**Engineering Course Progression Plans**

**9th Grade**

|  |  |
| --- | --- |
| Subject Area | Recommended Course |
| English | English II Honors |
| Social Studies | AP Human Geography |
| Mathematics | Algebra II Honors |
| Elective | Elective, Band, AP Capstone  Recommended: Foundations of Robotics |
| Science | Biology I Honors |
| Engineering | Game and Simulation Foundations \* |
| Engineering | Applied Engineering Technology I\* |

**10th Grade**

|  |  |
| --- | --- |
| Subject Area | Recommended Course |
| English | English III Honors |
| Social Studies | AP World History, World History Honors |
| Mathematics | Pre-Calculus |
| PE | HOPE |
| Science | Chemistry I Honors or AP Bio |
| Engineering | Game and Simulation Design\* |
| Engineering | Applied Engineering Technology II\* |

**11th Grade**

|  |  |
| --- | --- |
| Subject Area | Recommended Course |
| English | AP English Comp or DE Comp I and II |
| Social Studies | AP US History or DE History of the US I and II |
| Mathematics | AP Calculus or AP Stats, or DE Algebra and Trig |
| Elective | DE, AP Capstone, Fine Art |
| Science | AP Bio, AP Chemistry, AP Environmental, Marine Science, Forensic Science, DE Meteorology |
| Engineering | Game and Simulation Programming\* |
| Engineering | Applied Engineering Technology III\* |

**12th Grade**

|  |  |
| --- | --- |
| Subject Area | Recommended Course |
| English | AP Literature, AP Composition, DE Comp I and II or English IV |
| Social Studies | Economics, US Government (AP or Honors) |
| Mathematics | AP Calculus or AP Stats, or DE Algebra and Trig |
| Elective | DE, AP Capstone |
| Elective Science | DE Meteorology |
| Engineering | Multi-User Game and Simulation Programming\* |
| Engineering | Advanced Technology Applications\* |

**\*Required Engineering Courses**

**Robotics Program Progression**

**9th Grade**

|  |  |
| --- | --- |
| Subject Area | Recommended Course |
| English | English II Honors |
| Social Studies | AP Human Geography |
| Mathematics | Algebra II Honors |
| Robotics | Foundations of Robotics I Honors |
| Science | Biology I Honors |
| Engineering | Game and Simulation Foundations\* |
| Engineering | Applied Engineering Technology I\* |

**Summer Course Requirement: HOPE**

**10th Grade**

|  |  |
| --- | --- |
| Subject Area | Recommended Course |
| English | English III Honors |
| Social Studies | AP World History |
| Mathematics | Pre-Calculus |
| Robotics | Robotics Design Essentials Honors |
| Science | Chemistry I Honors or AP Bio |
| Engineering | Game and Simulation Design\* |
| Engineering | Applied Engineering Technology II\* |

**11th Grade**

|  |  |
| --- | --- |
| Subject Area | Recommended Course |
| English | AP English Comp or DE Comp I and II |
| Social Studies | US History or DE History of the US I and II |
| Mathematics | AP Calculus or AP Stats, or DE Algebra and Trig |
| Elective | Robotics Systems Honors |
| Science | AP Bio, AP Chemistry, AP Environmental, Marine Science, Forensic Science, DE Meteorology |
| Engineering | Game and Simulation Programming\* |
| Engineering | Applied Engineering Technology III\* |

12th

|  |  |
| --- | --- |
| Subject Area | Recommended Course |
| English | AP Literature, AP Composition, DE Comp I and II or English IV |
| Social Studies | Economics, US Government (AP or Honors) |
| Mathematics | AP Calculus or AP Stats, or DE Algebra and Trig |
| Robotics | Robotics Application Capstone |
| Elective | The College Experience, DE, PE, Fine Art |
| Engineering | Multi-User Game and Simulation Programming\* |
| Engineering | Advanced Technology Applications\* |

\***Required Engineering Courses**