



**MEHRAN UNIVERSITY OF ENGINEERING AND TECHNOLOGY JAMSHORO**

**Department of Chemical Engineering**

**LESSON PLAN**

<b>COURSE TITLE: Introduction to Computing and Programming</b>		<b>COURSE CODE: CS146</b>	<b>CREDIT HOURS: 02</b>	<b>MINIMUM CONTACT HOURS: 32</b>
<b>COURSE INSTRUCTOR: Dr. Fahad Rehman Abro (A+B+C+D)</b>				
<b>Batch: 23CE</b>	<b>Semester: 1<sup>ST</sup></b>	<b>Semester Starting Date: 15-08-2023</b>	<b>Semester Suspension Date: 24-11-2023</b>	
<b>COURSE LEARNING OUTCOMES:</b>				
<b>CLO No.</b>	<b>Description</b>	<b>Taxonomy level</b>	<b>Associated PLO</b>	
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	
<b>LESSON CONTENTS AND ASSOCIATED CLO(s)</b>				
<b>Contents</b>	<b>CLO No.</b>	<b>Marks Assigned</b>	<b>Delivery Methods</b>	<b>Assessment Methods (Marks)</b>
<ul style="list-style-type: none"> <li>Application areas of computer Information/Data Processing Cycle.</li> <li>History, Evolution and Generations of Computer.</li> <li>Input, output and peripheral Devices.</li> <li>Computer Memory: RAM, ROM, SRAM, DRAM, PROM, EPROM, EEPROM, Primary, cache memory, Secondary storage: Magnetic, Optical, and solid state, Units of memory measurement</li> <li>Basic CPU organization, Parts of CPU: ALU, MU, CU, FPU and Registers,</li> <li>Number systems (Binary, Octal, Decimal, Hexadecimal)</li> <li>Basic functions of operating system</li> <li>Computer Networks and their types.</li> <li>Computer software and its types.</li> </ul> <b>No. of lectures: 22</b>	<b>1</b>	<b>35</b>	<ul style="list-style-type: none"> <li>Class Lecture</li> <li>Discussion</li> </ul>	<ul style="list-style-type: none"> <li>Assignment-I (03)</li> <li>Class Test-I (02)</li> <li>Mid semester Exam (15)</li> <li>Final Exam (15)</li> </ul>
<ul style="list-style-type: none"> <li>Instruction and program, Source, and object code</li> <li>Language Translators: Assembler, Interpreter and Compiler, Bug and Debugging, Compilation process.</li> <li>Basic program structure, Statement, functions, header files, Conditional controlled structures: If, If-Else, Else-If, Switch</li> <li>Iterative control structures: for, while, do-while, break and continue Iterative Control Structures: while &amp; do while loops break and continue.</li> <li>Arrays: one and multi-dimensional, Strings Functions: predefined and user-defined, Structures and nested structures.</li> </ul> <b>No. of lectures: 10</b>	<b>2</b>	<b>15</b>	<ul style="list-style-type: none"> <li>Class Lecture</li> <li>Discussion</li> <li>Programing</li> </ul>	<ul style="list-style-type: none"> <li>Final Exam (10)</li> <li>Assignment-II (02)</li> <li>Class Test-II (03)</li> </ul>

### ASSESSMENT DETAILS

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

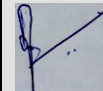
Prepared by: **Dr. Fahad Rehman Abro**

Signature:



Dated: 22-08-2023

Reviewed by: **Curriculum Review Committee**



Signature:

Dated: 14/10/2023

Approved by: **Chairman, CED**



Signature:

Dated: 14/10/2023