## Systems and Control Module

*for junior form Technology Education curriculum*

### Summary of the Learning Outcomes

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<th>Context</th>
<th>Learning Outcomes</th>
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| **Basic Concept**             | **Most students should:**  
› identify common systems in their home and school environments that serve particular purposes;  
› indicate the parts of a system using a real life example;  
› state the differences between open-loop and close-loop system.  
**Some students could:**  
› Carry out extensive research to identify complex systems. |
| **Types of Control System**   | **Most students should:**  
› describe and represent graphically different types of control systems and the devices that control them;  
› describe a sequence of steps to control a device;  
› experience the use of control devices that sense, switch, and regulate;  
**Some students could:**  
› build models of simulated control systems using electronic, electric, mechanical, and pneumatic parts. |
| **Application of System**     | **Most students should:**  
› investigate and analyse a technological problem which is related to control system;  
› design and construct a simple control system that senses, switches, or regulates;  
› compare ways that various control devices work, and explain their applications;  
**Some students could:**  
› integrate electric, electronic, pneumatic, and mechanical control devices within a system. |
| **Control and Automation**    | **Most students should:**  
› perform a case study in the area of production of modern products focusing on Computer Aided Manufacturing (CAM) or automation. |