

ENGINEERING DESIGN TECHNOLOGY

Programs

- 3D Design & Digital Manufacturing Certificate in Applied Science (<https://catalog.gvltec.edu/school-engineering-technology-professional-studies/engineering-design-technology/3d-design-digital-manufacturing-certificate/>)
- 3D Modeling CAD Design Certificate in Applied Science (<https://catalog.gvltec.edu/school-engineering-technology-professional-studies/engineering-design-technology/3d-modeling-cad-design-certificate/>)
- Engineering Design Technology Associate in Applied Science (<https://catalog.gvltec.edu/school-engineering-technology-professional-studies/engineering-design-technology/engineering-design-technology-aas/>)

Courses

EGT 110 Engineering Graphics I (2-6-4)

Offered Fall, Spring and Summer Semesters

Co-requisites: Placement into RDG 032 and MAT 105

This is an introductory course in engineering graphics science, which includes beginning drawing techniques and development of skills to produce basic technical drawings.

EGT 115 Engineering Graphics II (2-6-4)

Offered Fall and Spring Semesters

Prerequisite: EGT 110

Co-requisite: EGR 210 or EGR 275

This course in engineering graphics science includes additional drawing techniques for industrial applications.

EGT 119 Geometrics (3-0-3)

Offered Summer Semester

Prerequisites: EGT 115 and EGR 210 or EGR 275

This course provides the student with an in-depth knowledge of both the interpretation of geometric dimensioning and tolerancing symbols and the inspection techniques (conventional and X, Y, Z coordinate measuring machines) necessary to determine if parts meet the specification required by the drawing.

EGT 210 Engineering Graphics III (2-6-4)

Offered Fall Semester

Prerequisites: EGT 115 and EGR 210 or EGR 275

This advanced course in engineering graphics science covers the production of technical working drawings. This course is a project-based survey of basic mechanical and electrical engineering technology applications. The design process is explored with the results being presented as a set of technical drawings.

EGT 215 Mechanical Drawing Applications (2-6-4)

Offered Fall Semester

Prerequisites: EGT 115, EGT 119, EGR 275

This advanced drawing course covers industrial applications. Provides an in-depth study of the mechanical design process. This includes analysis calculations, vendor catalogs, GD&T and the creation of a complete drawing package for manufacture of a consumer product or industrial machine.

EGT 245 Principles of Parametric CAD (2-3-3)

Offered Fall Semester

Prerequisite: EGR 210 or EGR 275, or permission of instructor

This course is the study of 3-D product and machine design utilizing state-of-the-art parametric design software. This course is an introduction to CATIA V5 3D CAD software.

EGT 252 Advanced CAD (2-3-3)

Offered Spring Semester

Prerequisite: EGR 275

This course covers advanced concepts of CAD software and applications. This course constitutes part two of Solid Works. Advanced features of this design software are covered.