

ENGINEERING (ENGD)

ENGD 101 Introduction to Drafting (3.0 Units)

This survey course will explore the basic techniques used in the drafting industry. The course will emphasize proper use of hand drafting instruments, lettering, and line quality. Course includes work in the fields of architectural, engineering and mechanical drafting.

Lecture Hours: 36.00; Lab Hours: 54.00

Transfer: Transfers to CSU only

ENGD 103 Blueprint Reading for Construction (3.0 Units)

A course designed to develop the skills necessary to interpret both residential and commercial construction drawings and blueprints.

Lecture Hours: 54.00

Transfer: Transfers to CSU only

ENGD 110 Introduction to 2-D AutoCAD (3.0 Units)

An introduction to the AutoCAD program including all necessary basic commands required for computer aided drafting. Students will master drawing setup, common draw, edit and view commands, and plotting. Lectures and exercises are designed to provide a comprehensive knowledge of all basic computer drafting functions. Grade option.

Lecture Hours: 36.00; Lab Hours: 54.00

Transfer: Transfers to CSU only

ENGD 120 Introduction to Inventor (3.0 Units)

Solid Modeling and Three Dimensional CADD will introduce students to a new Autodesk software package entitled INVENTOR. Students will understand the concepts involved in Parametric Modeling. Students will begin by constructing basic shapes and proceed to building intelligent solid models and create multi-view drawings. Assembly drawings, section views, auxiliary views, sheet metal drawings, and details will also be produced. Students will develop their drafting and computer skills through drawings and projects that emphasize teamwork and the design process. Students will also learn various hardware, software and peripheral components related to operating a CADD station.

Lecture Hours: 36.00; Lab Hours: 54.00

Transfer: Transfers to CSU only

ENGD 130 Introduction to Solidworks (3.0 Units)

This course is designed to introduce the student to three-dimensional parametric solid modeling with SolidWorks. Students will begin with basic parametric solid modeling techniques and advance into complex assemblies requiring animation.

Lecture Hours: 36.00; Lab Hours: 54.00

Transfer: Transfers to both UC/CSU

ENGD 138 Cooperative Education Engineering (1-8 Units)

Cooperative Education is a key element of Victor Valley College's comprehensive approach to career development. Cooperative Education is a 16-, 12-, or 8-week course that enables students to receive college credit for paid or unpaid work opportunities. This course helps students gain valuable on-the-job work experience while providing practical education, best practices in professional development, and academic guidance through the course of their work opportunity. The combination of practical experience and curricular development empowers students to be more competitive, efficient and valuable employees upon completion of this program and/or their academic program trajectory. The course is ideal for students who are cross-training at their current worksite for upward mobility or seeking career changes, as well as those looking for entry-level occupational training through work-based learning experiences such as through an internship. Cooperative Education Transforms community businesses, industries, and public agencies into expanded educational training laboratories. Credit is awarded on the basis of learning objectives completed and the number of hours the student trains. Students must create/ complete new learning objectives each semester they enroll. Students may utilize their present work sites. More details are available in the Cooperative Education Office, (760) 245-4271, ext. 2281. The office, located in the Academic Commons, is open Monday-Thursday, 8:00 a.m.-1:00 p.m., 2:00-6:00 p. m., and by appointment. Transfer: Transfers to CSU only

ENGD 210 Advanced 2-D Autocad (3.0 Units)

A working knowledge of AutoCAD is necessary. This course will explore the more advanced two-dimensional features of the AutoCAD program including entity filters, attributes, external reference files, paper space and slide presentations. Projects include sectional description of compound shapes and developments.

Recommended Preparation: ENGD 110

Lecture Hours: 36.00; Lab Hours: 54.00

Transfer: Transfers to CSU only