THE CAMFORD INTERNATIONAL SCHOOL

ANNUAL LESSON PLAN 2025-2026

GRADE: 9 **SUBJECTS: ARTIFICIAL INTELLIGENCE (417)**

MONTH	UNIT NAME	CHAPTER NAME	DETAIL CONCEPTS TO BE COVERED	ACTIVITY/PRACTICALS
April **Session 1**	**UNIT 5** Introduction to Python	**Chapter1:** Python Basics	• Introduction to Python ➢ Features of Python • Getting Python ➢ Launching Python ➢ Python IDLE ➢ Python Interactive Mode ➢ Python Script Mode • Popular Python IDEs • Fun with numbers	Open IDLE python and perform calculations in an interactive mode.
April **Session 2**			• Fun with strings ➢ Simple string ➢ Enclose Single Quotes within double quotes ➢ Accessing individual letters of a string • IDLE script mode • Python comments	**Program 1:** Write a program to print 4th character of a string "computer". **Program 2:** Write a python program to print personal information like Name, Father's Name, Class, School Name.
April			• Understanding variables ➢ Naming the variables(Identifiers)	**Program 3:** Write a program to find square of number 7.

Session 3			• Understanding basic data types in Python ➢ Text or strings ➢ Numbers or Integers ➢ Floats • Arithmetic in Python ➢ Arithmetic operators ➢ Simple Input and Output	**Program 4:** Write a program to swap two values using third variable **Program 5:** Write a program to calculate average marks of 3 subjects.
April **Session 4**		**Chapter 1** **Python Basics** **Chapter 2: Python decision making and loops**	• Dual role of + operator • Implicit and explicit data type conversion • Making decisions in python program ➢ if statement ➢ Branching with if else statement	**Program 6:** Write a program to accept 2 values as strings and concatenate it. **Program 7:** Write a program to accept float and convert as integer. **Program 8:** Write a program to check if a person can vote using simple if. **Program 9:** Write a program to check even or odd using if else.
April **Session 5**			• Executing statements repeatedly ➢ while loop ➢ for loop ❖ range()	**Program 7:** Write a program to print first 10 even numbers. **Program 8:** Write a program to add first 10 natural numbers using for loop.

June **Session 6**		**Chapter-3** Python Data Structures: Lists	• The break keyword • The continue keyword • Array • Tuple • Stack • Queue • Dictionary	**Program 9:** Write a program to find the sum of all the numbers accepted from the user till the user entered 0. **Program 10:** Write a program to print numbers from 1 to 12 except multiples of 10.
June **Session 7**			• Creating python lists • replication operator * • Accessing list contents • Modifying list contents	**Program 11:** Write a python program to create a list and insert 5 values into it. **Program 12:** Write a program to print all the elements of a list 2 times. **Program 13:** Write a program to update the last element in list by 500. List=[10,20,30,40,50] Output: [10,20,30,40,500]
June **Session 8**			• Adding and removing items to the list • Sorting, reversing and counting items in the list • copying lists • Nested list	**Program 14:** Write a program to remove all the occurrences of odd elements from a list. **Program 15:** Write a program to sort all the elements of a list in increasing order and frequency of all the

				elements in it.
June **Session 9**	**PART B** **Unit 1: AI reflection, Project Cycle and Ethics**	**Chapter 1:** An introduction Chapter 2: AI Project Cycle	• Understanding AI • Why AI today? • AI applications in Daily Life • Domains of AI ➢ Data ➢ Computer Vision ➢ Natural Language Processing • Understanding problem scoping • Understanding AI project cycle • Stages in a standard AI Project Cycle	
June **Session 10**		Chapter 3: AI project Cycle: Problem Scoping Chapter 4: AI Project Cycle: Data Acquisition	• Introduction • Problem Scoping using 4W Framework • Problem Statement Template • Data Features • Data formats • Complex data types • AI system and Data ➢ Data quality • Data Acquisition ➢ Data sources ➢ Data acquisition process • System Map of an AI system • Interpreting the system map	

			• How to draw a system map?	

June
Session 11
		Chapter 5:
		AI Project Cycle: Data Exploration
		
		Chapter 6:
		AI Project Cycle: Data Modeling
			• Structured and unstructured data
			• Data exploration and missing values
			• Data exploration and information
			• Data exploration through data visualization
			• Visualising data for various requirements
			  ➢ Comparing values
			  ➢ Establishing relationships
			  ➢ Analysing Distribution and composition
			  ➢ Data Visualisation tools
			
			• AI, ML and DL revisited
			• AI modeling approaches
			  ➢ Rule-based approach
			  ➢ Learning-based approach
			• AI models
			  ➢ Decision Trees
			  ➢ Drawing a Decision Tree
			  ➢ The scenario and confusion matrix	

July **Session 12**		Chapter 7: Evaluation and Deployment Chapter 8: AI ethics	• Scenario • Confusion matrix • Model deployment • Understanding ethics • Need for ethical AI • Traditional vs AI programming • Addressing challenges related to AI • Ethical framework for ethically aligned design • The economics of AI	
July **Session 13**	**Unit 2: Data Literacy**	Chapter 1: Basics of Data Literacy	• Introduction • What is data literacy? • Why is data literacy important? • Understanding and using information • Data Points • The data pyramid: From Raw facts to actionable insights • Impact of Data Literacy ➢ Individual impact ➢ Societal impact • Challenges and future directions • How to become data literate? • A working example: Healthy habits survey	

July **Session 14**		Chapter 1: Basics of Data Literacy Chapter 2: Acquiring data, processing and interpreting data	• Data Literacy process framework • Data privacy: Protecting your information • Connections to AI • Best practices for cyber security • Real-world examples: Cyber security in action! • Types of data in AI • Other data types • Types of Data used in three domains of AI	
July **Session 15**		Chapter 2: Acquiring data, processing and interpreting data	• Data acquisition/ acquiring data • Data acquisition • Data augmentation • Data generation • Sources of data: Various sources for acquiring data • Data acquisition from websites • Best practices for acquiring data • Ethical concerns in data acquisition • Benefits of ethical data acquisition • Features of Data and Data Pre-processing • Usability of data • Independent and dependent features: Powering AI models • Data processing and Data Interpretation • Methods of data interpretation • What does qualitative data tell us?	

			• How is qualitative data interpreted? • Importance of data interpretation	
July **Session 16**		Chapter 3: Project Interactive Data Dashboard and presentation	• The Tableau initial screen • Importing the data in tableau • Saving Tableau sheet • Distributing and sharing Tableau sheet • Creating duplicates of a sheet • Visualising data in Tableau • Looking at the Data from various perspectives(Crosstab sheets)	
July **Session 17**	**Unit 3: Math for AI (Statistics and Probability)**		• How Math and AI is related? ➢ What are Patterns? ➢ Math, the pattern detective ➢ Why are patterns important in Math? • More mathematical superpowers! • Demystifying statistics: Turning numbers into knowledge	
July **Session 18**	**Unit 3: Math for AI (Statistics and Probability)**		• Some more applications of statistics • Introduction to probability: Fun with predictions!	

August **Session 19**	**Unit 4: Introductive to Generative AI**		• Supervised learning and discriminative modeling in AI • Unsupervised learning and generative modeling • What is generative AI? • The evolution of generative AI: A journey from simple to spectacular • Generative vs. Conventional AI: A tale of two intelligence • Types of generative AI ➢ GANs(Generative Adversarial Networks) ➢ VAEs(Variational Autoencoders) ➢ RNNs(Recurrent Neural Networks) ➢ Autoencoders	
August **Session 20**	**Unit 4: Introductive to Generative AI**		• Unleashing Creativity: The Power of generative AI • Art Reborn: The Next Rembrandt • AI symphony: AIVA's Musical Composition • Language Unleashed: Chatbots and Natural Language Generation • Benefits of Generative AI • Limitations of using generative AI • Generative AI and its tools • Generative AI in Action • Generate Presentation from the text outline	

August **Session 21**	**PART A** **Unit 1:Communication Skills I**	Chapter 1: Communication Cycle Chapter 2: Methods of communication	• Why communication is a skill to learn? • Process of communication • Effective communication • Communication barriers • Verbal communication ➢ Oral communication ➢ Written communication • Non-verbal communication- The Body Language • Audio- Visual communication	
August **Session 22**		Chapter 3: Communication Perspectives Chapter 4: Basic Writing Skills	• The factors that affect perspectives of communication • Basics of English Language • Articles • Paragraph writing	
August **Session 23**	**Unit 2: Self-Management Skills-I**	Chapter 1: Meaning and importance of self-management Chapter 2: Building self-confidence	• Importance of self-management • Key elements of self-management • Tools of self-management • Reasons behind lack of self-confidence • factors that influence self-confidence • Tips to build self-confidence	
August	**Unit 3: ICT Skills-I**	Chapter 1: Information and	• Role of ICT in Personal Life • Role of ICT in Industries and	

Session 24		Communication skills Chapter 2: Computer System	Businesses • Parts of a computer system ➢ Input Unit ➢ Central Processing Unit ➢ Functions of CPU ➢ Storage Unit ➢ Output Unit ➢ Peripheral Devices ➢ Printers, scanners and plotters ➢ Web camera ➢ Expansion cards ➢ Other digital devices	
September **Session 25**		Chapter 3: Basic Computer Operations	• Working with a computer • Computer software ➢ Operating system ❖ Functions of OS ❖ Types of OS ➢ Application Software ➢ Graphical user interface ➢ File ➢ Folder ➢ Common desktop operations(Windows 7) ➢ Taskbar and start menu ➢ Windows Accessories	
September **Session 26**		Chapter 4: Performing Basic File Operations	• Windows Explorer • Computer File and Folder • Basic File and Folder operations ➢ Creating new folder	

			➢ Rename file or folder ➢ Delete file or folder ➢ Copy file or folder ➢ Move file or folder ➢ Selecting file in sequence ➢ Selecting non-continuous files	
		Chapter 5: Internet and its applications	• Internet Terminology • Electronic Mail • Important components of Gmail window • Cyber crime • Social Media Platform • Digital India	
October **Session 27**	**Unit 4: Entrepreneurial Skills-I**	Chapter 1: Types of Businesses and Business Activities	• Various forms of business ownership ➢ Sole Proprietorship ➢ Partnership ➢ Corporation ➢ Limited Liability company ➢ cooperative • Types of business ➢ Service business ➢ merchandising business ➢ manufacturing business ➢ hybrid business • Business Activities	
		Chapter 2: Entrepreneurship:	• Process of Entrepreneurship Development • Characteristics of Entrepreneurship	

		Meaning and characteristics	• Role of entrepreneurship • Rewards of entrepreneurship	

October
Session 28
	Unit 5: Green Skills-I	Chapter 1:
		Environment, Natural Resources and Conservation
			• Natural Environment
			• Eco system
			• Relationship between society and environment
			• Deforestation
			• Pollution
			  ➢ Air pollution
			  ➢ Water pollution
			• Global Warming and Green House Effect
			• Endangered species and habitat
			• radioactive waste and e-waste	

		Chapter 2: Green Economy	• Importance of Green Economy • Achieving Green Economy • Political commitment • Legal and regulatory framework • Green policies • Technology viability • Institutional setup	