

# INFORMATION TECHNOLOGY MANAGEMENT (MS)

Department website (<https://www.uwp.edu/learn/programs/msitm.cfm>)

College: College of Business, Economics, and Computing

The online M.S. in information technology management program represents a fully online fixed curriculum consisting of 31 credits – 10 three-credit courses and a one-credit capstone preparation course. UW-La Crosse, UW-Oshkosh, UW-Parkside, UW-Stevens Point, UW-Stout and UW-Superior will offer the program jointly. In addition to courses in key areas such as IT operations, business analysis, cloud computing, enterprise security, data science, and management of emerging technologies, the required capstone course, which represents the culminating experience in the program, will provide students with the opportunity to apply skills acquired from coursework through a project-based experience that addresses a problem, need, or concern in an IT setting. Utilizing project management and leadership tools obtained through coursework and by working directly with IT leaders in the field, the students' hands-on project may result in an action plan or product suitable for implementation by the host organization. In addition, the courses in the IT Management program are structured into three distinct stackable graduate certificates on IT Leadership, Enterprise Infrastructure, and IT Operations. These certificates can be completed independently of each other, providing students with the flexibility to choose the path that best aligns with their career goals.

## Goals of the Program

The degree addresses a recognized high-need area of IT management as supported by research and input from employers and industry representatives. Upon completion of this degree program, students will have developed advanced knowledge and skills that will enable them to serve an important function and role within the IT workforce. It is a degree targeted at adult and nontraditional students possessing a bachelor's degree and thus broadens access for alumni and others to advanced study. The M.S. in IT management also builds upon the undergraduate experience of working adults by advancing proficiencies in communication, critical thinking, problem solving, analytical, leadership, teamwork, and collaboration skills. Furthermore, this multidisciplinary degree will serve to build bridges between disciplines and develop students' abilities to think in terms of systems and interrelationships, and within complex organizations.

1. Competency A: Conduct financial analysis and develop and manage technology budgets. Upon completion of the program, students will be able to: interpret and create pro forma financial statements; perform financial analysis for IT strategic planning purposes including portfolio management; develop and manage technology budgets.
2. Competency B: Lead and manage technology functions, projects and personnel. Upon completion of the program, students will be able to: plan and manage technology projects; develop organizational leadership skills relevant for IT management; lead IT personnel to meet organizational needs.
3. Competency C: Demonstrate effective professional collaboration and soft skills appropriate for technology settings. Upon completion of the program, students will be able to: demonstrate ability to effectively conduct crucial conversations; demonstrate ability to effectively communicate with stakeholders across the organization;

demonstrate professional behavioral skills accounting for ethics, diversity and cultural sensitivity.

4. Competency D: Manage security and compliance, accounting for governance and ethical implications. Upon completion of the program, students will be able to: apply ethical frameworks to analyze problems and evaluate alternative solutions; create and manage technology policies and procedures for an organization with an understanding of the regulatory environment; interpret and manage IT governance policies; design appropriate security architecture with an understanding of the technology.
5. Competency E: Investigate and plan innovative solutions for business challenges. Upon completion of the program, students will be able to: evaluate the impact of emerging technologies; analyze data to address organizational challenges and create competitive advantages; analyze requirements and propose technical solutions.
6. Competency F: Engineer, develop and deploy strategies for enterprise systems. Upon completion of the program, students will be able to: develop appropriate data management technologies; create and deploy enterprise solutions in support of organizational goals; plan and implement projects related to infrastructure, security, software development or data analysis.

## Requirements for the Master of Information Technology Management

Code	Title	Credits
<b>Required Courses</b>		
ITM 700	Communication for IT Professionals	3
ITM 705	Leading the IT Function	3
ITM 710	Finance for IT Managers	3
ITM 715	Data Science	3
ITM 720	Cloud Computing and Enterprise Applications	3
ITM 725	Enterprise Security	3
ITM 730	Agile and Traditional IT Project Management	3
ITM 735	Business Analysis and System Development	3
ITM 740	IT Operations	3
ITM 754	ITM Capstone Preparation	1
ITM 755	ITM Capstone	3
<b>Total Credits</b>		<b>31</b>

## University Requirements for Master's Degree Programs

To receive a master's degree from UW-Parkside, students must meet the following minimum requirements (note that individual programs may impose more stringent requirements):

1. Complete at least 30 graduate credits, of which no more than 12 may be transferred from another institution.
2. Have an overall GPA of at least 3.00 for all graduate work taken at UW-Parkside that is applicable to the degree program.
3. Satisfy all requirements of the graduate degree program.

Students may take no more than seven years to complete a degree, beginning with the semester in which they complete their first course as a UW-Parkside degree-seeking graduate student, unless they apply for and receive an extension through the appropriate graduate program. Some programs may impose a shorter time limit. To graduate, students must file a request for graduation. The request form, signed by the student's

advisor and filed in the appropriate graduate program office, initiates the final review of the candidate's records. Students also need to apply to graduate with the Office of the Registrar.

- Bachelor's degree from a regionally or nationally accredited university (in any discipline).
- 3.00/4.00 undergraduate GPA.
- Prerequisite coursework of Programming I, Database I, and Data Communications/Network.

## Courses in Information Technology Management

### ITM 700 | Communication for IT Professionals | 3 cr

Focuses on developing organizational communication skills for IT professionals. Includes crucial conversations, evidence-based decision making, and change management strategies for organizational transformation. Emphasizes the development of organizational and interpersonal communication skills relating to cultural sensitivity, diversity, and ethical issues in the IT field.

**Prerequisites:** Admitted MS-ITM degree seeking students only or program advisor consent on space available basis.

**Offered:** Yearly.

### ITM 705 | Leading the IT Function | 3 cr

Focuses on the application of management and leadership theories, students will explore their own personal assets and liabilities to become an effective leader and change agent in a complex adaptive system. Introduces strategic planning processes, as well as IT governance and ethical considerations.

**Prerequisites:** Admitted MS-ITM degree seeking students only or program advisor consent on space available basis.

**Offered:** Yearly.

### ITM 710 | Finance for IT Managers | 3 cr

Frames financial decisions within general and project accounting principles. Includes pro forma financial statements, time value of money, cash flows and equivalence, depreciation, net present value, rate of return, and ratio analysis. Covers preparing budgets that prioritize projects within constraints, address uncertainty and intangibles, and integrate with project scheduling.

**Prerequisites:** Admitted MS-ITM degree seeking students only or program advisor consent on space available basis.

**Offered:** Yearly.

### ITM 715 | Data Science | 3 cr

Addresses issues for developing, managing and supporting data-driven decision-making in the organization. Includes data analytics, data warehousing, machine learning, and artificial intelligence, as well as the ethical collection, use, and application of data.

**Prerequisites:** Admitted MS-ITM degree seeking students only or program advisor consent on space available basis.

**Offered:** Yearly.

### ITM 720 | Cloud Computing and Enterprise Applications | 3 cr

Examines leveraging cloud services to streamline computing resources, deploy enterprise applications, improve user access and system reliability, and utilize advanced computing capabilities. Discusses implementation of innovative technologies. Examines services available, along with deployment strategies, evaluation criteria, economic justification, and manageability.

**Prerequisites:** Admitted MS-ITM degree seeking students only or program advisor consent on space available basis.

**Offered:** Yearly.

### ITM 725 | Enterprise Security | 3 cr

Explores technical, administrative, and physical aspects of IT security. Investigates various threats within IT and fraud. Applies information classification to the design of information, network and physical security. Evaluates the business processes of risk, business continuity, audit, and the risk within software development.

**Prerequisites:** Admitted MS-ITM degree seeking students only or program advisor consent on space available basis.

**Offered:** Yearly.

### ITM 730 | Agile and Traditional IT Project Management | 3 cr

Examines project management concepts as applied to IT projects; covers traditional PMBOK techniques such as project identification, selection, procurement, and cost/schedule preparation and monitoring. Introduces agile IT project management concepts including Scrum and Extreme Programming. Requires students to apply these concepts to group projects.

**Prerequisites:** Admitted MS-ITM degree seeking students only or program advisor consent on space available basis.

**Offered:** Yearly.

### ITM 735 | Business Analysis and System Development | 3 cr

Focuses on the importance, role, and techniques of the business analysis function in the modern IT organization. Organized around the six knowledge areas and associated techniques of the Business Analysis Body of Knowledge (BABOK) specified by the International Institute of Business Analysis.

**Prerequisites:** Admitted MS-ITM degree seeking students only or program advisor consent on space available basis.

**Offered:** Yearly.

### ITM 740 | IT Operations | 3 cr

Explores best practices and techniques for managing IT infrastructure and operational environments in support of the organization's strategic goals in the development and deployment of applications and services. Includes network infrastructure, servers and devices, computer operations, service management, facilities, help desk services, DevOps, process automation, and governance frameworks.

**Prerequisites:** Admitted MS-ITM degree seeking students only or program advisor consent on space available basis.

**Offered:** Yearly.

### ITM 745 | IT Governance, Ethics, and Regulatory Compliance | 3 cr

This course examines best practices in IT governance to achieve regulatory compliance, optimize use of available resources, ensure trustworthiness of enterprise information, and support business strategies and objectives. Topics include: strategic alignment, IT service and control frameworks, portfolio management, IT risk management, and ethical issues in IT governance.

**Prerequisites:** Admitted MS-ITM degree seeking students only or program advisor consent on space available basis.

**Offered:** Yearly.

### ITM 750 | Evaluation of Emerging Technologies | 3 cr

This seminar course researches, identifies and evaluates significant new trends, technologies and events influencing the global environment of information technology and systems. The course will evaluate future and disruptive technologies, strategies for successful implementation of innovative technologies, critical thinking, and ethics pertaining to its use.

**Prerequisites:** Admitted MS-ITM degree seeking students only or program advisor consent on space available basis.

**Offered:** Yearly.

**ITM 754 | ITM Capstone Preparation | 1 cr**

Students select their capstone project, create a plan, define deliverables, secure approval and complete setup of their development environment. Students review concepts necessary for completion of the capstone including Agile project management, systems analysis and communicating with technical and non-technical audiences. Additional topics may be included.

**Prerequisites:** Admitted MS-ITM degree seeking students only or program advisor consent on space available basis.

**Offered:** Yearly.

**ITM 755 | ITM Capstone | 3 cr**

Students complete the projects approved in the Capstone Preparation course. This course includes the management, development and delivery of an information technology project to a client or employer, including regular communication of status to both technical and non-technical audiences.

**Prerequisites:** Admitted MS-ITM degree seeking students only or program advisor consent on space available basis.

**Offered:** Yearly.