BELLEVUE COLLEGE

Computer Science

Bachelor of Science Degree

STUDENT NAME		**SID #**	
PROGRAM CHAIR		**DATE**	

PROGRAM REQUIREMENTS			**Requested Substitution/Transfer Credits (if applicable)**			**Completed**		
Course	**Course Title**	**CR**	**College/University**	**Course**	**CR**	**Grade**	**Quarter**	**Year**
GENERAL EDUCATION REQUIREMENTS								
ENGL& 101	English Composition	**5**						
ENGL 201	The Research Paper **or ENGL& 235** Technical Writing	**5**						
MATH& 151	Calculus I	**5**						
MATH& 152	Calculus II	**5**						
MATH& 153	Calculus III	**5**						
MATH 208	Linear Algebra	**5**						
MATH 270	Probability and Statistics	**5**						
MATH 301	Discrete Math	**5**						
PHYS 121	General Engineering Physics I	**6**						
PHYS 122	General Engineering Physics II	**6**						
Humanities course	*from AAS-DTA list - choose 3 different areas*	**15**						
Social Science courses	*from AAS-DTA list - choose 3 different areas*	**15**						
Natural Science course	*with lab: Chemistry or Biology*	**6**						
Diversity Requirement	Please see *www.bellevuecollege.edu/programs/degrees/culturaldiversity* for the list of approved courses							
CORE PROGRAM REQUIREMENTS								
CS 19X	Special Topics in Computer Science	**2**						
CS 210	Fundamentals of Computer Science I	**5**						
CS 211	Fundamentals of Computer Science II	**5**						
CS 300	Data Structures	**5**						
CS 320	Programming Languages	**5**						
CS 331	Database Systems	**5**						
CS 351	Computer Architecture I	**5**						
CS 360	Operating Systems	**5**						
CS 401	Algorithms	**5**						
CS 410	Software Engineering	**5**						
CS 481/2/3	Capstone Courses	**10**						
UPPER DIVISION ELECTIVES		**15**						
Choose 15 credits from the following:								
CS 311	Software Patterns (5 Cr)							
CS 341	Computer Networks (5 Cr)							
CS 352	Computer Architecture II (5 Cr)							
CS 356	Computer Security (5 Cr)							
CS 380	Web Programming (5 Cr)							
CS 405	Numerical Methods (5 Cr)							
CS 411	Software Engineering Project Management (5 Cr)							
CS 420	Theory of Computation (5 Cr)							
CS 430	Image Processing (5 Cr)							
CS 441	Functional Programming (5 Cr)							
CS 455	Cloud Computing (5 Cr)							
CS 460	Machine Learning (5 Cr)							
CS 470	Mobile Application Development (5 Cr)							
CS 485	Computer Science Co-op/Practicum (1-5 Cr)							
FREE CHOICE ELECTIVES		**20**						
Students have an opportunity to take additional computer science courses, or additional general education courses of their own interest.								
GRAND TOTAL		**180**						

BELLEVUE COLLEGE

Computer Science

Bachelor of Science Degree

Bachelor of Science Degree (B.S.) in Computer Science from Bellevue College meets the critical and pervasive demand for rigorously trained computer science professionals. This degree program will prepare graduates to apply mathematical foundations, algorithmic principles, and computer science theory in the design of computer and software based systems of varying complexity.

PROGRAM OUTCOMES

Upon graduation, program students should be able to:

- Demonstrate the ability to apply knowledge of mathematics to develop and analyze computing systems.
- Demonstrate the conceptual knowledge to identify and analyze a problem, and then define the computing requirements to creatively solve it.
- Demonstrate the ability to design, implement, evaluate, trouble-shoot and test a computer-based system process, component, or program to meet desired results.
- Demonstrate the ability to use current techniques, skills and tools for computing practice.
- Demonstrate success skills, including teamwork, leadership, communication, critical thinking, creative problem-solving, personal responsibility and management skills.
- Demonstrate an awareness of the impact of computers in society as well as an understanding of the key ethical issues shaping the practice of Computer Science.

ENTRY REQUIREMENTS

Freshmen

Must be qualified to enroll in the following courses:

- MATH& 151 Calculus I: Placement by assessment or MATH& 142 with a C- or better, or AP score of 2 or higher on AB or BC exam.
- ENGL& 101 English Composition I: Placement by assessment or ENGL 092 or 093 with C- or better.

Transfer Students

- MATH& 151 and MATH&152, or equivalent credits.
- ENGL& 101 English Composition I.
- CS 210 and CS 211
- 5-6 credits of either PHYS 121, biology or chemistry.

DEGREE REQUIREMENTS

Completion of all required courses as shown in the worksheet. In addition to eligibility requirements, students must also achieve the following:

- Complete 180 credits with a minimum 2.0 cumulative GPA and minimum GPA of 2.0 for each individual core course (including transferred credits) in all mandatory program courses.
- At least 45 quarter credits for the degree must be completed in residence at Bellevue College, of which 30 credits must be upper division.
- Courses may be subject to minimum grade requirements and prerequisites. Check online at ***www.bellevuecollege.edu/classes/all/***.

College Academic Distribution Requirements (CADR)

Freshmen and transfer applicants must complete a minimum level of preparation prior to applying for admissions into Computer Science. Completion in six subject areas: English, Mathematics, Social Sciences/Social Studies, World Languages, Lab Science, Senior Year Math-Based Quantitative, and Arts. These minimum academic subject areas are set by the Washington Student Achievement Council. Most applicants have completed these requirements in high school, or through college course work.

SAT or ACT scores are required only for applicants with fewer than 40 transferrable college credits.

English Language Proficiency

All international applicants must submit proof of English language proficiency as defined by the Office of International Education and Global Initiatives by the application deadline. See ***www.bellevuecollege.edu/oiegi*** for details.

APPLICATION PROCESS

To be considered for the Bachelor of Science in Computer Science program, prospective students must submit the following:

- Completed general Bellevue College admission form
- Nonrefundable admissions and placement fee of $55
- Completed Bachelor of Science in Computer Sciences application form
- Nonrefundable application fee of $75
- Official transcripts from all college(s) attended and high school transcript
- SAT/ACT scores for first year admissions

FOR MOST UP-TO-DATE INFORMATION, GO TO:

www.bellevuecollege.edu/cs

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