

## Course Description - General Engineering Courses

To meet the College requirements, a set of general courses are offered in programs at the CE. The following are the outlines of these courses.

### **ENGR 100 Introduction to Engineering (3 crs)**

This course introduces engineering students to engineering communication and ethics, report writing, dimensions and units - length, time, mass, force, temperature, electric current - and their related parameters - energy and power. Prerequisite: FPE 100C, FPM 100B, FPT 100B.

### **ENGR 105 Engineering Graphics (2 crs)**

This course covers geometrical construction, orthographic projection, first angle and third angle projections, drawing convention or standards, sections, dimensions, oblique and isometric, tolerances, limits and fits. Students will also learn how to prepare engineering drawings using Computer Aided Drawing (CAD) software such as AutoCAD and solid work. Prerequisites: FPE 100C, FPM 100B, FPT 100B.

### **ENGR 110 Engineering Workshop (1 crs)**

This course covers five sections. 1) Lathe - machine components and different operations; 2) Basic principles of arc (AC and DC) and gas welding; 3) machine-shop, basic principle of milling, grinding, and drilling machines; 4) soldering of electronic components, and 5) electric wiring. The course includes hands-on practical experience on various machines. Prerequisite: FPE 100C, FPM 100B.

### **ENGR 300 Engineering Economy (3 crs)**

This course introduces economic decision processes in the design and implementation of real engineering projects; investment, financing, depreciation, economic selection, and replacement.