



**Curriculum**  
**Subject - Computer Science (Code – 083)**  
**Class - XI**  
**Session 2025-26**

Month	April	May	June	July
<b>Contents</b>	<b>Computer System Overview/ Data Representation</b>	<b>Society, Law and Ethics/ Cyber Safety</b>	<b>Introduction to Problem Solving / Python Fundamentals</b>	<b>Data Handling / Flow Control</b>
<b>Learning Outcomes</b>	Students will be able to: <ul style="list-style-type: none"> <li>• Explain components of computer systems.</li> <li>• Comprehend memory structure of computer.</li> <li>• Classify software and its types.</li> <li>• Comprehend operating system.</li> <li>• Comprehend encoding schemes used in computers.</li> </ul>	Students will be able to: <ul style="list-style-type: none"> <li>• Explain cyber ethics, cyber safety and cybercrime.</li> <li>• Describe impacts of technology on society.</li> <li>• Comprehend the terms digital footprint, IPR, malware etc.</li> <li>• Explain IT Act and e-waste management.</li> <li>• Describe the steps for Problem solving.</li> </ul>	Students will be able to: <ul style="list-style-type: none"> <li>• Develop algorithms and flowcharts.</li> <li>• Generate basic python programs.</li> <li>• Comprehend python data types.</li> <li>• Define operators.</li> <li>• Evaluate expressions.</li> <li>• Explain basic components of the python program and interface.</li> </ul>	Students will be able to: <ul style="list-style-type: none"> <li>• Classify different types of data a python program can accept.</li> <li>• Employ different operators on data.</li> <li>• Evaluate the given expression.</li> <li>• Describe the need and structure of flow control statements.</li> </ul>
<b>Skills</b>	Comprehend/Knowledge	Comprehend/ Application	Interpretation/Application/ Analysis	Interpretation/ Application/ Analysis
<b>Software</b>	Power Point / Acrobat Reader	Power Point / Acrobat Reader	Power Point	Power Point / Python
<b>Competency skills based activity / Experiential learning</b>	Conversions: Binary, Decimal, Octal. Hexadecimal	Group discussion on IPR.	Write an algorithm and draw flowchart for a given problem.	Python programs.

**Assessment:** Class Response, Homework, Class Test and Practical Work.



Month	August / September	October	November	December
<b>Content</b>	<b>Flow Control / String Manipulation</b>	<b>String Manipulation / List Manipulation</b>	<b>Tuples and Dictionaries</b>	<b>Project</b>
<b>Learning Outcomes</b>	Students will be able to : <ul style="list-style-type: none"> <li>● Implement conditional statements and loops.</li> <li>● Demonstrate string functions on strings.</li> <li>● Develop python programs based on flow control and strings.</li> </ul>	Students will be able to : <ul style="list-style-type: none"> <li>● Employ string functions on strings.</li> <li>● Generate python programs based on flow control and strings.</li> <li>● Comprehend list operations.</li> <li>● Discover and employ inbuilt list functions.</li> <li>● Employ list functions in python programs.</li> </ul>	Students will be able to : <ul style="list-style-type: none"> <li>● Define tuple and its operations.</li> <li>● Explain dictionaries and their operations.</li> <li>● Generate python programs based on tuples and dictionaries.</li> </ul>	Students will be able to : <ul style="list-style-type: none"> <li>● Combine python concepts with MYSQL to create a minor project.</li> </ul>
<b>Skills</b>	Comprehend/ Application/ Analysis	Application/Analysis	Application/Analysis/ Creation	Application/Analysis/ Creation
<b>Software</b>	Python	Python	Python	Python
<b>Competency skills based activity / Experiential learning</b>	Python programs.	Python programs.	Python programs.	Create a minor project based on python.

**Assessment:** Class Response, Homework, Class Test and Practical Work.