# CBSE | DEPARTMENT OF SKILL EDUCATION

## Modules for Middle School (class VI/VII/VIII)

CBSE has decided to offer students the flexibility of making a vocational choice of a short duration module, of 12 hours for each module, at a stage in their early academic career (either at Class VI, VII or VIII). In this way they will be able to spend relevant time period pursuing this choice as per convenience of school, while benefitting from access to courses that are broader based. This would give them the necessary orientation early on, so that they are able to make a choice at a later stage to pursue Skill courses at Secondary and Senior Secondary level, or choose a higher vocational degree.

In essence this flexibility will keep multiple career possibilities open for each student, instead of the current situation of rigidity once the first choice is made.

The following Skill Modules are being offered for students:

1. Artificial Intelligence
2. Beauty & Wellness
3. Design Thinking
4. Financial Literacy
5. Handicrafts
6. Information Technology
7. Marketing/ Commercial Application
8. Mass Media
9. Travel & Tourism

### OBJECTIVES:

The main objective of these modules is to develop a readiness for understanding and appreciating the various skills and their application in our lives.

### SCHEME:

At Middle level (Classes VI to VIII), one Skill Module of 12 hours duration can be offered as an option to the students for single academic session as per convenience of Schools.

Schools/students are free to opt for a Skill Module either at class VI or class VII or class VIII.

The marks distribution for each Skill Module is as follows:

| | |
|---|---|
| Theory | 15 marks |
| Practical | 35 marks |
| **Total** | **50 marks** |

The assessment shall be done internally by the school as per the above mentioned marks.

**The details about Skill Module are as follows:**

# 1. INTRODUCTION TO ARTIFICIAL INTELLIGENCE

**OBJECTIVES OF THE MODULE:**

This module of Artificial Intelligence focuses on:

- Helping learners understand the world of Artificial Intelligence and its applications through games, activities, and multi-sensorial learning to become AI-Ready.
- Allowing the learners to construct the meaning of AI through interactive participation and engaging hands-on activities.

**OUTLINE CURRICULUM:**

| MODULE | SUB-UNIT | DURATION |
|---|---|---|
| **Introduction to Artificial Intelligence** | Excite | 2.5 Hours |
| | Relate | 02 Hours |
| | Purpose | 02 Hours |
| | Possibilities | 02 Hours |
| | AI Ethics | 3.5 Hours |
| **TOTAL DURATION** | | **12 hours** |
| **TOTAL MARKS** | | **50 marks  (Theory = 15 + Practical 35)** |

**DETAILED CURRICULUM:**

| SUB-UNIT | LEARNING OUTCOMES | SESSION / ACTIVITY / PRACTICAL |
|---|---|---|
| **1. EXCITE** | • To identify and appreciate Artificial Intelligence and describe its applications in daily life. | Session: Introduction to AI and setting up the context of the curriculum |
| | | Ice Breaker Activity: Dream Smart Home idea Learners to design a rough layout of floor plan of their dream smart home. |
| | • To relate, apply and reflect on the Human-Machine Interactions.<br><br>• To identify and interact with the three domains of AI: Data, Computer Vision and Natural Language Processing. | Recommended Activity: The AI Game Learners' to participate in three games based on different AI domains.<br>o  Game 1: Rock, Paper and Scissors (based on data)<br>o  Game 2: Mystery Animal (based on Natural Language Processing - NLP)<br>o  Game 3: Emoji Scavenger Hunt (based on Computer Vision - CV) |
| | • To undergo an assessment for analysing progress towards acquired AI-Readiness skills. | Recommended Activity:<br>AI Quiz (Paper Pen/Online Quiz) |
| | • To imagine, examine and reflect on the skills required for futuristic job opportunities. | Recommended Activity: Writing a Letter to one's future self<br>Learners to write a letter to self-keeping the future in context. They will describe what they have learnt so far or what they would like to learn someday |
| **2. RELATE** | • Learners' to relate to application of Artificial Intelligence in their daily lives | Video Session: To watch a video Introducing the concept of Smart Cities, Smart Schools and Smart Homes |

| SUB-UNIT | LEARNING OUTCOMES | SESSION / ACTIVITY / PRACTICAL |
|---|---|---|
| | • To unleash their imagination towards smart homes and build an interactive story around it.<br><br>• To relate, apply and reflect on the Human–Machine interactions. | Recommended Activity: Write an Interactive Story<br>Learners' to draw a floor plan of a Home/ School/ City and write an interactive story around it using the Story Speaker extension in Google docs. |
| **3. PURPOSE** | • To understand the impact of Artificial Intelligence on Sustainable Development Goals to develop responsible citizenship. | Session: Introduction to UN Sustainable Development Goals |
| | | Recommended Activity: Go Goals Board Game<br>Learners to answer questions on Sustainable Development Goals |
| **4. POSSIBILITIES** | • To research and develop awareness of skills required for jobs of the future.<br><br>• To imagine, examine and reflect on the skills required for the futuristic opportunities.<br><br>• To develop effective communication and collaborative work skills. | Session: Theme-based research and Case Studies<br>Learners will listen to various case-studies of inspiring start-ups, companies or communities where AI has been involved in real-life.<br>Learners will be allotted a theme around which they need to search for present AI trends and have to visualise the future of AI in and around their respective theme. |
| | | Recommended Activity: Job Ad Creating activity<br>Learners to create a job advertisement for a firm describing the nature of job available and the skill-set required for it 10 years down the line. They need to figure out how AI is going to transform the nature of jobs and create the Ad accordingly. |
| **5. AI ETHICS** | • To understand and reflect on the ethical issues around AI. | Video Session: Discussing about AI Ethics<br>Recommended Activity: Ethics Awareness<br>Students play the role of major stakeholders and they have to decide what is ethical and what is not for a given scenario. |
| | • To gain awareness around AI bias and AI access. | Session: AI Bias and AI Access<br>o Discussing about the possible bias in data collection<br>o Discussing about the implications of AI technology |
| | • To let the students analyse the advantages and disadvantages of Artificial Intelligence. | Recommended Activity: Balloon Debate<br>Students divide in teams of 3 and 2 teams are given the same theme. One team goes in affirmation to AI for their section while the other one goes against it.<br>They have to come up with their points as to why AI is beneficial/ harmful for the society. |