

SOFTWARE ENGINEERING

- This worksheet is intended for supplemental use only. The University will use your Academic Requirements Report (ARR) to track your graduation requirements, including those for your major. Please continue to check your ARR for accuracy.
- If your ARR requires a correction, please submit an ARR Correction Form at www.csusm.edu/academicadvising.
- All courses used for the major and preparation for the major must be completed with a grade of C (2.0) or higher.
- All non-articulated courses MUST be reviewed and approved by a faculty advisor in the corresponding department.
- A maximum of 32 lower-division transfer units, including courses in Computer Science, Mathematics and Physics, may be applied toward the Preparation for the Major requirements (see Catalog for details).
- A minimum of 15 upper-division units counted for the major must be completed at CSUSM.

PREPARATION FOR THE MAJOR

Lower Division (12 units):

✓	Course	Units
<input type="checkbox"/>	CS 111: Computer Science I (^MATH 160)	4
<input type="checkbox"/>	CS 211: Computer Science II (*CS 111)	4
<input type="checkbox"/>	CS 231: Assembly Language and Digital Circuits (*CS 111)	4

Non-Computer Science Supporting Courses (19 units):

✓	Course	Units
<input type="checkbox"/>	MATH 160: Calculus with Applications I (*MATH 125, 126 or MATH 160 Placement Exam)	5
<input type="checkbox"/>	MATH 242: Introduction to Statistics	3
<input type="checkbox"/>	MATH 270: Basic Discrete Mathematics (*MATH 160)	3

Choose 1 of the following course sequences, for a total of 8 units:

- a. **PHYS 101:** Introduction to Physics I (4) (*HS Trigonometry)
PHYS 102: Introduction to Physics II (4) (*PHYS 101)

- b. **PHYS 201:** Physics of Mechanics and Sound (4) (*MATH 160)
PHYS 202: Physics of Electromagnetism and Optics (4) (*PHYS 201 or 205, MATH 162)

- c. **CHEM 150:** General Chemistry (4) (*Chemistry Placement Exam, CHEM 101 or CHEM 105)
CHEM 150L: General Chemistry Laboratory (1) (^CHEM 150)
CHEM 160: General Chemistry II (3) (*MATH 125 or 132, CHEM 150, 150L)

✓	Course	Units
<input type="checkbox"/>		
<input type="checkbox"/>		

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UPPER-DIVISION COURSEWORK

Software Engineering Core Coursework (44 units):

✓ <input type="checkbox"/>	Course	Units
<input type="checkbox"/>	CS 311: Data Structures (*CS 211, ^MATH 270)	3
<input type="checkbox"/>	CS 331: Computer Architecture (*CS 231)	3
<input type="checkbox"/>	CS 351: Programming Languages (^MATH 270, CS 311)	3
<input type="checkbox"/>	CS 433: Operating Systems (*CS 231, 311)	3
<input type="checkbox"/>	CS 441: Software Engineering (*CS 311)	3
<input type="checkbox"/>	SE 370: Software Structures (*CS 111, MATH 160)	3
<input type="checkbox"/>	SE 451: Software Requirements and Design (*CS 441, SE 370)	3
<input type="checkbox"/>	SE 461: Software Testing and Quality (*SE 451)	3
<input type="checkbox"/>	SE 471: Software Architecture (*SE 451)	3
<input type="checkbox"/>	SE 481: Software Project Planning and Management (*SE 451)	3
<input type="checkbox"/>	SE 490: Senior Project I (*SE 451)	3
<input type="checkbox"/>	SE 491: Senior Project II (*SE 490)	3

Software Engineering Electives (8 units):

Choose from Software Engineering, Computer Science and/or Computer Information Systems courses numbered 400 or higher.

✓ <input type="checkbox"/>	Course	Units
<input type="checkbox"/>		4
<input type="checkbox"/>		4