

Courses Description

College: Engineering

Department:

Couse ID: 110400101 **Description:** Engineering Workshop

Full Course Description: This course is designed to provide engineering students with fundamentals of engineering materials and their properties, manufacturing processes and industrial safety. It also exposes the student to practical training in different workshops in order to gain basic skills.

Couse ID: 110400102 **Description:** Computer Programming

Full Course Description: This course covers main topics of C++ programming including C++ fundamentals, operations, elements, structured methods, variables, assignment, Input/Output, control structures, functions, arrays, pointer, strings and classes.

Couse ID: 110400201 **Description:** Manual Engineering Drawing

Full Course Description: The course is designed to introduce principles of engineering drawing and descriptive geometry, and enhance students' visualization capabilities to handle 3D problems. It is hoped that this course will enable students to read and understand design details of engineering projects.

Couse ID: 110400202 **Description:** Computer Aided Engineering Drawing

Full Course Description: Drawing Introduction to Computer Aided Engineering Drawing (AutoCAD) Software, drawing limits, grid setting and rectangle, arc, aids, coordinate system, drawing tools (point, line, ray, multi-line, poly-line, polygons, circle, ellipse), Modify tools (copy, erase, offset, move, rotate, lengthen, terminate, fillet, chamfer, and isometric drawing array), Layers, Zoom, dimensions, text, hatch, orthographic projection.

Couse ID: 110400203 **Description:** Ethics and Communication Skills

Full Course Description: This course aims to introduce engineering ethics in theory and practice using a multi-disciplinary approach. The students are exposed to ethical issues that engineers sometimes face in professional practice. The course will make use of case studies of ethical issues drawn from different fields of engineering. Oral and written communication skills will be also discussed by introducing levels and styles of technical writing. Common errors in usage, documentation and citation of engineering documents will be discussed.

Couse ID: 1704001303 **Description:** Numerical Analysis

Full Course Description: Basic principles of numerical analysis and methods for solving different engineering problems: error analysis, solution of linear and nonlinear algebraic equations, regression and interpolating polynomials, numerical differentiation and integration, numerical solution of ordinary and partial differential equations.

Couse ID: 1804001128 **Description:** Cyber Hygiene

Full Course Description: Uni. Elective