

DFTG - DRAFTING

DFTG 1305 Introduction to Technical Drawing 3 Credit Hours (2 Lec, 4 Lab)

An introduction to reading, interpreting, and developing technical drawings, including the principles of drafting and computer-aided design.

Course Type: Technical/Vocational Course

DFTG 1309 Basic Computer Aided Drafting 3 Credit Hours (2 Lec, 4 Lab)

An introduction to computer-aided drafting. Emphasis is placed on setup; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects, adding text and dimensions, using layers, coordinate systems, and plot/print to scale.

Course Type: Technical/Vocational Course

DFTG 1310 Specialized Basic Computer Aided Drafting (CAD) 3 Credit Hours (2 Lec, 4 Lab)

A supplemental course to Basic Computer Aided Drafting using an alternative computer-aided drafting (CAD) software to create detail and working drawings.

Course Type: Technical/Vocational Course

DFTG 1317 Architectural Drafting-Residential 3 Credit Hours (2 Lec, 4 Lab)

Preparation of architectural drawings for residential structures with emphasis on light frame construction methods, including architectural drafting procedures, practices, terms, and symbols. Prerequisite:

DFTG 1309

Course Type: Technical/Vocational Course

DFTG 1325 Blueprint Reading and Sketching 3 Credit Hours (2 Lec, 4 Lab)

An introduction to reading and interpreting working drawings for fabrication processes and associated trades. Use of sketching techniques to create pictorial and multiple-view drawings. Prerequisite: Students need to have completed 1st year.

Course Type: Technical/Vocational Course

DFTG 1330 Civil Drafting I 3 Credit Hours (2 Lec, 4 Lab)

Preparation of civil drawings including drafting methods and principles used in civil engineering.

Course Type: Technical/Vocational Course

DFTG 1333 Mechanical Drafting 3 Credit Hours (2 Lec, 4 Lab)

Study of mechanical drawings using dimensioning and tolerances, sectioning techniques, orthographic projection, and pictorial drawings.

Prerequisites: DFTG 1305 and DFTG 1309.

Course Type: Technical/Vocational Course

DFTG 1345 Parametric Modeling and Design 3 Credit Hours (2 Lec, 4 Lab)

Parametric-based design software for 3D design and drafting.

Course Type: Technical/Vocational Course

DFTG 1358 Electrical/Electronics Drafting 3 Credit Hours (2 Lec, 4 Lab)

Electrical and electronic drawings, stressing modern representation used for block diagrams, schematic diagrams, logic diagrams, wiring/assembly drawings, printed circuit board layouts, motor control diagrams, power distribution diagrams, and electrical one-line diagrams.

Course Type: Technical/Vocational Course

DFTG 1405 Introduction to Technical Drawing 4 Credit Hours (3 Lec, 2 Lab)

An introduction to reading, interpreting, and developing technical drawings, including the principles of drafting and computer-aided design.

Course Type: Technical/Vocational Course

DFTG 1409 Basic Computer-Aided Drafting 4 Credit Hours (3 Lec, 2 Lab)

An introduction to computer-aided drafting. Emphasis is placed on setup; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects, adding text and dimensions, using layers, coordinate systems, and plot/print to scale.

Course Type: Technical/Vocational Course

DFTG 1425 Blueprint Reading and Schetching 4 Credit Hours (2 Lec, 4 Lab)

Course Type: Technical/Vocational Course

DFTG 1492 Special Topics in Architectural Drafting and Architectural CAD/CADD 4 Credit Hours (2 Lec, 4 Lab)

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency.

Course Type: Technical/Vocational Course

DFTG 2281 Cooperative Education - Drafting and Design Technology/ Technician, General 2 Credit Hours (1 Lec, 10 Lab)

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.

Course Type: Cooperative Course, Technical/Vocational Course

DFTG 2305 Printed Circuit Board Design 3 Credit Hours (2 Lec, 4 Lab)

Course including single-sided and double-sided printed circuit board design, emphasizing the drawings, standards, and processes required to layout printed circuit board and manufacturing documentation.

Prerequisite: DFTG 1358

Course Type: Technical/Vocational Course

DFTG 2306 Machine Design 3 Credit Hours (4 Lec, 2 Lab)

Theory and practice of design. Projects in problem-solving, including press fit, bolted and welded joints, and transmission components.

Prerequisites: DFTG 2319 & DFTG 2332.

Course Type: Technical/Vocational Course

DFTG 2312 Technical Illustration and Presentation 3 Credit Hours (2 Lec, 4 Lab)

Study of pictorial drawings including isometrics, obliques, perspectives, charts, and graphs. Emphasis on rendering and using different media.

Prerequisite: DFTG 2340.

Course Type: Technical/Vocational Course

DFTG 2319 Intermediate Computer Aided Drafting 3 Credit Hours (2 Lec, 3 Lab)

A continuation of practices and techniques used in basic computer-aided drafting including the development and use of prototype drawings, construction of pictorial drawings, extracting data, and basics of 3D.

Prerequisite: DFTG 1309. (Formerly DFTG 1372)

Course Type: Technical/Vocational Course

DFTG 2321 Topographical Drafting 3 Credit Hours (2 Lec, 4 Lab)

Plotting of surveyor's field notes. Includes drawing elevations, contour lines, plan and profiles, and laying out traverses. Prerequisite: DFTG 1330

Course Type: Technical/Vocational Course

DFTG 2323 Pipe Drafting 3 Credit Hours (2 Lec, 4 Lab)

A study of pipe fittings, symbols, specifications and their applications to a piping process system. Creation of symbols and their usage in flow diagrams, plans, elevations, and isometrics Prerequisite: DFTG 1305
Course Type: Technical/Vocational Course

DFTG 2328 Architectural Drafting-Commercial 3 Credit Hours (2 Lec, 4 Lab)

Preparation of architectural drawings for commercial structures with emphasis on construction methods, including architectural drafting procedures, practices, governing codes, accessibility requirements, terms and symbols. Prerequisite: DFTG 1309 and DFTG 1317
Course Type: Technical/Vocational Course

DFTG 2330 Civil Drafting 3 Credit Hours (2 Lec, 4 Lab)

An in-depth study of drafting methods and principles used in civil engineering. Prerequisite: DFTG 1309. (Formerly DFTG 1373)
Course Type: Technical/Vocational Course

DFTG 2332 Advanced Computer-Aided Drafting CAPSTONE 3 Credit Hours (2 Lec, 4 Lab)

Application of advanced CAD techniques. Prerequisite: DFTG 2340
Course Type: Technical/Vocational Course

DFTG 2340 Solid Modeling/Design 3 Credit Hours (2 Lec, 4 Lab)

A computer-aided modeling course. Development of three-dimensional drawings and models from engineering sketches and orthographic drawings and utilization of three-dimensional models in design work. Prerequisite: DFTG 1305 or DFTG 1309
Course Type: Technical/Vocational Course

DFTG 2349 CAD Management 3 Credit Hours (2 Lec, 4 Lab)

Introduction to CAD management, including CAD standards, data management, file management, software, hardware and network specifications; loading new software and upgrades, troubleshooting and communicating with users and management.
Course Type: Technical/Vocational Course

DFTG 2350 Geometric Dimensioning and Tolerancing 3 Credit Hours (2 Lec, 4 Lab)

Geometric dimensioning and tolerancing, according to standards, application of various geometric dimensions and tolerances to production drawings. Prerequisites: DFTG 1333 and DFTG 2332.
Course Type: Technical/Vocational Course

DFTG 2421 Topographical Drafting 4 Credit Hours (3 Lec, 2 Lab)

Plotting of surveyor's field notes. Includes drawing elevations, contour lines, plan and profiles, and laying out traverses
Course Type: Technical/Vocational Course

DFTG 2438 Final Project - Advanced Drafting 4 Credit Hours (2 Lec, 4 Lab)

An advanced course in which students produce a comprehensive project from conception to conclusion.
Course Type: Technical/Vocational Course