



MAHARAJA AGARSAIN PUBLIC SCHOOL
a Cambridge International School
Ashok Vihar, Delhi

CLASS -X
SUBJECT- ARTIFICIAL INTELLIGENCE
SESSION 2023-24

<u>DURATION</u>	<u>SYLLABUS COVERED</u>	<u>SYLLABUS TESTED</u>	<u>SUBJECT ENRICHMENT/PRACTICAL/ ENGLISH/ CONVERSATION/ VISUAL STIMULUS</u>	<u>LEARNING OUTCOMES</u>	<u>RESOURCES</u>	<u>SDG</u>
PT1 (APR- MAY)	Part A UNIT 2 – Self Management Part B Unit 1- Introduction to AI	Part A UNIT 2 – Self Management Part B Unit 1- Introduction to AI	1.Student will make poster on domains of AI 2. Student will make 3D ppt on Types of ai	1. Student will understand and meaning and importance of Stress management 2. Student will understand the importance of the ability to work independently. 3. Student will understand what is intelligence 4. Student will understand what is artificial intelligence and what is not? 5. Student will understand the application of AI – a look at real life AI implementations	https://www.youtube.com/watch?v=7O60HOZRLng https://www.youtube.com/watch?v=q_bU9x36FAQ https://www.youtube.com/watch?v=O8PUJwGfx6R8 https://www.youtube.com/watch?v=RS09CdZ8OMQ	Goal 11 – Sustainable Cities and Communities
TERM-I (JUNE-JULY)	Part A Unit 3 ICT skills –II Part B Unit 2Project Life Cycle	Part A UNIT 2 – Self Management Unit 3 ICT skills –II Part B Unit 1- Introduction to AI Unit 2Project Life Cycle	1. Student will make ppt on project life cycle 2. Student will do case on problem scoping 3. Student will practicing of creating, renaming and deleting files and folders and sub folders , restoring files and folders from recycle bin	1. Student will understand basic skills for care and maintenance of computer 2. Student will distinguish between operating system 3. Student will understand problem scoping and sustainable development goals 4. Student will understand modeling of AI system. 5. Student will understand rule based and learning based AI Approaches 6. Student will understand supervised unsupervised and reinforcement learning models	https://www.youtube.com/watch?v=JtbzhDFoZr8 https://www.youtube.com/watch?v=4dwsSz_fNSQ https://www.youtube.com/watch?v=xtOg44r6dsE https://www.youtube.com/watch?v=WSbgixdC9q8 https://www.youtube.com/watch?v=9dFhZFUkzuQ	students will design AI project template on SDG GOALS covering water , education problems etc

PT-2 (JULY-AUG)	Part A Unit 4 – Entrepreneurial skills -II Part B Unit 2 Project Life Cycle	Part A Unit 4 –Entrepreneurial skills -II Part B Unit 2Project Life Cycle	<ol style="list-style-type: none"> 1. Student will make ppt on project life cycle 2. Student will do case on problem scoping- Case Study- Kimchi Rising Prices- Art Integrated Activity 3. Student will Do group discussion of self qualities that student feel are needed to become successful entrepreneur 	<ol style="list-style-type: none"> 1. Student will identify the AI Project Cycle framework 2. Identify stakeholders involved in the problem scoped. Brainstorm on the ethical issues involved around the problem selected. 3. Student will understand qualities and functions of an entrepreneur 4. Myth about entrepreneurship 	https://www.youtube.com/watch?v=L0q9GvyCd4c https://www.youtube.com/watch?v=5wkZ4HXfSz8 https://www.youtube.com/watch?v=tF_sRz7XFu4 https://www.youtube.com/watch?v=8rude1pGkRY	Quality of education
HALF YEARLY (SEP)	Part B Unit 3 Advance Python	Part A Unit 4 –Entrepreneurial skills -II UNIT 2 – Self Management Unit 3 ICT skills –II Part B Unit 1- Introduction to AI Unit 2Project Life Cycle	<ol style="list-style-type: none"> 1. Students go through lessons on Python Basics (Variables, Arithmetic Operators, Expressions, Data Types - integer, float, strings, using print() and input() functions) 2. Students will try some simple problem-solving exercises on Python Compiler <p>Students go through lessons on Python Lists (Simple operations using list) Students will try some basic problem-solving exercises using lists on Python Compiler</p>	<ol style="list-style-type: none"> 1. Student will Learn basic programming skills through gamified platforms. 2. Acquire introductory Python programming skills in a very user-friendly format. 	https://www.w3schools.com/python/ https://www.freecodecamp.org/news/learning-python-from-zero-to-hero-120ea540b567/	GOAL 9: Industry, Innovation and Infrastructure
TERM II (NOV)	Part B Unit 6 Natural language processing Unit 7 Evaluation	Part A Unit 4 –Entrepreneurial skills -II UNIT 2 – Self Management Unit 3 ICT skills –II Part B Unit 1- Introduction to AI Unit 2Project Life Cycle Unit 6 NLP Unit 7 Evaluation	<ol style="list-style-type: none"> 1. Student will do hands on practice on <ol style="list-style-type: none"> a. Text processing b. Bag of words c. TFIDF 2. Student will hand on accuracy , precision an recall and F1score 	<ol style="list-style-type: none"> 1. Student will understand NLP and NLP applications. 2. Student will understand Chat bots and types of Chabot 3. Student will understand confusion matrix and model evaluation 	https://azure.microsoft.com/en-us/products/cognitive-services/text-analytics https://medium.com/analytics-vidhya/what-is-a-confusion-matrix-d1c0f8feda5	Quality of education

PREBOARD (DEC)	Unit 5 Green Skills	100%	<ol style="list-style-type: none"> 1. Student will identify the problem related to sustainable development in the community 2. Group discussion on the importance of respecting and conserving indigenous knowledge and cultural heritage 	<ol style="list-style-type: none"> 1. Student will understand demonstrate the knowledge of importance problems and solutions related to sustainable development 2. Student will importance of green economy 	https://www.youtube.com/watch?v=roNfBQvoucQ	Good Health and Well-Being
FINAL BOARD EXAM	Revision	100%				