

Program Prerequisite Pre-Approved Options

The following is a list of pre-approved options to meet the prerequisites, if required, for the Masters of Information Technology Management program. Note: this is not an all-inclusive list. Please contact an enrollment adviser for more details.

#### Computer Networking

## Introduction to Programming

#### Introduction to Databases

## Computer Networking

- Fox Valley Technical College: Network Essentials- 10150162
  - Provides an introduction to networking theory and technologies, including the basics of communication, common protocols, the OSI model, network topologies, local network media, network devices, network security and networking tools. Includes more in-depth study of the components of TCP/IP, Ethernet, and wireless networks. Involves considerable time developing troubleshooting skills.
  - <u>https://classes.fvtc.edu/</u>
- UW-Parkside: Management Information Systems- MIS 320
  - Use of the computer as a problem-solving tool, as part of data processing systems, MIS and decision support systems; information systems planning and development; overview of database management, networking and web technologies; project management.
  - <u>https://www.uwp.edu/learn/courseschedule/</u>
- UW-Stevens Point: Network Management I CIS 250
  - Examine core concepts in designing and managing a network infrastructure, e.g. designing and planning out a mock network, administering and configuring network equipment, and troubleshooting. Hands-on labs with network equipment and/or simulation tools.
  - <u>https://www.uwsp.edu/regrec/Pages/timetable.aspx</u>



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# Introduction to Programming

- Fox Valley Technical College: Introduction to Programming (C#)-10152111
  - Introduces students with little or no programming background to programming and logic principles that apply to traditional and Windows systems. Uses C# to apply the principles by developing simple Windows applications.
  - https://classes.fvtc.edu/
- Moraine Park Technical College: Introduction to Programming-152 108
  - Explores basic concepts of programming including data types, variables, expressions, arrays, collections, strings, conditional statements, streams, functions, recursion, classes and objects. Students will employ these fundamental building blocks of programming to create projects.
  - https://www.morainepark.edu/academics/classes/
- Moraine Park Technical College: Object-Oriented Programming-152 121
  - Designs and outlines the logic and structure of programming. Builds skills in using object oriented programming concepts such as the use of API's, user defined classes, and program documentation for use in developing complex web applications. Builds skills in creating classes, employing classes, use of data objects, and incorporation of RSS and XML.
  - https://www.morainepark.edu/academics/classes/
- UW Flexible Option Information Science & Technology (UW-Milwaukee): Introduction to Application Development-INFOST 350X (monthly start dates)
  - Introduction to the fundamental concepts of application development. Basic application development concepts will be explained, analyzed, and practiced.
  - https://flex.wisconsin.edu/degrees-programs/information-science-technology/
- UW-Green Bay Data Science Certificate: INTRODUCTION TO COMPUTER PROGRAMMING (Non-Credit certificate courses, accelerated eight week format)
  - Providing an introduction to the history of computing, fundamental computer concepts, procedural and structured programming techniques, including Python.
  - https://www.uwgb.edu/certificate-programs/data-science/
- UW-Milwaukee, UW-Oshkosh, UW-Platteville, UW-River Falls, UW-Stevens Point: Programming I APC 300
  - This course offers an introduction to the history of computing, fundamental computer concepts and structured programming techniques. Java will be used to teach the basic concepts of program analysis, design, implementation, debugging and testing. It provides hands-on coverage of simple data types, problem solving, program design, conditional execution, loops, and basic user-defined methods.
  - https://appliedcomputing.wisconsin.edu/courses/
- UW-Milwaukee: Introductory Computer Programming COMPSCI 250
  - Problem solving with structured programming techniques using an object-oriented programming language, including control structures, functions, arrays, vectors, and predefined objects.
  - <u>https://catalog.uwm.edu/course-search/</u>
- UW-Parkside: Introduction to Programming- CSCI 130
  - Fundamentals of high-level programming language: object-orientation, methods, functions, variables, program control.
  - https://www.uwp.edu/learn/courseschedule/



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- UW-Stout: Introduction to Programming- CS 141
  - Solving problems using computer programming. Input/output, user interface, objects, events, flow of control, functions, arrays.
  - https://accesspub.uwstout.edu/psp/ps/EMPLOYEE/SA/c/COMMUNITY\_ACCESS.CLASS\_SEARCH.GBL?
- UW-Whitewater, UW-Eau Claire, UW-Milwaukee, UW-Oshkosh, UW-Parkside, UW-River Falls, UW-Stevens Point: Introduction to Programming- UWX CS130
  - In this course, you will learn many of the fundamentals of computer programming.
  - https://uwex.wisconsin.edu/aas#course-schedule

## Introduction to Databases

- Fox Valley Technical College: Data Access For Programmers-10152168
  - Provides background in fundamental database concepts, design, documentation, implementation and distribution involving the relational database model. Students will create, query and update relational databases using Structured Query Language (SQL).
  - <u>https://classes.fvtc.edu/</u>
- Moraine Park Technical College: Relational Databases-152 105
  - Explore relational database concepts and the use of Structure Query Language while working within a Database Management System (DBMS). Design, build and query a relational database and its tables. Manipulate a DBMS using concepts such as stored procedures and triggers.
  - <u>https://www.morainepark.edu/academics/classes/</u>
- UW Flexible Option Information Science & Technology (UW-Milwaukee): Database Information Retrieval Systems-INFOST 410X (monthly start dates)
  - Introduces the design and development of different types of electronic information systems, including database types, design issues, application development, and software selection and evaluation.
  - https://flex.wisconsin.edu/degrees-programs/information-science-technology/
- UW-Green Bay Data Science Certificate: INTRO TO DATABASES AND DATA ANALYTICS (Non-Credit certificate courses, accelerated eight week format)
  - Providing an overview of basic concepts of SQL (Structured Query Language and basic concepts of relational database systems.
  - <a href="https://www.uwgb.edu/certificate-programs/data-science/">https://www.uwgb.edu/certificate-programs/data-science/</a>
- UW-Green Bay: Database Design & Management COMP SCI 221
  - This introductory course focuses on how databases and database systems work and how they are used in various datadriven applications. The course covers relational databases, SQL, different ways of designing databases, and management of databases. The course provides hands-on experience with exercises using SQL Server and Microsoft Access and includes group discussions. The course also introduces some advanced topics, including database security, data privacy, data analytics, and big data. Working knowledge of Microsoft Office suite and Windows is required for this course.
  - <u>http://sis.uwgb.edu/schedule/</u>

#### • UW-Milwaukee, UW-Oshkosh, UW-Platteville, UW-River Falls, UW-Stevens Point: Database Management I – APC 360

- This course covers the design and implementation of relational database management systems to support computerbased information systems. Topics include: data modeling techniques such as entity-relationship modeling, extended entity-relationship modeling, database normalization techniques, and basic and advanced features of database query language SQL.
- <a href="https://appliedcomputing.wisconsin.edu/courses/">https://appliedcomputing.wisconsin.edu/courses/</a>
- **UW-Parkside:**Database Management Systems CSCI 380
  - Provides background in fundamental database concepts, design, documentation, implementation and distribution involving the relational database model. Students will create, query and update relational databases using Structured Query Language (SQL).
  - https://www.uwp.edu/learn/courseschedule/
- UW-Stout: Database Systems Manipulation And Design-CS 324
  - Conceptual and logical organization of data, data models, data manipulation and data definition languages, and design of databases.
  - <a href="https://accesspub.uwstout.edu/psp/ps/EMPLOYEE/SA/c/COMMUNITY\_ACCESS.CLASS\_SEARCH.GBL?">https://accesspub.uwstout.edu/psp/ps/EMPLOYEE/SA/c/COMMUNITY\_ACCESS.CLASS\_SEARCH.GBL?</a>