# **ENGINEERING TECHNOLOGY** (EGT)

### EGT 100 Introduction to Engineering Product Design (3 Credits)

45 lecture, 3 total contact hours

In this course, students will focus on product design history and the journey to product development. Students will explore how to research topics such as engineering specifications of components, materials and their applications, and the design development process. Students will also design, present and modify a conceptual product using a user-centered design process. The title of this course was previously Introduction to Product Design. Level I Prerequisite: Academic Reading and Writing Levels of 6; Academic Math Level 3

#### EGT 125 Advanced Engineering Design Technology (3 Credits)

30 lecture, 30 lab, 3 total contact hours

Advanced fundamentals of creating 3D parametric models using graphic environment. This course will focus on parts, assemblies and drawings. Level I Prerequisite: Academic Reading and Writing Levels of 6; Academic Math Level 3

## EGT 150 Engineering Design Technology Material Science (3 Credits)

45 lecture, 3 total contact hours

In this course, students will be introduced to the structures and properties of materials used in design. Students will create their own engineering design to gain an understanding of the processing and design limitations of materials. Topics fundamental to the further study of material procurement, testing and failure will be emphasized as a foundation to engineering design technologies. Level I Prerequisite: Academic Reading and Writing Levels of 6; Academic Math Level 2

#### EGT 175 Engineering Design Technology Material Processing (3 Credits)

30 lecture, 30 lab, 3 total contact hours

In this course, students will apply the principles of basic sciences and engineering to understanding the behavior of materials, their development and applications and to show an understanding of material processing technology for the manufacture of products. Students will also have an understanding of the processing factors that influence selection in design. Level I Prerequisite: Academic Reading and Writing Levels of 6; Academic Math Level 3; EGT 150 minimum grade "C", may enroll concurrently