## Physics and Astronomy Major Course Schedule and Requirements

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SUMMER 2015</td>
<td>A1</td>
<td>A2/3</td>
<td>P4</td>
</tr>
<tr>
<td>A2/A3</td>
<td>P3</td>
<td>P5*</td>
<td>P1/P2</td>
</tr>
<tr>
<td>P3</td>
<td>P13</td>
<td>A25</td>
<td>P4</td>
</tr>
<tr>
<td>P42</td>
<td>P15</td>
<td>P13</td>
<td>A15</td>
</tr>
<tr>
<td>P19</td>
<td>P14</td>
<td>P14</td>
<td></td>
</tr>
<tr>
<td>P43</td>
<td>P16</td>
<td>P19</td>
<td></td>
</tr>
<tr>
<td>P47</td>
<td>P41</td>
<td>P30</td>
<td></td>
</tr>
<tr>
<td>P68</td>
<td>P48 (ENGS 32)</td>
<td>P31</td>
<td></td>
</tr>
<tr>
<td>P70 (ENGS 92)</td>
<td>P90</td>
<td>P40</td>
<td></td>
</tr>
<tr>
<td>P73</td>
<td>P66*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P77*</td>
<td>P74*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGS 72</td>
<td>P76</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Notes:
1. P24 re-numbered to P40 starting Spring 2016
2. Students who took P15 do not need to take P19 but must take additional elective
3. P42 re-numbered to P50 starting in Fall 2016 and moves to Fall term
4. ENGS 72 can be substituted for P44 as a core course
5. 40's level core courses may be taken in any order
6. Most courses numbered 50 and above have additional pre-reqs. Consult ORC.
7. Astronomy FSP in alternate years (W15, W17) gives credit for A15, A61, and A81
8. * denotes course that are offered every other year
9. Please note-A15 will NOT be offered 17S as stated in the ORC.

### Physics Major Requirements

**Pre-requisite:** Math 3, Math 8 (or Math 11), Math 13, Math 23, PHYS 13, PHYS 14 (or P15/16)

**Core Courses:** P19 (or P15), P40 (or P24), P41, P43, P44 (or ENGS 72), P50

**Electives:** Two required (three for students taking P15 instead of P13/19)

**Lab Req.:** electives must include one upper level laboratory course

**Culminating:** Credit for one of the following satisfies the culminating activity requirement.

- ENGS 24, 27, 29, 30, 37, 40, 44, 47, 50

Additional courses recommended for students interested in graduate study:

- Physics 66, 76, and 90
- Math 22 or Math 24

### Astronomy Major Requirements

**Pre-requisite:** Math 3, Math 8 (or Math 11), Math 13, PHYS 3/4 or PHYS 13/14 or PHYS 15/16

**Core Courses:** A15, A25, A61, plus one of A74, A75, A81 or A87

**Electives:** Two additional from any P&A course numbered 19 and above

**Culminating:** Credit for one of the following satisfies the culminating activity requirement.

- A74, A75, A81, or P77

The culminating activity is included in the 8 courses required for the major

### Engineering Physics Major Requirements

**Pre-requisite:** Math 3, Math 8 (or Math 11), Math 13, Math 23, PHYS 13, PHYS 14 (or P15/16)

**Core Courses:** ENGS 22, 23, 24, PHYS 19 (or substitute other for P15 students), 40, 43

**Electives:** four required (two from each department - see ORC)

Students completing an engineering physic major can enter the BE program at Thayer school

### Other Majors and Minors

(Please consult the ORC and your advisor for details)

- Modified Physics Major
- Physics Minor
- Astronomy Minor
- Mathematical Physics Minor

**Warning!** This document only briefly summarizes major requirements. Please consult with your major advisor to make sure your schedule meets your personal interests and the requirements!