NAVY CHILDREN SCHOOL, MUMBAI

SPLIT-UP SYLLABUS FOR THE SESSION: 2024-25

Subject – ARTIFICIAL INTELLIGENCE **CLASS- IX**

Month	Periods for class room Teaching	Practical	Chapter	Detailed Split Up Syllabus	Learning Outcomes	Practical's
April	**08**	**-**	**Part – A Communication Skill**	• Communication Definition Methods of Communication Verbal Communication Non-verbal Communication • Communication Cycle and Importance of Feedback • Barriers to Effective Communication	• Understanding of human communication theories related to culture, self-concept, perception, listening, verbal and nonverbal communication. • Students will be able to prepare and deliver speeches effectively and participate in small group interactions. • Flip study on Communication skill.	
May & June	**04**	**-**	**Part – ASelf management skills**	• Self Management • Self-awareness - • Strength and Weakness Analysis Self-motivation • Self-regulation — Goal Setting	• Students will learn about personal stressors and understand how they affect on their physical, mental, emotional, and spiritual well-being. Practicing mindfulness and self-reflection can enhance self-awareness in managing stress effectively • Students will learn how to Set SMART goals based on self-analysis helps in achieving personal and professional success	

July	**06**	**02**	**Part – B** **Unit 1: Introduction to Artificial Intelligence (AI)**	• Excite • Relate • Purpose • Purpose • AI and Ethics	• To identify and appreciate Artificial Intelligence and describe its applications in daily life. • To relate, apply and reflect on the Human-Machine Interactions. To identify and interact with the three domains of AI: Data, Computer Vision and Natural Language Processing. • To undergo an assessment for analyzing progress towards acquired AI-Readiness skills • To imagine, examine and reflect on the skills required for futuristic job opportunities • To understand and reflect on the ethical issues around AI. • To gain awareness around AI bias and AI access.	
Aug	**06**	**02**	**Part – B** **Unit 2: AI Project Cycle**	• Introduction to AI Project Cycle • Problem Scoping • Data Acquisition • Data Exploration • Modelling • Evaluation and Development	Identify the AI Project Cycle framework.	
					• Learn problem scoping and ways to set goals for an AI project. • Identify stakeholders involved in the problem scoped. Brainstorm on the ethical issues involved around the problem selected. • Understand the iterative nature of problem scoping for in the AI project cycle. Foresee the kind of data required and the kind of analysis to be done	

Sep	**06**	**02**	**Part – B** **Unit 3: Neural Network**	• Modelling Approaches • Neutral Network • Architecture of ANN • More about ANNs • Describing the function of neural network	• Understand how neural networks take inputs, process them through layers of neurons, and produce an output. • Discuss the ethical implications of deploying neural networks, including bias in data, transparency, and accountability.	**Recommended Activity:** Creating a Human Neural Network • Students split in four teams each representing input layer (X students), hidden layer 1 (Y students), hidden layer 2 (Z students) and output layer (1 student) respectively.
Oct	**02**	**02**	**Part – B** **Unit 4: Introduction to Python**	• Introduction to Language Python, its modes • Python Programming and its Application • Python Basic (Variables, Arithmetic Operators, Expressions, Data Types - integer, float, strings, using print() and input() functions	Learn basic programming skills through gamified platforms. Acquire introductory Python programming skills in a very user-friendly format. Develop basic principles of Computational thinking along with the defined use of various types of operators and high order structure like list, tuples and strings	
Nov	**06**	**02**	**Unit 4: Introduction to Python**	• Python List	Theory + Practical: Python Basics • Students go through lessons on Python Basics • Students will try some simple problem-solving exercises on Python Compiler.	

Dec	**04**	**-**	**Part – A** **ICT skills**	Basics of Computer System Performing Basic Operations Computer Care and Maintenance Computer Security and Privacy	Understand sustainable entrepreneurship and its role in promoting environmental sustainability and resilience as part of economic development strategies.	
Jan	**05**	**03**	**Part – A** **Entrepreneurial Skills**	• Business meaning and its types • Entrepreneurial Development • Entrepreneurial Skills • Role of Entrepreneurship in Economic Development	• Understand the types of business and its benefits • Understand sustainable entrepreneurship and its role in promoting environmental sustainability and resilience as part of economic development strategies.	• Flip study by students on the Entrepreneurial skills • Identify the famous entrepreneurs of the present time and prepare a poster
Feb	**08**	**-**	**Part – A Green skills**	• Society and environment • Natural Resources and their conservation • Green Economy and main sectors of the green economy	• Understand how a green economy balances economic growth, social inclusion, and environmental protection. • Understand global and local sustainability challenges, including climate change, pollution and resource depletion. • Understand the lifecycle of electronic products from production and usage to disposal and recycling, emphasizing the importance of each stage in minimizing environmental impact.	
Mar	**-**	**-**	**Revision**			