COMPUTER SCIENCE EDUCATION, BSED

Department Chair: Anne Foerst, Ph.D.

This program is designed to prepare graduates to teach in education institutions having mastered content area and having met the academic requirements for teacher certification.

This program enables students to obtain initial certification in Computer Science Education. Students complete a computer science major especially tailored to the New York State Education requirements for teaching computer science in grades K-12 while also completing all of the courses required for initial teaching certification.

Formal admission to the School of Education's education certification program (for junior year field clinical block approval) is granted provided a student meets the following qualifications:

- GPA of 3.0 in the academic major
- GPA of at least 2.5 in all courses in computer science
- Cumulative GPA of 3.0 or better
- Grades of C (2.0) or better in two writing courses.

Requirements for graduation include

- Cumulative GPA of 3.0
- GPA of 3.0 in all education courses (including SPED courses)
- Minimum GPA of 2.5 in the disciplinary concentration.

Students complete 140 hours of clinical block experience, during which they apply classroom knowledge with supervised experience in classrooms, as well as student teaching requirements.

Code	Title	Credits
Computer Science		**30**
CS-101 & CSL-101	Beauty & Joy of Computer Science and BEAUTY & JOY OF COMPUTING LAB	
CS-131 & CSL-131	OBJECT ORIENTED PROGRAMMING and OBJECT ORIENTED PROGRAMMING LAB	
CS-132 & CSL-132	ALGORITHMS & DATA STRUCTURES and ALGORITHMS & DATA STRUCTURES LAB	
CYB-101	INTRODUCTION TO INFORMATION SECURITY	
CS-241	COMPUTERS, SOCIETY & ETHICS	
CS-254 & CSL-254	COMPUTER NETWORKS and COMPUTER NETWORKS LAB	
CS-257 & CSL-257	USER EXPERIENCE DESIGN and USER EXPERIENCE DESIGN LAB	
	Computer Science elective course with lab	
Mathematics		**6**
MATH-107	INTRODUCTION TO STATISTICS	
MATH-207	DISCRETE MATHEMATICS I	
Education		**44**
EDUC-101	SOCIAL FOUNDATIONS OF AMERICAN EDUCATION: A CURRENT ISSUES APPROACH	
EDUC-208	DESIGNING AND DELIVERING INSTRUCTION	
EDUC-208L	INSTRUCTIONAL DESIGN FOR ALL LEARNERS	
EDUC-210	HUMAN DEVELOPMENT & LEARNING	
EDUC-354	PROBLEMS OF LITERACY IN SEC SCHOOLS	
SPED-445	INSTRUCTIONAL STRATEGIES FOR MATH & SCIENCE IN INCLUSIVE SECONDARY EDUCATION	
EDUC-306	MANAGING INTRUCTION/BEHAVIOR IN SEC ED	
EDUC-330	METHODS, MODELS, MANAGEMENT OF INSTRUCTION	
EDUC-334	COMPUTER SCIENCE METHODS	
EDUC-360	LITERACY IN THE CONTENT AREA	
EDUC-406	EVALUATING LEARNERS & LEARNING	
EDUC-495	SEC.STUD.TEACHING:GRADES 7-9	
EDUC-496	SEC STUD TEACH:GRADES 10-12	
EDUC-499	SENIOR SEMINAR:CURRENT ISSUES, ASSESSMENT & REFLECTION	
EDUC-430	METHODS AND MODELS OF TEACHING ELEMENTARY STEAM	
Workshops		
EDUC-099A	SAFE SCHOOLS WORKSHOP	
EDUC-099B	CHILD ABUSE PREVENTION	
EDUC-099D	CULTURAL DIVERSITY WORKSHOP	
EDUC-099F	Harassment, Bullying, Cyberbullying & Di	
Foreign Language [1]		**3**
General Education Requirements (https://catalog.sbu.edu/undergraduate/degree-requirements/)		**37**
General Electives		**3**
Total Credits		
Total Credits		**123**

[1] The foreign language must be at the level of 202 or higher. Students not prepared to begin at this level will need to take additional courses in language.

First Year

Fall	Credits	Spring	Credits
CS-101 & CSL-101	4	CS-131 & CSL-131	4
ENG-101	3	MATH-107	3
BONA-101	3	ENG-102	3
EDUC-101	3	THFS-101	3
General Education Course	3	General Education Course	3
	16		**16**

Second Year

Fall	Credits	Spring	Credits
CS-132 & CSL-132	4	CS-241	3
CYB-101	3	CS-254 & CSL-254	4
MATH-207	3	Foreign Language Requirement [1]	3
Foreign Language Requirement [1]	3	EDUC-210	3
EDUC-208 & 208L	3	General Education Course	3
EDUC-099A	0	EDUC-099F	0
EDUC-099B	0		
	16		**16**

Third Year

Fall	Credits	Spring	Credits
CS-257 & CSL-257	4	EDUC-306	3
SPED-445	4	EDUC-330	2

EDUC-354	3	EDUC-334	1
General Elective	3	EDUC-360	3
EDUC-099D	0	EDUC-406	3
		General Education Course	3
	14		**15**

Fourth Year

Fall	Credits	Spring	Credits
EDUC-495	5	General Education Courses	7
EDUC-496	5	EDUC-430	3
EDUC-499	3	Computer Science elective course with lab	4
		PHIL-104	3
	13		**17**

Total Credits 123

[1] The foreign language must be at the level of 202 or higher. Students not prepared to begin at this level will need to take additional courses in language.