In the complex, competitive world of technology-driven industry, skilled engineers who not only understand technology but also the essential principles of business and law have a tremendous competitive advantage. The Pratt School of Engineering at Duke University is helping engineering students meet the demand for such professionals with its unique Master of Engineering Management (MEM) Degree. By combining a core management curriculum with a master's level technical education, an internship, and an intensive seminar and workshop series, Duke's professional MEM program enables students to build upon their undergraduate degrees in engineering or science and develop marketable skills in business, technology management, or entrepreneurship—skills that resonate with industry.

Creating a Business-Savvy Engineer

Visit: http://memp.pratt.duke.edu/
Core Management Courses

The four core management courses, developed in conjunction with the Duke School of Law and the Fuqua School of Business, are specifically tailored to enhance each student’s technical background with critical business acumen.

EGRMGMNT 510: Marketing
By learning to understand the customer’s perspective, students see beyond technical feasibility to the design, development, and commercialization of new products and services in rapidly changing markets.

EGRMGMNT 520: Intellectual Property, Business Law, and Entrepreneurship
Through focusing on the legal fundamentals that protect business ventures and intellectual property, students obtain a competitive advantage in industry.

EGRMGMNT 530: Finance and Accounting for Technology-Based Companies
Students learn to make managerial decisions based on financial criteria in this accelerated course combining accounting fundamentals and financial analysis tools.

EGRMGMNT 540: Management in High-Tech Industries
Students focus on managerial decision making and organization building while learning the skills to coordinate and leverage human capital.

Build a Business Foundation

Duke’s MEM degree offers students flexibility and variety to suit their interests. All students complete four core management courses. Students customize their coursework by choosing technical electives from a wide variety of courses offered by the Pratt School of Engineering or other Duke schools, such as the Fuqua School of Business, the Duke School of Law, or the Nicholas School of the Environment. An internship requirement ensures students gain valuable experience in industry. The seminar series introduces students to business leaders and the complex issues they face, while interactive workshops allow students to develop business skills.

To receive a Master’s degree in Engineering Management, students complete:

- 4 core management courses
- 4 technical electives
- An internship, including report and presentation
- 2 semesters of the MEM Seminar and Workshop Series

EXAMPLE CURRICULUM

The program can be completed in as little as one year. The internship is typically completed during the summer either before or after beginning the program.

<table>
<thead>
<tr>
<th>FALL</th>
<th>SPRING</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGRMGMNT 510: Marketing</td>
<td>EGRMGMNT 520: IP, Bus. Law &amp; Entrepreneurship</td>
</tr>
<tr>
<td>EGRMGMNT 530: Finance</td>
<td>EGRMGMNT 540: Management</td>
</tr>
<tr>
<td>Elective 1</td>
<td>Elective 3</td>
</tr>
<tr>
<td>Elective 2</td>
<td>Elective 4</td>
</tr>
<tr>
<td>MEM Seminar and Workshop Series</td>
<td>MEM Seminar and Workshop Series</td>
</tr>
</tbody>
</table>
The Duke Advantage

Duke’s MEM Program is distinctive among graduate programs in its flexibility and integration of business, law, and engineering. The curriculum is offered by the Pratt School of Engineering with the support of the Fuqua School of Business and the Duke School of Law.

Duke University, one of the world’s leading institutions in education, research, and medicine, is consistently ranked as one of the best universities in the country. With 6,500 undergraduates, 6,200 graduate and professional students, and more than 2,300 faculty, staff, and researchers, the university is known for excellence in the classroom and beyond.

The Pratt School of Engineering offers undergraduate and graduate programs in a variety of engineering disciplines, including Duke’s top-ranked biomedical engineering department. The Fuqua School of Business is the youngest of America’s top-tier business schools, and the Duke School of Law is consistently ranked as one of the best in the nation.

Known as the “City of Medicine”, Durham is located in the Research Triangle Park region of North Carolina, an area anchored by Duke University in Durham, North Carolina State University in Raleigh, and the University of North Carolina at Chapel Hill. The “Triangle” is home to over 1,000,000 residents, and the Research Triangle Park boasts more than 140 major high-tech companies employing thousands of workers. With a vibrant arts scene, a mild climate, and beaches and mountains located a few hours away, it’s no surprise that the area is consistently rated as one of the best places to live in the country.
Technical Electives

Technical electives allow students to tailor the MEM degree to their interests, providing variety and flexibility as students enhance their technical depth and/or breadth. Students may:

- take courses at the highly-ranked departments within the Pratt School of Engineering, including our top-ranked Biomedical Engineering department,
- customize an interdisciplinary set of courses in subjects such as photonics or nanotechnology,
- select from a variety of topics in the area of management of technology and entrepreneurship,
- take courses outside of the Pratt School of Engineering, with the Director’s approval, from the Fuqua School of Business or in areas such as physics, chemistry, computer science, or statistics/decision science,
- pursue courses at NC State University and the University of North Carolina through an inter-institutional transfer, with approval of the Director, or
- develop an independent study course by identifying a topic and an interested faculty member. Students may take up to two independent study courses.

“Working in groups and interacting with such a broad array of people has been amazing – you learn so much more than if you were working with people from the same background as yourself.”

- Lee Anne Cox
  MS Electrical and Computer Engineering 2007
  MEM 2007
  Rotational Leadership Program
  Raytheon Company
Concentrations
Though not required by the MEM Program, focus areas are often chosen by students who would like to focus on a technical field or industry segment. Students choose from a varied selection of courses, enabling both those with strong technical interest and those with an interest in integrating business and technology to expand their knowledge in a particular area. Focus areas include:

Management of Technology Concentrations
Focused on students with an interest in applied classes that integrate business and technology
- Construction Management and Property Development
- Data and Decisions
- Entrepreneurship
- Financial Engineering
- Innovation and Commercialization
- Operations and Supply Chain Management

Science and Technology Concentrations
Focused on students seeking graduate level science and engineering knowledge
- Biomaterials
- Biomedical Engineering
- Civil Engineering
- Electrical and Computer Engineering
- Energy and the Environment
- Environmental Engineering
- Materials Science
- Mechanical Engineering
- Photonics

“The practicum course was a great replication of a real-world consulting situation. My team developed a unique approach to identifying renewable energy market opportunities for a real client and major construction engineering firm while honing both our research and communication skills. This course has been most useful in my position because of its analytical nature and the way it encouraged innovation.”

- Brooke Rennick
MEM 2007
Consultant
Accenture
**Previous Speakers:**

Ken Bohlen  
Executive Vice President and CIO, Textron

Wendy Toh  
Vice President of Rational Client Success, IBM

Radhika Kulkarni  
Vice President of Advanced Analytics R&D, SAS Institute

Brook Byers  
Partner, Kleiner Perkins Caufield & Byers

Phil Sciabarrasi  
Vice President, Parsons

Gigi Karmous-Edwards  
Director of Technology, Sensus

---

**Seminar & Workshop Series**

Seminars offer students the opportunity to interact with top industry leaders, experienced business managers, entrepreneurs, venture capitalists, and small-business owners. Designed to introduce students to different aspects of business and industry, the series also includes information on career opportunity and development. A weekly post-seminar reception allows students to talk one-on-one with speakers and network with their peers.

Duke’s unique workshop series allows students to further develop marketable business skills in an intensive, interactive environment. Topics are selected through input from industry, program administrators, and students, and include:

- **Successful Teamwork:** students review the key concepts of successful teamwork and practice techniques that make teams more productive.

- **The Art of Negotiation:** students consider the keys to successful persuasion, from tips on negotiating with clients and vendors to the secret of selling ideas within an organization.

- **Business Etiquette for Success:** students learn to project a professional image and increase their confidence in business interactions, including interviews, business meals, and other corporate functions.

- **High-Stakes Communication:** through case studies and mock interviews, students investigate the art of effective communication with the media.

- **Communication and Creativity in the Moment:** using principles and techniques from improvisational theater, students explore ways to enhance creativity and become a more dynamic communicator.

- **The Leading Edge:** students study the core elements of leadership and management while practicing techniques that enhance leadership ability.

- **Technical Networking Tactics:** students study the process of cultivating business relationships and practice their networking skills during a reception and dinner with local business representatives.

- **Ethics for Developing Leaders:** students explore the fundamentals of ethical decision making through discussion and teamwork.

Visit memp.pratt.duke.edu/seminars for a complete list of speakers and to subscribe to our Innovation and Technology Management Series on YouTube.

---

In High-Stakes Communication, students read a case and are interviewed on “TV” as the spokesperson for a company in the midst of a crisis.
Beyond Academics

The Duke MEM experience goes beyond the classroom. With hundreds of student activities, including competitions, technical clubs, volunteer opportunities, social activities, athletic pursuits, and a vibrant arts scene, MEM students have plenty to do when classes aren’t in session.

MEM students have a tradition of excellence in both the Duke Start-Up Challenge, a business plan competition, and the Engineering World Health CUREs Competition, where students develop innovative, inexpensive medical devices that meet the needs of people in developing countries. To date, students have won over $250,000 to support their entrepreneurial efforts.

The Duke Smart Home is a 6,000 sq. ft. live-in research laboratory designed, operated, and occupied by students exploring sustainable living, technology integration, and design.

MEM Program Development Committee members work with the program’s leaders to plan student activities, coordinate student recruitment events, and enhance industry relations.

“The beginning, Duke’s MEM Program allowed me to focus not only my courses, but also my activities, to my interest in global health. The program gave me the knowledge and resources to create a not-for-profit business venture, as well as the opportunity to travel to Africa, China, and Panama for research.”

- Glen Rabito
Engineering World Health Fellow
MEM 2007
Technical Development Program
Edwards Lifesciences

MEM students find several ways to participate in athletics at Duke. From left to right: an MEM club basketball team celebrates a win in Cameron Indoor Stadium; MEM Cameron Crazies cheer on the Blue Devils; MEM student Eli Nichols (52) served as captain of Duke’s 2006-2007 football team.
Accelerate Your Career

The Duke MEM Program prepares its students for a wide variety of careers. Working with our dedicated career team and the Duke Career Center, students have joined top employers, from small businesses to large firms, as interns or full-time employees, including:

**Technical/Engineering**
- Boeing
- DuPont
- ExxonMobil
- General Electric
- General Motors
- John Deere
- Lockheed Martin
- Philips
- Raytheon
- Samsung Electronics
- Textron

**Health/Medical**
- Abbott Laboratories
- Becton, Dickinson, & Co.
- Boston Scientific
- Edwards Lifesciences
- GlaxoSmithKline
- Johnson & Johnson
- Medtronic
- Merck & Co.
- St. Jude Medical

**Consulting**
- Accenture
- Boston Consulting Group
- Capgemini
- Deloitte Consulting
- Katzenbach Partners

**Information Technology**
- Alcatel-Lucent
- Alltel
- Cisco Systems
- IBM
- Intel
- Microsoft
- Nortel

**Finance**
- American Express
- Bank of America
- Citibank
- Deutsche Bank
- Ernst & Young
- Merrill Lynch
- PricewaterhouseCoopers
- Wachovia Securities

Take the Next Step
Duke’s Master of Engineering Management Program

Science or engineering majors interested in developing skills in business, technology management, or entrepreneurship are encouraged to explore Duke’s Master of Engineering Management Program. Application requirements include:

- Bachelor’s degree in engineering or science
- Graduate Record Exam results
- Test of English as a Foreign Language results (*international applicants only*)
- Resume
- Statement of Purpose
- Three recommendations

Applications are accepted for fall or spring entrance. For more information, including deadlines and a link to our online application, visit our applicant website at [http://memp.pratt.duke.edu/apply](http://memp.pratt.duke.edu/apply) or contact us.

Master of Engineering Management Program
Pratt School of Engineering
Duke University
3120 Fitzpatrick Center (FC/EMAS)
Durham, North Carolina 27708
Phone: 919.660.5455

Web: [http://memp.pratt.duke.edu/](http://memp.pratt.duke.edu/)
E-mail: memp@pratt.duke.edu