**Technology and Engineering Curriculum**

**Note: Engineering will be optional depending on the game progress.**

**Grade 8 - Science and Technology ( Elementary)**

Aim:

Explore science using technology in real-world problems

Analyze the different common technologies used everyday

Describe the technological innovations involving topics in Science

Topics needed:

\*Same topics as discussed in Science

Life Systems: Cell biology

Matter and Energy Fluids

Structures and Mechanisms

Earth and Space Systems: Solar System

Goals

Implement basic technologies to build houses

Create a new environment

Use basic machines

* A machine may be a simple mechanical tool like a pulley or a bicycle
* A machine may be a tractor or a computer system

Innovate the tools used in the game

**Grade 9 - Exploring Technologies (Secondary)**

Aim

Show the influences of the technological innovations

Make sure the student becomes technologically literate

Topics

Use interactive media and animations

Transportation innovation

Construction technology - electrical,cooling,carpentry

Healthcare- provide medical services

Goals

Students can evaluate a service/product and learn

how to innovate it.

Discuss the durability,reliability,ease of use and safety of a technology

Learn emerging technologies

**Grade 10 - Communications Technology (Secondary)**

**Note: This course is optional for students in Grade 10**

Aim

Introduce a new range of technological tools

Analyze the impact of technology on environment

Creating videos,editing photos, working with audio, developing animations

Topics

Communication models

Technology in the environment- renewable-energy powered devices, recycling centers

Computer Technology skills

Construction technology - use of construction tools

Computing Fundamentals - Binary Language and Data Representation

Goals

Understand the steps in applying a technology in a problem-solving process

Identify the different mechanical systems and their applications