Model Programs of Study in Information Technology
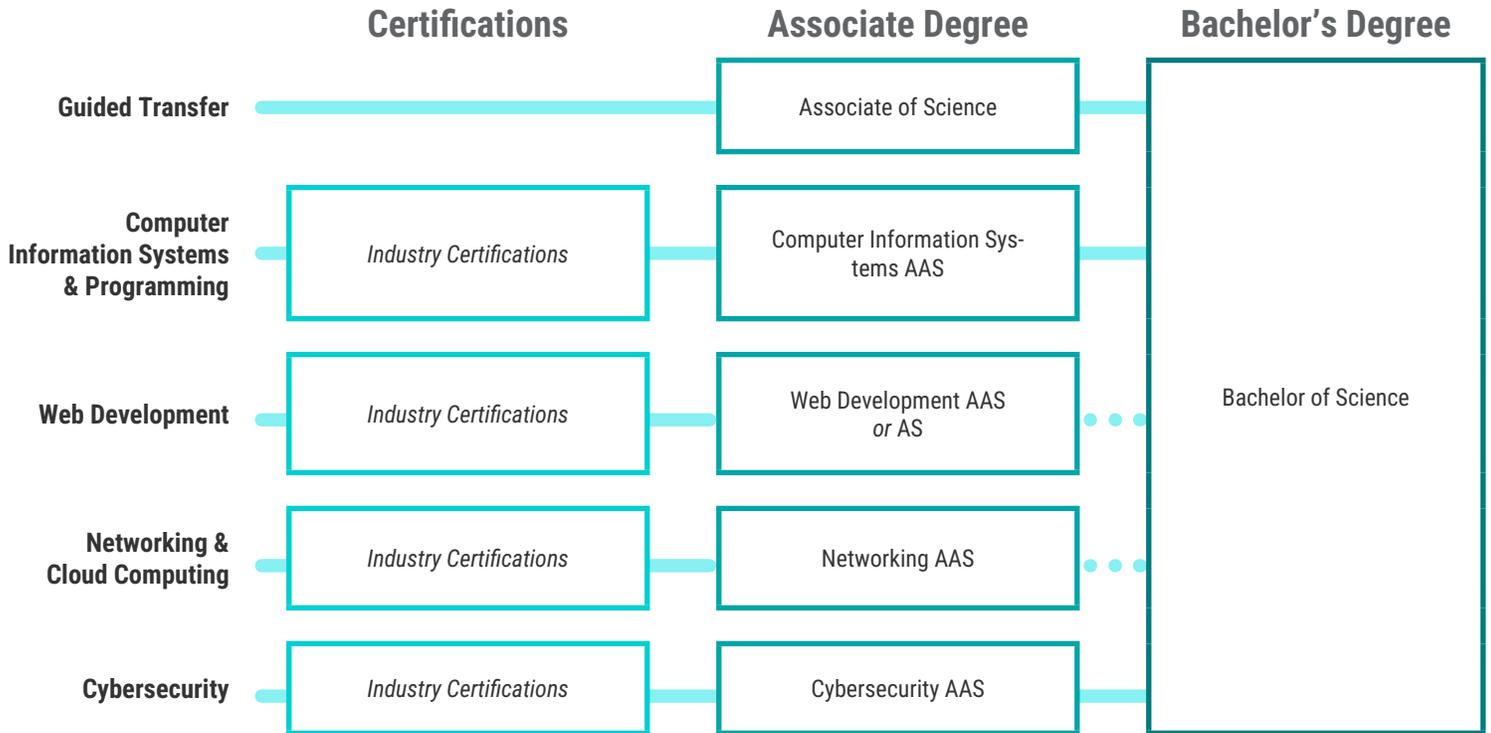
Recommended Courses

	GRADES 9–10 **Orientation**	GRADES 10–12 **Skill Development**	GRADE 12 **Capstone**	🏅 1ST YEAR* **Postsecondary**
Computer Information Systems, Programming, & Web Development	**Computer Applications for Business** 📇	*Mobile applications or web development courses* ✔ *Choose 1:* • **Introduction to Computer Information Systems** 📄 • **Computer Science Principles** 📄	*Choose 1:* • **Computer Science I** 📇 • **Computer Science A** 📄	**Computer Science I** 📇 **Computer Science II** 📇 **Intro to Web Development**
Networking		*Hardware or operating system courses* ✔ *Choose 1:* • **Introduction to Computer Information Systems** 📄 • **Computer Science Principles** 📄	**Intro to Networking** 📄 ✔	*Continue Course Sequence* ✔
Work-Based Learning	**Career Exploration (2)**	*Choose 1:* **Career Development Experience** *or* **Youth Apprenticeship**		
	Team-Based Challenge (2); *may be offered through* <u>Career and Technical Student Organizations</u>			
Math	*Math sequence: highest-level course possible*	*Math sequence: highest-level course possible*	*Choose 1:* • **College Algebra** 📇 • **Pre-Calculus** • **Transitional Math: STEM** • **Calculus** 📄 • **Statistics** 📄	*Choose 1:* • **Calculus*** 📇 • **Statistics*** 📇
English	*English sequence*	*English sequence*	*Choose 1:* • **Transitional English** • **English Composition** 📄	*Choose 1:* • **English Composition*** 📇 • **Oral Communication** 📇 • **Business Communications**
Science	*Science sequence*	*Science sequence*	*Science sequence*	*Science sequence*
Social Science	*Social science sequence*	*Social science sequence*	*Social science sequence* 📄	*Social science sequence* 📇

KEY:
📄 *AP or dual credit course*
📇 *Dual credit course with IAI*
📄 *Dual credit course*
📇 *Postsecondary course with IAI*
🏅 *College & Career Pathway Endorsement*
✔ *Course prepares for industry credential*
* *If credit was already earned through an early college course, take the next requirement in the sequence or, if none, additional AAS or major courses*

	Certifications	**Associate Degree**	**Bachelor's Degree**
Guided Transfer		Associate of Science	
Computer Information Systems & Programming	*Industry Certifications*	Computer Information Systems AAS	
Web Development	*Industry Certifications*	Web Development AAS *or* AS	Bachelor of Science
Networking & Cloud Computing	*Industry Certifications*	Networking AAS	
Cybersecurity	*Industry Certifications*	Cybersecurity AAS	

● ● ● *Bachelor's degree is not required for employability*

State of Illinois Model Programs of Study in Information Technology
Revised September 2024

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Selected Occupations, Wages, and Job Growth

Program	Typical Job(s)	Living Wage Potential*	Median Hourly Wage**	IL Growth: Change over 10 years ***	IL Annual Job Openings***	Typical Educational Requirements
Guided Transfer	Computer and Information Systems Managers	High	$78.01	8.0%	1,828	Bachelor's Degree
	Software Developers or Software Quality Assurance Analysts and Testers	High	$52.44	18.0%	6,256	
	Database Architects	High	$66.32	5.6%	526	
Computer Information Systems & Programming	Computer User Support Specialists	Medium	$27.93	4.1%	1,539	Some College
	Database Administrators	High	$49.18	5.6%	526	Bachelor's Degree
	Computer Systems Analysts	High	$49.45	4.2%	2,306	
Web Development	Web and Digital Interface Designers	Medium	$35.94	7.3%	548	Bachelor's Degree
Networking, Cloud Computing, & Cybersecurity	Computer Network Support Specialists	Medium	$33.95	3.4%	999	Associate Degree
	Network and Computer Systems Administrators	High	$42.72	3.1%	804	Bachelor's Degree
	Information Security Analysts	High	$54.18	25.3%	428	

* Living wage potential is based on MIT's Living Calculator (livingwage.mit.edu) for Illinois in 2024. Occupations with median salaries higher than the living wage for 1 adult + 1 child ($39.63/hour) are considered as having a "high" living wage potential. Occupations with median salaries only higher than the living wage of 1 adult, no children ($22.86/hour) are considered as having a "medium" living wage potential, and occupations with median salaries below the living wage of 1 adult, no children (less than $22.86/hour) are considered as having a "low" living wage potential.

** Illinois Department of Employment Security (2022). Wage Information: Occupational Employment and Wage Statistics (Statewide). Retrieved April 2, 2024, from ides.illinois.gov/resources/labor-market-information/oews.html

*** Illinois Department of Employment Security. Employment Projections (Long-Term Occupational Projections 2020-2030). Retrieved April 2, 2024, from ides.illinois.gov/resources/labor-market-information/employment-projections.html

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