Military Institute of Science & Technology

Department of Computer Science & Engineering

COURSE OUTLINE

Subject
Title: Compiler Sessional
Code: CSE-304
Credit Hour: 0.75
Contact Hour: 3 hr
Level-3, **Term-I**

Instructor(s)
Name and Designation:
Lec Moumita Sarker
Lec Nabila Shahnaz Khan
Lec Iyolita Islam
Lec Afia Anjum
Lec Sumaiya Afroze Mila
Lec Raiyan Rahman

1.0 Course Objectives:

1.1 Teaching the basic techniques of compiler construction and tools that can be used to perform syntax-directed translation of a high-level programming language into an executable code.
1.2 Understanding the working of lex and yacc compiler for debugging of programs.
1.3 Teaching the new tools and technologies used for designing a compiler.

2.0 Course Outcomes (CO):

Upon completion of the course, the students will be able to:
2.1 Use the basic techniques of compiler construction and tools that can be used to perform syntax-directed translation of a high-level programming language into an executable code.
2.2 Describe the working of lex and yacc compiler for debugging of programs.
2.3 Discuss the new tools and technologies used for designing a compiler.

3.0 Mapping of Course Outcomes (CO) and Program Outcomes:

Course Outcomes (CO) of the Course	Program Outcome (PO)											
	1	2	3	4	5	6	7	8	9	10	11	12
Use the basic techniques of compiler construction and tools that can used to perform syntax-directed translation of a high-level programming language into an executable code.										√		
Describe the working of lex and yacc compiler for debugging of programs.									√			
Discuss the new tools and technologies used for designing a compiler.											√	

4.0 Distribution (Planning) of the Course Contents:

Week	Topics
1	Symbol Table
2	Tokenizer
3	Tokenizer Using Flex
4	Arithmetic Calculator Using Bison
5	Intermediate Code Generator (Flex + Bison)
6	**Online**
7	**Quiz**

5.0 Distribution of Marks:

Category	Marks %
Online	25
Quiz	20
Attendance	10
Offline	20
Class performance	25
Total	**100%**

6.0 Text and Ref Books:
1. Compilers: Principles, Techniques & Tools (2nd ed)- Alfred V Aho, Monica S Lam, Ravi Sethi, and Jeffrey D Ullman, Pearson/Addison Wesley (2006).
2. Engineering A Compiler (2nd Ed)- Linda Torczon and Keith Cooper, Morgan Kaufmann Publishers Inc (2011).

Date: 05 Feb, 2019

Signature of the course teacher(s)