



# Information Technology Career Pathway

## MadREP Region 2024-2026



**EXPLORE:** Click on the links to find the job titles that seem most interesting to you to learn more!  
Save any jobs you are interested in to your XELLO account so that you can create an Academic and Career Plan (ACP).

Educational Level <small>May also require work experience</small>	Information Systems	Data & Cybersecurity	Emerging Technology	Network & Systems Infrastructure	Software Development & Programming
<b>HS Diploma, Certification</b>	<ul style="list-style-type: none"> <li>• <a href="#">Data Entry Clerk</a> ○</li> <li>• <a href="#">PC Technician</a> ○</li> <li>• <a href="#">Quality Controller (Software)</a> * ○</li> <li>• <a href="#">Technical Writer</a> ○</li> <li>• <a href="#">Tech Support Technician</a> * ○</li> <li>• <a href="#">Web Designer</a> ○</li> </ul> <p style="text-align: center;">Range \$24,710-\$94,140</p>				
<b>Certification or Technical Diploma</b>	<ul style="list-style-type: none"> <li>• <a href="#">Database Entry Specialist</a></li> <li>• <a href="#">E-Commerce Manager</a></li> <li>• <a href="#">Quality Assurance Specialist</a></li> <li>• <a href="#">SEO Specialist</a></li> <li>• <a href="#">Tech Support Spec.</a> * ○</li> </ul> <p style="text-align: center;">Range \$24,710-\$107,560</p>	<ul style="list-style-type: none"> <li>• <a href="#">Computer Operator</a></li> <li>• <a href="#">Information Security Specialist</a> * ○</li> </ul> <p style="text-align: center;">Range \$28,710-\$121,890</p>	<ul style="list-style-type: none"> <li>• <a href="#">Mobile App Support</a></li> </ul> <p style="text-align: center;">Range \$41,350-\$72,440</p>	<ul style="list-style-type: none"> <li>• <a href="#">Cloud Engineer</a> *</li> <li>• <a href="#">Field Service Technician</a></li> <li>• <a href="#">Systems Analyst</a> *</li> <li>• <a href="#">System Engineer</a> *</li> <li>• <a href="#">Systems Tech</a></li> </ul> <p style="text-align: center;">Range \$45,020-\$108,620</p>	<ul style="list-style-type: none"> <li>• <a href="#">Junior Web Developer</a> * ○</li> <li>• <a href="#">Quality Assurance Specialist</a></li> <li>• <a href="#">User Interface/Experience (UI/UX) Developer</a> * ○</li> </ul> <p style="text-align: center;">Range \$41,320-\$98,510</p>
<b>Registered Apprenticeship</b>	<ul style="list-style-type: none"> <li>• <a href="#">IT Service Desk Technician</a></li> </ul> <p style="text-align: center;">Range \$41,350-\$72,440</p>	<ul style="list-style-type: none"> <li>• <a href="#">Cybersecurity Analyst</a> *</li> <li>• <a href="#">Data Analyst</a> *</li> </ul> <p style="text-align: center;">Range \$64,410-\$121,890</p>			<ul style="list-style-type: none"> <li>○ <a href="#">Software Developer</a> *</li> <li>• <a href="#">Back End Engineer</a> *</li> <li>• <a href="#">Front End Engineer</a> *</li> <li>• <a href="#">Full Stack Engineer</a> *</li> </ul> <p style="text-align: center;">Range \$69,970-\$118,470</p>
<b>Associate Degree</b>	<ul style="list-style-type: none"> <li>• <a href="#">Business Systems Analyst</a> * ○</li> <li>• <a href="#">Tech Program Manager</a></li> <li>• <a href="#">Tech Project/Product Coordinator</a></li> <li>• <a href="#">Technical Trainer</a></li> </ul> <p style="text-align: center;">Range \$46,250-\$108,620</p>	<ul style="list-style-type: none"> <li>• <a href="#">Information Security Analyst</a> *</li> <li>• <a href="#">Cryptographer/Block Chain Engineer</a></li> <li>• <a href="#">Database Developer</a> *</li> </ul> <p style="text-align: center;">Range \$50,850-\$137,330</p>	<ul style="list-style-type: none"> <li>• <a href="#">Video Game Designer</a> ○</li> <li>• <a href="#">Robotics Technician</a></li> <li>• <a href="#">Application Developer</a> ○</li> </ul> <p style="text-align: center;">Range \$42,980-\$118,470</p>	<ul style="list-style-type: none"> <li>• <a href="#">Cloud Administrator</a> *</li> <li>• <a href="#">Computer Network Specialist</a> * ○</li> <li>• <a href="#">Network Administrator</a> *</li> <li>• <a href="#">Software Quality Analyst</a></li> </ul> <p style="text-align: center;">Range \$50,850-\$105,520</p>	<ul style="list-style-type: none"> <li>• <a href="#">Augmented/Virtual Reality Developer</a></li> <li>• <a href="#">Dev Ops Engineer</a> ○</li> <li>• <a href="#">Programmer Analyst</a></li> <li>• <a href="#">SCRUM Master</a> *</li> <li>• <a href="#">Software Developer</a> *</li> </ul> <p style="text-align: center;">Range \$50,850-\$118,470</p>
<b>Bachelor Degree and beyond</b>	<ul style="list-style-type: none"> <li>• <a href="#">Business Intel. Analyst</a> *</li> <li>• <a href="#">IT Project/Product Mgr</a> ○</li> <li>• <a href="#">Tech Director</a></li> <li>• <a href="#">Computer &amp; Info Systems (Tech Support) Manager</a></li> <li>• <a href="#">UI/UX Manager</a> *</li> </ul> <p style="text-align: center;">Range \$38,410-\$167,780</p>	<ul style="list-style-type: none"> <li>• <a href="#">Chief Info Security Officer</a> *</li> <li>• <a href="#">Cyber Crime Investigator</a> *</li> <li>• <a href="#">Cybersecurity Engineer</a> *</li> <li>• <a href="#">Database Architect</a> *</li> <li>• <a href="#">Security Architect</a> *</li> </ul> <p style="text-align: center;">Range \$50,850-\$343,930</p>	<ul style="list-style-type: none"> <li>• <a href="#">Artificial Intelligence Programmer</a> *</li> <li>• <a href="#">Data Scientist</a> * ○</li> <li>• <a href="#">Robotics Engineer</a> ○</li> </ul> <p style="text-align: center;">Range \$66,010-\$118,470</p>	<ul style="list-style-type: none"> <li>• <a href="#">Cloud Architect</a> *</li> <li>• <a href="#">Data Warehouse Analyst</a> ○</li> <li>• <a href="#">Hardware Engineer</a> ○</li> <li>• <a href="#">Network Architect</a> *</li> <li>• <a href="#">System Architect</a> *</li> </ul> <p style="text-align: center;">Range \$50,850-\$107,560</p>	<ul style="list-style-type: none"> <li>• <a href="#">Computer Programmer</a> * ○</li> <li>• <a href="#">Computer Scientist</a> ○</li> <li>• <a href="#">Dev Ops Engineer</a> * ○</li> <li>• <a href="#">GIS Specialist</a> ○</li> <li>• <a href="#">Video Game Developer</a></li> <li>• <a href="#">Web Administrator</a> ○</li> </ul> <p style="text-align: center;">Range \$50,850-\$137,570</p>
<b>Postsecondary Options</b>	Click <a href="#">HERE</a> for Postsecondary Options				

\* **BRIGHT OUTLOOK** = these jobs are expected to grow in the future – which means more opportunities for you!

○ **XELLO** = you can learn more and save this job in your Xello account (note: some job titles might look a little different in Xello)

\$ Salary ranges based on average annual entry-level wages through average annual experienced-level wages for the job titles in each box.



# Information Technology Career Pathway In High School



A career pathway in high school must include:

- A sequence of courses (including at least 2 CTE courses)
- Two of the following components: *Career and Technical Student Organization, Work-based Learning, Industry Recognized Credential, College Credit Opportunity*

<b>Career &amp; Technical Education Courses</b>	Must include a sequence of at least TWO Career and Technical Education courses. Should align with the curriculum standards for the pathway: <ul style="list-style-type: none"> <li>• </li> <li>• </li> <li>• <a href="#">Destinations Career Academy virtual course options</a></li> </ul>	<b>Career Exploration Programs</b>  <b>State:</b> <ul style="list-style-type: none"> <li>• <a href="#">Badger Pre-College Online</a></li> <li>• <a href="#">Cyberg.org</a></li> <li>• Destination Imagination</li> <li>• First Wisconsin</li> <li>• GenCyber</li> <li>• UW-Green Bay--Video Game Programming Camps</li> <li>• <a href="#">UW-Madison Engineering Summer Program</a></li> <li>• <a href="#">UW Madison College of Engineering Outreach Programs</a></li> <li>• <a href="#">UW Madison IT Academy</a></li> <li>• <a href="#">UW Platteville Youth Programs</a></li> <li>• UW-Stevens Point--STEAM Campus</li> <li>• UW-Whitewater--Game Development Camps</li> <li>• More <a href="#">career exploration programs</a>.</li> </ul> <b>Regional:</b> <ul style="list-style-type: none"> <li>• Madison College Career Discovery Camps</li> <li>• <a href="#">Inspire Madison Region</a> (Profiles &amp; Career Dev. Activities)</li> <li>• Hour of Code</li> <li>• <a href="#">Future Quest</a></li> </ul> <b>Local:</b> <ul style="list-style-type: none"> <li>• Girls Go CyberStart</li> <li>• Girls Who Code</li> <li>• Made By Them (MAYDM)</li> <li>• MKE Esports</li> <li>• Vex Robotics</li> </ul>
<b>Additional Employer Recommended Courses</b>	Should align with the curriculum standards for the pathway: <ul style="list-style-type: none"> <li>• </li> </ul>	
<b>Career &amp; Technical Student Organization</b>	<ul style="list-style-type: none"> <li>• <a href="#">Future Business Leaders of America (FBLA) Student Organization</a></li> <li>• <a href="#">SkillsUSA</a></li> </ul>	
<b>Work-Based Learning Program Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">Employability Skills</a> (90 hours)</li> <li>• <a href="#">State Skill Standards Co-Op- Business/IT</a> (480 hours/1 year)</li> <li>• <a href="#">Youth Apprenticeship- IT</a> (450 hours/year; 1-2 years)</li> <li>• Local Work-based Learning Programs that meet <a href="#">state quality requirements</a></li> </ul>	
<b>College Credit Opportunities</b>	<ul style="list-style-type: none"> <li>• You can find the list of college credit opportunities included in the postsecondary options for this pathway <a href="#">HERE</a>.</li> </ul>	

<b>Industry Recognized Credential Options</b>  Learn the skills that employers want to see!  <small>*This certification is eligible for reimbursement to high school through the technical incentive grant</small>	<b>Information Systems</b>	<b>Data &amp; Cybersecurity</b>	<b>Emerging Technology</b>	<b>Network &amp; Systems Infrastructure</b>	<b>Software Development &amp; Programming</b>
	<a href="#">IC3</a> <a href="#">Microsoft MOS*</a> , <a href="#">MTA*</a> , <a href="#">MCSA</a> , <a href="#">MCSD</a> , <a href="#">MCSE</a> via <a href="#">Microsoft</a> or <a href="#">Certiport</a> <a href="#">Seal of Biliteracy (DPI)</a> <a href="#">Certificate of Global Competence (DPI)</a>				
	<a href="#">Apple Certified Support Professional (ACSP)</a>  <a href="#">Apple Certified Mac Technician (ACMT)</a>  <b>CompTIA</b> <ul style="list-style-type: none"> <li>• <a href="#">IT Fundamentals</a></li> <li>• <a href="#">A+*</a></li> <li>• <a href="#">SECURITY+</a></li> <li>• <a href="#">NETWORK+</a></li> <li>• <a href="#">PROJECT+</a></li> <li>• <a href="#">CLOUD ESSENTIALS</a></li> </ul> <a href="#">PMI Certified Associate in Project Management (CAPM)</a>	<b>Cisco</b> <ul style="list-style-type: none"> <li>• <a href="#">CCT</a></li> <li>• <a href="#">CCNA</a> – Any specialty*</li> </ul> <b>CompTIA</b> <ul style="list-style-type: none"> <li>• <a href="#">SECURITY+</a></li> <li>• <a href="#">NETWORK+</a></li> </ul> <a href="#">Palo Alto (PCCSA, PCNSA, PCNSE)</a>	<b>Oracle Certified Junior Associate or higher*</b> <ul style="list-style-type: none"> <li>• <a href="#">Java Foundations</a></li> <li>• <a href="#">Oracle Database Foundations</a></li> </ul>	<b>Cisco</b> <ul style="list-style-type: none"> <li>• <a href="#">CCNA</a> – Any specialty*</li> </ul> <b>LINUX- Essentials *</b>  <b>CompTIA</b> <ul style="list-style-type: none"> <li>• <a href="#">IT Fundamentals</a></li> <li>• <a href="#">A+*</a></li> <li>• <a href="#">SECURITY+</a></li> <li>• <a href="#">NETWORK+</a></li> <li>• <a href="#">PROJECT+</a></li> <li>• <a href="#">CLOUD ESSENTIALS+</a></li> </ul> <b>Certified Network Defense Architect (CDNA)</b>	<b>Certiport: <a href="#">Swift Cert. Level 1*</a></b>  <b><a href="#">Google Developer</a></b>  <b><a href="#">Adobe*</a></b>  <b><a href="#">Python</a></b>  <b><a href="#">C++</a></b>  <b><a href="#">Scrum</a></b>  <b><a href="#">CIW</a></b>

Add your district logo here!

# Information Technology Career Pathway at <Name of High School>



**Your Academic and Career Plan (ACP) for this career pathway starts here...**

Use this page to figure out which classes and activities you will take to prepare for this career pathway. Record your plan in XELLO.

<b>Career and Technical Education Courses</b>	<ul style="list-style-type: none"> <li>• CTE Course #1</li> <li>• CTE Course #2</li> <li>• CTE Course #3</li> </ul>				Start creating your professional network through <b>CAREER EXPLORATION PROGRAMS</b> . Record your experiences in XELLO.								
<b>Other Recommended Courses</b>	<ul style="list-style-type: none"> <li>• Course #1</li> <li>• Course #2</li> <li>• Course #3</li> </ul>				<u>State:</u> <ul style="list-style-type: none"> <li>• Program Name/link #1</li> <li>• Program Name/link #2</li> </ul>								
<b>Career and Technical Student Organization</b>	<ul style="list-style-type: none"> <li>• Name of CTSO</li> </ul>				<u>Regional:</u> <ul style="list-style-type: none"> <li>• Program Name/link #1</li> <li>• Program Name/link #2</li> </ul>								
<b>Work-Based Learning Options</b>	<ul style="list-style-type: none"> <li>• WBL Option #1</li> <li>• WBL Option #2</li> </ul>				<u>Local:</u> <ul style="list-style-type: none"> <li>• Program Name/link #1</li> <li>• Program Name/link #2</li> </ul>								
<b>Industry Recognized Credential Options</b>  <i>Italics = must be 18 years old to obtain</i>	Information Systems	Data and Cybersecurity	Emerging Technology	Network & Systems Infrastructure	Software Development & Programming								
	IRC Name/link #1 IRC Name/link #2												
	IRC Name/link #1 IRC Name/link #2	IRC Name/link #1 IRC Name/link #2	IRC Name/link #1 IRC Name/link #2	IRC Name/link #1 IRC Name/link #2	IRC Name/link #1 IRC Name/link #2								
<b>College Credit Opportunities and Post Secondary Options</b>  You can find the list of college credit opportunities for this pathway <a href="#">HERE</a>  You can find the postsecondary options for this pathway <a href="#">HERE</a> .	<b>College Courses Offered at Your High School</b>												
	<b>Transcripted Credit</b> <ul style="list-style-type: none"> <li>• Name of HS Course #1, IHE granting credit</li> <li>• Name of HS Course #2, IHE granting credit</li> </ul>		<b>AP and/or IB Courses</b> <table border="0"> <tr> <td>Name of AP/IB Course #1</td> <td>Name of AP/IB Course #2</td> </tr> <tr> <td>- Score, College, Course</td> <td>- Score, College, Course</td> </tr> <tr> <td>- Score, College, Course</td> <td>- Score, College, Course</td> </tr> <tr> <td>- Score, College, Course</td> <td>- Score, College, Course</td> </tr> </table>			Name of AP/IB Course #1	Name of AP/IB Course #2	- Score, College, Course	- Score, College, Course	- Score, College, Course	- Score, College, Course	- Score, College, Course	- Score, College, Course
	Name of AP/IB Course #1	Name of AP/IB Course #2											
	- Score, College, Course	- Score, College, Course											
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- Score, College, Course	- Score, College, Course												
<b>College Courses You Can Take at a College Campus</b> Application Deadlines: <table border="0"> <tr> <td>October 1st: Spring Courses</td> <td>February 1st: Summer Courses (ECCP only)</td> <td>March 1st: Fall Courses</td> </tr> </table>					October 1st: Spring Courses	February 1st: Summer Courses (ECCP only)	March 1st: Fall Courses						
October 1st: Spring Courses	February 1st: Summer Courses (ECCP only)	March 1st: Fall Courses											
<b>Start College Now</b> <ul style="list-style-type: none"> <li>• Name of College #1, College Course #1</li> <li>• Name of College #1, College Course #2</li> <li>• Name of College #2, College Course #1</li> <li>• Name of College #2, College Course #2</li> </ul>		<b>Early College Credit Program</b> <table border="0"> <tr> <td>- Name of College #1, College Course #1</td> <td>- Name of College #1, College Course #2</td> </tr> <tr> <td>- Name of College #2, College Course #1</td> <td>- Name of College #2, College Course #2</td> </tr> <tr> <td>- Name of College #3, College Course #1</td> <td>- Name of College #3, College Course #2</td> </tr> <tr> <td>- Name of College #4, College Course #1</td> <td>- Name of College #4, College Course #2</td> </tr> </table>			- Name of College #1, College Course #1	- Name of College #1, College Course #2	- Name of College #2, College Course #1	- Name of College #2, College Course #2	- Name of College #3, College Course #1	- Name of College #3, College Course #2	- Name of College #4, College Course #1	- Name of College #4, College Course #2	
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