

DRAFTING AND DESIGN TECHNOLOGY (DDT)

DDT 1503 AutoCAD 1 2 s.h.

Basic instruction in the use of AutoCAD computer-aided drafting system. Includes primary 2D skills including dimensioning, blocks, external reference and plotting. Customization methods and an introduction to application programming. One and one-half hours lecture, one and one-half hours lab per week. Grading is A, B, C, NC. Prereq. or coreq: MATH 1513.

Concurrent with: DDT 1504.

DDT 1504 Drafting and Plan Reading 2 s.h.

Drafting basics including plan, section, and elevation views; orthographic projections; line types and weights; drafting scales; dimensioning; tolerances; grading and contours, and construction layout for the civil, mechanical, and electrical technology disciplines. Development of skills in the interpretation and preparation of plans used for civil, mechanical, and electrical construction and fabrication. One and one-half hours lecture, one and one-half hours laboratory per week. Grading is A, B, C, NC. Prereq. or coreq: MATH 1513.

Concurrent with: DDT 1503.

DDT 1505 CAD Technology 1 4 s.h.

Basic instruction in the use of AUTOCAD computer-aided drafting system. Includes primary 2D skills including dimensioning, blocks, external reference and plotting. Customization methods and an introduction to application programming. Three hours lecture, three hours lab per week.

Prereq.: High school drafting or equivalent.

DDT 2606 CAD Solid Modeling 4 s.h.

Parametric solid modeling and other 3D techniques. Customization techniques and use of an application programming language within the CAD software. Three hours lecture, three hours lab per week.

Prereq.: DDT 1503 or DDT 1505.

DDT 2607 Civil 3D 2 s.h.

Civil 3D is a course intended to prepare students for entry-level production use of AutoCAD Civil 3D. The primary goal of this class is to teach students how to use the software, but it is also an opportunity to show them how projects are executed and what types of roles they will play in completing them.

Prereq.: DDT 1503 or DDT 1505.

DDT 2608 Machine Elements 3 s.h.

Design and drafting of machine elements common to mechanical equipment, including bending, torsion, and bearing concepts. Application and interpretation of GD & T. Two hours lecture, three hours lab per week.

Prereq.: CCET 2604.

DDT 2609 Industrial Technology 3 s.h.

Materials planning and handling, applications of quality assurance, post-production control. Introduction to ergonomics and manufacturing standards. Two hours lecture, three hours lab per week.

Prereq.: MET 2630.

DDT 2610 Manufacturing Elements 3 s.h.

Mechanical power transmission, mechanisms and linkages. Hydrostatics, system losses, interpretation and analysis of hydraulic and pneumatic schematics. Two hours lecture, three hours lab per week.

Prereq.: PHYS 1501.

DDT 2690 Special Topics in DDT 1-4 s.h.

Special topics/new developments in drafting and design technology. Subject matter, special prerequisites, and credit hours to be announced in advance of each offering. May be repeated with different subject matter to a maximum of 8 s.h.

Prereq.: Consent of the instructor.

DDT 3701 Quality Improvement 3 s.h.

Quality improvement methods for industry and processes, statistical controls used to evaluate, improve, and maintain quality standards, sampling techniques and ensuring reliability in evaluation results.

Prereq.: "C" or better in the following courses: ENTC 1505, MATH 1513 or MATH 1510 and MATH 1511, CCET 2604, MET 1515.