MEHRAN UNIVERSITY OF ENGINEERING AND TECHNOLOGY JAMSHORO
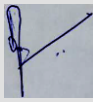**Department of Chemical Engineering**

LESSON PLAN

COURSE TITLE: **Introduction to Computing and Programming**	COURSE CODE: **CS146**	CREDIT HOURS: **02**	MINIMUM CONTACT HOURS: **32**
COURSE INSTRUCTER: **Dr. Fahad Rehman Abro (A+B+C+D)**			

Batch: **23CE**	Semester: **1ST**	Semester Starting Date: **15-08-2023**	Semester Suspension Date: 24-11-2023

COURSE LEARNING OUTCOMES:

CLO No.	Description	Taxonomy level	Associated PLO
1	UNDERSTAND basic computer organization and functions of various computer hardware and software components.	C2	1
2	APPLY effective solutions to computer oriented civil engineering problems.	C3	3 & 5

LESSON CONTENTS AND ASSOCIATED CLO(s)

Contents	CLO No.	Marks Assigned	Delivery Methods	Assessment Methods (Marks)
• Application areas of computer Information/Data Processing Cycle. • History, Evolution and Generations of Computer. • Input, output and peripheral Devices. • Computer Memory: RAM, ROM, SRAM, DRAM, PROM, EPROM, EEPROM, Primary, cache memory, Secondary storage: Magnetic, Optical, and solid state, Units of memory measurement • Basic CPU organization, Parts of CPU: ALU, MU, CU, FPU and Registers, • Number systems (Binary, Octal, Decimal, Hexadecimal) • Basic functions of operating system • Computer Networks and their types. • Computer software and its types. **No. of lectures: 22**	**1**	**35**	• Class Lecture • Discussion	• Assignment-I (03) • Class Test-I (02) • Mid semester Exam (15) • Final Exam (15)
• Instruction and program, Source, and object code • Language Translators: Assembler, Interpreter and Compiler, Bug and Debugging, Compilation process. • Basic program structure, Statement, functions, header files, Conditional controlled structures: If, If-Else, Else-If, Switch • Iterative control structures: for, while, do-while, break and continue Iterative Control Structures: while & do while loops break and continue. • Arrays: one and multi-dimensional, Strings Functions: predefined and user-defined, Structures and nested structures. **No. of lectures: 10**	**2**	**15**	• Class Lecture • Discussion • Programing	• Final Exam (10) • Assignment-II (02) • Class Test-II (03)

S. No.	Assessment Activities	Marks	Activities		CLO(s) to be assessed
1	Quiz/Assignment/	**10**	Assignment(s)	2	1 and 2
			Class Test(s)	2	1 and 2
2	Mid Semester Exam	**15**	1		1
3	Final Semester Exam	**25**	1		1 & 2

ASSESSMENT DETAILS

Prepared by: **Dr. Fahad Rehman Abro**

Signature:

Dated: 22-08-2023

Reviewed by: **Curriculum Review Committee**

Signature:

Dated: 14/10/2023

Approved by: **Chairman, CED**

Signature:

Dated: 14/10/2023