Computer Science

Degree Type
Bachelor of Arts

Objective:

This program is for students who wish to pursue a liberal arts degree with some specialization in computer science, but do not intend to enter graduate school in computer science. Selected job titles of graduates include: programmer, software engineer, network analyst, systems analyst, game programmer, system administrator, web developer, web designer.

Administrator: Chair, Department of Mathematics and Computer Science

Requirements: 61-62 credits including 35-37 in computer science.

Required Courses:

Item #	Title	Credits
COMP1220	Introduction to Computer Science	3
COMP2220	Computer Programming I	3
COMP2220L	Computer Programming I Laboratory	1
	COMP2040 or COMP2260/COMP2260L	3-4
COMP2630	Computer Architecture	3
COMP2750	Data Structures	3
COMP3330	Database Design and Programming	3
COMP3330L	Database Design and Programming Laboratory	1
COMP3370	Systems Analysis and Design	3
COMP3630	Networks and Data Communications I	3
COMP3970	Introduction to Senior Project	1
	COMP4680 or COMP4970 (4 required)	4
COMP4980	Senior Seminar/Capstone	1
MATH2240	Elementary Statistics	3
MATH2310	Discrete Mathematics	3
	Any additional Computer Science course numbered 3000 or above	3

COMP4980 must be taken at Northwest Nazarene University

Concentration: Twenty (20) credits in a specific area of concentration approved by the chair of the Department of Mathematics and Computer Science.

An additional major, co-major, or minor at NNU will qualify in fulfillment of an area of concentration.

Cybersecurity Concentration

Item #	Title	Credits
COMP3470	Cybersecurity Principles	3
COMP3480	Cyber Defense	3
COMP3640	Networks and Data Communications II	3
COMP4470	Cyber Warfare	3
COMP4480	Cyber Forensics and Recovery	3
	COMP4330 or COMP4340	3

Two (2) additional credits in either Computer Science or a discipline approved by the chair of the Department of Mathematics and Computer Science.

Data Science Concentration

Item #	Title	Credits
COMP4750	Algorithm Analysis	3
COMP4330	Machine Learning	3

Choose three courses from:

Item #	Title	Credits
COMP3230	Introduction to Spatial Analysis	3
COMP4810	Parallel Computation	3
COMP4220	Artificial Intelligence	3
COMP4340	Advanced Database Design and Programming	3

Five (5) additional credits in either Computer Science or a discipline approved by the chair of the Department of Mathematics and Computer Science.

Accelerated Master of Science

NNU, in collaboration with Boise State University (BSU), is working with its students to apply for an accelerated master's degree program at BSU. This accelerated program gives bachelor's degree students a "fast-track" option to pursue their master's degree in engineering or computer science. Upon a student's successful completion of this 4+1 model, the student will have earned a Bachelor of Science degree from NNU and a Master of Science degree from BSU.

Students who have been early admitted to the accelerated program *before* their senior year will be able to take two graduate courses during their senior year. These will apply to the BSU Master of Science degree as well as their NNU Bachelor of Science degree.

Please refer to the Graduate and Professional Studies Catalog for detailed course descriptions of the graduate level courses students participating in this program may enroll in: COMP5220, COMP5330, COMP5340, COMP5470, COMP5480, COMP5750, COMP5810.

Total Credits	**58-60**