Engineering Graphics, A.A.S.

(Formerly Drafting and Design Technology)

Engineering Graphics encompasses many divergent fields of study, including Aerospace, Architectural, Civil, Electrical, Mechanical, Piping, Structural, and Technical Illustrating. All of these fields focus on the ability to communicate by using a graphic language. Graphic communication is the ability to translate ideas and rough sketches into finished drawings that can be used to manufacture or assemble the desired product. These drawings are produced with the aid of specialty drawing and measuring instruments and the use of special computer programs. Students in this program learn basic drafting techniques as well as advanced topics within the fields of Architectural Design, Mechanical Design, and 3-D Design. Computer-Aided Drafting and Design (CAD) is an essential part of this program and is explored in depth.

Students who complete the prescribed degree curriculum will earn an associate in applied science degree in Engineering Graphics.

Admission is conditional and depends on the student's ability to perform the essential functions for this program. Reasonable accommodations are considered.

Note: Troy University Mechanical Engineering Students take DDT 104 for Engineering Graphics.

Program: Engineering Graphics
Type: Associate in Applied Science

Area I: Written Composition

Item #	Title	Credits
ENG 101	English Composition I	3

Area II: Humanities and Fine Arts

Item #	Title	Credits
	Humanities/Fine Arts Elective	3
	SPH 106 OR SPH 107	3

Area III: Natural Sciences and Mathematics

Item #	Title	Credits
	MTH 116 or higher	3
	Science/Math Elective	3-4

Area IV: History, Social and Behavioral Sciences

Item #	Title	Credits
	History/Behavioral Science/Social Science Elective	3

Area V: Career and Technical Courses

Item #	Title	Credits
	ORI 101 or 105 or ORT100	1-3
CIS 146	Microcomputer Applications	3
DDT 104	Basic Computer-Aided Drafting and Design	3
DDT 111	Fundamentals of Drafting and Design Technology	3
DDT 124	Basic Technical Drawing	3
DDT 127	Intermediate Computer-Aided Drafting and Design	3
DDT 128	Intermediate Technical Drawing	3
DDT 144	Basic 3D Modeling	3
WKO 106	Workplace Skills	3
DDT 150	Theory of Residential Drawing and Design	3
DDT 155	Drawing for Residential Construction	4
DDT 213	Civil Drafting, Plat Maps	3
DDT 216	Design of Structural Wood Members	3
DDT 225	Structural Steel Drafting	3
DDT 233	Intermediate 3D Modeling	3
DDT 244	Advanced 3D Modeling	3

- All DDT classes (except DDT 111 and DDT 216) requires the student to have already taken DDT 104.
- DDT 150 and DDT 155 are co-requisites.

	Total credits:	65-68

Course Sequencing

Engineering Graphics Associate of Applied Science Degree Suggested Course Sequence First Semester

Item #	Title	Credits
CIS 146	Microcomputer Applications	3
DDT 104	Basic Computer-Aided Drafting and Design	3
DDT 111	Fundamentals of Drafting and Design Technology	3
	Humanities/Fine Arts Elective	3
	ORI 101 or 105 or ORT100	1-3

Engineering Graphics Associate of Applied Science Degree Suggested Course Sequence Second Semester

Item #	Title	Credits
DDT 124	Basic Technical Drawing	3
DDT 127	Intermediate Computer-Aided Drafting and Design	3
DDT 144	Basic 3D Modeling	3
ENG 101	English Composition I	3
	MTH 116 or higher	3

After successful completion of Semester 2 students will be:

- Eligible for AutoCAD Certification Exam

Engineering Graphics Associate of Applied Science Degree Suggested Course Sequence Third Semester

Item #	Title	Credits
DDT 150	Theory of Residential Drawing and Design	3
DDT 155	Drawing for Residential Construction	4
DDT 216	Design of Structural Wood Members	3
WKO 106	Workplace Skills	3

After successful completion of Semester 3 students will be:

- Eligible for NOCTI - Architectural Drafting Exam

Engineering Graphics Associate of Applied Science Degree Suggested Course Sequence Fourth Semester

Item #	Title	Credits
DDT 128	Intermediate Technical Drawing	3
DDT 213	Civil Drafting, Plat Maps	3
DDT 233	Intermediate 3D Modeling	3
DDT 244	Advanced 3D Modeling	3

After successful completion of Semester 4 students will be:

- Eligible for Inventor Certification Exam

Engineering Graphics Associate of Applied Science Degree Suggested Course Sequence Fifth Semester

Item #	Title	Credits
DDT 225	Structural Steel Drafting	3
	History/Behavioral Science/Social Science Elective	3
	Science/Math Elective	3-4
	SPH 106 OR SPH 107	3