Lesson plan

Year 1: Foundations and Basic Applications

Semester 1: Introduction to Coding and IoT

1. Introduction to coding: Learn basic programming concepts, syntax, and functions using Python, Scratch, and Java.

2. Introduction to IoT: Understand the concept of IoT, its applications, and the role of coding in IoT.

3. Work with local businesses to identify and understand a problem they are facing. Make a website that solve the problem.

Semester 2: AI-Assisted Learning and Basic Applications

1. Introduction to AI: Learn the basics of AI, its applications, and how to code AI applications.

2. Introduction to Raspberry Pi: Learn the basics of Raspberry Pi, its applications, and how to code for Raspberry Pi.

3. Collaborate with the identified local businesses to propose solutions to their problem using learned coding skills.

Year 2: Advanced Applications and Product Creation

Semester 3: 3D Printing, Modeling and the Precious Plastic Project

1. Learn about 3D printing and modeling, including their applications.

2. Introduction to the Precious Plastic project, understanding the problem of plastic waste, and learning how to apply coding and IoT to solve it.

3. Working with local businesses, initiate a project that applies 3D printing and/or Precious Plastic solutions to solve a problem.