

COMPUTER SCIENCE

MAJOR CHECKLIST

STUDENT: _____ ADVISOR: _____

GENERAL EDUCATION REQUIREMENTS (42-56 credit hours)			
SEMESTER OR TERM	GENERAL ED. REQUIREMENT	COURSE NUMBER & TITLE	CREDIT HOURS
UNIVERSITY WRITING (3)			
	College Comp.	ENG 120 College Composition	3
	Advanced Writing	Paper Title:	
CIVILIZATION (17)			
	LIB 110	Reason and the Self	3
	LIB 120	America and the Enlightenment	3
	LIB 130	Classics of Western Literature	3
	ART 210, 215, MUS 210, or THE 215	History of the Arts (Choose 1)	3
	HIS 210, 215 or POL 213	Western Civilization (Choose 1)	3
	LIB 490	Contemporary Issues (Sr. Seminar)	2
NATURAL SCIENCES AND MATHEMATICS (10)			
	Physical Science		3-4
	Life Science		3-4
	Laboratory	Taken in conjunction with a 4 credit phy. or life science course	(a 4 above)
	Mathematics		3
FOREIGN LANGUAGE (0-14)			
	Foreign Lang. I		4
	Foreign Lang. II		4
	Foreign Lang. III		3
	Foreign Lang. IV		3
SKILLS FOR LIFE (6)			
	Service	SER 103	1
	Physical Activity	PER	1
	Physical Activity	PER	1
	Physical Activity	PER	1
	Health & Wellness	PER 143 Health & Wellness	1
	Tech. Tools	CSC 103 Technology Tools	1
SOCIAL SCIENCE (3)			
			3
FINE ARTS (3)			
			3

MAJOR REQUIREMENTS (32 credit hours)		
CORE (17)		
	CSC 213 Programming Fundamentals	3
	CSC 324 Data Structures	3
	CSC 326 Computer Organization	3
	CSC 327 Algorithms	3
	CSC 336 Theory of Computation	3
	CSC 499 Senior Internship/Paper	2
ELECTIVES I (MINIMUM 9 HOURS)		
		3
		3
		3
		3
		3
ELECTIVES II (MAXIMUM 6 HOURS)		
		3
		3
OTHER COURSES TOWARD GRADUATION (Required: 120 credit hours)		

BACHELOR OF ARTS GRADUATION REQUIREMENTS

1. Complete a minimum of 120 credit hours of study, at least 60 of which or at least the last two full-time semesters before graduation are at SVU. No more than 9 credit hours will be granted for internship courses.
2. Complete all general education requirements.
3. Complete all requirements of at least one major.
4. Earn a minimum grade point average of 2.00 on all course work taken at the University.
5. Comply with all University standards, regulations, and procedures, from the date of matriculation through the date of final graduation.

BACHELOR'S DEGREE GENERAL EDUCATION REQUIREMENTS (59 credit hours)

Writing and Computer Skills (4)

1. ENG 120 College Composition (3)
2. Advanced Writing: a paper of at least 3000 words that (a) is written for an upper-division Advanced Writing course, (b) satisfies the style standard in the course's discipline, and (c) accounts for the comments of the instructor

Foreign Language (14)

1. Semesters I-IV of a foreign language (14) (may be partly or wholly waived for student demonstrating comparable second language abilities)

Cultural Heritage (18)

1. Each of the following (9 credit hours):
 - LIB 110 Reason and the Self
 - LIB 120 America and the Enlightenment
 - LIB 130 Classics of Western Literature
2. One member of either of the following pairs (3 credit hours):
 - ART 210 & 215 Art History
 - MUS 210 & THE 215 Music & Theatre History
3. HIS 210 & 215 Western Civilization I & II
- POL 213 Western Political Thought
3. LIB 490 Contemporary Issues (2) (Sr. Seminar)

Natural Sciences and Mathematics (10)

1. One general education physical science course from chemistry or physics (3-4)
2. One general education life science course from biology (3-4)
3. One of the general education physical or life science courses must have a laboratory component.
4. One general education mathematics course (or PHI 223 Introduction to Logic: see course description) (3)

Skills for Life (6)

1. SER 103
2. Three PER physical activity courses (3)
3. PER 143 Health & Wellness (1)
4. CSC 103 Technology Tools (1)

Electives (6)

1. Social Sciences (3 credit hours):
 - ECN 210 Principles of Microeconomics (3)
 - ECN 215 Principles of Macroeconomics (3)
 - EDU 250 Human Growth and Development (3)
 - FCD 210 Marriage and Family (3)
 - FCD 250 Child and Adolescent Development (3)
 - GOV 227 Family Social Policy and Law (3)
 - PSY 201 General Psychology I (3)
2. Fine Arts (3 credit hours):
 - ART 113 Introduction to Studio Art (3)

- ART 120 Introduction to Drawing (3)
- ART 130 Introduction to Painting (3)
- ART 223 Two-Dimensional Design (3)
- MUS 108 Music Fundamentals (3)
- MUS 129R Group Voice Instruction (3)
- MUS 151 Music Theory I (3)
- MUS 167 Conducting Fundamentals (3)
- THE 106 Stagecraft (3)
- THE 110 Acting I (3)

COMPUTER SCIENCE MAJOR REQUIREMENTS (37 credit hours)

Computer science is the systematic study of computational systems and computability. It includes theories for understanding the analysis, design, implementation, validation and verification of solution to complex problems, and for the elicitation, representation, manipulation and visualization of knowledge. More simply put, computer scientists learn to understand what a computer can and cannot do, how computers can efficiently perform specific tasks, how computers can store and retrieve specific types of information, how computers can more effectively organize and display information, and how computers can appear to behave intelligently. Building on the core ideas of a liberal education, the Computer Science major combines theory with practical experiences to develop skills in problem solving, programming, communication, and collaboration in order to help students realize their potential to assume leadership roles in an increasingly technical world. Computer Science majors can prepare for careers in research, development and teaching by pursuing graduate degrees, or they can apply their skills in virtually any industry, from business to biochemistry, and from education to entertainment.

Program Coordinator: Dr. Alan Whitehurst

MAJOR REQUIREMENTS (32 CREDIT HOURS)

Core (17):

- CSC 213 Programming Fundamentals (3)
- CSC 324 Data Structures (3)
- CSC 326 Computer Organization (3)
- CSC 327 Algorithms (3)
- CSC 336 Theory of Computation (3)
- CSC 499 Senior Internship/Paper (2)

Electives I (a minimum of 9 credit hours from among the following):

- CSC 313 Software Engineering (3)
- CSC 316 Database Systems (3)
- CSC 443 Operating Systems (3)
- CSC 447 Programming Languages (3)
- CSC 453 Networking (3)
- CSC 457 Artificial Intelligence (3)

Electives II (a maximum of 6 credit hours from among the following):

- CSC 223 Authoring for the Web (3)
- CSC 224 Dynamic Web Development (3)
- CSC 323 Advanced Authoring for the Web (3)
- CSC 375R Topics in Computer Science (3)
- CSC 395R Directed Study (3)
- MAT 114 Finite Mathematics (3)
- MAT 221 Statistics (GE) (3)
- MAT 241 Calculus I (GE) (4)
- MAT 242 Calculus II (GE) (3)
- MAT 341 Calculus III (3)
- MAT 343 Linear Algebra (3)
- PHI 223 Introduction to Logic (3)