

Model Programs of Study Guide: Information Technology

Education Systems Center
NORTHERN ILLINOIS UNIVERSITY | ICCB

ORIENTATION / INTRODUCTION Grades 9-10

Computer Applications for Business

SKILL DEVELOPMENT Grades 10-12

Intro to Computer Info Systems
or
AP Computer Science Principles

Mobile Application / Web Development Course(s)

Hardware / Operating System Course(s) Aligned with IT Certification

CAPSTONE / ADVANCED Grades 12

Computer Science I
or
AP Computer Science A

Intro to Networking Aligned with IT Certification

POSTSECONDARY COURSES Recommended 1st Year

Computer Science I
Computer Science II
Intro to Web Development

Continue AS or AAS Course Sequence Aligned with IT Certification

CAREER FOCUSED COURSES

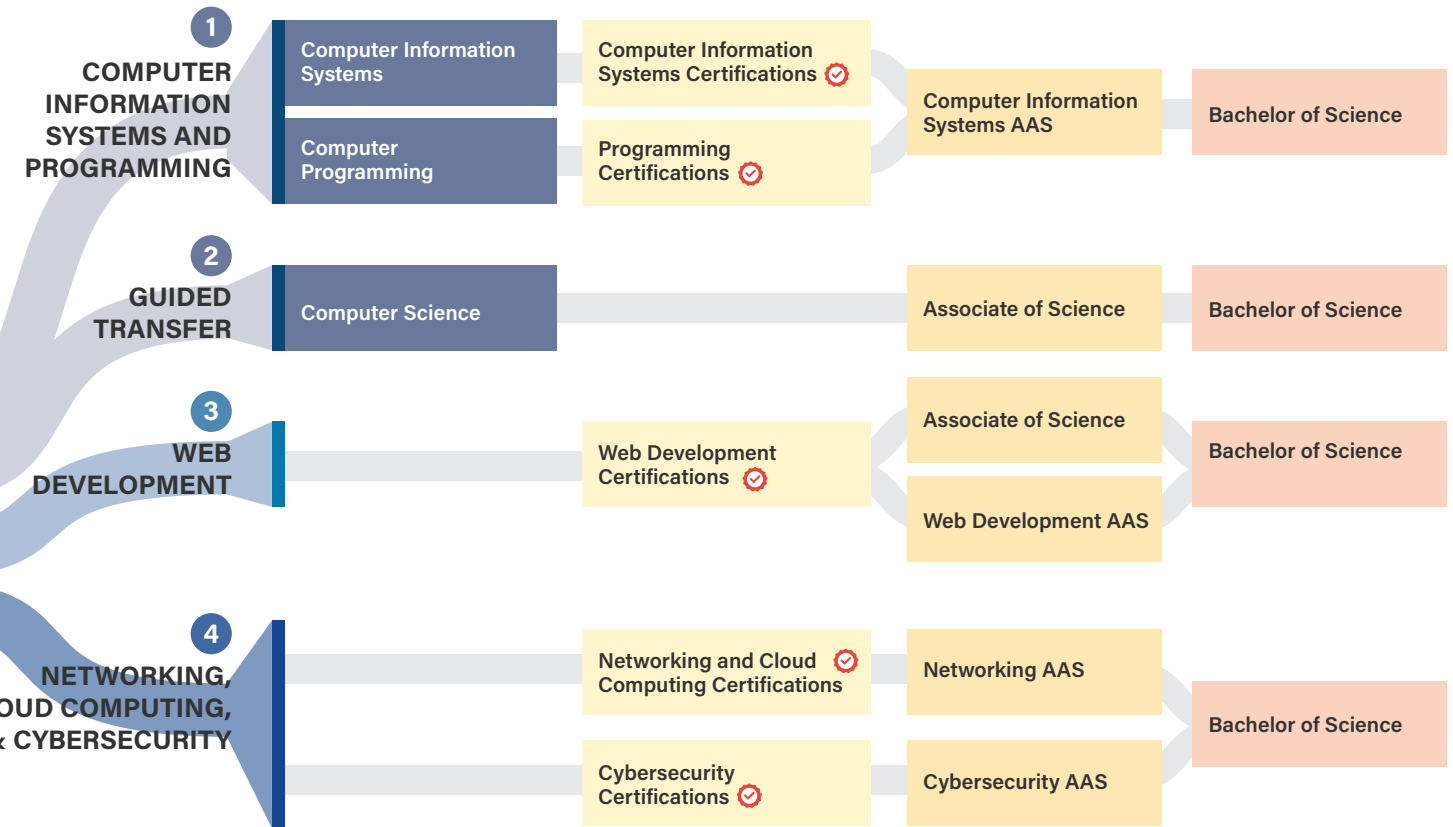
Information Technology

Programming

Networking

Courses and Work-Based Learning Address the PWR Act Recommended Technical and Essential Employability Competencies

POSTSECONDARY OPTIONS



SELECTED OCCUPATIONS, WAGES, & JOB GROWTH

Program	Typical Job	Near or Above Living Wage Threshold for 1 Adult + 1 Child ¹	Median Hourly Wage ²	Growth in Illinois: Annual Job Openings ²	Growth in Illinois: % Change Over 10 years ²	Stackable?
1. Computer Information Systems and Programming	Computer Systems Analysts	Y	\$41.67	2,230	9%	Typically Stacks to Bachelor's Program
	Computer User Support Specialists	Y	\$24.27	220	11%	
2. Computer Science	Computer and Information Systems Managers	Y	\$65.12	1,370	10%	
	Computer Hardware Engineers	Y	\$50.35	110	12%	
	Software Developers - Applications	Y	\$45.88	2,690	28%	
	Software Developers - Systems Software	Y	\$51.63	1,030	13%	
	Computer and Information Research Scientists	Y	\$55.43	90	21%	
3. Web Development	Web Developers	Y	\$33.85	515	15%	
4. Networking, Cloud Computing, and Cybersecurity	Computer Network Architects	Y	\$56.07	400	7%	
	Information Security Analysts	Y	\$46.13	430	23%	
	Network and Computer Systems Administrators	Y	\$39.87	970	5%	
	Computer Network Support Specialists	Y	\$29.80	840	8%	

1. Living wage calculations are based on MIT's Living Calculator (livingwage.mit.edu), where the "Living Wage" for 1 Adult + 1 Child is \$26.27/hour for the state of Illinois. "Near" defined as 85% of the statewide living wage, which is \$22.33/hour
 2. U.S. Department of Labor, CareerOnestop (careeronestop.org/explorecareers)

WORK-BASED LEARNING

Career Exploration (2)
Team-Based Challenge

Team-Based Challenge
Career Development Experience
or
Youth Apprenticeship

Team-Based Challenge
Career Development Experience
or
Apprenticeship

SCIENCE

Science Sequence

Science Sequence

Science

Science

SOCIAL SCIENCE

Social Science Sequence

Social Science Sequence

Social Science

Social Science

MATH

Algebra
Geometry

Geometry
Algebra 2
Pre-Calculus

Transitional Math: STEM
College Algebra
Pre-Calculus
Calculus
Statistics

College Algebra
Calculus
Statistics

ENGLISH

English Sequence

English Sequence

Transitional English
English Composition

English Composition
Oral Communication

AP or Dual Credit

Dual Credit Course

Dual Credit Course Affiliated With IAI Code

Course or Program Prepares for Industry Credential

Postsecondary Course Affiliated with IAI Code

College and Career Pathway Endorsement Earned

If courses in this column were accomplished through early college credit, students should take the next required course in the sequence or, if none, additional AAS or Major Courses