

INFORMATION TECHNOLOGY BACHELOR OF SCIENCE

Leading to the Bachelor of Science Degree in Information Technology

Students pursuing a Bachelor of Science in Information Technology (BSIT) gain valuable skills in enterprise infrastructure, information management, system analysis and design, networks and security, network administration, web and mobile systems, software development and project management. Students also apply these skills directly in the field through two required co-op work semesters beginning in their junior year.

Program Educational Objectives

Within three to five years of graduation:

- Graduates are proficient in solving information technology problems in the workplace.
- Graduates pursue productive careers in information technology or a related computing field.
- Graduates are engaged in continuing professional development or professional societies in information technology or a related computing field.
- Graduates follow standards set forth by professional societies of which they are members.

Student Outcomes

Graduates of the program will have an ability to:

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Use systematic approaches to select, develop, apply, integrate and administer secure computing technologies to accomplish user goals.

Total credits for degree: 120

This four year program, starting in the fall semester of the student's first year and planned to end in the summer semester of the student's fourth year which includes 2 required semesters of Co-op course work for a total of 10 required semesters. The degree requirements for the Bachelors of Science in Information Technology (BSIT) include 36 credits in General Education coursework, 52 credits in Foundational coursework, and beginning in the fall semester of the junior year students must declare a concentration comprised of 32 credits in coursework in either Network Infrastructure (CNIN) or Information Technology Operations and Design (CITO).

Course	Title	Credits
Freshman Year		
Fall Semester		
COMP1010	FUNDAMENTALS OF IT	4
COMP1000	COMPUTER SCIENCE I	4
MATH1500	PRECALCULUS	4
English Sequence*		4
Credits		16
Spring Semester		
COMP1050	COMPUTER SCIENCE II	4
COMP1100	INTRODUCTION TO NETWORKS	4
MATH2300	DISCRETE MATHEMATICS	4
English Sequence*		4
Credits		16
Sophomore Year		
Fall Semester		
COMP2010	SYSTEM ANALYSIS & DESIGN	4
COMP2500	SECURITY PRINCIPLES	4
MATH1030	STATISTICS & APPLICATIONS	4
HSS Elective*		4
Credits		16
Spring Semester		
COMP2110	INFRASTRUCTURE DESIGN	4
COMP2160	WIRELESS NETWORKS	4
COMP2210	FUNDAMENTALS OF INFORMATION & DATA MANAGEMENT	4
Science Elective		4
Credits		16
Summer Semester		
COOP3000	PRE CO-OP WORK TERM (OPTIONAL)	0
Credits		0
Junior Year		
Fall Semester		
COMP3010	IT SOFTWARE DEVELOPMENT & MANAGEMENT	4
Concentration 1		4
Concentration 2		4
HSS Elective*		4
Credits		16
Spring Semester		
COOP3500	COOP EDUCATION 1	0
Credits		0
Summer Semester		
COMP4650	WEB DEVELOPMENT	4
Concentration 3		4
COMP IT Elective 1		4
GENERAL General Elective		4
Credits		16
Senior Year		
Fall Semester		
COOP4500	COOP EDUCATION 2	0
Credits		0

Course	Title	Credits
Spring Semester		
COMP4950	PROJECT MANAGEMENT	4
Concentration 4		4
HSS Elective*		4
Credits		12
Summer Semester		
COMP5500	SENIOR PROJECT	4
COMP IT Elective 2		4
Concentration 5		4
Credits		12
Total Credits		120

Course	Title	Credits
COMP IT Operations and Design Concentration Elective 1		4
COMP IT Operations and Design Concentration Elective 2		4
GENERAL General Elective IT Operations and Design 1		4
Total Credits		32

ENGL/HSS Note

Students are required to complete:

- At least one course in Humanities: CSAS, HSSI, HIST, HUMN, LITR and PHIL
- At least one course in the Social Sciences: CSAS, HSSI, COMM, ECON, ENVM, POLS, PSYC and SOCL
- The remaining course from either the Humanities or Social Sciences category.

Students with a three English course sequence may use the third English course to satisfy a Humanities requirement.

A minimum of 20 credits total, including English, humanities, and social science credit, is required to complete the humanities and social sciences graduation requirement.

Of the listed humanities and social science electives students must include the one Directed Elective:

- **An Ethics elective**

Math Placement (<https://catalog.wit.edu/academic-policies-procedures/ug/math-placement/>) may alter the course schedule above.

Concentration in Network Infrastructure (CNIN)

Course	Title	Credits
COMP2150	NETWORK ADMINISTRATION	4
COMP3100	SYSTEM ADMINISTRATION	4
COMP3500	NETWORK SECURITY	4
COMP3555	EDGE SECURITY	4
COMP4110	NETWORK DESIGN & MANAGEMENT	4
COMP Network Infrastructure Concentration Elective 1		4
COMP Network Infrastructure Concentration Elective 2		4
GENERAL General Elective Network Infrastructure Concentration		4
Total Credits		32

Concentration in IT Operations and Design (CITO)

Course	Title	Credits
COMP2150	NETWORK ADMINISTRATION	4
COMP3100	SYSTEM ADMINISTRATION	4
COMP3125	DATA SCIENCE FUNDAMENTALS	4
COMP3210	ADVANCED INFORMATION MANAGEMENT	4
COMP3660	MOBILE APP DEVELOPMENT	4