

Hagerstown Community College
OFFICIAL MASTER SYLLABUS DOCUMENT

COURSE: EGT–101 Foundations of Engineering Technology (3 credits)

INSTRUCTOR: Olu Bamiduro, Ph.D.
2018

SEMESTER/ YEAR: SPRING/

COURSE DESCRIPTION:

This course enables students to learn the techniques of decision making and problem solving using an array of software such as Microsoft Excel and Matlab.

***Prerequisite:** MAT 100

TEXTBOOK (REQUIRED)

Engineering Pkg. ISBN: 1269782975 (only at textbook store)

STUDENT LEARNING OUTCOMES:

- Read and understand technical information/textbooks.
- Apply mathematical concepts across broad ranges or classes of problems.
- Identify the correct approach to solve particular math problems.
- Categorize different types of problems that are solved by the same techniques.
- Categorize different techniques that may be used to solve the same problem.
- Utilize current technology to reinforce mathematical concepts.
- Demonstrate proficiency at the use of MatLab.
- Utilize an Excel spreadsheet for data analysis and decision-making.
- Provide an Excel workbook that solves an engineering problem

EGT-101 is a foundational course that sets the tone for subsequent courses in the Mechanical Engineering Technology Program. It is expected that 80% of the students enrolled in this course will begin to think analytically and methodically: thus, completing the MET program and be employed in a related field or continue their education.

TOTAL HOURS REQUIRED FOR THIS COURSE:

To earn one academic credit at HCC, students are required to complete a minimum of 37.5 clock hours (45 fifty-minute “academic” hours) of coursework per semester. Those hours of coursework may be completed through a combination of hours within the classroom and hours outside the classroom. Certain courses may require more than the 37.5 minimum hours of coursework per credit. For most classes, students should expect to do at least 2 hours of coursework outside of class for each hour of in-class coursework.

ASSIGNMENT/ASSESSMENT	Clock Hours
In-class Instruction	45
Textbook Chapter Readings	15 hours
Study of Manuals for Hands-on	15 hours
Chapter Review Questions and	15 hours
Research Assignments	15 hours
Exam Preparation	20 hours
	Total hours=125 hours

SERVICES FOR STUDENTS WITH DISABILITIES:

Students may receive reasonable accommodations if they have a diagnosed disability and present appropriate documentation. Students seeking accommodations are required to contact the Disability Support Services (DSS) office as early as possible. Students may contact a DSS staff member for an appointment at dss@hagerstowncc.edu or at 240-500-2530