## Engineering Design and Development

### CAREER PATHWAY COURSES

| Year 1                  | PLTW Intro to Engineering Design*  
|------------------------|-----------------------------------
|                        | PLTW Principles of Engineering*   |

| Year 2 and 3           | PLTW Digital Electronics*         
|                        | PLTW Civil Engineering and Architecture  
|                        | PLTW Computer Integrated Manufacturing |

| Year 4                  | PLTW Engineering Design and Development |

### College Major or Career Examples
- Civil Engineering
- Electrical Engineering
- Mechanical Engineering
- Entrepreneur

### Related Extracurricular Activities
- Vex Robotics Team
- Science Olympiad

*Current dual credit course with Triton College

## Architecture and Construction

### CAREER PATHWAY COURSES

| Year 1                  | Intro to Woodworking* |
|------------------------|-----------------------

| Year 2                  | Advanced Woodworking |

| Year 3                  | PLTW Civil Engineering and Architecture |

| Year 4                  | PLTW Digital Electronics*  
|------------------------|-----------------------------
|                        | PLTW Engineering Design and Development |

### College Major or Career Examples
- Building/Construction Management
- Architecture
- Carpentry
- Electrician

### Related Extracurricular Activities
- Vex Robotics Team
- Science Olympiad

*Current dual credit course with Triton College

## Husky STEM Career Exploration and Preparation Guide

How do I become a __________?

The Science and Technology division at Oak Park and River Forest High School has developed programming to help students explore and prepare for future careers before they graduate. In addition to completing a Biology, Chemistry, and/or Physics class, we encourage students to identify a career pathway to explore through their elective course selections. Completion of one of our career pathways will help students determine if that career area is the right one for their future. If it is, the student will likely have accumulated dual credits and/or certifications related to that career giving them a head start on their postsecondary endeavors. If not, the student will have come to that decision in high school before incurring unnecessary postsecondary education debt.
### Science Research

<table>
<thead>
<tr>
<th>CAREER PATHWAY COURSES</th>
<th>Year 1, 2, &amp; 3</th>
<th>• Research Project in Models Science Course</th>
</tr>
</thead>
</table>
|                        | Year 3         |  • AP Biology  
|                        |                |     • AP Chemistry  
|                        |                |     • AP Environmental Science |
|                        | Year 4         |  • Investigative Research Design and Innovation  
|                        |                |     • AP Physics |

**College Major or Career Examples**
- Life or Physical Science Researcher
- Medical Scientist/Physician
- Biotechnology
- Entrepreneur

**Related Extracurricular Activities**
- Vex Robotics Team
- Science Olympiad
- BioEngineering Team

### Automotive Service

<table>
<thead>
<tr>
<th>CAREER PATHWAY COURSES</th>
<th>Year 1</th>
<th>Intro to Auto</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Year 2</td>
<td>Advanced Auto</td>
</tr>
<tr>
<td></td>
<td>Year 3</td>
<td>Summer Internship with local Repair Shop</td>
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</tbody>
</table>

**College Major or Career Examples**
- Automotive Service Technician/Management
- Aircraft Maintenance Technician

### Health Science

<table>
<thead>
<tr>
<th>CAREER PATHWAY COURSES</th>
<th>Year 1</th>
<th>• Biology</th>
</tr>
</thead>
</table>
|                        | Year 2 |  • Chemistry  
|                        |        |     • Introduction to Health Careers and Medical Terminology* |
|                        | Year 3 |  • Fundamentals of Nursing*  
|                        |        |     • Anatomy and Physiology |
|                        | Year 4 |  • AP Biology  
|                        |        |     • AP Chemistry |

**College Major or Career Examples**
- Nursing
- Dentistry
- Emergency Medical Technician
*Current dual credit course with Triton College

### Manufacturing

| CAREER PATHWAY COURSES | Year 1 |  • PLTW Intro to Engineering Design*  
<table>
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<tbody>
<tr>
<td></td>
<td>Year 2</td>
<td>• Advanced Woodworking</td>
</tr>
<tr>
<td></td>
<td>Year 3</td>
<td>• PLTW Computer Integrated Manufacturing</td>
</tr>
<tr>
<td></td>
<td>Year 4</td>
<td>• Engineering Design and Development</td>
</tr>
</tbody>
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**College Major or Career Examples**
- Machinist
- Packaging
- Engineering Technician

**Related Extracurricular Activities**
- Vex Robotics Team
- Science Olympiad
*Current dual credit course with Triton College