

Bachelor of Science in Computer Science -- 120 Credits

Standard Track

JCSCI-BS/JSTD-TR

Effective August 2016

GENERAL EDUCATION REQUIREMENTS (RG 6825)

REQUIRED COURSES

| Foundational Courses | CR | Satisfied/Term |
|--|----|----------------|
| Engcmp 0003 or 0005 | 3 | |
| Engcmp 0004 or 0006 | 3 | |
| CommRc 0052 Public Speaking | 3 | |
| Basic Algebra or Placement Test | | |
| Math 0001 Algebra 1 | 3 | |
| Quantitative Reasoning (QR) - 1 Course | | |
| <i>Note - a student cannot test out of their QR requirement.</i> | | |
| | 3 | |

FREE ELECTIVES

Free electives are the balance of credits required for graduation (120) that are not used to satisfy competencies, knowledge areas, major requirements, electives, or any related area required by the department.

| | CR | Satisfied/Term |
|--|----|----------------|
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WORLDS OF KNOWLEDGE

| Aesthetic and Creative Expression | | | | |
|-----------------------------------|--------|--------------|----|----------------|
| Subject | Number | Course Title | CR | Satisfied/Term |
| | | | 3 | |
| | | | 3 | |

| Societies & Civics | | | | |
|--------------------|--------|--------------|----|----------------|
| Subject | Number | Course Title | CR | Satisfied/Term |
| | | | 3 | |
| | | | 3 | |

| Follow-Up Courses | | | | |
|-------------------|--------|------------------------|----|----------------|
| Subject | Number | Course Title | CR | Satisfied/Term |
| Math | 0231 | Analytic Geom & Calc 2 | 4 | |
| Math | 0241 | Analytic Geom & Calc 3 | 4 | |

| Global History & Culture | | | | |
|--------------------------|--------|--------------|----|----------------|
| Subject | Number | Course Title | CR | Satisfied/Term |
| | | | 3 | |
| | | | 3 | |

| Science & Nature | | | | |
|------------------|--------|------------------------|----|----------------|
| Subject | Number | Course Title | CR | Satisfied/Term |
| Math | 0221 | Analytic Geom & Calc 1 | 4 | |
| | | | 3 | |

Each student must take 2 courses in each World of Knowledge. The 8 courses taken in the Worlds must represent 8 different Subjects. A student must take two additional "Follow-Up" courses in any World.

- >The minimum number of courses taken in the Worlds must be 10.
- >The Follow-Up courses may repeat a subject previously taken in a World.
- >A student cannot use a major required Subject course in one of the Worlds.
- >For example: A Biology student cannot use BIOL 0110 to fulfill a requirement in the Science and Nature World.
- >Students cannot use a course to count both in their QR requirement and one of the Worlds.
- >Students can choose QR and Worlds of Knowledge courses from published course lists.

MAJOR REQUIREMENTS (RG 7267)

(RQ 3395)

| First Term | | |
|--------------------------------------|----------|----------------|
| Complete the following Courses | CR | Satisfied/Term |
| Math 0401 Discrete Math Structures | 3 | |
| CS 0100 Perspectives in Comp Science | 3 | |
| Requirement Satisfied | 6 | |

(RQ 3396)

| Second Term | | |
|--|----------|----------------|
| Complete the following Courses | CR | Satisfied/Term |
| CS 0406 Discrete Math 2 and Statistics | 3 | |
| CS 0410 Intro to CS Applications | 1 | |
| CS 0411 Intro to CS Programming | 3 | |
| Requirement Satisfied | 7 | |

(RQ 3397)

| Third Term | | |
|---|----------|----------------|
| Complete the following Courses | CR | Satisfied/Term |
| CS 0045 Intro to Info Structure Apps | 1 | |
| CS 0046 Comp Sys Architecture Apps | 1 | |
| CS 0455 Intro to Information Structures | 3 | |
| CS 0456 Computer System Architecture | 3 | |
| Requirement Satisfied | 8 | |

(RQ 3398)

| Fourth Term | | |
|--------------------------------------|----------|----------------|
| Complete the following Courses | CR | Satisfied/Term |
| CS 0047 Adv Program Concepts Apps | 1 | |
| CS 0048 Data Structures & Files Apps | 1 | |
| CS 0457 Adv Programming Concepts | 3 | |
| CS 0458 Data Structures & Files | 3 | |
| Requirement Satisfied | 8 | |

(RQ 3399)

| Required Upper Level Mathematics | | | | |
|--------------------------------------|-----------|----------------|--|--|
| Complete the following Courses | CR | Satisfied/Term | | |
| Math 0221 Analytic Geom & Calculus 1 | 4 | | | |
| Math 0231 Analytic Geom & Calculus 2 | 4 | | | |
| Math 0241 Analytic Geom & Calculus 3 | 4 | | | |
| Math 1181 Linear Algebra 1 | 3 | | | |
| Requirement Satisfied | 15 | | | |

(RQ 3400)

| Upper Level CS Electives | | | | |
|--|-----------|----------------|--|--|
| Select 15 credits from the following courses | CR | Satisfied/Term | | |
| CS 1132 Classical Numerical Analysis or Math 1071 Numerical Math Analysis | 3 | | | |
| CS 1163 Advanced Topics in CS | 3 | | | |
| CS 1164 Advanced Topics in CS | 3 | | | |
| CS 1710 Formal Structures in CS | 3 | | | |
| CS 1713 Algorithm Design & Analysis | 3 | | | |
| CS 1720 Programming Languages | 3 | | | |
| CS 1735 Software Design Methodology | 3 | | | |
| CS 1736 Software Engineering 3 | 3 | | | |
| CS 1750 Systems Programming | 3 | | | |
| CS 1760 Advanced Programming | 3 | | | |
| CS 1762 Web Programming | 3 | | | |
| CS 1765 Data Base Mgmt Systems | 3 | | | |
| CS 1766 Intro to Computer Graphics | 3 | | | |
| CS 1783 Artificial Intelligence Programming | 3 | | | |
| CS 1791 Compiler Design | 3 | | | |
| CS 1792 Operating Systems | 3 | | | |
| CS 1793 Computer Architecture & Org | 3 | | | |
| Requirement Satisfied | 15 | | | |

IMPORTANT INFORMATION:

This sheet is an unofficial representation of the major requirements and the information is subject to change. It is not an official record of academic progress and should not be treated as such. Official degree information can only be obtained through the Division Office or the Office of the Registrar.

Created 10/17/2017