

Winona State University Information Technology Strategic Plan

Continuing to Pioneer the Intersection of Teaching, Learning, Technology, and Engagement

Fall 2024-Summer 2027



“A Community of Learners Improving Our World”

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Information Technology Services – Winona State University

Mission Statement

Information Technology Services (ITS) provides the technology-based foundation to support and empower the Winona State University (WSU) community to meet and exceed their educational and business needs.

Vision

Information Technology Services endeavors to position the University as a national leader in the innovative and effective use of technology to support the academic enterprise.

Values

People, Performance, and Innovation

Pillars

- **Teaching and Learning.** Information Technology Services will empower technology-enriched teaching, learning, and student success.
- **Digital Transformation (Dx).** Information Technology Services must continue to prepare and support Winona State for shifts in culture, workforce, and technology that will transform our institution’s operations.¹
- **Customer Partnerships and Experience.** Information Technology Services will enhance customer relationships to realize the promise of, “the trusted partner for your digital life.”
- **Information Technology Core.** Information Technology Services will provide a resilient, flexible, agile, and secure core information technology infrastructure. A foundation for the other three pillars.

Our Customers

WSU students (current and prospective), faculty, staff, alumni, and retiree

¹ “Dx: Digital Transformation of Higher Education.” EDUCAUSE. <https://www.educause.edu/focus-areas-and-initiatives/digital-transformation>

Planning Assumptions

There were several planning assumptions used by the All-University Technology Committee (AUTC) and Information Technology Services (ITS) leadership team as the information technology strategic plan for Winona State University (WSU) was being developed. A few of those assumptions are as follows:

- Information technology is critical to the realization of institutional goals and must be aligned with the mission and vision of the University.
- The University is likely to experience budgetary constraints during the effective years in which this information technology strategic plan is implemented.
- The Winona campus is committed to providing a multi-platform, one-to-one, mobile computing strategy to students and faculty through its *e-Warrior: Digital Life and Learning Program* which provides the stage to deliver technology access anytime and anywhere.
- Some Winona State University - Rochester students are not currently involved in the *e-Warrior: Digital Life and Learning Program*, which results in some distinct technology issues for these students and their faculty.
- The University is dedicated to supporting an information technology infrastructure that is secure, robust, reliable, and transparent to the end user.
- Individual faculty members are ultimately responsible for setting the technological expectations of students in their courses. The departments and colleges are responsible for integrating technology into their academic programs as appropriate and assessing these efforts.
- The Minnesota State system office provides and supports the core administrative, productivity, and academic software applications used by the institution.
- Emphasis must be placed on training and professional development to assist students, faculty, and staff with the use and application of information technology.

This new Information Technology Strategic Plan continues to provide a framework for integrating and prioritizing technology related issues at WSU. It was developed to articulate a common vision for technology and provide a guide for future technology implementations. Assessments (both quantitative and qualitative) of the activities in the plan are critical to moving initiatives forward. Doing this will provide a guide to enhance and improve services to meet the needs of students, faculty, and staff now and in the future. This Information Technology Strategic Plan represents the University's effort to continue to pioneer the intersection of teaching, learning, technology, and engagement.



Governance - All University Technology Committee (AUTC)

The All-University Technology Committee reviews technology initiatives, assesses technology use and recommends policy and resource utilization. The committee reviewed and assisted in the implementation of the Information Technology Strategic Plan development process and reviewed information collected from the focus group sessions held from January 2024 to September 2024.

All University Technology Committee (AUTC) Membership (2023-2024)

Ex-Officio

Robin Honken, CIO, Director for Digital Transformation and User Experience

Ken Graetz, Associate Vice President for Academic Affairs, Dean of the Library, Director for Teaching, Learning, and Technology Services

Inter Faculty Organization (IFO) Representation

Ann Loth, Assistant Professor, College of Nursing and Health Sciences

Ann Lichliter, Assistant Professor, College of Nursing and Health Sciences

FINAL – Sept. 15, 2024

Trung Nguyen, Assistant Professor, College of Science and Engineering
Amy Smith, Assistant Professor, College of Nursing and Health Sciences
Vernon Leighton, Professor, Library and Information Services

Minnesota Association of Professional Employees (MAPE) Representation

Sally Mathews, Laptop Repair Center Lead, AUTC Chair 2023-2024
Elizabeth Berres, Information Officer, MarComm

Administrative and Service Faculty (ASF) Representation

Doug Westerman, KQAL – General Manager, Mass Communications Department

American Federation of State, County, and Municipal Employees (AFSCME) Representation

Dustin Tollefsrud, Technology Specialist, Adult and Continuing Education (ACE)

Students

Ahlea Wright
Jahin Arefin

Middle Managers Association (MMA) Representation

Tom Hill, Classroom Support Lead, Teaching, Learning, and Technology Services

Deans' Council Representation

Julie Anderson, Dean, College of Nursing and Health Sciences

Information Technology Strategic Planning Development Process

This document represents the culmination of work started in Spring of 2024. The All-University Technology Committee (AUTC) developed and endorsed the planning concept of a foundation (Information Technology Core) and the three pillars (Teaching and Learning, Digital Transformation and Customer Partnerships and Experience). This foundation and three pillars were used to collect feedback from the campus.

Robin Honken, Ken Graetz, John Yearous, and Dave Gresham conducted several technology planning and listening sessions across the campus during the spring of 2024. During these multiple planning and listening sessions, general feedback and ideas from various stakeholder groups were collected.



Next Steps

Once the information technology strategic planning is complete, the Information Technology Services (ITS) leadership team will create a **tactical plan** to operationalize the Information Technology Strategic Plan. ITS will **perform and execute** the tactical plan. ITS will **assess and evaluate** the outcomes and report the results back to AUTC and Cabinet. The Information Technology Strategic Plan will guide all future technology implementations at Winona State University.

Responsible Positions – Office Holder

Abbreviation	Full Title	Responsible Position	Fall 2024 Office Holder
ITS	Information Technology Services	Chief Information Officer	Robin Honken
TLT	Teaching and Learning Technology Services	Director	Ken Graetz
IDS	Infrastructure and Data Services	Director	Dave Gresham
DTUE	Digital Transformation and User Experience	Director	Robin Honken
SEC	Security Office	Data Security Officer	Tobias Schmidt

Strategic Framework

Winona State University has a strategic framework which guides the University. The University strategic framework themes are broadly written to include the whole University community and to help the campus community identify and support the underlying goals of each theme. The five themes help organize planning and initiatives of the University.



An icon has been created for each strategic framework theme. To show alignment between the information technology strategic plan and the overall strategic framework the icons that most closely align with each theme have been placed next to the corresponding pillar. The themes are as follows:

Theme 1 – Student Learning



Goal: Create and sustain a coordinated and rigorous set of learning experiences inside and outside the classroom to prepare students for their post-graduate life.

Theme 2 – Student Success



Goal: Enhance the student experience while evolving to meet the needs of future students by providing comprehensive support programs and services so that students can successfully meet their goals.

Theme 3 – Stewards of Place and Recourses



Goal: Enhance a culture of learning and stewardship of resources at Winona State University to prepare students to become responsible citizens and community members.

Theme 4 – Inclusive Excellence

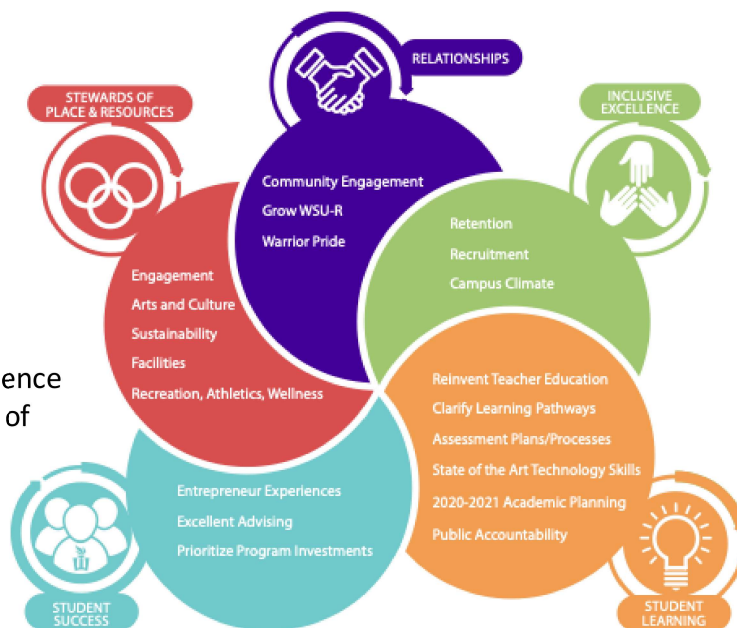


Goal: Increase diversity in the University community and embrace a culture of inclusive excellence.

Theme 5 – Relationships



Goal: Strengthen internal and external relationships by promoting an environment that enriches WSU, Winona, and Rochester community constituents.



1. Teaching and Learning

Information Technology Services will empower technology-enriched teaching, learning, and student success.

1.1 Support high-quality learning experiences

Activity	Responsible	Time (yrs.)
<p>1.1.1 Improve the use of instructional technology through standards, guidelines, templates, and actionable analytics.</p> <p><i>Assessment:</i> Work with System Office, leverage D2L data, survey data, and count the number of developed templates which have been added to the repository.</p>	TLT	1-3
<p>1.1.2 Support accessibility across the curriculum.</p> <p><i>Assessment:</i> Review the number of courses that support accessibility standards.</p>	TLT	1-3
<p>1.1.3 Support faculty use of open course materials.</p> <p><i>Assessment:</i> Review the number of faculty who are integrating open course materials into their courses.</p>	TLT	1-2
<p>1.1.4 Enhance the ability of faculty to use flexible teaching methods.</p> <p><i>Assessment:</i> Review the number of faculty who participate in training, as well as the number of online, HyFlex, and hybrid courses.</p>	TLT	1-3
<p>1.1.5 Work with stakeholders to develop a course delivery strategy that includes a quality improvement process.</p> <p><i>Assessment:</i> Review the number of academic programs that include alternative delivery options as well as the rate of adoption of quality assurance practices.</p>	TLT	1
<p>1.1.6 Explore the use of generative AI to enhance adaptive and personalized learning.</p> <p><i>Assessment:</i> Review the number of courses that include adaptive learning activities.</p>	TLT	1-3

1.2 Enhance professional development support

Activity	Responsible	Time (yrs.)
<p>1.2.1 Develop professional development around high impact practices.</p> <p><i>Assessment:</i> Number of workshops and faculty who attended</p>	TLT	1-3
<p>1.2.2 Develop asynchronous online learning opportunities for faculty.</p> <p><i>Assessment:</i> Count the number Wiki articles, support videos, self-guided D2L courses, and LinkedIn Learning offerings.</p>	TLT	1-3
<p>1.2.3 Enhance instructional design and learning engineering practices.</p> <p><i>Assessment:</i> Count the number of faculty who are participating in Instructional Design Professional Development Opportunities as well as the number of courses which are integrating Instructional Design Standards.</p>	TLT	1-3
<p>1.2.4 Promote and deliver digital citizenship learning opportunities to the entire campus community.</p>	TLT	1-3

<i>Assessment:</i> Count the number of participants in the Digital Citizenship program.		
1.2.5 Support the development of micro-credentialing programs. <i>Assessment:</i> Count the number of new badge programs and how many badges have been distributed.	TLT	1-3
1.2.6 Increase generative AI literacy for both employees and students <i>Assessment:</i> Number of campus community members using AI effectively	TLTDLC	1-3

1.3 Enrich learning spaces

Activity	Responsible	Time (yrs.)
1.3.1 Leverage and improve learning space assessment process (Educause learning space rating system). <i>Assessment:</i> Review the process that has been developed and level of user satisfaction of that process.	TLT	1
1.3.3 Enhance our ability to support events using large venues (e.g., streaming) and multi-room events (e.g., Frozen River). <i>Assessment:</i> Count the number of large venues that have been remodeled.	TLT	1-2
1.3.4 Enhance support for the use of technology in active learning classrooms. <i>Assessment:</i> Count the number of technology-enabled active learning classrooms as well as the number of hours that these rooms are booked.	TLT	1-3

1.4 Sustain innovation

Activity	Responsible	Time (yrs.)
1.4.1 Establish scalable application of extended reality in specific disciplines. <i>Assessment:</i> Count the number of integrations.	TLT	1-3
1.4.2 Support interested faculty to identify and make accessible open educational resources for instruction. <i>Assessment:</i> Calculate and document the cost savings produced for students.	TLT	1-3
1.4.3 Explore innovative applications of generative AI across the institution <i>Assessment:</i> Number of innovative applications being used.	TLT	1-3



1.4.4 Evaluate adaptive and next generation learning environments and trends (e.g., gamification, personalized learning). <i>Assessment:</i> Develop and review recommendations for evaluating trends.	TLT	1-3
1.4.5 Assess the effectiveness of new educational technology tools and methods being applied at WSU. <i>Assessment:</i> Count the number of processes developed and adopted at WSU.	TLT	1-3
1.4.6 Extend opportunities for students to create using maker resources. <i>Assessment:</i> Number of students engaged in maker activities	TLT	1-3

2. Digital Transformation (Dx)

Information Technology Services must prepare Winona State now for shifts in culture, workforce, and technology that will transform our institutions operations.

2.1 Enhance Academic and Administrative support and associated business processes.

Activity	Responsible	Time (yrs.)
2.1.1 Continue to implement strategies to ensure system interoperability, scalability, extensibility, and data integrity in taking on new projects. <ul style="list-style-type: none"> • Provide process to evaluate new requests and determine if we provide on prem solution or wait for Workday. • Continue to build and support migration to Workday for Finance and HCM and implement integrations when possible. • Participate in requirements gathering for Workday Student (2029-2030). • Help lead the system in determining standardized companion projects, for example, ticketing system, document imaging, CRM. • <i>Assessment:</i> Add a “Done/Not Done” option/goal to the project Intake process.	DTUE	1-3
2.1.2 Continue to create a seamless experience for students from prospects to graduates. (Specific examples below) <ul style="list-style-type: none"> • Continue user enhancements to CRM, following change and enhancement request process. • Evaluate the expansion of users and functions of CRM (Salesforce), example ACE, Housing, Athletics. • Continue enhancements to the MyWarriorLife: future warrior and current warrior portal. 	DTUE	1-3

<ul style="list-style-type: none"> Expand the use of CRM functionality, for example Knowledgebase, chat, chatbot. Evaluate event sign-up module and determine better path forward. <p><i>Assessment:</i> Increased recruitment and retention numbers.</p>		
<p>2.1.3 Continue to automate business processes for enhanced efficiencies.</p> <ul style="list-style-type: none"> Continue to support and improve existing processes. UI improvements. Continue integration between BP Logix and other campus systems when appropriate. <p><i>Assessment:</i> Count the number of business processes that have been transformed.</p>	DTUE	1-3
<p>2.1.4 Support process improvement, and system reengineering to reduce redundant or unnecessary efforts and improve end-user experiences. (Using tools we currently have)</p> <ul style="list-style-type: none"> Convert on-prem apps to entraID authentication. Evaluate custom apps and determine if we need to continue to support, enhance, or sunset based on Workday functionality. <p><i>Assessment:</i> Develop a process to review customer services experiences (done/not done), and survey customer satisfaction.</p>	DTUE	1-3
<p>2.1.6 Implement an enhanced document imaging process.</p> <ul style="list-style-type: none"> Implement document imaging AI functionality into existing processes and workflows. Work with the system to standardize a document imaging tool across the system. <p><i>Assessment:</i> Determine whether implementation has been completed (done/not done).</p>	DTUE	1

3. Customer Partnerships and Experience



Information Technology Services will enhance customer relationships to realize the promise of “the trusted partner for your digital life.”

3.1 Enhance support services

Activity	Responsible	Time (yrs.)
3.1.1 Create and holistically review service catalog and services for efficiency and effectiveness. <i>Assessment:</i> Review the completed services catalog and all services offered.	DTUE/TLT	1 - 3
3.1.2 Continue to develop and enhance campus service level agreements (SLA's). <ul style="list-style-type: none"> • Health and Counseling services • Workday support for Business Office and HR • Athletics • Campus Security • Central Scanning • Executive Leadership • Housing/CBord • Other <i>Assessment:</i> Determine whether an SLA has been developed and agreed upon (Done/Not Done).	DTUE	1
3.1.3 Explore use of Team Dynamix as a ticketing system and replacement for ITSM. <i>Assessment:</i> Make decision to implement or not	DTUE	1
3.1.4 Add additional support services in the library/DLC <i>Assessment:</i> Count the number of additional services	DTUE	1
3.1.5 Enhance services related to campus card <i>Assessment:</i> Customer satisfaction survey	DTUE	1-3
3.1.6 Update WSU-R digital commons spaces for improved user experience, accessibility, and support. <i>Assessment:</i> Improved spaces and user satisfaction	DTUE	1
3.1.7 Continue to evaluate options for eWarrior cost savings for students while still maintaining high quality technology and digital equity.	DTUE	1-3

3.2 Strengthen benchmarks and metrics

Activity	Responsible	Time (yrs.)
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<p>3.2.1 Gather more information on what students want around technology to enhance the customer experience so users become more self-sufficient.</p> <p><i>Assessment:</i> Count the number of feedback opportunities offered for students: focus groups, surveys, etc.</p>	DTUE/TLT	1-3
<p>3.2.2 Leverage the higher education analytics available through EDUCAUSE to continue to improve services.</p> <p><i>Assessment:</i> Count the number of services aligned with the Educause analytics.</p>	DTUE/TLT	1-3

3.3 Augment community communication tools and relationships

Activity	Responsible	Time (yrs.)
<p>3.3.1 Continue to build and enhance IT Communication Plan.</p> <p><i>Assessment:</i> Allocate resources for IT communication and measure end user satisfaction.</p>	TLT/DTUE	1-2
<p>3.3.2 Marketing the strengths, dynamic nature, depth of services, & technology foundation of the e-Warrior program to current and new students. (Partner with Admissions and Marketing and Communications)</p> <p><i>Assessment:</i> Determine whether a communication plan has been developed (done/not done) and review partnership successes related to the marketing of the e-Warrior program.</p>	TLT/DTUE	1-3
<p>3.3.3 Continue to build IT relationships with other Minnesota State institutions to create better support for WSU students learning and transferring from those campus locations.</p> <p><i>Assessment:</i> Review the engagements with other institutions and review the impact and/or improved service opportunities for WSU students.</p>	DTUE	1-3
<p>3.3.4 Improve the use of digital communication channels, including digital signage, CRM marketing tool, website, and social media.</p> <p><i>Assessment:</i> Impact of digital communication channels by views, click throughs, etc.</p>	TLT	1-3

4. Information Technology Core.



Information Technology Services will provide a resilient, flexible, agile, and secure core information technology infrastructure. A foundation for the other three pillars.

4.1 Enhance and expand the core network operations

Activity	Responsible	Time (yrs.)
4.1.1 Enhance the network infrastructure for maximum robustness while maintaining a secure environment: <ul style="list-style-type: none"> Enhance/Upgrade WiFi System University wide for more coverage, including more density in residence hall BYOD network Ensure bandwidth remains sufficient to meet demand Implement 802.1x – smart switching where network equipment knows who the user is and attaches appropriate security posture to that person <i>Assessment:</i> Create and work the 3-year network plan (Done/Not Done).	IDS	1-3
4.1.2 Enhance firewall network for more efficiency – simplify routing by moving networks off old cores? <i>Assessment:</i> Less complex routing diagram	IDS	1-2
4.1.3 Continue to enhance Zoom phone capabilities including survivability when wifi is unavailable. <i>Assessment:</i> Phone availability when wifi is unavailable		

4.2 Enhance infrastructure services

Activity	Responsible	Time (yrs.)
4.2.1 Leverage cloud services for flexibility, growth and continuity. <ul style="list-style-type: none"> Software as a service when applicable, example door access/security camera system replacement Move class/dept/personal store Authenticate eWarrior program and all local workstations to entraID Evaluate role of potential cloud-based warehouse <i>Assessments:</i> Complete an annual evaluation of increased flexibility, security, added redundancy, and cost savings.	IDS	1-3
4.2.2 Work towards standardization with System around third-party tools (example: helpdesk software, imaging services, CRM) <i>Assessment:</i> System-wide third-party tools adopted	IDS	1-3
4.2.4 Complete mobile device management transition to inTune (Endpoint Manager) for all student and employee machines. <i>Assessment:</i> Number of devices in Endpoint Manager	IDS/DTUE	1-3

<p>4.2.5 Remove – move Workday stuff to digital transformation - Focus on application data integration needs as tools and services emerge from NextGen.</p> <p><i>Assessment:</i> Determine whether we are meeting the needs of the community in terms of getting data to them securely and in the format desired.</p>	IDS	1-3
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4.3 Enhance IT Security

Activity	Responsible	Time (yrs.)
<p>4.3.1 Update the internal IT policy site:</p> <ul style="list-style-type: none"> • Refresh documents to reflect new Minnesota state nomenclature • Update internal responsible parties for data ownership <p><i>Assessment:</i> Determine whether the templates have been refreshed, the content is more easily viewable, changes are self-tracking, and content is more easily publishable.</p>	SEC	1-3
<p>4.3.2 Create process to update Business Continuity Plan annually, including</p> <ul style="list-style-type: none"> • Leadership contact information • Document of Services and Systems we support • Disaster recovery <p><i>Assessment:</i> Documented plan</p>		
<p>4.3.3 Assess and address top MinnState security initiatives.</p> <ul style="list-style-type: none"> • Take NIST assessment and review findings • Implement NIST • Implement MS A5 security tools • Finalize the internal security assessment tool and make it available to the entire system. • Establish a common reporting architecture for the system. <p><i>Assessment:</i> Determine whether all campuses within the Minnesota State system have been provided with a standardized framework to build a 2-3 year tactical roadmap for addressing security shortcomings.</p>	SEC	1-3
<p>4.3.4 Adopt a long-term certificate management roadmap: Include Internal CA; examples - Let's Encrypt, SecureW2, Future Intune Features; Thawte/Digicert</p> <p><i>Assessment:</i> tool implemented</p>	SEC	1-3

<p>4.3.4 Fully adopt (employees) cloud based conditional elevation of access application (Admin by request)</p> <p><i>Assessment:</i> Number of machines enrolled in Admin by Request</p>	<p>SEC</p>	<p>1-2</p>
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4.4 Improve budgeting and related processes

Activity	Responsible	Time (yrs.)
<p>4.4.1 Develop sustainable funding model for information technology.</p> <p><i>Assessment:</i> Determine whether a new budget model has been developed (Done/Not done).</p>	<p>ITS</p>	<p>1-3</p>
<p>4.4.2 Develop a process for updating the Business Continuity Plan.</p> <p><i>Assessment:</i> Determine whether the process has been developed (Done /Not Done).</p>	<p>IDS</p>	<p>1</p>