2023-24 Catalog Requirements (assumes GE Plan G)

**NOTE:** Select either 110/L or 111A/L-B/L sequence based on math and programming skills.

**A1** G.E. Oral Communication (3)
**A2** G.E. Freshman Composition (3)
**A3** PHIL 230 (3) Formal Logic
**A4** MATH 105/L (5/1) Pre-Calculus II (preparatory)
**B1/B3** Physical Science with lab (4-5) from restricted list
**B2/B3** Life Science with lab (4) from restricted list

Always check the online University Catalog for the latest requirements of the major.

A Graduation Evaluation is required 2 to 3 semesters prior to planned date of graduation.

(#{}) MATH 482 has prerequisites of MATH 150B and MATH 262 with grade of "C" or better; COMP 482 has prerequisites of COMP 282 and COMP 256/L.

(##) Check senior electives for their prerequisites, many require just COMP 380/L, some require just COMP 322/L, some require both COMP 322/L and COMP 380/L, COMP 430 requires COMP 310, networking and security courses require COMP 324.

Must receive "C-" or better in all courses attempted at CSUN that are required by major unless otherwise stated.

A letter in the upper left corner of a course box denotes requirement also satisfies a G.E. requirement.

Placement in math courses leading to major requirements is dependent on high school preparation and MPT scores.

Consult with an academic advisor for proper placement in entry level math and computing courses.

*GEOL 110/112 can be used to satisfy at most one of the science requirements.
Computer Science B.S. degree (120-123 units)

The required units are divided into:

- Computer Science Core
  - Lower Division....................................... 22-24 units
  - Upper Division....................................... 25 units
  - Mathematics...................................................... 17 units
  - Formal Logic..................................................... 3 units
  - Lab Sciences...................................................... 8-9 units
  - Senior Electives in Computer Science........... 15 units
  - General Education/U.S. History/Government.... 30 units

Senior Electives in Computer Science (15 units)

Areas of emphasis:
- Artificial Intelligence
- Computer Graphics/Multimedia
- Computer Networks and Security
- Embedded Applications
- Human/Computer Interface
- Data Science
- Object Oriented Programming/Design
- Operating Systems
- Software Engineering
- Web Engineering

Computer Science majors are required to take 15 units of senior electives. A student may wish to discuss their career goals with an advisor prior to selecting their senior electives. The advisor will suggest appropriate sequences of courses for the student to select from. All 400 and 500 level COMP courses (with the exception of not COMP 482, 490/L, 491/L, 492, 494 or 499) and MATH 481A are pre-approved for inclusion as Senior Electives. Requests for inclusion of a 400 or 500 level course as a senior elective that does not meet the requirements stated above must be approved by the student’s advisor and the Computer Science Department Chair prior to enrollment in the course.

A First Year Sequence for Freshmen Needing Preparatory Courses
(Taken as part of the preparatory sequence appearing on the other page. The preparatory sequence may extend the four-year program by a year. Check with your academic advisor regarding the proper course sequence.)

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Semester 2</th>
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<tbody>
<tr>
<td>MATH 102/L</td>
<td>MATH 105/L</td>
</tr>
<tr>
<td>First semester Stretch English</td>
<td>Second semester Stretch English</td>
</tr>
<tr>
<td>COMP 111A/L</td>
<td>COMP 111B/L</td>
</tr>
<tr>
<td>G.E. course</td>
<td>G.E. course</td>
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</tbody>
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Grade and Degree Requirements in the Major
(Current catalog year course prerequisite requirements apply to all major course work not yet completed; major degree requirements are determined by the catalog year of the major; always apply the higher of the two standards.)

A. Transfer courses
- “C” or better for all transfer courses

B. Courses taken at CSUN - rules depend on the academic year of the University Catalog of your major [2023-2024 means from August 2023 through July 2024]; consult with the Computer Science Dept Office if your catalog year is not listed; although every attempt has been made to accurately represent the following information, your responsibility is to follow the rules that appear in the appropriate University Catalog for the year of your major appearing in your DPR report.

1. 2010-2015 Catalog years: “C” or better in each of the following seven lower division core courses: COMP 110/L, 122/L, 182/L, PHIL 230, MATH 150A, G.E. A.1 and A.2; “C-“ or better in all remaining courses required by the major except for “C” or better in select prerequisite math courses.

2. 2015-2023 Catalog years: “C” or better in each of the following four lower division core courses: COMP 110/L, 122/L, 182/L, and MATH 150A; “C-“ or better in all remaining courses required by the major except for “C” or better in select prerequisite math courses.

3. 2023-2024 Catalog year: “C-“ or better in each of the courses required by the major except for “C” or better in select prerequisite math courses.

C. Overall GPA requirements (to stay in good academic standing and for graduate)
1. 2.0 or higher overall GPA for all courses taken at CSUN
2. 2.0 or higher overall GPA for all courses taken (combination of CSUN & transfer)
3. 2.0 or higher overall GPA for all upper division courses required by the major