Systems and Control Module

for junior form Technology Education currirulum

Module Outline

I. Target Level

Secondary 2-3

II. Duration

20-25 hours

III. Aims and Objectives

The module aims at introducing students with the basic concepts of system and control technology and providing them with the opportunities to experience simple system and control projects.

At the end of the module, students should be able to:

- describe the type of system in simple terms;
- represent any systems using block diagrams;
- identify relevant technology used in a control system;
- design simple control projects according to clear system boundary and applying appropriate technology;
- be aware of modern production methods using automation systems.

IV. Deliverables – Learning Outcomes

Students are required to:

- Demonstrate the understanding of a system by carrying out a group presentation on a chosen topic;
- Build models of simulated control systems using electronic, electrical, mechanical, and pneumatic parts;
- Complete a simple project on system and control by going through the investigation, analysis, design and make cycle;
- Perform a case study in the area of production of modern products focusing on Computer Aided Manufacturing (CAM) or automation.

V. Concept Map