

**COLLEGE:** Sinclair College

**ODE CAREER FIELD:** Engineering & Science Technologies

**ODE PATHWAY:** Engineering & Design

**SINCLAIR PROGRAM:** Automation & Control Technology with Robotics

62 - 63 Credit Hours - Associate of Applied Science

AMCT.S.AAS

|  |                     |   |   |  |   |   |  |  |
|--|---------------------|---|---|--|---|---|--|--|
| <b>HIGH SCHOOL</b>   | <b>Freshman</b>     | English I (1)                                       | Algebra & Geometry or<br>Algebra I (1)                      | Physical Science (1)   | Social Studies (1)  | Health (.5)<br>Physical Education (.5)  | Career Field Exploration   | Fine Arts/Foreign<br>Language/Business Elective<br>(1)   |
|  | <b>Sophomore</b>    | English II (1)                                      | Geometry or Algebra II (1)                                  | Biology or Life Science (1)  | US History (1)  | Technology<br>Elective (1)  | Career Pathway Foundation  | Fine Arts/Foreign<br>Language/Business Elective<br>(1)   |
|  | <b>Junior</b>       | English III (1)                                     | Algebra II / Adv Algebra II &<br>Trigonometry (1)           | Advanced study in Life or<br>Physical Science <b>OR</b><br>Earth/Space Science (1) | US Govt (.5)<br>Economics and Financial<br>Literacy Social Studies<br>Elective (.5) | Career Tech<br>Engineering & Science<br>Technologies (1)  | Career Tech<br>Engineering & Science<br>Technologies (1)           | Career Tech<br>Engineering & Science<br>Technologies (1) |
|  | <b>Senior</b>       | English IV (1)                                      | College Math or Calculus (1)                                | Physics (1)  | Psychology, Sociology or<br>Social Studies Elective (1)                             | Career Tech<br>Engineering & Science<br>Technologies (1)  | Career Tech<br>Engineering & Science<br>Technologies (1)           | Career Tech<br>Engineering & Science<br>Technologies (1) |
| Take ACT, SAT, or required Sinclair placement test. Visit Sinclair academic advising. Earn high school diploma. Complete pathway as designed.  |                     |   |   |  |   |   |  |  |
| <b>COLLEGE</b>   | <b>1st Semester</b> | EET 1120<br>Introduction to DC & AC<br>Circuits (2) | EET 1198<br>Digital Technology (2)                          | EGR 1128<br>Robotics in CIM Systems (3)  | EGR 1217<br>Fluid Power & Control (2)   | • ENG 1101<br>English Composition I (3)   | EGR 1106<br>Basic Mechanical & Electrical<br>Skills (2)            |  |
|  | <b>2nd Semester</b> | EET 1139<br>Electrical Machinery (3)                | EET 1166<br>Industrial Machine<br>Writing (2)               | • MAT 1580<br>Pre-Calculus (5)   | • COM 2211<br>Effective Public Speaking (3)   | ■ EET 2281<br>Programmable Logic<br>Controllers (3)   | MET 2711<br>Ethics for Engineering<br>Technology Professionals (1) |  |
|  | <b>3rd Semester</b> | EGR 1144<br>Sensors & Vision Systems (4)            | • ■ MET 1371 <b>OR</b><br>CAD Concepts Using<br>AutoCAD (3) | MET 1101<br>Introduction to Engineering<br>Drafting (2)                            | EGR 2252<br>Teach Pendant Robot<br>Programming (2)                                  | • PHY 1141<br>College Physics I (4)   | EGR 2231<br>Troubleshooting of<br>Automated Systems (3)            |  |
|  | <b>4th Semester</b> | EGR 2278<br>Automation & Control<br>Capstone (3)    | EET 2282<br>Advanced Programmable<br>Logic Controllers (3)  | EET 2157<br>Radio Frequency<br>Identification (RFID)<br>(3)                        | • OTM<br>Social & Behavioral<br>Sciences Elective<br>(3)                            | EGR<br>Engineering Elective (4) <b>OR</b><br>EGR 2270<br>Automation & Control<br>Internship I (4) |  |  |
| • = Courses guaranteed to transfer to Ohio's public institutions of higher education   |                     |   |   |  |   |   |  |  |
| Indicates eligible college course opportunities via Proficiency credit or Articulated Award credit.  |                     |   |   |  |   |   |  |  |
| ■ Indicates Career-Technical Assurance Guides (CTAG)-approved transfer credit. The high school or career center is responsible for sending the proper documentation, along with the Verification of Course/Program Completion form to the college in order for credits to be posted on a student's transcript. |                     |   |   |  |   |   |  |  |
| Required Courses (credit hours)  |                     |   |   |  |   |   |  |  |
| Recommended Elective Courses   |                     |   |   |  |   |   |  |  |

revised: 7/22/2019

**Please note: This template does not provide department approved course sequences for students to follow. That is, the courses may be presented out of order. It is best for students to consult with an academic advisor in order to plan a semester by semester course schedule in order to meet the requirements for their certificates and degree programs.**