

# ENGINEERING DESIGN TECHNOLOGY ASSOCIATE IN APPLIED SCIENCE

## Program Description

This program trains students to transform design and engineering solutions into 2-D drawings, 3-D models and specifications using state-of-the-art CAD software, such that the product can be manufactured.

### Embedded Certificate

This program contains one or more embedded certificates which will automatically be awarded if the certificate requirements are met unless the student completes and submits the Program of Study Change Form ([https://www.gvltec.edu/admissions\\_aid/student\\_forms/](https://www.gvltec.edu/admissions_aid/student_forms/)) requesting to opt out of the embedded certificate.

## Mission Statement

The mission of the Engineering Design Technology program is to provide the Upstate of South Carolina with professionally prepared entry-level CAD design technicians capable of making significant contributions to the progress of business and industry in the area.

## Entrance Requirements

Acceptable placement test score(s), plus high school diploma or GED

## Type of Program

Day or evening

## Requirements for Completion

To graduate with an associate degree, candidates must meet the computer competency requirement by taking EGR 130 Engineering Technology Applications and Programming or by passing the exemption exam at a cost to be assessed by the college.

## Program Accreditation

The EDT Associate in Applied Science program is accredited by the Engineering Technology Accreditation Commission of ABET, <https://www.abet.org/>.

## Employment Opportunities

Manufacturing, industrial, engineering, mechanical contractors, design & build

Visit our web page at <https://www.gvltec.edu/edt/>.

## Recommended Program Schedule

Listed below is the ideal grouping of courses in order by semester. This plan assumes a full-time schedule. Note, however, that many variables can affect this plan, and not every course is offered every semester. Please see your advisor to map out your own personalized progression toward graduation.

The course schedule listed is designed for students who begin the program with ENG 101 English Composition I\* and MAT 110 College Algebra\* based on the placement test. Students taking pre-requisite courses for MAT 110 College Algebra\* should also take the following

courses: COL 103 College Skills for students taking MAT 100 Introductory College Math (Non-Degree Credit) and/or EGR 102 Introduction to Industrial/Engineering Careers for students who are taking MAT 105 Introduction to College Algebra

**Note:** Please contact your advisor for recommended evening schedules.

First Semester		Hours
COL 105	Freshman Seminar	3
EGT 110	Engineering Graphics I	4
EGR 210	Introduction to Engineering CAD	3
ENG 101	English Composition I	3
MAT 110	College Algebra	3
<b>Total Semester Hours</b>		<b>16</b>
Second Semester		Hours
EGR 130	Engr Tech Applications & Programming	3
EGT 115	Engineering Graphics II	4
EGR 275	Introduction to Engineering/Computer Graphics	3
MAT 111	College Trigonometry	3
MTT 121	Machine Tool Theory I	3
<b>Total Semester Hours</b>		<b>16</b>
Third Semester		Hours
EGR 175	Manufacturing Processes	3
EGT 119	Geometrics	3
PHY 201	Physics I	4
Social/Behavioral Elective <sup>1</sup>		3
<b>Total Semester Hours</b>		<b>13</b>
Fourth Semester		Hours
EGT 210	Engineering Graphics III	4
EGT 245	Principles of Parametric CAD	3
EGR 170	Engineering Materials	3
EGR 194	Statics and Strength of Materials	4
SPC 205	Public Speaking	3
<b>Total Semester Hours</b>		<b>17</b>
Fifth Semester		Hours
EGT 215	Mechanical Drawing Applications	4
EGT 252	Advanced CAD	3
Select one of the following:		2
EGR 255	Engineering Tech Senior Systems Project <sup>2</sup>	
CWE	Cooperative Work Experience <sup>2</sup>	
MAT 120	Probability and Statistics	3
Humanities /Fine Arts Elective		3
<b>Total Semester Hours</b>		<b>15</b>
<b>Total Required Credit Hours</b>		<b>77</b>

<sup>1</sup> Approved Social/Behavioral Electives

- ECO 211 Microeconomics
- PSY 201 General Psychology
- SOC 101 Introduction to Sociology

<sup>2</sup> Department head approval required (two-course minimum)