CATALOG TERM: SPRING 2019 **TOTAL UNITS REQUIRED = 120**

COMPUTER SCIENCE

- 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 Student Center and 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.
- A minimum of 15 units counted toward the major must be completed at CSU San Marcos.
- No more than 3 units of CS 498 or 499 may be applied toward the major.
- All non-articulated courses MUST be reviewed and approved by a faculty advisor in the corresponding department.

PREPARATION FOR THE MAJOR (38-39 UNITS)

Lower Division (12 units):

✔	Course	Units
	CS 111: Computer Science I (^MATH 160)	4
	CS 211: Computer Science II (*CS 111 and MATH 160)	4
	CS 231: Assembly Language and Digital Circuits (*CS 111)	4

Non-Computer Science Supporting Courses (26-27 units)

✔	Course	Units
	MATH 160: Calculus with Applications I (*MATH 125, 126 or MATH 160 Placement Exam)	5
	MATH 162: Calculus with Applications II (*MATH 160)	4
	MATH 270: Basic Discrete Mathematics (*MATH 160)	3

Choose 1 of the following courses:

MATH 242: Introduction to Statistics (3)
MATH 440: Introduction to Mathematical Probability and Statistics (4) (*MATH 260)

✔	Course	Units
		3-4

Choose 1 of the following courses:

MATH 264: Introduction to Linear Algebra
MATH 374: Linear Algebra (*MATH 160)

✔	Course	Units
		3

Biology, Chemistry or Physics Courses that count toward a science major (8 units):

✔	Course	Units
		4
		4

8 units may be selected from **BIOL** 100, 101 + 101L, 105, 200, 201, 210, 211, 212; **CHEM** 104 or **CHEM** 105+205 (must both be completed in addition to selecting another science course), **CHEM** 110 + 110L, 115, 220; **PHYS** 120, 121, 200, 201, 230*, 231*

***Students who wish to complete PHYS 301, should complete PHYS 230 + PHYS 231.**

COMPUTER SCIENCE

UPPER-DIVISION COMPUTER SCIENCE COURSEWORK (30 UNITS)

✔	Course	Units
	CS 311: Data Structures (*CS 211; ^MATH 270)	3
	CS 331: Computer Architecture (*CS 231)	3
	CS 351: Programming Languages (^CS 311 and MATH 270)	3
	CS 421: Theory of Computing (*CS 351)	3
	CS 433: Operating Systems (*CS 231 and 311)	3
	CS 436: Introduction to Networking (*CS 311)	3
	CS 441: Software Engineering (*CS 311)	3

Computer Science Electives (12 units):

Choose from CS/CIS numbered 400 or higher, MATH 464, MATH 480 or PHYS 301.

✔	Course	Units

**prerequisite; ^co/prerequisite*