

ENGINEERING DESIGN

(CIP 15.1301)

Associate of Applied Science

Engineering Design is a four-semester program leading to an Associate of Applied Science degree. Specialized learning experiences include the implementation of computer-aided design software in various design disciplines. Instruction emphasizes the development of technical knowledge and drafting skills that are essential to the successful entrance into the job market as a design technician.

Former students have been employed as pipe designers, architectural designers, tool designers, civil designers, structural detail designers, electrical designers, and job estimators.

The Engineering Design program provides workplace experiences recommended by the U.S. Department of Labor Secretary's Commission on Achieving Necessary Skills (SCANS).

NOTE: The program is only offered at the Wharton campus.

Semester I courses are only offered in the fall semester. It is recommended that all Engineering Design students counsel with a department instructor or Program Director in their first semester of coursework.

Students must be enrolled in all Engineering Design courses offered for each semester.

Student success in drafting coursework is improved if students take core courses during the summer or mini-terms.

Some upper-level universities will allow 24-44 hours of technical credit to transfer toward a Bachelor of Applied Arts or Science degree. Contact the transfer university for information.

College Readiness Courses (if needed)

Semester I

DFTG 1405*	Introduction to Technical Drawing
DFTG 1409*	Basic Computer-Aided Drafting
DFTG 1410*	Specialized Basic Computer-Aided Drafting (CAD)
MATH 1314	College Algebra

Semester II

MATH 1316	Plane Trigonometry
DFTG 1417*	Architectural Drafting, Residential
DFTG 2319*	Intermediate Computer-Aided Drafting
DFTG 1430*	Civil Drafting I
ENGL 1301	Composition I

Semester III

Humanities/Fine Arts from the AAS General Education Course List	
DFTG 2406*	Machine Design
DFTG 2407*	Electrical Drafting
ARCE 1352*	Structural Drafting

Semester IV

DFTG 2338**	Final Project – Advanced Drafting (Capstone Course)
DFTG 2423*	Pipe Drafting
DFTG 2432*	Advanced Computer-Aided Drafting
Social/Behavioral Sciences from the AAS General Education Course List	

Total Semester Hours – 60

*Students must maintain a grade of "C" or higher in all Engineering Design courses to be eligible for the AAS Engineering Degree.

**DFTG 2338 must be taken during the students graduating semester. If summer graduation is planned, DFTG 2338 must be taken the spring semester before the anticipated graduation. DFTG 2338 is not offered during the summer sessions.