# COURSE PREREQUISITES AND RECOMMENDATIONS

Use the following to evaluate your background and requirements for specific labs as you determine your preferences.

<table>
<thead>
<tr>
<th>Laboratory - Director</th>
<th>Prerequisite</th>
<th>Recommended</th>
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<tr>
<td><strong>Astronomy &amp; Astrophysics</strong> - Mrs. Hennig</td>
<td>Advanced Astronomy: The Solar System or The Universe Or permission from the Lab Director</td>
<td>Both electives are recommended. The prerequisite can be co-requisite with permission of Lab Director.</td>
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| **Automation and Robotics** - Mr. Dela Cuesta | Automation and Robotics 1 or 2 Or permission from the Lab Director | One or more of the following:  
- Advanced Analog or Digital Electronics  
- Prototype Development & Processing  
- Nature of Materials |
| **Life Sciences & Biotechnology** - Dr. Cobb | DNA Science I Or permission from the Lab Director | One of the following:  
- DNA Science 2, AP Chemistry, AP Biology |
| **Chemical Analysis** - Dr. Kennedy | AP Chemistry Or permission from the Lab Director | Introductory Organic Chemistry with Instrumental Analysis |
| **Communication Systems** - Mr. Montgomery | Intro to Communication Systems Or permission from the Lab Director | Advanced Digital and/or Analog Electronics |
| **Computer Systems** - Mr. Steuben - Dr. Gabor | AP Computer Science A + Data Structures  
Artificial Intelligence 1 & 2  
Parallel Computing 1 & 2 Or permission from the Lab Director |  
- Intro to Engineering  
- Advanced Architectural Drawing & Design |
| **Computer Assisted Design** - Dr. Walker | Specialized Computer Assisted Design Or permission from the Lab Director | One or more of the following:  
- Intro to Engineering  
- Advanced Analog Electronics  
- Specialized Computer Assisted Design (CAD) |
| **Energy Systems** - Mr. Kemp | Conventional Energy Systems or Alternate Energy Systems or Advanced Digital Electronics Or permission from the Lab Director | One or more of the following:  
- Automation and Robotics 1 or 2  
- Prototyping Development and Processing  
- Advanced Audio Electronics  
- Advanced Microprocessors Systems |
| **Microelectronics** - Mr. Bell - Mr. Montgomery | Advanced Analog Electronics & Advanced Digital electronics Or permission from the Lab Director | One or more of the following:  
- Advanced Analog Electronics  
- Advanced Digital Electronics |
| **Neuroscience** - Dr. Cammer | Neurobiology  
AP Biology Or permission from the Lab Director | One or more of the following:  
- Advanced Analog Electronics  
- Advanced Digital Electronics |
| **Optics and Modern Physics** - Dr. Dell | One or more of the following:  
AP Physics or Physics 1 with permission of Lab Director | Also recommended depending on project:  
- Computational Physics  
- Advanced Digital and/or Analog Electronics  
- AP Chemistry |
| **Oceanography and Geophysical Systems** - Mrs. Wu | One or more of the following:  
Advanced Marine Biology  
DNA Science I  
Advanced Digital Electronics Or permission from the Lab Director | Automation and Robotics 1 or 2  
Conventional or Alternative Energy Systems  
Prototype Development & Processing |
| **Prototyping and Engineering Materials** - Mr. Behling | Advanced Nature of Materials and:  
Prototyping Development and Processing Or permission from the Lab Director | Specialized Computer Assisted Design (CAD) |