



**MADISON**  
**AREA | TECHNICAL**  
**COLLEGE**

**INFORMATION  
TECHNOLOGY**

## Table of Contents

<b><i>How to Reach Us</i></b> .....	<b>3</b>
In Person .....	3
By Mail.....	3
Email.....	3
Web .....	3
Phone .....	3
<b><i>Associate Degree Programs</i></b> .....	<b>4</b>
IT – Cloud DevOps Specialist .....	4
IT – Cyber Compliance Specialist .....	6
IT – Cybersecurity Specialist .....	8
IT – Data and Analytics Specialist .....	10
IT – Front End Developer.....	12
IT – Network Systems Administration.....	14
IT – Web Software Developer.....	16
<b><i>Technical Diploma</i></b> .....	<b>18</b>
IT – Desktop Support Technician .....	18
<b><i>Career Pathway Certificate</i></b> .....	<b>19</b>
IT – Service Center Technician .....	19
<b><i>Certificates</i></b> .....	<b>20</b>
IT – Cisco Certified Networking Associate (CCNA) .....	20
IT-Intro to Software Development.....	20
IT – Java Professional Developer .....	20
IT – PHP Professional Web Developer.....	20
IT-Software Quality Fundamentals .....	20
<b><i>Scholarships and Financial Aid</i></b> .....	<b>21</b>
Financial Aid.....	21
Scholarships .....	21
Information Technology Specific Scholarships .....	21
<b><i>Student Organizations</i></b> .....	<b>21</b>
Wolfpack Techies.....	21
<b><i>Experience Madison College</i></b> .....	<b>21</b>
<b><i>Parking at Madison College</i></b> .....	<b>22</b>

# How to Reach Us

## In Person

Truax Main Campus  
Room D1676  
1701 Wright Street  
Madison, WI 53704

## By Mail

Madison College – IT Department  
1701 Wright Street  
Madison, WI 53704

## Email

[itdept@madisoncollege.edu](mailto:itdept@madisoncollege.edu)

## Web

<https://it.madisoncollege.edu/>

## Phone

608-246-6800 Ext. 8  
800-322-6282 Ext 6800  
Deaf/hh: use 711 (relay)

This brochure and more can be found on the Information Technology website:  
<https://it.madisoncollege.edu/>

# Associate Degree Programs

## IT – Cloud DevOps Specialist

As more people use cloud storage and computing, the need to provide customer service grows. Learn the fundamentals of managing these operating systems to help businesses and customers alike. We are the first two-year college in the Midwest to offer this program!

### Program Information

With an associate degree from Madison College in IT-Cloud DevOps, you will learn the fundamentals of architecture, deployment, management, and operations on leading cloud computing platforms.

Valuable skills sought by employers including cloud-based identity management, networking, infrastructure migration and management, application deployment and automation, as well as security and cost controls are at the core of this program. The IT-Cloud DevOps Specialist focuses on the Amazon AWS and Microsoft Azure cloud environments. The virtual computing capability and cloud services offered by these two industry leaders are revolutionizing the way business of all sizes approach their information technology needs.

### Students will Learn

Through classroom instruction, extensive hands-on labs, and group projects students will become proficient in computing infrastructure and applications in cloud-based systems. As part of this program, students will deploy and configure virtual machines, networks, VPN gateways, storage, and web applications as well as configure directory and identity management services. Auditing and security in cloud scenarios are explored in addition to fundamental cloud business practices. Use of scripting and templates to build repeatable, easily modified virtual infrastructure is emphasized throughout the course culminating with the capstone Cloud Automation/DevOps course.

### Typical Job Duties

Cloud DevOps Specialist graduates will support a wide range of services in both public cloud and on-premises infrastructure. With experience, graduates will be positioned for key roles within enterprises of all sizes managing cloud infrastructure. Typical job duties range from deployment and management of cloud-based infrastructure to meet business needs to working with application developers in migrating and managing critical business applications hosted by Amazon, Microsoft, and other cloud vendors. Cloud systems are quickly evolving, require continuing education to stay proficient and are at the forefront of modern information technology systems.

### Career Outcomes

- Cloud System Administrator
- Cloud Support Associate
- Cloud Support Engineer

### Recent Employers

- American Family Insurance, CUNA, Blain's Farm & Fleet, Cascade Asset Management, TDS, York Solutions, Zendesk

### More Information

<https://madisoncollege.edu/academics/programs/cloud-support-associate>

### Special Note

Courses core to the IT-Cloud DevOps Specialist program will only be offered during the daytime for Students accepted in the spring term.

Recommended Two-Year Course Progression for IT – Cloud DevOps Specialist

61 credits

Semester 1 15 credits	Semester 2 15 credits	Semester 3 16 credits	Semester 4 15 credits
Data Communications 10150104 (3 credits)	Intro to Cloud Computing 10157101 (3 credits)	AWS Administration <sup>f</sup> 10157141 (3 credits)	Azure Administration <sup>s</sup> 10157130 (3 credits)
Enterprise Client 10154184 (3 credits)	Windows Server 1 10154171 (3 credits)	Virtualization Technology 10157135 (3 credits)	
Linux Server 1 10154190 (3 credits)	Python Scripting 10152109 (3 credits)	Advanced Scripting for Cloud <sup>f</sup> 10157123 (3 credits)	DevOps <sup>s</sup> 10157155 (3 credits)
IT Sec Awareness-10151102 (1cr)	Introduction to Databases 10156124 (3 credits)	Job Search Prep-10107175 (1cr)	Cloud Internship 10157196 (3 credit)
AI Fundamentals-10156105 (1cr)		Psychology of Human Relations <sup>2</sup> 10809199 (3 credits)	Elective (3 Credits)
Exploration of IT-10107111 (1cr)			
Written Communication <sup>2</sup> 10801195 (3 credits)	Oral/Interpersonal Comm <sup>2</sup> 10801196 (3 credits)	Math of Finance <sup>2</sup> 10804144 (3 credits)	Contemporary Amer Society <sup>2</sup> 10809197 (3 credits)

<sup>f</sup>Fall Only <sup>s</sup>Spring Only  
<sup>2</sup>See your advisor for alternate general education courses that transfer

Color Codes for Course Types

Cloud/Virtualization	Automation	Infrastructure
Career Preparation	General Education	

Recommended Electives (3 credits total)

10151114	Linux Server 2	3
10151118	Infrastructure Automation <sup>f</sup>	3
10152120	Website Development	3
10152131	Agile Practices	3

Graduate Summary

Graduate Employment Report: IT – Cloud DevOps Specialist			
	2021	2022	2023
Number of Program Graduates	2	9	9
Number Surveys Returned	2	9	9
Graduates Employed	2	7	7
Related Occupation	1	5	5
Unrelated Occupation	1	2	2

Salary Trend: IT – Cloud DevOps Specialist				
	2021	2022	2023	
Full Time Employment	Full Time Salary Count	1	5	4
	Average Monthly Wage	\$6,039	\$6,527	\$6,311
	Average Hourly Wage	\$35.11	\$37.95	\$36.69
	Average Work Hours per Week	43.0	41.0	40.0



## IT – Cyber Compliance Specialist

A Cyber Compliance Specialist plays a critical role in ensuring that an organization's systems, processes, and practices meet established cybersecurity and regulatory standards. Their responsibilities typically include a mix of compliance, auditing, risk management, and security strategy.

### Program Information

The IT-Cyber Compliance Specialist degree program from Madison College is designed to meet the growing demand for skilled professionals in resolving various compliance challenges within cybersecurity. Through a blend of foundational analysis and hands-on experience, students acquire the knowledge required to safeguard organizational assets and navigate the evolving landscape of cybersecurity compliance, policies, and standards.

This program is tailored to students seeking to deepen their understanding of security governance, regulatory compliance, and policy-related aspects of cybersecurity. Graduates of the program will be well-prepared for jobs in cyber governance, risk, and regulatory compliance in both public and private organizations across multiple industries.

### Students Will Learn

#### Through classroom instruction

#### Typical Job Duties

- Compliance Management - Ensure the organization complies with applicable cybersecurity frameworks, laws, and regulations (e.g., GDPR, HIPAA, PCI-DSS, NIST, CMMC, ISO 27001). Monitor updates to cybersecurity laws, industry standards, and best practices. Develop and maintain compliance policies, procedures, and documentation.
- Risk Assessment and Management - Conduct risk assessments to identify vulnerabilities in systems, networks, and processes. Collaborate with IT and security teams to implement risk mitigation strategies. Maintain and update risk registers to track and address compliance gaps.
- Security Auditing and Monitoring - Perform internal and external compliance audits to verify adherence to standards. Assist in preparing for third-party audits and certification processes. Monitor security controls and practices to ensure ongoing compliance.
- Reporting and Documentation - Prepare detailed compliance reports for leadership, regulatory bodies, and auditors. Maintain documentation of security policies, processes, training materials, and audit results. Track remediation efforts and progress on resolving compliance issues.
- Training and Awareness - Conduct training programs to educate employees on compliance requirements and cybersecurity practices. Foster a culture of security awareness throughout the organization.
- Collaboration and Communication - Work closely with IT, legal, and business teams to integrate compliance requirements into operational processes. Liaison with regulatory agencies, auditors, and third-party vendors on compliance matters.
- Incident Response Support - Assist in responding to cybersecurity incidents to ensure compliance with legal and regulatory reporting requirements. Participate in post-incident reviews to identify compliance-related improvements.

### Career Outcomes

- Risk & Compliance Specialist
- Risk Advisory Consultant
- Cybersecurity Governance Analyst
- Cybersecurity Analyst – Product Compliance
- Risk Compliance Manager

#### More Information

<https://madisoncollege.edu/academics/programs/cyber-compliance-specialist>

### Special Note

In response to this demand from businesses in the Madison College district, the new IT-Cyber Compliance Specialist program will offer students a unique opportunity for in-depth training in cybersecurity governance, compliance, and risk assessment skills. This includes a study of cybersecurity policy, frameworks, and creation of procedures.

Courses core to the IT-Cybersecurity Specialist Associate program will only be offered during the daytime for Students accepted in the spring term.

Recommended Two-Year Course Progression for IT – Cyber Compliance Specialist

61 credits

Semester 1 15 credits	Semester 2 15 credits	Semester 3 16 credits	Semester 4 15 credits
Cybersecurity Compliance Fundamentals <sup>f</sup> 10151107 (3 credit)	Data Privacy <sup>s</sup> 10151113 (3 credit)	Cybersecurity Standards and Frameworks <sup>f</sup> 10151132 (3 credits)	Cybersecurity Policy <sup>s</sup> 10151146 (3 credits)
IT Sec Awareness-10151102 (1cr)	Linux Server 1 10154190 (3 credit)	Linux Server 2 10151114 (3 credits)	
Enterprise Client 10154184 (3 credits)	Windows Server 1 10154171 (3 credits)	Python Scripting 10152109 (3 credits)	Intro to Cloud Computing 10157101 (3 credits)
Data Communications 10150104 (3 credits)		Elective (3 Credits)	Elective (3 Credits)
AI Fundamentals-10156105 (1cr)	Intro to Ethics <sup>2</sup> 10809166 (3 credits)		Cybersecurity Internship 10151197 (3 credit)
Exploration of IT-10107111 (1cr)		Job Search Prep-10107175 (1cr)	
Written Communication <sup>2</sup> 10801195 (3 credits)	Oral/Interpersonal Comm <sup>2</sup> 10801196 (3 credits)	Math of Finance <sup>2</sup> 10804144 (3 credits)	Psychology of Human Relations <sup>2</sup> 10809199 (3 credits)

<sup>f</sup> Fall Only   <sup>s</sup> Spring Only  
<sup>2</sup> See your advisor for alternate general education courses that transfer

Recommended Electives (6 credits total)		
10151137	Incident Response	3
10151164	Penetration Testing	3
10154136	Technology Implementation	3

Color Codes for Course Types

Compliance	Administration	Security/Other
Career Preparation	General Education	

Graduate Summary

Below is a chart that shows the expected change in the selected job numbers from 2024-2029.

Region	2024 Jobs	2029 Jobs	Change	% Change
● Madison College District	538	611	73	13.6%
● National Average	756	867	112	14.8%

## IT – Cybersecurity Specialist

Wage the war against modern cyber adversaries by mastering the tools and techniques needed to analyze, investigate, protect, and defend your organization's valuable data assets.

### Program Information

With an associate degree from Madison College in IT-Cybersecurity you will be provided with comprehensive instruction and the hands-on experience you need to meet the challenges facing professionals responsible for defending on premise and cloud-based assets.

Valuable skills sought by employers include security vulnerability scanning, scripting, penetration testing, web application vulnerability testing, security log data collection and analysis, team collaboration, and cybersecurity oriented critical thinking.

### Students Will Learn

Through classroom instruction, extensive hands-on labs, and group projects students will become proficient in countering the threats, challenges and risks faced in protecting and defending the assets of a modern enterprise network. As part of this program students are exposed to real world scenarios reflecting everyday issues associated with the offensive and defensive aspects of cybersecurity. Extensive hands-on labs build practical experience using the most up to date open-source tools and threat modeling frameworks in the areas of penetration testing, vulnerability analysis, Incident response, and threat hunting all while studying the tactics and techniques used by real world adversaries.

### Typical Job Duties

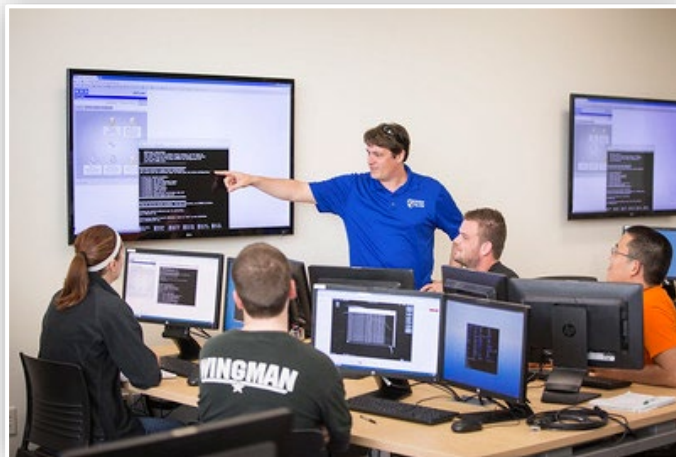
- Participating as a team member on the security operation center to detect real time attacks on an organization.
- Take part in a rapid incident response team to quickly thwart information security attacks against the organization.
- Performing vulnerability assessments to prevent exploitation and ensure proper adherence to compliance requirements.
- Analyzing emerging threats and advising management on ways to mitigate those threats and gain detection visibility.
- Developing and disseminating information security awareness presentations throughout the organization.

### Career Outcomes

- Cybersecurity Defense Analyst
- Cybersecurity Defense Infrastructure Support Specialist
- Incident Responder
- Vulnerability Assessment Analyst
- Cyber Defense Forensics Analyst
- Threat/Warning Analyst
- Exploitation Analyst

### Recent Employers

- Charter Communications
- Clifton Larson Allen
- Dept of Employee Trust Funds
- Payment Service Network
- Rhodes Bake-N-Serv
- Silgan Containers
- Summit Credit Union
- TDS
- UW Credit Union
- Vogel Bros
- WiscNet



### More Information

<https://madisoncollege.edu/academics/programs/cybersecurity-specialist>

### Special Note

Courses core to the IT-Cybersecurity Specialist Associate program will only be offered during the daytime for Students accepted in the spring term.



Recommended Two-Year Course Progression for IT – Cybersecurity Specialist

64 credits

Semester 1 18 credits	Semester 2 15 credits	Semester 3 16 credits	Semester 4 15 credits
Linux Server 1 10154190 (3 credit)	Linux Server 2 10151114 (3 credits)	Incident Response 10151137 (3 credits)	Ntwrk Forensics & Threat Hunt 10151133 (3 credits)
IT Sec Awareness-10151102 (1cr)	Perimeter Security 10151106 (3 credits)	Penetration Testing 10151164 (3 credits)	Web Application Security 10151142 (3 credits)
Enterprise Client 10154184 (3 credits)	Windows Server 1 10154171 (3 credits)	Virtualization Technology 10157135 (3 credits)	Security Design 10151168 (3 credit)
Data Communications 10150104 (3 credits)	Python Scripting 10152109 (3 credits)	Intro to Cloud Computing 10157101 (3 credits)	
AI Fundamentals-10156105 (1cr)			Cybersecurity Internship 10151197 (3 credit)
Exploration of IT-10107111 (1cr)		Job Search Prep-10107175 (1cr)	
Written Communication <sup>2</sup> 10801195 (3 credits)	Oral/Interpersonal Comm <sup>2</sup> 10801196 (3 credits)	Math of Finance <sup>2</sup> 10804144 (3 credits)	Contemporary Amer Society <sup>2</sup> 10809197 (3 credits)
Psychology of Human Relations <sup>2</sup> 10809199 (3 credits)	<sup>f</sup> Fall Only <sup>s</sup> Spring Only <sup>2</sup> See your advisor for alternate general education courses that transfer		

Color Codes for Course Types

Security	Administration	Other
Career Preparation	General Education	

Graduate Summary

Graduate Employment Report: IT – Cybersecurity Specialist			
	2021	2022	2023
Number of Program Graduates	21	25	17
Number Surveys Returned	17	22	10
Graduates Employed	17	18	5
Related Occupation	16	16	4
Unrelated Occupation	1	2	1

Salary Trend: IT – Cybersecurity Specialist				
	2021	2022	2023	
Full Time Employment	Full Time Salary Count	16	16	4
	Average Monthly Wage	\$4,735	\$4,938	\$4,473
	Average Hourly Wage	\$27.53	\$28.71	\$26.01
	Average Work Hours per Week	40.6	40.8	40.3

## IT – Data and Analytics Specialist

With an associate degree from Madison College in IT-Data & Analytics Specialist, you will have practical, applicable skills in data engineering and analytics to secure employment in this rapidly growing specialty and thrive in most technical workplaces.

### Program Information

Valuable skills sought by employers include Python programming, relational database technologies/programming and data-related cloud expertise. Training blends general educational development and required IT technical skills. Graduates are prepared for data-centric jobs in information technology, government, insurance, medicine, marketing, manufacturing, service, software development, wholesale and retail sales, utilities, banking, and academics.

### Typical Job Duties

Graduates of the IT-Data & Analytics Specialist are prepared to:

- Prepare data for more extensive analysis through data engineering (ETL) by writing moderately complex Python scripts.
- Discover and quantify trends in data by using industry-standard tools or writing moderately complex Python scripts.
- Solve common analytics tasks through machine learning.
- Recommend basic business solutions through a complete understanding of the data analytics life cycle.
- Communicate status and findings through professional charts and dashboards.
- Manage and store data based on usage (e.g., data lakes, relational, warehouse), both in the cloud and on-prem.
- Migrate data between data stores using Python scripts and industry-standard tools, both in the cloud and on-prem.

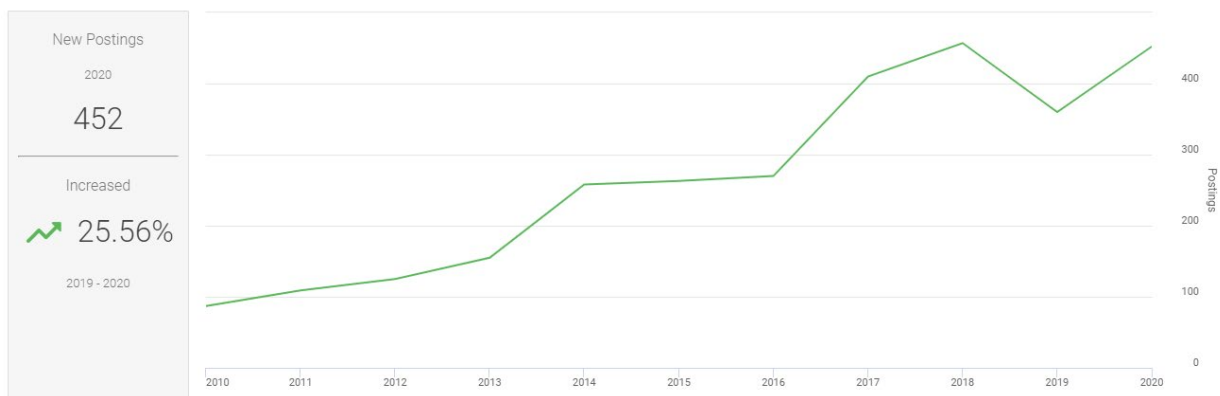
### Career Outcomes

- Data Analyst
- Data Wrangler

### More Information

<https://madisoncollege.edu/academics/programs/data-analytics-specialist>

Based on reports from Burning Glass, the number of jobs in the Madison College district requesting the types of data analytics skills that will be taught in the IT Data and Analytics Associate Degree program. Jobs have been growing since 2010, and even more significantly since 2016.



Recommended Two-Year Course Progression for IT – Data and Analytics Specialist

61 credits

Semester 1 15 credits	Semester 2 15 credits	Semester 3 16 credits	Semester 4 15 credits
Business Spreadsheet Apps 10106109 (3 cr)	Data Visualization <sup>s</sup> 10156133 (3 credits)	Machine Learning <sup>f</sup> 10156144 (3 credits)	Applied Analytics in the Cloud <sup>s</sup> 10156145 (3 credits)
Introduction to Databases 10156124 (3 credits)	SQL Database Programming 10156125 (3 credits)	Applied SQL <sup>f</sup> 10156126 (3 credits)	
Python for Developers <sup>f</sup> 10152211 (3 credits)	Cloud for Developers 10152110 (3 credits)	Elective (3 Credits)	Agile Practices 10152131 (3 credits)
Exploration of IT-10107111 (1cr)	Data Engineering <sup>s</sup> 10156135 (3 credits)		Data Analytics Internship <sup>s</sup> 10156196 (3 credits)
IT Sec Awareness-10151102 (1cr)		Job Search Prep-10107175 (1cr)	
AI Fundamentals-10156105 (1cr)		Oral/Interpersonal Comm <sup>2</sup> 10801196 (3 credits)	Elective (3 credits)
Math of Finance <sup>2</sup> 10804144 (3 credits)	Written Communications <sup>2</sup> 10801195 (3 credits)	Contemporary Amer Society <sup>2</sup> 10809197 (3 credits)	Psychology of Human Relations <sup>2</sup> 10809199 (3 credits)

<sup>f</sup> Fall Only   <sup>s</sup> Spring Only  
<sup>2</sup> See your advisor for alternate general education courses that transfer

Color Codes for Course Types

Data	Analytics	Development/Other
Career Preparation	General Education	

Recommended Electives (6 credits total)		
10152120	Website Development	3
10152168	Advanced JavaScript	3
10152200	Foundations of Software Quality	3
10102104	Business Statistics	3

Below is a chart that shows the expected change in the selected job numbers from 2020-2025.

Region	2020 Jobs	2025 Jobs	Change	% Change
● United States	585,163	620,976	35,813	6%
● Madison College District	1,857	1,989	132	7%

## IT – Front End Developer

### Program Information

The Front-End Developer associate degree program prepares students for employment as an entry level software developer typically advertised/recruited as Front-End Engineer, JavaScript Developer, Full-Stack Web Developer. Students learn fundamental web development technologies such as HTML, CSS, and JavaScript. In contrast to our Web Developer associate degree program the front-end developer curriculum focuses on JavaScript and its vast ecosystem rather than Java, PHP, and/or C#.

### Students Will Learn

Students in this program learn to build Single Page Applications (SPAs) with JavaScript and popular frameworks and libraries such as Angular, React, and others. Various Cloud and ‘Serverless’ offerings are also introduced to provide students with valuable experience in modern JavaScript software development.

### Typical Job Duties

- Write front-end web applications using modern JavaScript frameworks.
- Code using current JavaScript.
- Write front-end applications to access “serverless” cloud-based services and endpoints.
- Write SQL statements to retrieve/manipulate data and manipulate relation database structures.
- Apply UI/UX design principles to perform analysis to and build user-centric applications.
- Demonstrate an understanding of the ever-changing IT field and its job roles with emphasis on IT security as it applies to development.
- Work as an ethical and reliable team member using software collaboration tools.

### Careers

- Front End Developer
- CSS/HTML Developer
- Web Software Developer
- Front End Accessibility
- Front End DevOps
- Front End Engineer
- Front End Architect

### Recent Employers

- Dept of Revenue
- Stark Company Realtors
- TDS
- Zendesk



### More Information

<https://madisoncollege.edu/academics/programs/front-end-developer>

### Special Note

The core classes unique to the IT-Front End Developer program are offered only during the day. Courses core to the IT-Front End Developer program will only be offered during the daytime for students accepted in the spring term.

## Recommended Two-Year Course Progression for IT – Front End Developer

61 credits

Semester 1 15 credits	Semester 2 15 credits	Semester 3 16 credits	Semester 4 15 credits
Intro to Prog with JavaScript 10152119 (3 credits)	Cloud for Developers 10152110 (3 credits)	JS Frameworks <sup>f</sup> 10152158 (3 credits)	Adv Front End Development <sup>s</sup> 10152182 (3 credits)
Introduction to Databases 10156124 (3 credits)	UI/UX and Web Accessibility 10152130 (3 credits)	Agile Practices 10152131 (3 credits)	Serverless Cloud with React <sup>s</sup> 10152108 (3 credits)
Website Development 10152120 (3 credits)	Advanced CSS 10152121 (3 credits)	Elective (3 Credits)	Elective (3 Credits)
IT Sec Awareness-10151102 (1cr)	Advanced JavaScript 10152168 (3 credits)	Job Search Prep-10107175 (1cr)	Front End Dev Internship 10152114 (3 credits)
Exploration of IT-10107111 (1cr)			
AI Fundamentals-10156105 (1cr)		Math of Finance <sup>2</sup> 10804144 (3 credits)	
Written Communication <sup>2</sup> 10801195 (3 credits)	Oral/Interpersonal Comm <sup>2</sup> 10801196 (3 credits)	Contemporary Amer Society <sup>2</sup> 10809197 (3 credits)	Psychology of Human Relations <sup>2</sup> 10809199 (3 credits)

<sup>f</sup> Fall Only <sup>s</sup> Spring Only<sup>2</sup> See your advisor for alternate general education courses that transfer

## Color Codes for Course Types

Front End Dev	Website Dev	Other
Career Preparation	General Education	

## Recommended Electives (6 credits total)

10152130	C# Web Dev Using ASP .NET <sup>s</sup>	3
10152166	PHP Web Dev with MySQL	3
10156125	SQL Database Programming	3
10152200	Foundations of Software Quality	3

## Graduate Summary

## Graduate Employment Report: IT Front-End Developer

	2021	2022	2023
Number of Program Graduates	5	14	12
Number Surveys Returned	3	9	10
Graduates Employed	2	6	6
Related Occupation	0	4	2
Unrelated Occupation	2	2	4

## Salary Trend: IT Front-End Developer

	2021	2022	2023	
Full Time Employment	Full Time Salary Count	2	6	6
	Average Monthly Wage	\$3,333	\$5,009	\$3,302
	Average Hourly Wage	\$19.23	\$29.12	\$19.20
	Average Work Hours per Week	40	40	43

## IT – Network Systems Administration

With competitive salaries and job opportunities exceeding most IT positions across the state and nationally, Networking Systems Administration remains a high-demand field. Representing the 4th largest IT sector in the state (U.S. Census Job Code: 15-1244 – Network & Computer Systems Administrators), this area of expertise offers significant growth potential and opportunity. Additionally, the program includes an embedded 1-year certificate in Computer User Support Specialist (IT Desktop Support Technician), the 2nd largest IT field (U.S. Census Job Code: 15-1232).

For a state-specific breakdown of these job categories, refer to the Bureau of Labor Statistics data: [https://www.bls.gov/oes/current/oes\\_WI.htm#15-0000](https://www.bls.gov/oes/current/oes_WI.htm#15-0000)

### Program Information

The IT-Network Systems Administration Program from at Madison College provides students with a strong foundation in a variety of computer systems, as well as substantial skills in virtualization, cloud computing and Cisco networking. Students get experience installing, configuring, and managing servers in a virtualized environment. They will promote servers to be domain controllers, create and manage resources in Active Directory, use Group Policy, and configure DNS and DHCP. Students will learn to write scripts, as well as manage and automate on-premises and cloud-based infrastructure.

### Students Will Learn

- Manage and support client operating systems.
- Manage and support server operating systems.
- Manage and support virtualization technologies.
- Design, implement, and support computer networks.
- Design, implement, and support services in a cloud environment.
- Develop scripts for IT automation.
- Develop technical documentation for management and colleagues.
- Manage IT hardware and software.
- Solve problems individually and in a team environment.
- Troubleshoot all aspects of corporate IT infrastructure systems.

### Typical Job Duties

Network Specialists will be involved in all facets of network management and operation. Typical duties include:

- Evaluation and design of products/technologies to scale the network.
- Capacity management
- Creation of software programs or scripts that aid in network automation, analysis and troubleshooting utilities.
- Securing the enterprise from the Internet
- User administration and event log monitoring



### Career Outcomes

- Systems Administration
- Network Administration
- Technical Support Services
- Data Center Management
- Virtualization Administration

### Certifications

The program prepares students for the following certification:

- Cisco Certified Networking Associate (CCNA)

### More Information

<https://madisoncollege.edu/academics/programs/network-administration-specialist>

### Special Note

Courses core to the IT-Network Systems Administration Associate program will only be offered during the daytime for Students accepted in the spring.

Recommended Two-Year Course Progression for IT - Network Systems Administration

61 credits

Semester 1 15 credits	Semester 2 15 credits	Semester 3 16 credits	Semester 4 15 credits
Enterprise Client 10154184 (3 credits)	Windows Server 1 10154171 (3 credits)	Infrastructure Automation 10154118 (3 credits)	
	Linux Server 1 10154190 (3 credits)	Technology Implementation 10154136 (3 credits)	Elective (3 Credits)
Intro to Cisco Networking 10150121 (3 credits)	Cisco Networking 2 10150122 (3 credits)	Cisco Networking 3 10150123 (3 credits)	Adv Technology Implementation 10150148 (3 credits)
AI Fundamentals-10156105 (1cr)	Intro to Cloud Computing 10157101 (3 credits)	Python Scripting 10152109 (3 credits)	Virtualization Technology 10157135 (3 credits)
IT Sec Awareness-10151102 (1cr)			
Exploration of IT-10107111 (1cr)		Job Search Prep-10107175 (1cr)	Networking/Sys Admin Internship 10150192 (3 credit)
Written Communication <sup>2</sup> 10801195 (3 credits)	Oral/Interpersonal Comm <sup>2</sup> 10801196 (3 credits)	Math of Finance <sup>2</sup> 10804144 (3 credits)	Contemporary Amer Society <sup>2</sup> 10809197 (3 credits)
Psychology of Human Relations <sup>2</sup> 10809199 (3 credits)	<sup>f</sup> Fall Only <sup>s</sup> Spring Only <sup>2</sup> See your advisor for alternate general education courses that transfer		

Recommended Electives (3 credits total)		
10151114	Linux Server 2	3
10157130	Azure Administration <sup>f</sup>	3
10157141	AWS Administration <sup>s</sup>	3

Color Codes for Course Types

Systems Admin	Network	Infrastructure
Career Preparation	General Education	

Graduate Summary

Graduate Employment Report: IT Network			
	2021	2022	2023
Number of Program Graduates	22	17	16
Number Surveys Returned	16	13	14
Graduates Employed	15	11	12
Related Occupation	15	10	9
Unrelated Occupation	0	1	3

Salary Trend: IT Network				
	2021	2022	2023	
Full Time Employment	Full Time Salary Count	13	10	8
	Average Monthly Wage	\$4,049	\$5,080	\$5,264
	Average Hourly Wage	\$23.54	\$29.53	\$30.60
	Average Work Hours per Week	40.4	40.9	41.3

## IT – Web Software Developer

Most businesses and freelance professionals rely on having a good website. You will learn the fundamentals of designing interactive, secure websites and professional communication skills.

### Program Information

The Web Software Developer program meets the specific skills and knowledge requirements of technical and professional jobs within the IT field for an entry-level web software developer. It is designed to meet entry-level educational needs of most segments of the IT field, which utilize a variety of computers. Training blends general educational development and required IT technical skills. Graduates are prepared for entry-level web developer jobs in government, insurance, manufacturing, service, software development, wholesale and retail sales, utilities, banking, and accounting.

### Students Will Learn

Students learn required core IT technical skills in areas such as SQL, XML, XHTML, JavaScript, ES6 technology, UI/UX, Accessibility Best Practices and object-oriented systems design.

### Typical Job Duties

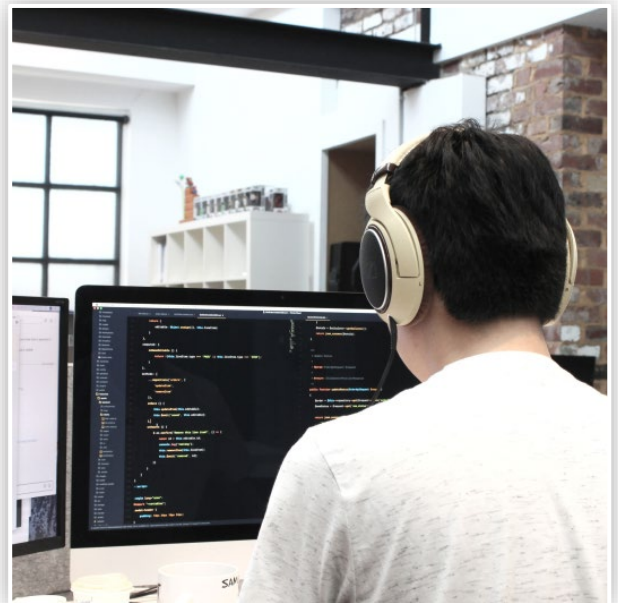
The Web Software Developer will code and deploy applications in a cross-platform, cross-browser environment; build user interfaces and prototypes from wireframes and designs; build applications using java, html, CSS, and JavaScript; update applications to meet modern standards and requirements; consult with managerial and engineering and technical personnel to clarify program intent, identify problems, and suggest changes.

### Career Outcomes

- Web Developer

### Recent Employers

- Century Insurance
- CUNA Mutual Group
- Dept of Health Services
- Dept of Revenue
- Full Compass Systems
- Johnson Health Tech North America
- Madison Metropolitan School District
- Mandli Communications
- Moxe Health
- Nordic
- RenewAire
- Revature
- Sentry Insurance
- Singlewire
- Stealthbits Inc
- TDS
- UW Credit Union
- Web Coursework
- Widen Enterprises
- Zendesk



### More Information

<https://madisoncollege.edu/program/web-software-developer>

### Special Note

Courses core to the IT-Web Software Developer program will only be offered during the daytime for students accepted in the spring term.



Recommended Two-Year Course Progression for IT – Web Software Developer

64 credits

Semester 1 18 credits	Semester 2 15 credits	Semester 3 16 credits	Semester 4 15 credits
Intro to Prog with JavaScript 10152119 (3 credits)	Java Programming 10152111 (3 credits)	Adv Java Programming 10152112 (3 credits)	Enterprise Java Programming 10152113 (3 credits)
Website Development 10152120 (3 credits)	UIUX and Web Accessibility 10152130 (3 credits)	Cloud for Developers 10152110 (3 credits)	Advanced JavaScript 10152168 (3 credits)
Introduction to Database 10156124 (3 credits)	SQL Database Programming 10156125 (3 credits)	Agile Practices 10152131 (3 credits)	
AI Fundamentals-10156105 (1cr)	PHP Web with MySQL 10152166 (3 credits)	Elective (3 Credits)	Elective (3 Credits)
Exploration of IT-10107111 (1cr)			Web Software Internship 10152132 (3 credits)
IT Sec Awareness-10151102 (1cr)		Job Search Prep-10107175 (1cr)	
Written Communication <sup>2</sup> 10801195 (3 credits)	Oral/Interpersonal Comm <sup>2</sup> 10801196 (3 credits)	Math of Finance <sup>2</sup> 10804144 (3 credits)	Contemporary Amer Society <sup>2</sup> 10809197 (3 credits)
Psychology of Human Relations <sup>2</sup> 10809199 (3 credits)	<sup>f</sup> Fall Only <sup>s</sup> Spring Only <sup>2</sup> See your advisor for alternate general education courses that transfer • May be taken in lieu of Enterprise Java		

Color Codes for Course Types

Software Dev	Website Dev	Other
Career Preparation	General Education	

Recommended Electives (6 credits total)		
10152103	C# Web Dev using ASP .NET <sup>s</sup> •	3
10152108	Serverless Cloud with React <sup>s</sup>	3
10152121	Advanced CSS	3
10152158	JS Frameworks <sup>f</sup>	3
10152167	Adv PHP & MySQL Web Dev <sup>f</sup> •	3
10152200	Foundations of Software Quality	3

Graduate Summary

Graduate Employment Report: IT Web Software Developer			
	2021	2022	2023
Number of Program Graduates	26	44	21
Number Surveys Returned	17	31	14
Graduates Employed	13	28	8
Related Occupation	12	24	7
Unrelated Occupation	1	4	1

Salary Trend: IT Web Software Developer				
	2021	2022	2023	
Full Time Employment	Full Time Salary Count	10	21	3
	Average Monthly Wage	\$5,498	\$6,041	\$6,164
	Average Hourly Wage	\$31.97	\$35.12	\$35.84
	Average Work Hours per Week	43.2	41.7	40.0

# Technical Diploma

## IT – Desktop Support Technician

The IT-Desktop Support Technician is responsible for providing technical assistance and support to end-users within an organization. Their primary goal is to ensure that all desktop systems, software, and related peripherals function smoothly, enabling employees to work effectively. The IT-Desktop Support Technician program will help you become proficient in troubleshooting Windows and Linux operating systems as well as basic networking concepts. Courses in this Technical diploma are part of several of the IT-Infrastructure programs: IT-Network Systems Administration, IT-Cybersecurity Specialist; IT-Cyber Compliance Specialist, and IT-Cloud DevOps Specialist.

### Typical Job Duties

- Troubleshoot and resolve software and network issues for desktop systems. Provide technical assistance to end-users via phone, email, chat, or in-person. Diagnose and fix problems with peripherals such as printers, monitors, and keyboards.
- Install, configure, and update operating systems, and software.
- Assist with creating, modifying, and managing user accounts and access permissions. Ensure users have appropriate access to systems and data in compliance with company policies.
- Maintain detailed records of support requests, issues, and resolutions in the ticketing system. Document processes and procedures for common troubleshooting tasks.
- Work closely with IT teams to escalate and resolve complex technical issues.
- Track and manage inventory of IT equipment, including desktops, laptops, and peripherals. Assist in hardware upgrades and lifecycle management.

### Recommended One-Year Course Progression for IT – Desktop Support Technician

27 credits

Semester 1 15 credits	Semester 2 12 credits
Enterprise Client 10154184 (3 credits)	Windows Server 1 10154171 (3 credits)
Intro to Cisco Networking 10150121 (3 credits)	Linux Server 1 10154190 (3 credits)
IT Sec Awareness-10151102 (1cr)	Intro to Cloud Computing 10157101 (3 credits)
AI Fundamentals-10156105 (1cr)	
Exploration of IT-10107111 (1cr)	
Psychology of Human Relations <sup>2</sup> 10809199 (3 credits)	
Written Communication <sup>2</sup> 10801195 (3 credits)	Oral/Interpersonal Comm <sup>2</sup> 10801196 (3 credits)

### Color Codes for Course Types

System Admin	Network
Infrastructure	Career Preparation
General Education	

<sup>f</sup> Fall Only   <sup>s</sup> Spring Only

<sup>2</sup> See your advisor for alternate general education courses that transfer

### Graduate Summary

Graduate Employment Report: IT – Desktop Support Technician			
	2021	2022	2023

<b>Number of Program Graduates</b>	31	12	19
<b>Number Surveys Returned</b>	26	11	16
<b>Graduates Employed</b>	11	6	5
<b>Related Occupation</b>	9	6	3
<b>Unrelated Occupation</b>	2	0	2

#### Salary Trend: IT – Desktop Support Technician

		2021	2022	2023
<b>Full Time Employment</b>	Full Time Salary Count	8	6	2
	Average Monthly Wage	\$4,949	\$3,229	\$4,080
	Average Hourly Wage	\$28.77	\$18.77	\$23.72
	Average Work Hours per Week	40.9	41.7	42.7

## Career Pathway Certificate

### IT – Service Center Technician

The IT-Service Center Technician Certificate from Madison College provides instruction for information systems professionals and programming students in the areas of computer software and communications. Topics covered include installation, maintenance and troubleshooting of operating systems and software. Students will also cover the configuration of devices to connect to an existing network as well as understand the fundamentals of exchanging data between end points.

Courses in this certificate, are part of the IT-Desktop Support Technician. You can continue with this pathway for job advancement.

#### IT – Service Center Technician 6 credits

Enterprise Client  
10154184 (3 credits)

Intro to Cisco Networking  
10150121 (3 credits)

## Certificates

### IT – Cisco Certified Networking Associate (CCNA)

The Cisco Certified Networking Associate (CCNA) certificate program is designed to prepare information systems professionals for the field of network management, design, configuration, maintenance and troubleshooting of both local area networks (LANs) and wide area networks (WANs). CCNAs are becoming increasingly important as the number of networking devices continues to increase. Students enrolling in the CCNA certificate program will be able to meet these needs, thereby effectively engaging with this growing segment of the economy. Four courses will teach students the necessary skills to make them successful in the field of data networking.

After completing the certificate courses, students will need additional preparation and practice time to successfully pass the CCNA certification exam.

### IT – Intro to Software Development

The Intro to Software Development Program gives students a head start developing skills and knowledge in the IT field as a developer. After completing this certificate, students may also continue to earn a two year Associate Degree in the IT-Web Software Developer Program or the IT-Front End Developer Program. You will begin to develop skills in HTML, CSS, SQL, and JavaScript. For students who are interested in a future career potentially as a Web Developer, Internet Developer, Application Developer, Web Programmer, or Web Analyst.

### IT – Java Professional Developer

The IT-Java Professional Developer certificate from Madison College is designed to prepare information systems professionals to use the Java programming language for web development. Three classes teach students the necessary skills to be successful in Java web development.

### IT – PHP Professional Web Developer

The IT-PHP Professional Web Developer Certificate at Madison College is designed to prepare information systems professionals to use the PHP programming language for web development. Classes cover advanced web application features such as shopping carts, content management systems using Drupal, web forums and connecting to web services. The certificate classes teach students the necessary skills to make them successful in PHP web development.

### IT – Software Quality Fundamentals

The IT-Software Quality Fundamentals certificate from Madison College is designed to prepare professionals to assess quality in developed software solutions. This platform and technology agnostic certificate includes three courses which explore the use of common web technologies for interface design and covers the basics of usability and accessibility in modern user interfaces. Professionals will then learn to verify and validate the quality of software using testing techniques, security assessment, risk analysis, and the critical analysis of perspective. The certificate classes will enable professionals to consistently assess the quality of deployed software systems with competence.

# Scholarships and Financial Aid

## Financial Aid

Online application is available at <http://madisoncollege.edu/financial-aid/>. Paper applications are available in the Enrollment Center on the Truax Campus, Downtown Education Center, and at all regional campuses, or call (608) 246-6170.

## Scholarships

### Madison College Foundation

The Foundation has disbursed more than \$8 million in financial assistance to more than 27,000 Madison College students. For more information, call (608) 246-6441. <http://madisoncollege.edu/scholarships>

### External Scholarships

Hundreds of scholarships from private organizations and donors

### New Student Scholarships

Ready to open those doors but aren't sure how you can afford college.

### Emergency Assistance Scholarships

Emergency and short-term book loans

## Information Technology Specific Scholarships

### GIPAW

Scholarships are intended to defray the educational costs for full-time Associate Degree IT program students.

### Women in IT

Available to women who are pursuing an associate degree in computer Information Technology at the MATC Truax campus. To receive the award, a student must have applied and been accepted into one of the IT associate degree programs.

## Student Organizations

### Wolfpack Techies

Wolfpack Techies is Madison College's only computer repair service for all students, faculty, and staff. Wolfpack Techies is comprised of students in IT degrees that are looking for more exposure and experience with computer repair.

## Experience Madison College

The best way to see yourself at Madison College is by visiting campus. Tour our facilities, schedule an appointment with a recruiter, get help with your college application and more. <https://madisoncollege.edu/get-started/visit>

# Parking at Madison College

For more information about parking, please visit: <https://madisoncollege.edu/parking>

## Madison College Parking Regulations

All vehicles that are parked on Madison College Campuses by students must be registered by completing the online vehicle registration form on the Madison College Public Safety website. All students shall park in general parking areas and must be parked in a **marked stall**. Parking along curbs or in the grass is **NOT** allowed on Madison College Campuses. Vehicles found in violation are subject to citation and/or towing at the owner's expense without warning. **Unpaid citations may also result in suspension of the vehicles registration.**

To learn more about parking and to register your vehicle please visit the Public Safety website and select parking information.  
<https://madisoncollege.edu/public-safety>

