San Diego State University
Preparation-for-Major Courses

Computer Engineering, B.S.

<table>
<thead>
<tr>
<th>SDSU COURSE</th>
<th>SDSU COURSE TITLE</th>
<th>SDCCD COURSE</th>
<th>UNITS</th>
<th>CITY</th>
<th>MESA</th>
<th>MIRA</th>
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</thead>
<tbody>
<tr>
<td>COMPE 160</td>
<td>INTRO TO COMPUTER PROGRAMMING</td>
<td>CISC 192</td>
<td>4</td>
<td>X</td>
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<tr>
<td>COMPE 260</td>
<td>DATA STRUCTURES AND OBJECT-ORIENTED PROGRAMMING</td>
<td>CISC 187</td>
<td>4</td>
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<td>X</td>
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<tr>
<td>COMPE 270</td>
<td>DIGITAL SYSTEMS</td>
<td>ENGE 240</td>
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<tr>
<td>COMPE 271</td>
<td>COMPUTER ORGANIZATION</td>
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<td>N/A</td>
<td>N/A</td>
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<tr>
<td>BIOL 100 or BIO 101</td>
<td>GENERAL BIOLOGY or WORLD OF ANIMALS</td>
<td>BIOL 107* or NO EQUIV</td>
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<td>X</td>
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<tr>
<td>EE 210</td>
<td>CIRCUIT ANALYSIS I</td>
<td>ENGE 260</td>
<td>3</td>
<td>X</td>
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<tr>
<td>ENGR 280</td>
<td>METHODS OF ANALYSIS</td>
<td>MATH 255*</td>
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<tr>
<td>MATH 150</td>
<td>CALCULUS I</td>
<td>MATH 150*</td>
<td>5</td>
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<tr>
<td>MATH 151</td>
<td>CALCULUS II</td>
<td>MATH 151*</td>
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<tr>
<td>MATH 245</td>
<td>DISCRETE MATHEMATICS</td>
<td>MATH 245*</td>
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<td>MATH 254</td>
<td>INTRO TO LINEAR ALGEBRA</td>
<td>MATH 254*</td>
<td>3</td>
<td>X</td>
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<td>PHYS 195</td>
<td>PRINCIPLES OF PHYSICS</td>
<td>PHYS 195*</td>
<td>5</td>
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<tr>
<td>PHYS 196 and PHYS 196L</td>
<td>PRINCIPLES OF PHYSICS and PRINCIPLES OF PHYSICS LAB</td>
<td>PHYS 196*</td>
<td>5</td>
<td>X</td>
<td>X</td>
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</tbody>
</table>

* Course also fulfills general education requirement(s) for the CSU GE or IGETC pattern

TOTAL UNITS: 36-46

**Transfer Admission Eligibility**

All transfer applicants must meet the following requirements to be considered for admission:

- Complete a minimum of 60 CSU-transferable semester units.
- Complete General Education (GE) requirements in written communication, oral communication, critical thinking, and mathematics with a "C" or higher in each course.
- Earn a minimum 2.1 cumulative CSU-transferable GPA. Applicants must meet this GPA at the time of application and must maintain the GPA prior to transfer.
- Be in good standing at the last college or university attended.

Applicants who meet the requirements listed above will be ranked based on the completion of lower division General Education and preparation for the major coursework. Out-of-service area applicants will be selected based on a GPA ranking that may be higher than the major GPA. Visit [www.sdsu.edu/admissions](http://www.sdsu.edu/admissions) for details.

CONTINUED ON THE OTHER SIDE
Impacted Major Entrance Criteria

In order to be admitted to this major at SDSU, students must meet both the transfer admission eligibility requirements listed above and also the following impacted major entrance criteria:

- Complete with a “C” or higher SDSU’s COMPE 160; EE 210; MATH 150, 151; and PHYS 195, 196 (or appropriate transfer equivalents). These cannot be taken credit/no credit. Students who do not meet the impacted major entrance criteria prior to transfer will be required to complete these requirements at SDSU prior to enrolling in any upper division courses in the major.

Notes

- General Education: Students may complete either a certified General Education package (CSU GE or IGETC patterns) or the general education pattern specified in the SDSU catalog under "Computer Engineering". The following SDCCD courses are recommended if the student elects to complete the GE pattern listed in the SDSU catalog under "Computer Engineering":
  - Oral Communication (3 units): COMS 103. These cannot be taken credit/no credit.
  - Composition (3 units): ENGL 101 or 105. These cannot be taken credit/no credit.
  - Intermediate Composition and Critical Thinking (3 units): ENGL 205 or PHIL 205. These cannot be taken credit/no credit.
  - Physical Sciences and Lab (7 units): PHYS 195 and PHYS 196
  - Life Sciences (3 units): BIOL 107
  - Mathematics/Quantitative Reasoning (7 units): MATH 150 and MATH 151. These cannot be taken credit/no credit.
  - Social and Behavioral Sciences (3 units): ANTH 103; HIST 120 and 121 (both courses must be completed prior to transfer); PSYC 135; ECON 120; ECON 121; GEOG 102; GEOG 104; HUMS 101; RTVC 200 or JOUR 202; ENGL 202; POLI 103; PSYC 101; SOCO 101; PHIL 126 or PSYC 133.
  - Humanities (9 units): Three courses in three different areas:
    - Literature: BLAS 155; ENGL 220; ENGL 221; ENGL 208
    - Art, Classics, Dance, Drama, Humanities, and Music: ARTF 100; ARTF 110; ARTF 111; HIST 120 and 121 (both courses must be completed prior to transfer); CHIC 210; DANC 181; HUMA 101; HUMA 201; MUSI 100; RTVC 160 or DRAM 150 and 151 (both courses must be completed prior to transfer) or DFLM 101; DRAM 105; PHIL 125
    - History: HIST 100; HIST 101; HIST 105; HIST 106
    - Philosophy and Religious Studies: PHIL 102B; PHIL 102A; PHIL 103 or PHIL 104A or PHIL 104B; HUMA 103 and HUMA 104 (both courses must be completed prior to transfer); HUMA 106
    - Foreign Language: Select a foreign language course listed in CSU GE area C2.
  - American Institutions (6 units. 3 of these units may also be applied to one of the General Education categories above.) Complete any series of courses that satisfies areas US1, US2, and US3 as listed under “CSU United States History, Constitution and American Ideals” for Miramar College on www.assist.org, or complete one of the following two-course sequences:
    - BLAS 140A and 140B
    - HIST 150 and 151
    - CHIC 141A and 141B
    - HIST 109 and 110