**CIS Core Courses (Grade of "C" or better) - 44 Credits**

- CIS 180 - Object-Oriented Programming I (4)
- CIS 181 - Object-Oriented Programming II (4) (Pre: CIS 180)
- CIS 190 - Introduction to Procedural Programming (4) (Pre: CIS 180)
- CIS 272 - Introduction to Computing Systems (4) (Co: CIS 190, MTH 181)
- CIS 273 - Computer Organization and Design (4) (Pre: CIS 272)
- CIS 280 - Software Specification and Design (4) (Pre: CIS 181)
- CIS 360 - Algorithms and Data Structures (3) (Pre: CIS 181, MTH 181)
- CIS 361 - Models of Computation (3) (Pre: CIS 181, MTH 182)
- CIS 370 - Design of Operating Systems (4) (Pre: CIS 273)
- CIS 481 - Parallel and Distributed Software Systems (3) (Pre: CIS 280, CIS 370)
- CIS 498 - Software Engineering Project I (4) (Pre: CIS 280, CIS 362)
- CIS 499 - Software Engineering Project II (4) (Pre: CIS 498) - USC 5A + 5B

**Mathematics Requirements - 17 Credits**

- MTH 153 (or MTH 151) - Calculus I (4) - USC 1D
- MTH 154 (or MTH 152) - Calculus II (4) (Pre: MTH 153 or 151)
- MTH 181 - Discrete Structures I (3)
- MTH 182 - Discrete Structures II (3) (Pre: MTH 181)
- MTH 331 - Probability (3) (Pre: MTH 154 or 152)

**Science/Quantitative Requirements - Minimum 14 Credits**

- PHY 113 - BIO 121/131 - CHM 151/161 (4) (Circle one)
- PHY 114 - BIO 122/132 - CHM 152/162 (4) (Must be continuation of above)
- Science Elective (Must satisfy USC 2A if CHM Track) (3)

**English Requirements/Foundations for Engagement - 9 Credits**

- ENL 101 - Critical Writing and Reading I (3) - USC 1A
- ENL 102 - Critical Writing and Reading II (3) (Pre: ENL 101) - USC 1B
- ENL 266 - Technical Communications (3) (Pre: ENL 102) - USC 1C

**Ethics and Social Responsibility/Science in the Engaged Community - 3 Credits**

- CIS 381 - Social and Ethical Aspects of Computing (3) - USC 2B

**University Studies** - 18 Credits

- EGR 111 (3) - USC 1E (Transfer student: CIS 200 level or above, or equivalent)
- Literature (3) - Choose from USC 3A
- Visual and Performing Arts (3) - Choose from USC 3B
- Human Questions and Contexts (3) - Choose from USC 4A
- Nature of US Society (3) - Choose from USC 4B
- Nature of the Global Society (3) - Choose from USC 4C

**Free Electives - A single course or combination that adds up to 3 Credits**

- (3)

**Comment Box**

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*A minimum 2.00 GPA in the major, a minimum 2.00 cumulative GPA, and a minimum 120 earned credits to graduate

**USC - University Studies Cluster; A preapproved list can be found at: http://www.umassd.edu/universitystudies/approvedcourses/

Note: Any CIS core course or technical elective that is a prerequisite to another CIS course, must be passed with a grade of C or better in order to satisfy the prerequisite.*