PROGRAM DESCRIPTION

The Master of Science in the Management of Technology (MSMOT) is a program designed for technology professionals whose careers take them to the intersection of business and technology. The MSMOT program is a Graduate School of Engineering Program that takes advantage of courses offered in the MBA program of the Charles F. Dolan School of Business. Unlike a traditional MBA, the focus of the MSMOT is not on finance, but on the use of management and business principles for projects related to technology. The degree helps professionals to blend management and technical skills, preparing graduates for leadership roles within organizations that develop and market technological products and within firms of any kind seeking to embrace innovation and employ technology effectively.

This cost-effective program is designed to accommodate working professionals; in fact, the learning environment is greatly enhanced by the perspectives and experiences students bring from the workplace. Both technology and non-technology professionals are given the opportunity to hone their abilities and prepare for a wide-spectrum of occupations and challenges in the management of research, development, design, testing, manufacturing and production, operations and maintenance, subcontracting, marketing and technical sales.

THE FAIRFIELD UNIVERSITY MOT PROGRAM IN BRIEF

FOUNDATION
Interdisciplinary focus in engineering, accounting, finance, management, marketing, operations and business strategy, as well as the management of technology.

ENGINEERING, TECHNOLOGY AND BUSINESS
The Management of Technology program prepares managers and leaders to apply the technical, financial and management skills relevant to a competitive global environment. Graduates translate technology into business actions and implement solutions for today’s global economy. They are prepared to develop and manage efficient systems that integrate workers, machines, materials, information, and energy to deliver a product or provide a service. As industrial engineers they may create production schedules, engineering specifications, and process flows to understand activities in manufacturing and services.

Graduates use their knowledge of engineering, mathematics, information technology, business administration, and management, to focus on the way products and services are made and performed. Though a combination of technical abilities, people skills, and business understanding, they analyze, design, build, and manage systems. Graduates of the Management of Technology program work in every industry including aerospace, hospitals, communications, e-commerce, entertainment, government, finance, food, information systems, manufacturing, military, pharmaceuticals, semiconductors, sports, insurance, sales, accounting, banking, travel, and transportation. The most distinctive aspect of the Management of Technology program is the flexibility that it offers. The program will help graduates make business and technical decisions as well as advances in science and technology in the context of their organization’s strategic business goals.

TYPICAL JOB TITLES FOR PROGRAM GRADUATES
• Engineering Manager
• Industrial Engineer
• Quality Engineer
• Manufacturing Manager
• Project Manager
• Systems Engineer
• Process Engineer
• Manufacturing Engineer
• Systems Analyst
• Technical Sales
• Supply Chain Manager

PERSPECTIVE
National and global economic view.

PROGRAM LEARNING OUTCOMES
After completing the program student will be prepared to do the following:

• Develop a technical program for an engineering project
• Create and implement corporate strategic technology plans
• Effectively communicate with technical and non-technical customers and colleagues
• Have a framework for data-driven decision making
• Manage the work of engineers, scientists and technicians in fields such as research and development, information systems, health systems and manufacturing
• Coordinate testing, quality control, and production activities
• Lead and manage a diverse team of technical professionals
• Manage projects taking into consideration resources, schedule, customer needs and expectations, and budgets.
• Analyze the financial performance of an organization.
• Evaluate organizational decisions with consideration of the technical, political, legal and ethical aspects.
• Evaluate technologies and innovations using technical and business parameters.
• Evaluate and select appropriate strategies from a global business perspective.
• Manage new product development
The multi-disciplined Management of Technology program helps engineers build an integrated framework that enables them to make successful technical business decisions in today’s fast-paced global environment.

FACULTY
The MOT engineering faculty and the Dolan School of Business faculty have practical “real-world” engineering and engineering management experience.

PREFERRED APPLICANT CAREER STAGE
Three years of professional work experience.

UNDERGRADUATE DEGREE
All undergraduate degrees considered. Engineering or technology preferred.

GRADUATION CREDIT HOURS
36

ENGLISH LANGUAGE TESTING
International students must take the IELTS or TOEFL exam.

ENTRANCE TEST
GRE or GMAT scores are not required.

FORMAT
Full-time or part-time enrollment.

ESTIMATED PROGRAM LENGTH
Two years (full-time) or four years (part-time).

START DATES
September, January, or May.

CAREER OPPORTUNITIES
MOT alumni are employed by such outstanding companies as:
• United Technologies Corp.
• Hamilton Standard
• Carrier
• Otis Elevator
• Sikorsky Aircraft
• DRS Technologies
• NASDAQ

• Bigelow Tea, Inc.
• Priceline.com
• Oracle
• Gartner, Inc.
• Covidiën
• IBM
• Yale University
• Cigna Corp.
• Duracell, Inc.
• United Illuminating
• Microsoft

COURSE OF STUDY
The MSMOT degree requires 36 credits (12 courses).

REQUIRED COURSES (24 CREDIT HOURS)
• Project Management
• Information Systems
• Strategic Management of Technology and Innovation
• Accounting for Decision Making
• Global Competitive Strategy OR
  Introduction to Systems Engineering
• Leadership in Technical Enterprise
• Capstone I: Project Definition and Planning
• Capstone II: Project Execution and Results

CONCENTRATION COURSES
In addition to the eight (8) required courses, students must complete four (4) electives. The four electives may include any graduate courses that support the student’s career objectives. MSMOT students may elect to focus on one of four concentrations: Management of Design and Manufacturing, Strategic Management of Resources, Management of Information Technology, or Systems Engineering Concepts and Methods. Examples of courses in the concentration areas are shown below:
MANAGEMENT OF DESIGN AND MANUFACTURING
- Supply Chain Design
- Design of Manufacturing Systems and Processes
- Design for Economy and Reliability
- Management of Design for Automation

MANAGEMENT OF RESOURCES
- Global Competitive Strategy
- Management of Risk in Research and Development
- Management of Intellectual Property

MANAGEMENT OF INFORMATION TECHNOLOGY
- Software Engineering Practices
- Database Concepts
- Data Warehouse Systems
- Software Engineering Methods
- Data Mining and Business Intelligence

SYSTEMS ENGINEERING CONCEPTS AND METHODS
- Introduction to Systems Engineering
- Principles of Quality Management

ELECTIVE COURSES
MSMOT students have a great deal of flexibility in completing their elective course requirements. Courses may be selected from those offered by the Management of Technology, Electrical Engineering, Software Engineering, Mechanical Engineering or Automation Engineering departments. Elective courses should be selected to support the student's career objectives and may be chosen from any graduate course offered by the University. MSMOT students may enroll in a maximum of five graduate courses offered by the Dolan School of Business. Consult with the program director for guidance.

THE CAPSTONE PROJECT
Capstone projects address real needs that students have encountered, or are likely to encounter in the technology workplace and in their professional positions. Examples of recent projects include:
- Laser alignment of military helicopter instruments for aligning flight and flight control systems in manufacture.
- The Computer Tutor Education System to help the chronically unemployed receive private training through the Connecticut Department of Labor and acquire skills.
- An ambulance-based data collection and management system to reduce the time between an emergency pick-up site and hospital intake and care.
- The application of real options in the management of complex projects to mitigate the risk to investors and thus encourage important R&D initiatives.

Prerequisite coursework or demonstrated aptitude in the following subjects is required:
- Introductory probability and statistics
- Computer programming that uses a high-level language and includes applications
- Financial accounting

Applicants who have had no courses in these areas and who are unable to demonstrate aptitude in these subjects must take these courses at the undergraduate level as soon as possible.

FORMAL ADMISSION PROCESS
Applications to the graduate program are accepted on a rolling basis. Applications are reviewed by the Graduate Admission Committee. Students seeking admission must complete and submit the following online:

1. A completed application. (Apply online at www.fairfield.edu/soeapp.)
2. A non-refundable $60 application fee.
3. A professional résumé.
4. Personal statement describing intent for studying in the program.
5. Official transcripts from all universities/colleges attended (All foreign transcripts must be evaluated by an approved evaluating service. A list of approved evaluators is available at www.fairfield.edu/eval.)
6. Two recommendation letters, one of which must be from a current supervisor or professor, completed online.
7. All international students whose native language is not English must demonstrate proficiency in the English language by taking either TOEFL or IELTS exams. For admission to the graduate school, a TOEFL composite score of 550 for the paper test, 213 for the computer-based, 80 on the internet based test or an IELTS score of 6.5 is strongly recommended. Scores must be sent directly from the Educational Testing Service (TOEFL) or www.IELTS.org. Fairfield's ETS code is 3390.

Submit transcripts and any other documents that cannot be uploaded to:
Fairfield University
Office of Graduate Admission
Kelley Center
1073 North Benson Road
Fairfield, CT 06824

Academically-gifted international applicants with English deficiency will have the opportunity to be conditionally admitted into our graduate program, pending their successful completion of English as Second Language (ESL) summer program at our partner institution. Students will be provided on-campus accommodations and enrollment into the summer ESL program.

The TOEFL/IELTS requirement is waived upon written recommendation from the ESL Coordinator, based on successful performance of end-of-session internal assessments.

TRANSFER STUDENTS
Transfer credit will be considered for graduate coursework earned with a grade of B or better. No more than six credits may be transferred.
MANDATORY IMMUNIZATIONS

Connecticut State law requires each full-time or matriculated student to provide proof of immunity or screening against measles, mumps, rubella, varicella (chicken pox), meningitis and tuberculosis. Certain exemptions based on age and housing status apply. Matriculating students are defined as those enrolled in a degree seeking program. More detailed information and the required downloadable forms are available online at www.fairfield.edu/immunization. Completed forms should be submitted directly to the Student Health Center. Although this is not required to complete an application, you must provide proof of immunity/screening prior to course registration. Please consult your private health care provider to obtain the necessary immunizations. Questions may be directed to the Student Health Center: 203-254-4000 ext. 2241 or e-mail health@fairfield.edu.

NON-MATRICULATED STUDENT STATUS

Non-matriculated status may be granted to individuals who have not completed the admission process but wish to begin taking courses, or who are not seeking a degree or certification. Individuals wishing to enroll as non-matriculated students must submit:

1. A completed application.  
   (Apply online at www.fairfield.edu/soeapp.)
2. A non-refundable $60 application fee.
3. A written request to the Graduate Program Director, specifying the semester for which this status is requested.
4. Official transcripts verifying that a baccalaureate (or higher) degree with a grade point average of 3.0 or higher has been earned.

Non-matriculated student status is granted for 9 credits only. Students seeking admission must complete the formal application process by the end of their 9 credit limit in order to continue with their studies. Individuals enrolled as non-matriculated students cannot enroll for more than six credits each term, cannot register on a full-time basis, and are not eligible for any tuition aid or financial support. Upon formal admission to the Graduate Program, credits earned while a non-matriculated student will be applied toward the master’s degree, provided the courses were approved by the faculty advisor and the grade received in each course was a B or better. Successful completion of coursework does not automatically guarantee formal admission.

NON-DEGREE STUDENTS

Students who hold master’s degrees and who are interested in taking courses for professional and/or personal continuing education may be admitted as non-degree students. Individuals wishing to enroll as non-degree students must submit:

1. A completed application.  
   (Apply online at www.fairfield.edu/soeapp.)
2. A non-refundable $60 application fee.
3. A written request to the Graduate Program Director, specifying the semester for which this status is requested.
4. Official transcripts verifying that a master’s degree has been earned.

Courses taken under this status will not be considered toward fulfillment of degree requirements.

TUITION/FINANCIAL AID

Academic Year 2017/2018
Tuition: $825 per credit hour

A graduate education can provide countless professional and personal rewards in the future. However, the costs associated with earning a master’s degree may be challenging. Many students need to look beyond their own financial resources or the resources of their employer for assistance. There are many ways to finance a graduate education, including graduate assistantships, federal direct loan programs and our Veterans Pride Program, which are all discussed at www.fairfield.edu/gradfa.

SCHOLARSHIPS

The School of Engineering provides merit-based, research, and practical experience scholarships for students based on their academic performance at Fairfield University. Other types of employment, including technology-based, are available on-campus.

OFFICE OF FINANCIAL AID

Advisors from the Office of Financial Aid are committed to helping students find the options that best suit each of their needs. We encourage all Fairfield University graduate students to contact the Financial Aid office with any questions or to make an appointment to speak with a counselor.

FINANCIAL AID CONTACT INFORMATION
Phone: 203-254-4125
Fax: 203-254-4008
E-mail: finaid@fairfield.edu

FINANCIAL AID OFFICE OPERATIONS
Days: Monday-Friday
Hours: 8:30 a.m.-4:30 p.m.
Location: Aloysius P. Kelley, S.J. Center

MORE INFORMATION

ADMISSION QUESTIONS
Questions about the application process should be directed to the Office of Graduate Admission.  
Phone: 203-254-4184
Fax: 203-254-4073
E-mail: gradadmis@fairfield.edu

OFFICE OPERATIONS
Days: Monday-Friday
Hours: 8:30 a.m.-4:30 p.m.
Location: Aloysius P. Kelley, S.J. Center

SCHOOL OF ENGINEERING WEBSITE
www.fairfield.edu/engineering

ONLINE CATALOG

For detailed course descriptions and other University information, please refer to our online catalog www.fairfield.edu/catalogs.