



Month	April	May	June	July
Content	Computer System Overview/ Data representation/ Boolean logic	Introduction to Problem Solving/ Getting Started with Python/ Python Fundamentals	Python Fundamentals/ Data Handling	Introduction to Python Modules/ Flow of Control
Learning Outcomes	Students will be able to : <ul style="list-style-type: none"> Describe computer components. Illustrate types of software. Perform conversions. Develop Boolean logic. Comprehend DE Morgan’s Theorem 	Students will be able to : <ul style="list-style-type: none"> Design algorithm. Compare algorithm. Create and compile basic python program. Use tokens of python. Describe variables and assignment. 	Students will be able to : <ul style="list-style-type: none"> Implement simple input and output. Illustrate data types. Comprehend operators. Debug python program. 	Students will be able to : <ul style="list-style-type: none"> Comprehend modules in python. Import and implement modules. Execute different types of flow control statements. Execute different types of looping control statements.
Skills	Understanding/Comprehend	Understanding/Creation/Application/ Knowledge	Implementation /Application/Knowledge	Creation/Application/Knowledge
Software	Power Point	Python/ Visual Studio	Python/ Visual Studio	Python/ Visual Studio
Competency skills based activity / Experiential learning	Create a presentation to demonstrate different types of software. Integration with: : English, Math and Science	Create a basic algorithm Integration with: : English, Math and Science	Create a python program and use simple input and output. Integration with: : English, Math and Science	Create a python program using flow control statement. Integration with: : English, Math and Science

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



Month	August	September	October	November
Content	Flow of Control/ String Manipulation/ List Manipulation/ Project	List Manipulation/ Tuples/ Directories/ Project	Directories/ Cyber Safety Society ,Law and Ethics/ Project	Society ,Law and Ethics/ Project
Learning Outcomes	Students will be able to : <ul style="list-style-type: none"> ● Execute nested loops. ● Illustrate the Concept of string. ● Analyze string operators. ● Create a project applying python concepts. 	Students will be able to : <ul style="list-style-type: none"> ● Demonstrate string function. ● Create and access lists. ● Describe tuples. ● Execute concept of tuple operations. ● Illustrate the meaning of dictionaries and their use in python. ● Create a project using python demonstrating the concepts of list and tuples. 	Students will be able to : <ul style="list-style-type: none"> ● Analyze Dictionaries function and methods. ● Browse safely on internet. ● Identify types of cyber-crime. ● Comprehend cyber law and IT act. ● Identify threats to security. ● Embed Open source philosophy. 	Students will be able to : <ul style="list-style-type: none"> ● Economic benefits of technology and society. ● E-waste management.
Skills	Understanding/Creation	Understanding/Creation/Knowledge	Implementation/Creation /Knowledge	Creation/Application/Knowledge
Software	Python/Visual Studio	Python/ Visual Studio	Python/ Visual Studio	Python/ Visual Studio
Competency skills based activity / Experiential learning	Create a program using python loops. Integration with: English, Math and Science	Create a program using list in python Integration with: : English, Math and Science	Create a program using python. Integration with: : English, Math and Science	Create a presentation to demonstrate cyber concern and e-waste management. Integration with: : English, Math and Science

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