Military Institute of Science and Technology
Mirpur Cantonment, Dhaka

Introduction to Computer Science and Programming Language

COURSE OUTLINE

Subject	Instructor
Title: Introduction to Computer Science and Programming Language Course Code: CSE-121 Credit Hr: 3.00 Contact Hr: 3.00 Level-1, Term-II	**Zinia Sultana** Lecturer E-mail: ziniasultana@cse.mist.ac.bd **Md. Jakaria** Lecturer E-mail: jakaria@cse.mist.ac.bd

1. Course Objectives:

To achieve a basic idea about programming Languages

1.1. Learn programming with C
1.2. Learn multi-paradigm numerical computing environment and proprietary programming language using MATLAB
1.3. Learn how to think about the problems, their solutions and translating it to a programming language.

2. Textbooks:

2.1. Teach Yourself C, Herbert Schildt, 3rd Edition
2.2. Programming with C - Schaums Outline Series
2.3. MATLAB for Engineers - Holly Moore, Pearson Education Inc, 2018

3. Reference Books:

3.1. C, The Complete Reference, Herbert Schildt, 4th Edition
3.2. C Programming Language, Dennis M. Ritchie. 2nd Edition
3.3. Introduction to Matlab for Engineering Students - David Houcque, version-1.2

4. Distribution of Marks:

Description	Percentage
Class Participation/Observation	05%
Class Test	20%
Mid Term Exam	15%
Final Examination(Section A & Section B)	60%
Total	**100%**

5. Distribution (Planning) of the Course Contents:

Week	Lecture	Topic	Remarks
1	1-3	Introduction to digital computers. Programming languages, algorithms and flowcharts	Z
2	4-6	Structured Programming using C: Variable and constants, operators & expression	Z
3	7-9	Control Statements: "if else", "else if", "switch"	Z
Class Test – 1			
4	10-12	Control Statements: Loop (for, While Loop, Do While)	Z
5	13-15	Control Statements: Nested Loops	Z
6	16-18	Function and recursion	Z
7	19-21	Arrays	Z
Class Test – 2			
8	22-24	String manipulation	J
9	25-27	Pointers	J
10	28-30	User Defined Data Types: Structures, Unions, Enumeration	J
11	31-33	File Input/ Output	J
Mid Term Exam			
12	34-36	Introduction and familiarization with MATLAB Matrix Operation	J
13	37-39	Basic plotting	J
Class Test – 4			
14	40-42	Control flow and operators	J

Date: 07 July, 2019

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