (1) of the three (3) specializations: Architectural/ Civil/Structural Specialization, Mechanical Specialization or Energy/ Industrial Specialization taking the courses listed under each specialization below this Plan of Study.

For more detailed information on this program, contact the Department Chair or full-time faculty.

## PLAN OF STUDY

5EDG

First Year		Credits
<b>First Term</b>		
DFTG 1305	Introduction to Technical Drawing	3
DFTG 1409	Basic Computer-Aided Drafting	4
ENGL 1301 or ENGL 2311	Composition I <sup>1</sup> or Technical and Business Writing	3
<b>Credits</b>		<b>10</b>
<b>Second Term</b>		
DFTG 1417	Architectural Drafting-Residential	4
DFTG 1445	Parametric Modeling and Design	4
DFTG 2423	Pipe Drafting	4
<b>Credits</b>		<b>12</b>
<b>Second Year</b>		
<b>First Term</b>		
DFTG 2407	Electrical Drafting	4
Select one (1) course from the three (3) Specializations:		4
Architectural/Civil/Structural Specialization		
Mechanical Specialization		
Energy/Industrial Specialization		
DFTG 2317	Descriptive Geometry	3
MATH 1332 or MATH 1314	Contemporary Mathematics (Quantitative Reasoning) <sup>1</sup> or College Algebra	3
<b>Credits</b>		<b>14</b>
<b>Second Term</b>		
Select three (3) courses from the three (3) Specializations not previously selected:		12
Architectural/Civil/Structural Specialization		
Mechanical Specialization		
Energy/Industrial Specialization		

## Electives

Code	Title	Credits
Architectural/Civil/Structural Specialization		3
ARCE 1415	Structural Steel Detailing	
ARCE 1421	Architectural Illustration	
ARCE 1452	Structural Drafting	
DFTG 1430	Civil Drafting I	
DFTG 2421	Topographic Drafting	
DFTG 2428	Architectural Drafting-Commercial	
DFTG 2431	Advanced Technologies in Architectural Design and Drafting	
Mechanical Specialization		
DFTG 1433	Mechanical Drafting	
DFTG 2402	Machine Drafting	
DFTG 2406	Machine Design	
DFTG 2435	Advanced Technologies in Mechanical Design and Drafting	
DFTG 2440	Solid Modeling/Design	
DFTG 2450	Geometric Dimensioning and Tolerancing	
DFTG 2458	Advanced Machine Design	
Energy/Industrial Specialization		
ARCE 1452	Structural Drafting	

2 *Engineering Design Graphics, Level 2 Certificate*

DFTG 1430	Civil Drafting I
DFTG 2408	Instrumentation Drafting
DFTG 2421	Topographic Drafting
DFTG 2445	Advanced Pipe Drafting
DFTG 2457	Advanced Technologies in Pipe Design and Drafting