**COMPUTER SCIENCE, B.S. (ABINGTON)**

**Begin Campus:** Any Penn State Campus

**End Campus:** Abington

## Suggested Academic Plan

The suggested academic plan(s) listed on this page are the plan(s) that are in effect during the 2022-23 academic year. To access previous years’ suggested academic plans, please visit the archive (https://bulletins.psu.edu/undergraduate/archive/) to view the appropriate Undergraduate Bulletin edition. (Note: the archive only contains suggested academic plans beginning with the 2018-19 edition of the Undergraduate Bulletin).

### Computer Science, B.S. at Abington Campus

The course series listed below provides only one of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an academic requirements or What If report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

#### First Year

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 15 or 30H (GWS)‡</td>
<td>3</td>
<td>CAS 100 (GWS)²</td>
<td>3</td>
</tr>
<tr>
<td>CMPSC 121 (GQ)¹‡</td>
<td>3</td>
<td>CMPSC 122¹‡</td>
<td>3</td>
</tr>
<tr>
<td>MATH 140 (GQ)¹‡</td>
<td>4</td>
<td>MATH 141 (GQ)¹‡</td>
<td>4</td>
</tr>
<tr>
<td>General Education Course</td>
<td>3</td>
<td>Arts (GA)</td>
<td>3</td>
</tr>
<tr>
<td>Health and Wellness (GHW)</td>
<td>1.5</td>
<td>PHYS 211 (GN)¹</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>14.5</td>
<td><strong>17 Credits</strong></td>
<td></td>
</tr>
</tbody>
</table>

#### Second Year

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social and Behavioral Sciences (GS)</td>
<td>3</td>
<td>Natural Sciences (GN)</td>
<td>2-3</td>
</tr>
<tr>
<td>Natural Sciences (GN) (PHYS 212 recommended but not required)</td>
<td>3-4</td>
<td>Arts (GA)</td>
<td>3</td>
</tr>
<tr>
<td>CMPSC 360²</td>
<td>3</td>
<td>MATH 220</td>
<td>2</td>
</tr>
<tr>
<td>CMPSC 312²</td>
<td>3</td>
<td>MATH 318 or STAT 318</td>
<td>3</td>
</tr>
<tr>
<td>CMPSC 221²</td>
<td>3</td>
<td>CMPSC 462²</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>15-16</td>
<td><strong>16-17 Credits</strong></td>
<td></td>
</tr>
</tbody>
</table>

#### Third Year

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPSC 463²</td>
<td>3</td>
<td>Humanities (GH)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 202C (GWS)‡</td>
<td>3</td>
<td>CMPSC 470²</td>
<td>3</td>
</tr>
<tr>
<td>Social and Behavioral Sciences (GS)</td>
<td>3</td>
<td>Additional Computer Science (Select 3 Credits)</td>
<td>3</td>
</tr>
<tr>
<td>CMPSC 430²</td>
<td>3</td>
<td>CMPSC 460²</td>
<td>3</td>
</tr>
</tbody>
</table>

**Fourth Year**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPSC 487W²</td>
<td>3</td>
<td>CMPSC 472²</td>
<td>3</td>
</tr>
<tr>
<td>Supporting Courses: Select 2 credits of 100-400 level courses in consultation with an academic adviser³</td>
<td>2</td>
<td>CMPSC 488²</td>
<td>3</td>
</tr>
<tr>
<td>Additional Computer Science (Select 3 Credits)</td>
<td>3</td>
<td>Additional Computer Science (Select 3 Credits)</td>
<td>3</td>
</tr>
<tr>
<td>Supporting Courses: Select 3 credits of 300-400 level courses in consultation with an academic adviser³</td>
<td>6</td>
<td>Additional Computer Science/Math Courses (Select 3 Credits)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits 120-122**

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1. Natural Sciences (GN), recommended courses
   • PHYS 212 General Physics: Electricity and Magnetism

2. Students must earn a 2.5 or higher grade point average in the following courses: CMPSC 221, CMPSC 312, CMPSC 360, CMPSC 430, CMPSC 460, CMPSC 462, CMPSC 463, CMPSC 469, CMPSC 470, CMPSC 472, CMPSC 487W, and CMPSC 488.

3. 6 credits from courses at 300-400 level and 5 credits from courses at 100-400 level are to be chosen in consultation with the adviser and with program approval.

**University Requirements and General Education Notes:**

US and IL are abbreviations used to designate courses that satisfy University Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

GWS, GQ, GHW, GN, GA, GH, and GS are abbreviations used to identify General Education program courses. General Education includes Foundations (GWS and GQ) and Knowledge Domains (GHW, GN, GA, GH, GS, and Integrative Studies). Foundations courses (GWS and GQ) require a grade of ‘C’ or better.

Integrative Studies courses are required for the General Education program. N is the suffix at the end of a course number used to designate an Inter-Domain course and Z is the suffix at the end of a course number used to designate a Linked course.

**Program Notes:**
1. General Education & Entrance to Major Requirements (55 credits)
   a. English (9 credits)
      i. ENGL 15 or ENGL 30H (GWS)
      ii. ENGL 202C (GWS)
      iii. CAS 100 (GWS)
   b. Mathematics (10 credits)
      i. MATH 140 (GS)
      ii. MATH 141 (GS)
      iii. MATH 220 (GS)
   c. Computer Science (6 credits)
      i. CMPSC 121 (GQ)
      ii. CMPSC 122
   d. Natural Sciences
      i. PHYS 211 (GN)
      ii. Additional 5 credits of any courses with a GN suffix
         (PHYS 212 recommended)
   e. Arts
      i. 6 credits of any courses with a GA suffix
   f. Humanities
      i. 6 credits of any courses with a GH suffix
   g. Social & Behavioral Sciences
      i. 6 credits of any courses with a GS suffix
   h. Health & Physical Activities
      i. 3 credits of any courses with a GHW suffix

2. Core Requirements (65 credits)
   a. Required Computer Science Courses - Students must earn a 2.5 or higher-grade point average in the Required Computer Science Courses (36 credits):
      i. CMPSC 221
      ii. CMPSC 312
      iii. CMPSC 360
      iv. CMPSC 430
      v. CMPSC 460
      vi. CMPSC 462
      vii. CMPSC 463
      viii. CMPSC 469
      ix. CMPSC 470
      x. CMPSC 472
      xi. CMPSC 487W
      xii. CMPSC 488
   b. Required Mathematics Courses - Select one course from the following (3 credits):
      i. STAT 318
      ii. MATH 318

3. Additional Computer Science/Math Courses (15 credits)
   a. Select at least 15 credits from the following. Other courses are to be chosen in consultation with the advisor and with program approval. At least 9 of these additional computer science/math course credits must be from courses with a CMPSC prefix.
      i. CMPSC 313
      ii. CMPSC 412
      iii. CMPSC 413
      iv. CMPSC 414
      v. CMPSC 421

4. Additional Electives / Supporting Courses (11 credits)
   a. 6 credits from courses at 300-400 level and 5 credits from courses at 100-400 level are to be chosen in consultation with the advisor and with program approval.