



Master of Science in Technology Management ONLINE

Program overview

The Master of Science in Technology Management (MSTM) program is offered by the Department of Decision and Information Sciences (DIS) within the Charlton College of Business at the University of Massachusetts Dartmouth. It is designed with the primary goal of helping engineers and business managers appreciate and comprehend the complexity of management challenges in today's technology-driven and globalized business world.

The intended audiences include both experienced engineers who would like to advance their careers in management, and business managers who are facing challenges of implementing complicated enterprise level systems. Graduates should be well prepared to lead their organizations to respond rapidly and innovatively to the challenges in the dynamic, technology-driven, and competitive global business environment.

The program consists of 30 credit hours (24 credits for required core courses and 6 credits for required elective courses).

Program strengths and highlights

The unique combination of operations management and management information system courses in the MSTM curriculum helps students understand operational strategy and processes. The program also provides them with technological perspectives to be innovative in solving operational problems and executing operational strategies.

Charlton College of Business is AACSB accredited - the international gold standard. Only 10% of business schools have all undergraduate and graduate programs accredited by AACSB.

The MSTM program provides high value, affordability, and high quality class experiences with maximum flexibility.

The MSTM courses are taught by very active scholars in their academic fields supplemented by a cadre of seasoned practitioners.

Application requirements

The following are general admission requirements. Exceptions and waivers will be considered on a case-by-case basis with all the application materials as a package.

1. Undergraduate Degree: Official transcripts.
A minimum overall GPA of 3.0 is required.
2. GMAT exam (or equivalent): can be waived (more details enclosed). The LSAT may also be substituted for the GMAT.
3. Candidates whose Bachelor's degree was not earned in an approved English language country must submit either the TOEFL exam (minimum score of 80 internet-based or 550 paper-based) or IELTS exam (minimum band score of 6.5).
4. Requires all other University admissions requirements, including two letters of recommendation, preferably one from a faculty member and one from an employer.

GMAT score may be waived for applicants who have

- An earned baccalaureate degree (or the equivalent of a USA baccalaureate degree) in any major/discipline from an accredited college/university with a cumulative GPA of at least 3.00 on a 4.00 scale. *Minimum documentation required: Official transcript (if you earned UMass Dartmouth baccalaureate degree, the official transcript will be obtained on your behalf).*
- At least five (5) years of managerial/supervisory work experience. *Minimum documentation required: Letter of recommendation from at least one (1) employer (preferably current employer) and resume which cites months and years of all employment, all employer(s) name(s), all job title(s), and specific description(s) of managerial/supervisory duty(-ies).*
- A professional license or certificate that requires a test of field-specific knowledge (e.g., CPA, CFA, CPSM, etc.) and is relevant to the degree program. *Minimum documentation required: Copy of license or certificate.*
- An earned graduate degree (master's or doctoral) in any major/discipline from an accredited college/university. *Minimum documentation required: Official transcript.*
- An earned Graduate Certificate from the Charlton College of Business at the University of Massachusetts Dartmouth with a cumulative GPA of at least 3.30. *Minimum documentation required: Official transcript (will be obtained on your behalf).*

To earn a degree

No more than three MSTM course credits of grades below a B may be counted toward the MSTM, and no graduate degree will be awarded to any student whose overall cumulative grade point average falls below 3.0. Other policies, as contained in the UMass Dartmouth graduate catalog, will also apply as appropriate.

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Program Curriculum Outline

Major Required (Core) Courses (Total courses required = 8)		
Course Title		Credit Hours
POM651	Advanced Operations Analysis	3
POM677	Logistics Strategy and Management	3
POM681	Business Analytics and Data Mining	3
POM682	Technology Management Strategies	3
MIS650	Information Technology Management	3
MIS676	Managing Projects for Technology	3
MIS681	Business Intelligence and Knowledge Management	3
MIS685	Enterprise System: Theory and Practice	3
	Core Credits Required	24

Other/Elective Course Choices (Total courses required = 2)

ACT650	Accounting for Decision Making	3
MIS672	Digital Economy and Commerce	3
POM679	Management of Health Care Operations	3
POM675	International Supply Chain Management	3
POM683	Managing Supply Chains in Healthcare	3
MGT659	Strategic Management	3
MKT650	Marketing Strategy	3
	Other Approved Engineering or/and MBA courses (case by case)	
	Elective Credits Required	6

Curriculum Summary

Total number of courses required for the degree	10
Total credit hours required for degree	30

Prerequisite or Additional Requirements (as needed):

ACT 500	Financial Accounting
FIN 500	Finance and Economics for Managers
POM 500	Statistical Analysis

Core Courses (24 credits)

POM 651 Advanced Operations Analysis

Techniques for the analysis and improvement of the value-adding activities of an organization. Such activities are called by a number of names: processes, operations, production or just plain "work." Value is added only when the output from a process meets the needs of customers, both internal and external. The course focuses on the efficient and effective management, in both manufacturing and service environments, of processes (a set of tasks or activities that contribute to delivering products and services in order to meet customers' needs, whereby inputs are transformed into outputs thereby adding value).

POM 677 Logistics Strategy and Management

Understand and analyze the concepts of logistics and supply chain management. Topics include customer service, inventory management, information systems, order fulfillment, transportation, third-party logistics, warehousing and supply chain strategy. Emphasis will be placed on providing logistical support for procurement, manufacturing and distribution.

POM 681 Business Analytics and Data Mining

Introduction to business analytics and data mining. Topics covered include data mining, exploratory data analysis, methods for classification and prediction, affinity analysis, multiple regression, logistic regression, discriminant analysis, and clustering. Applications of business analytics and data mining methodologies to a wide variety of real world business data are included.

POM 682 Technology Management Strategies

An exploration of economic analysis and corporate finance concepts when it interacts with the adoption of new technology. Students are required to have basic macroeconomic and finance knowledge. This course considers new technology evaluation; cost of capital; firm valuation with new technology; the financial decision interaction with technology choice; strategic consideration and economic analysis; the short and long term economic analysis of technology adoption. The concepts that are analyzed in relation to organization problems are market domination, risk profile and analysis, the resolution of new technology risk, and market efficiency. The validity of analytical tools is tested based on the analysis of financial instruments and sustainable and non-sustainable market inefficiencies.

MIS 650 Information Technology Management

Introduction to the information technology used in modern organizations. The course is designed to provide a technical understanding of information technology, practical experience and management perspectives on its utilization in organizations.

MIS 676 Managing Projects for Technology

Managing projects from an organizational perspective. Introducing project management with an emphasis in Technology. Consistent with the Project Management Body of Knowledge guide, the major topics include aligning the projects with organizational strategies, managing project management process groups, and building project manager's competence. Technological tools of managing projects will be introduced.

MIS 681 Business Intelligence and Knowledge Management

Business intelligence (BI) and knowledge management (KM) issues facing technology management today and information technology needed to solve managerial problems using BI and KM. Concepts of BI and KM, processes of BI and KM, and the integration of BI and KM are discussed.

MIS 685 Enterprise System: Theory and Practice

To study a variety of management issues related to enterprise systems (ES). ES is the central nervous system in any modern organizations. To help students effectively use and manage this central nervous system, this course will cover key ES management issues based upon both classic and most recent case/research studies through discussing topics such as the fit between enterprise systems and organizations, knowledge transfer between consultants and organizations, performance evaluation of enterprise systems, and enterprise system selection and implementation issues, etc. Besides conceptual discussions, a real-world enterprise system (a proprietary system or an open source system) will be used to help students obtain hands-on experiences and facilitate the learning process by linking theory with practice.

Please forward all credentials to:

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