

**New York State Technology Education Network Implementation and Resource Guide
Middle & High School Levels**

| CLASS ACTIVITY | PROBLEM STATEMENT | LEGO Dacta PRODUCTS |
|---|---|--|
| Middle School Level | | |
| Bio-related Technology: Bio-Agriculture Controlled Environment | <i>"Design and model environments that will control plant growth, charting the influences of temperature from a minimum to maximum range."</i> | #942, #943 #944, #945 Control Lab Technology Investigations and Inventions, Greenhouse activity Pgs 1.1 - 1.6 |
| Computer Control: Introductory Activity 2 | <i>"Input a simple procedure that will allow the fan to be controlled by the touch sensor."</i> | #942, #943 #944, #945 Control Lab Quick Start Guide Pgs. 14 - 19 |
| Computer Control: Introductory Activity 4 | <i>"Input a simple procedure that will allow the fan to be controlled by the temperature sensor."</i> | #942, #943 #944, #945 Control Lab Quick Start Guide Pgs. 20 - 22 |
| Computer Control: Smart Dwelling, Days 2-20 | <i>"Design, build and test the performance of a security system for a smart dwelling. The security system will:</i> - monitor one or more inputs - alert the occupant - alert the proper agency - use an ergonomically designed control panel to monitor and display system information." | #9707, #9708, #9710 and temperature sensor #9889 |
| Computer Control: People Mover, Days 3-18 | <i>"Design and build a computer controlled people moving model that uses data from sensory inputs, processes data, and continuously control the system's output."</i> | #942, #943, #944, #945 with special procedures developed by the NYSTEN team. |
| High School Level | | |
| Computer Control: Simulating Environments, Days 3-18 | <i>"Design a device that will synchronize videotape input with mechanical motion to provide the sensations of "being there" to be used as entertainment or training for the user, e.g. skateboard, aircraft cockpit."</i> | #942, #943 #944, #945 with special procedures developed by the NYSTEN team. |
| Computer Control: Parking Lot System, Days 3-18 | <i>"Design a system that sorts automobile traffic to parking spots in a parking lot(s) and monitors empty parking spaces. The solution should use data from a variety of sensor inputs and provide an output that will direct traffic flow."</i> | #942, #943 #944, #945 with special procedures developed by the NYSTEN team. |