WHAT CLASSES DO I TAKE IN FALL?
Baskin School of Engineering Frosh Course Recommendations

1. Math Course
   Three methods can be used to determine your first math class:

   **Math Placement (ALEKS Assessment)**
<table>
<thead>
<tr>
<th>ALEKS assessment</th>
<th>MP SCORE:</th>
<th>ENROLL IN:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 60</td>
<td>100</td>
<td>MATH 2</td>
</tr>
<tr>
<td>60 – 69</td>
<td>200</td>
<td>MATH 3</td>
</tr>
<tr>
<td>70 – 74</td>
<td>300</td>
<td>MATH 3 (do not enroll in Math 11A, AMS/Econ 11A)</td>
</tr>
<tr>
<td>75 – 84</td>
<td>400</td>
<td>MATH 19A (do not enroll in Math 11A, AMS/Econ 11A)</td>
</tr>
<tr>
<td>85 – 100</td>
<td>500</td>
<td>MATH 19A or MATH 20A</td>
</tr>
</tbody>
</table>

   For more information about Math Placement and ALEKS please go to: https://mathcoach.sites.ucsc.edu

2. Class for your Major (see back for suggestions) – Please also refer to the Proposed Major Status Information Sheet

3. College Core Course and/or Writing course based on placement

   Please contact your college advisor if you have any questions regarding your general education requirements or college Core course.

<table>
<thead>
<tr>
<th>Test</th>
<th>Score</th>
<th>Course to enroll in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculus AB</td>
<td>3</td>
<td>MATH 19A</td>
</tr>
<tr>
<td></td>
<td>4 or 5</td>
<td>MATH 19B</td>
</tr>
<tr>
<td>Calculus BC</td>
<td>3</td>
<td>Bioengineering, Biomolecular concentration: Receive credit for MATH 19A &amp; 19B; enroll in additional major course (i.e. BME 5)</td>
</tr>
<tr>
<td></td>
<td>4 or 5</td>
<td>Game Design: Receive credit for MATH 19A &amp; 19B; enroll in MATH 21</td>
</tr>
<tr>
<td></td>
<td></td>
<td>For all other BSOE majors: MATH 23A</td>
</tr>
<tr>
<td>AP Computer</td>
<td>3</td>
<td>CMPS 12A/L ®</td>
</tr>
<tr>
<td>Science A*</td>
<td></td>
<td>Can enroll in CMPS 12B/M, but recommended to enroll in CMPS 12A/L</td>
</tr>
</tbody>
</table>

*If you intend on using your AP score to satisfy CMPS 5J, CMPS 5P or CMPS 12A/L credit, please contact BSOE advising.
®CMPS 12A/L will not count toward major requirements for the Computer Engineering, Network and Digital Technology, or Robotics Engineering majors. It is recommended that students with prior programming experience that plan to pursue one of these majors, or Electrical Engineering enroll in CMPE 12/L instead.

or AP Credit
Show or turn in a transcript to BSOE Advising at orientation, or email to advising@soe.ucsc.edu.

or College Credit
Show or turn in a transcript to BSOE Advising at orientation, or email to advising@soe.ucsc.edu.
# MAJOR CLASSES

<table>
<thead>
<tr>
<th>Major</th>
<th>If you place in MATH 2, or MATH 3</th>
<th>If you place in MATH 19A or above</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioengineering</td>
<td><strong>Biomolecular:</strong> Take CHEM 1A*, but if unable to, consider BME 5</td>
<td><strong>Biomolecular:</strong> Take CHEM 1A*, but if unable to, consider BME 5</td>
</tr>
<tr>
<td></td>
<td><strong>Bioelectronics:</strong> Take CMPE 12/L®, but if not ready, take CMPS 5P ④</td>
<td><strong>Bioelectronics:</strong> Take CMPE 12/L®, (or CMPS 5P ② if no prog. background), but if unable to take BME 80G</td>
</tr>
<tr>
<td></td>
<td><strong>Assistive Technology (Motor):</strong> Take CMPE 12/L®, but if not ready, take CMPS 5P ④</td>
<td><strong>Assistive Technology (Motor):</strong> Take CMPE 12/L®, (or CMPS 5P ② if no prog. background), but if unable to take CMPE 80A or BMI 80G (For Bioelectronics &amp; Assistive Tech (Motor), students that place into Math 19B should take Physics 5A/L)</td>
</tr>
<tr>
<td>Bioinformatics</td>
<td>Take CHEM 1A*</td>
<td>Take CHEM 1A* or CHEM 1B*, but if unable to, consider CMPS 12A/L**, or BME 80G</td>
</tr>
<tr>
<td>Computer Engineering</td>
<td>(CMPS 5J or CMPS 5P) ④</td>
<td>(CMPS 5J or CMPS 5P) ② or CMPE 12/L® ④</td>
</tr>
<tr>
<td></td>
<td>or CMPE 12/L®</td>
<td>Students that place into Math 19B should take Physics 5A/L</td>
</tr>
<tr>
<td>Computer Science (BA or BS)</td>
<td>CMPS 5J</td>
<td>CMPS 5J or CMPS 12A/L**</td>
</tr>
<tr>
<td>Game Design</td>
<td>Take CMPS 5J, but if unable to take ARTG 80G or ARTG 80H</td>
<td>Take CMPS 5J or CMPS 12A/L**, but if unable to take ARTG 80G or ARTG 80H</td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>(CMPS 5J or CMPS 5P) ②</td>
<td>(CMPS 5J or CMPS 5P) ② or CMPE 12/L® ④</td>
</tr>
<tr>
<td></td>
<td>or CMPE 12/L®</td>
<td>Students that place into Math 19B should enroll it Physics 5A/L</td>
</tr>
<tr>
<td>Network and Digital Technology</td>
<td>(CMPS 5J or CMPS 5P) ②</td>
<td>CMPE 12/L®</td>
</tr>
<tr>
<td></td>
<td>or CMPE 12/L®</td>
<td>or CMPE 8</td>
</tr>
<tr>
<td>Robotics Engineering</td>
<td>(CMPS 5J or CMPS 5P) ②</td>
<td>(CMPS 5J or CMPS 5P) ② or CMPE 12/L® ④</td>
</tr>
<tr>
<td></td>
<td>or CMPE 12/L®</td>
<td>Students that place into Math 19B should enroll it Physics 5A/L</td>
</tr>
<tr>
<td>Technology and Information Management</td>
<td>ECON 10A or CMPS 5J</td>
<td>ECON 10A or CMPS 5J</td>
</tr>
<tr>
<td></td>
<td></td>
<td>or CMPS 12A/L**</td>
</tr>
</tbody>
</table>

* Students enrolling in CHEM 1A must be placed or enrolled in MATH 3. Prior to enrolling in any Chemistry course, it is strongly recommended to take the Chemistry self-assessment exam. Students who start in CHEM 1B are still required to take CHEM 1A. A score of 5 on the AP Chemistry exam gives course credit for CHEM 1A.

④ The suggested course recommendations for the Bioengineering major depend heavily on the major concentration.

⑥ PHYS 5A/L is restricted to students with the proposed majors Bioengineering, Computer Engineering, Electrical Engineering, Network and Digital Technology Physics, and Robotics Engineering. If you are planning to major in Bioengineering, Computer Engineering, Electrical Engineering, Network and Digital Technology, or Robotics Engineering, and are receiving an error message because your proposed major is not correct in myUCSC, please contact BSOE advising to have you proposed major changed.

** CMPS 12A/L can be challenging for some without prior programming experience.

② CMPS 5J and CMPS 5P do not count towards the Bioengineering: Bioelectronics, Bioengineering: Assistive Technology –Motor, Computer Engineering, Electrical Engineering, Network & Digital Technology, or Robotics Engineering majors. However, these classes will give students a programming foundation for success in CMPE 12/L.

③ CMPE 12/L (no pre-requisites but programming experience strongly recommended)

⑥ CMPE 8 is not required but strongly recommended for frosh in the Robotics major.

^ It is recommended to take TIM 50 after completing some lower division Economics courses first.

http://ua.soe.ucsc.edu • advising@soe.ucsc.edu • (831) 459-5840 • 7/24/17