Three choices in Physics Degree paths:  
BS Physics-General, BS Physics-Teaching Certification, or BS Physics-Engineering

Current Requirements for all students:

PHY 230 & 231  
PHY 309* & 370  [*PHY309 is usually offered as a W course]  
PHY 461 & 471  
MAT 150, 151, 252 & 245  
CHE 120 & 121

Additional Requirements for each path:

BS Physics-General: PHY 400, 401, 406, 3 credits CSC, & 12 credits of physics electives

BS Physics-Certification: PHY 400, 406, 6 credits of physics electives, EDU 201, EDU 413, IDS 470/471, PSY 370, SED 482, & one semester of student teaching

BS Physics-Engineering: PHY 355, EGR 151, EGR 251, 6 credits CSC and 9 credits of physics electives & a minor in computer science, chemistry or general management or an additional 12 credits in physics, engineering, or math. – we need to rethink this a potentially repackage [e.g., Nanotech, computer/electrical, management]

Sequence of Physics courses for 4-year plan

BS Physics-General

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PHY 230, MAT 150, CSC</td>
<td>PHY 231, MAT 151</td>
</tr>
<tr>
<td>2</td>
<td>PHY 309, MAT 252, CHE 120</td>
<td>PHY 370, CHE 121, PHY ELEC</td>
</tr>
<tr>
<td>3</td>
<td>PHY 461, MAT 245, PHY ELEC</td>
<td>PHY 400, PHY ELEC</td>
</tr>
<tr>
<td>4</td>
<td>PHY 401, PHY 406</td>
<td>PHY 471, PHY ELEC</td>
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</table>

BS Physics-Certification

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td>1</td>
<td>PHY 230, MAT 150</td>
<td>PHY 231, MAT 151</td>
</tr>
<tr>
<td>2</td>
<td>PHY 309, MAT 252, CHE 120</td>
<td>PHY 370, CHE 121, EDU 201</td>
</tr>
<tr>
<td>3</td>
<td>PHY 461, MAT 245, PHY ELEC, PSY 370</td>
<td>PHY 400, PHY 471, SED 482</td>
</tr>
<tr>
<td>4</td>
<td>PHY 406, PHY ELEC, IDS 470/471, EDU 413</td>
<td>Student Teaching</td>
</tr>
</tbody>
</table>

BS Physics-Engineering

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PHY 230, MAT 150, CSC</td>
<td>PHY 231, MAT 151, EGR 151</td>
</tr>
<tr>
<td>2</td>
<td>PHY 309, MAT 252, CHE 120</td>
<td>PHY 370, EGR 251, CHE 121</td>
</tr>
<tr>
<td>3</td>
<td>PHY 461, MAT 245, PHY 355</td>
<td>PHY ELEC, CSC (if not earlier)</td>
</tr>
<tr>
<td>4</td>
<td>PHY 471, PHY ELEC</td>
<td>PHY ELEC</td>
</tr>
</tbody>
</table>
# Regular Schedule of Physics Course Offerings

<table>
<thead>
<tr>
<th>Each Fall Semester</th>
<th>Each Spring Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 100/103/123/111/120/200/210</td>
<td>PHY 100/103/123/111/120/201/210</td>
</tr>
<tr>
<td>PHY 230</td>
<td>PHY 231</td>
</tr>
<tr>
<td>PHY 309(W)</td>
<td>PHY 370</td>
</tr>
<tr>
<td>PHY 355</td>
<td>PHY 400</td>
</tr>
<tr>
<td>PHY 406</td>
<td>EGR151</td>
</tr>
<tr>
<td>PHY 461</td>
<td>EGR 251</td>
</tr>
<tr>
<td>EGR 151</td>
<td>Elective(s)</td>
</tr>
</tbody>
</table>

**Elective(s)**

### Fall Semester of Every Other Year

- PHY 401 (Every odd year; starting Fall 2011)
- PHY 430 (Every even year; starting Fall 2012)

**Physics Electives (offered based on student/faculty interests and projected enrollments)**

- PHY 120 (Nanotechnology)
- PHY 340 (Lasers and Fiber Optics)
- PHY 356 (Electronics Instrumentation)
- PHY 398 (Special Topics (sometimes offered as W))
- PHY 405 (Scientific Computer Interfacing)
- PHY 410/411 (Optics/Optics Laboratory)
- PHY 415 (Solid State/Nanotech III)
- PHY 440 (Quantum Mechanics)
- PHY 499 (Independent Study and Research)
- EGR 232 (The Science and Engineering of Materials)
- EGR 398 (Special Topics (sometimes offered as W))
- PHY 507 (Graduate Seminar)
- PHY 519 (Methods of Theoretical Physics)
- PHY 519 (Nanotech I: Fundamentals of Nanotech)
- PHY 521 (Nanotech II: NanoCharacterization)
- PHY 523 (Nanotech IV: Nanosystems Lab)
- PHY 530 (Optics and Detector Physics)
- PHY 531 (Interferometric Imaging)

**Note:** Students must complete the University/LEP Requirements appropriate to their specific degree program and should consult with their faculty advisor to select the appropriate courses for this purpose. To be awarded credit towards a degree in physics, a grade of “C-” or higher must be earned in each of the following courses: PHY 230, 231, 309 and 370

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*Tentative Physics Electives Schedule for 2013 – 2016*

### Fall '13

- PHY 340 (Lasers and Fiber Optics)
- PHY 401 (Classical Mechanics II)
- PHY 440 (Quantum Mechanics)
- PHY 507 (Graduate Seminar)**
- PHY 530 (Optics and Detector Physics)**

### Spring '14

- PHY 415 (Solid State/Nanotech III)
- EGR 232 (Science and Engineering of Materials)
- PHY 531 (Interferometric Imaging)**
- PHY 519 (Fundamentals of Nanoscience)**

### Fall '14

- PHY 401 (Classical Mechanics II)
- PHY 430 (Thermodynamics)
- PHY 507 (Graduate Seminar)**
- PHY 521 (NanoCharacterization)**

### Spring '15

- EGR 232 (Science and Engineering of Materials)
- PHY 398 (Special Topics)
- PHY 440 (Quantum Mechanics)
- PHY 512 (Methods of Theoretical Physics)**
- PHY 298 (Physics for Sci. and Engineers III)
- PHY 405 (Scientific Computer Interfacing)

### Fall '15

- PHY 340 (Lasers and Fiber Optics)
- PHY 401 (Classical Mechanics II)
- PHY 519 and/or PHY 530

### Spring '16

- PHY 410/411 (Optics and Optics Lab)
- PHY 531 and/or PHY 521

**Undergraduate students must file a “petition for irregular schedule” with the Dean of Arts and Sciences**

Course offerings subject to change based on major changes in student interests and/or enrollments

*Note:* Students must complete the University/LEP Requirements appropriate to their specific degree program and should consult with their faculty advisor to select the appropriate courses for this purpose. To be awarded credit towards a degree in physics, a grade of “C-” or higher must be earned in each of the following courses: PHY 230, 231, 309 and 370

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*Refer to the LEP guidelines starting with entering class fall 2011*