May be completed on-campus and online
30 credits

MS REQUIRED COURSES
Students must successfully complete 30 credits as outlined below.

Core Courses (choose 3 courses to earn 9 credits)
- PTC 603 Identity, Technology & Comm. Available Online
- PTC 629 Theory and Practice of Social Media Available Online
- PTC 681 Technology in Class and Learning Available Online
- PTC 698 Digital Instruction Essentials Available Online

Master’s Project (3 credits) or Master’s Thesis (6 credits)

Track Courses (15-18 credits) See tracks available on other side of page. Students must successfully complete 15-18 credits in a chosen track. An additional elective is needed if the master’s project option is selected.

Program Advisor
Dr. Andrew Klobucar
klobucar@njit.edu
973-596-5724

How to Apply
Visit apply.njit.edu to start your application today!
### Tracks

#### Business

**Required Courses (3 credits)**
- MGMT 620 Management of Technology 

**Additional Courses (choose 4 courses to earn 12 credits)**
- ECON 610 Managerial Economics
- FIN 600 Corporate Finance I
- FIN 624 Corporate Finance II
- MGMT 635 Data Mining and Analysis
- MGMT 640 New Venture Management
- MGMT 650 Knowledge Management
- MGMT 691 Legal and Ethical Issues
- MGMT 692 Strategic Management

#### Computer Science

**Required Courses (6 credits)**
- CS 505 Programming, Data Structures & Algorithms
- CS 506 Foundations of Computer Science

**Additional Courses (choose 3 courses to earn 9 credits)**
- CS 610 Data Structures & Algorithms
- CS 630 Operating Systems Design
- CS 631 Data Management System Design
- CS 656 Internet & Higher-Layer Protocols

#### Engineering Management

**Required Courses (6 credits)**
- EM 636 Project Management
- HRM 601 Organizational Behavior

**Additional Courses (choose 3 courses to earn 9 credits)**
- ACCT 615 Management Accounting
- IE 673 Total Quality Management
- MIS 645 Information Systems Principles
- EM 634 Legal, Ethical and Intellectual Property
- EM 637 Project Control
- EM 691 Cost Estimating for Capital Projects
- EM 632 Legal Aspects in Construction

#### Information Systems

**Required Courses (6 credits)**
- IS 601 Web Systems Development
- IS 663 System Analysis and Design

**Additional Courses (choose 3 courses to earn 9 credits)**
- IS 631 Enterprise Database Management
- IS 665 Data Analytics for Information Systems
- IS 676 Requirements Engineering
- IS 678 IT Service Management
- IS 680 Information Systems Auditing
- IS 681 Computer Security Auditing
- IS 684 Business Process Innovation
- IS 688 Web Mining

#### Engineering

**Required Courses (6 credits)**
- IE 604 Advanced Engineering Statistics
- IE 621 Systems Analysis and Simulation

**Additional Courses (choose 3 courses to earn 9 credits)**
- ECE 601 Linear Systems
- ECE 605 Discrete Event Dynamic Systems
- ECE 673 Random Signal Analysis I
- IE 618 Engineering Cost & Production Economics
- IE 672 Industrial Quality Control
- IE 673 Total Quality Management
- ME 616 Matrix Methods in Mechanical Engineering
- ME 632 Mechanical Engineering Measurements
- ME 635 Computer-Aided Design
- BME 669 Engineering Physiology
- BME 670 Intro to Biomedical Engineering

---

### Graduate Certificates

**Five courses (15 credits)**

Successful completion of required courses and some additional courses to achieve 15 credits will result in an Applied Science graduate certificate in the corresponding track.

#### Architecture

**Required Courses (6 credits)**
- ARCH 545G Structures I
- ARCH 548G Structures II

**Additional Courses (choose 3 courses to earn 9 credits)**
- ARCH 555G Architectural Graphics
- ARCH 500G Advanced Architectural Graphics
- ARCH 528G History of Architecture I
- ARCH 529G History of Architecture II
- ARCH 541G Construction I
- ARCH 542G Construction II
- ARCH 543G Environmental Control Systems I
- ARCH 544G Environmental Control Systems II
- ARCH 569G Building and Development

#### Chemistry

**Required Courses (6 credits)**
- CHEM 605 Advanced Organic Chemistry
- CHEM 661 Instrumental Analysis Laboratory

**Additional Courses (choose 3 courses to earn 9 credits)**
- CHEM 673 Biochemistry
- CHEM 777 Principles of Medicinal Chemistry
- EVSC 616 Toxicology for Engineers and Scientists
- EVSC 610 Environmental Chemical Science

#### Mathematics

**Required Courses (6 credits)**
- MATH 545 Introductory Mathematical Analysis
- MATH 546 Advanced Calculus

**Additional Courses (choose 3 courses to earn 9 credits)**
- MATH 611 Numerical Methods for Computation
- MATH 630 Linear Algebra and Applications
- MATH 660 Intro to Statistical Computing w/ SAS & R
- MATH 661 Applied Statistics

#### Physics

**Required Course (3 credits)**
- PHYS 611 Advanced Classical Mechanics

**Additional Courses (choose 4 courses to earn 12 credits)**
- PHYS 621 Classical Electrodynamics
- PHYS 631 Quantum Mechanics I
- PHYS 641 Statistical Mechanics
- PHYS 661 Solid-State Physics
- PHYS 607 Topics in Astronomy and Cosmology

#### Custom track

Students may develop an individual track in consultation with a graduate advisor. A coherent set of courses involving mathematics, computing, physics, chemistry, biology or engineering are expected.