## FACULTY OF MECHANICAL ENGINEERING

## **COURSE STRUCTURE**

1	Course Code and Name	Technical Informatics I
2	Year	1
3	Program Level/Category	Degree/Computing
4	Unit	3 Credits
5	Prerequisite Course	Nil
6	Contact Hours	Lecture 1 units 1 hours X 14 weeks
		Tutorial 0 unit 0 hour X 14 weeks
		Laboratory   2 unit   2 hours X 14 weeks
7	Course Synopsis	This course is an introductory course to C programming which includes programming basics, program structures, input/output functions, variables, math functions, selection and repetition control structures, numeric arrays, and functions.
8	Course Outcomes	<ul> <li>By the end of semester, students should be able to:</li> <li>CO1: Understand computing fundamentals and construct simple C programs that utilises standard input/output functions</li> <li>CO2: Construct C programs that uses math operations and math function</li> <li>CO3: Construct C programs with selection control structure (if, else if, else, switch)</li> <li>CO4: Construct C programs with repetition control structure (for, while, dowhile loops)</li> <li>CO5: Construct C programs with functions and numeric arrays</li> </ul>
11	References	<ol> <li>Harry H. Cheng, C for Engineers and Scientists: An Interpretive Approach, McGraw Hill 2010</li> <li>Brookshear, J.G., C Programming for Engineering &amp; Computer Science, Benjamin-Cummings 2000</li> <li>Forouzan, B.A and Gilberg, R.F., Computer Science: A Structured Programming Approach Using C, Brooks/Cole 2001</li> <li>Jeri R.Hanly and Elliot Koffman, Problem Solving &amp; Program Design in C, Addison Wesley, 2002</li> <li>Elice E. Fischer, David W.Eggert and Stephen M.Ross, Applied C: An Introduction and More, McGraw-Hill, 2001</li> </ol>

Technical Informatics I