

# Major GPA

- Major Courses:
  - All engineering, Science & Math courses (except Engr 195A/B)
  - listed under writing assessment, Preparation for the Major, Requirements for the Major, and technical electives (highlighted next)
- Major GPA calculation
  - Based on SJSU unofficial transcript
  - Based on catalog assigned
  - Math 30P and Math 30PL count as 3 units
  - Math 19 and Phys 49 do not count
  - Grade Forgiveness (GF) :
    - 2 attempts - lower grade is waived
    - > 2 attempts - all attempts count except 1<sup>st</sup>

# San Jose State University

## Info.sjsu.edu



### Computer Engineering

#### BS - Computer Engineering

This degree program meets certain University Requirements through approved major modifications. Please see the **Major Exceptions** area in the Policy and Procedures section of this catalog to identify the specific adjustment/s for this degree program or contact your major advisor for more details.

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#### Course Requirements

<b>University Graduation Requirements</b>		<b>27</b>
<b>Core Lower Division General Education</b>		<b>9</b>
Of the 39 units required by the university, 30 units may be satisfied by coursework outlined below. Courses that meet GE Areas A1, A2, A3 or B4 must be passed with a "C" or better to meet the requirement. Consult with major advisor for details.		
<b>Upper Division General Education</b>		<b>3</b>
Of the 9 units required by the university, 6 units may be satisfied by coursework outlined below. Consult with major advisor for details.		
<b>American Institutions</b>		<b>12</b>
Coursework shown below for the 6 units required by the university are double counted within GE. Consult with major advisor for details.		
<b>AMS 001A. American Civilization</b>	<b>M4</b>	<b>6</b>
<b>AMS 001B. American Civilization</b>	<b>M5</b>	<b>6</b>
<b>Physical Education</b>		<b>0</b>
<b>Graduation Writing Assessment Requirement</b>		<b>3</b>
At SJSU, students must pass both the SJSU Writing Skills Test (WST) and a 100W course. For additional information on the WST, please see <a href="http://testing.sjsu.edu/wst">http://testing.sjsu.edu/wst</a> . Exceptions to the GWAR may be found at <a href="http://info.sjsu.edu/gwar.html">http://info.sjsu.edu/gwar.html</a> .		

*A grade of C or better (C- not accepted) is required to meet graduation requirement.*

**ENGR 100W**. Engineering Reports Z+R 3 **30**

**Preparation for the Major**

*Students must complete the following courses with "C" or better to graduate: MATH 030, MATH 031, PHYS 050, PHYS 051. The remaining courses in Preparation for the Major must be completed with "C-" or better to graduate.*

**BIOL 010**. The Living World B2 3

**ISE 130**. Engineering Probability and Statistics 3

**MATH 030**. Calculus B4 3

**MATH 031**. Calculus II B4 4

**MATH 032**. Calculus III B4 3

**MATH 042**. Discrete Mathematics 3

**MATH 123**. Differential Equations and Linear Algebra 3

**PHYS 050**. General Physics/Mechanics B1+B3 4

**PHYS 051**. General Physics/Electricity and Magnetism B1+B3 4

**Requirements of the Major**

*Students must complete all the courses in Core Courses, Required Courses and Approved Upper Division Electives sections with "C-" or better to graduate.*

**Core Courses** 13

**CMPE 030**. Programming Concepts and Methodology 3

**CMPE 050**. Object-Oriented Concepts and Methodology 3

**ENGR 010**. Introduction to Engineering E 3

**EE 097**. Introductory Electrical Engineering Laboratory 1

**EE 098**. Introduction to Circuit Analysis 3

**Required Courses** 47

**CMPE 102**. Assembly Language Programming 3

**CMPE 110**. Electronics for Embedded Systems 3

**CMPE 124**. Digital Design I 3

**CMPE 125**. Digital Design II 3

**CMPE 126**. Algorithms and Data Structure Design 3

**CMPE 127**. Microprocessor Design I 3

**CMPE 130**. Advanced Algorithm Design 3

**CMPE 131**. Software Engineering I 3

**CMPE 140**. Computer Architecture and Design 3

**CMPE 142**. Operating Systems Design 3

**CMPE 146**. Real-Time Embedded System Co-Design 3

**CMPE 148**. Computer Networks I 3

**CMPE 152**. Compiler Design 3

**CMPE 195A**. Senior Design Project I S 2

**CMPE 195B**. Senior Design Project II Y 3

**EE 101**. Circuits Concepts and Problem Solving 1

<u>ENGR 195A. Global and Social Issues in Engineering</u>	<u>S</u>	1
<u>ENGR 195B. Global and Social Issues in Engineering</u>	<u>V</u>	1

*Note: Must complete CMPE 195A/B and ENGR 195 A/B with C or Better to meet GE Area requirements.*

**Approved Upper Division Electives** 6

Selected in consultation with the student's advisor

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**Total Units:** 120

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