

# INDUSTRIAL TECHNOLOGY (M.S.)

## Master of Science Program

Program Code: MS-SP

Major Code: IDT

## Engineering Technology Department

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[engineeringtechnology.buffalostate.edu/](http://engineeringtechnology.buffalostate.edu/) (<http://engineeringtechnology.buffalostate.edu/>)

This program prepares professionals for positions of leadership and responsibility in business, industry, and government. It provides direct exposure to actual business and industrial problems in an applications-oriented environment. It encourages part-time study while the participant is involved in full-time employment. Representative undergraduate degrees include industrial technology, engineering technology, computer information systems, and business. Required courses include engineering economics, operations management, integrated industrial systems and research design. These courses provide a common core of knowledge enabling the graduate to effectively function in diverse settings. Elective courses allow the student to pursue topics of interest that may be of immediate professional benefit. A research project, often based on current work experiences, completes the program.

This part-time program is designed to provide a 30-hour degree that blends the management and technology disciplines, and can be completed in three years of part-time study.

## Admission Requirements

1. A bachelor's degree in technology, engineering, business, or information systems from an accredited college or university. Candidates holding other baccalaureate degrees but having significant work experience in one of the previously mentioned disciplines will be considered.
2. A minimum cumulative GPA of 2.5 (4.0 scale) in the baccalaureate degree.
3. Three letters of reference, including one from the applicant's current or most recent employer.
4. Letter of intent. A brief statement describing the applicant's experience and how this degree is expected to help achieve his or her career goals.

In addition, all applicants should review the Admission to a Graduate Program (<http://ecatalog.buffalostate.edu/graduate/admission-graduate-program/>) section in this catalog.

## Application Procedures

1. Obtain application information online (<https://suny.buffalostate.edu/graduate/new/>) through the Graduate Studies website.
2. Request sealed official transcripts from all higher education institutions attended and submit them with the complete application packet to Graduate Studies.
3. Obtain approval from the Graduate Studies Committee, the department chair, and the Graduate School.

Admission applications are not complete until all required forms, documents, and data are received.

## Program Requirements

Code	Title	Credit Hours
<b>Required Courses (12 credit hours)</b>		
INT/ECO 601	ENGINEERING ECONOMY	3
INT 602	OPERATIONS MANAGEMENT (ADVANCED SYSTEMS ANALYSIS)	3
INT 659	INTEGRATED INDUSTRIAL SYSTEMS	3
INT 689	RESEARCH DESIGN AND METHODOLOGY	3
<b>Elective Courses (12-18 credit hours)</b>		
Select 12-18 credit hours of the following: <sup>1</sup>		12-18
BUS/HIS 536	THE AMERICAN ENTERPRISE SYSTEM	
HIS 607	THE UNITED STATES IN CONTEMPORARY WORLD AFFAIRS	
INT 610	MANAGERIAL MARKETING	
INT 611	NETWORK THEORY	
INT 612	QUALITY CONTROL MANAGEMENT	
INT 630	WORK MEASUREMENT	
INT 661	MANUFACTURING PROPERTIES OF MATERIALS	
INT 662	MANUFACTURING CASE STUDY	
INT 670	PRODUCTION AND INVENTORY MANAGEMENT	
INT 675	JUST-IN-TIME MANUFACTURING	
<b>Master's Project, Master's Thesis, or Comprehensive Examination (0-6 credit hours)</b>		
Select one from the following:		0-6

INT 690	MASTER'S PROJECT
INT 695	MASTER'S THESIS
Comprehensive Examination	
<b>Total Credit Hours</b>	<b>30</b>

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Selected under advisement

All courses are 3 credit hours unless otherwise indicated.

Students will be able to:

1. Demonstrate competence in written and/or oral communication.
2. Demonstrate knowledge of how to apply analytical methods to the solution of manufacturing and service-related problems.
3. Demonstrate knowledge of research methods and their application to the structuring of complex investigations.
4. Demonstrate knowledge of how to apply principles of industrial technology management (e.g.: engineering economics; production operations management; project planning; quality; automation; plant layout; marketing) to the solution of technology-based problems.
5. Demonstrate knowledge of lean production methods.