The Entrepreneurship & Management (E&M) program offers Johns Hopkins Arts & Sciences, Engineering, and Peabody students a broad array of courses designed to equip them to lead in business, professional, and academic arenas. Some students simply take a course or two. Many choose to fulfill the seven-course E&M minor, pairing it with their engineering, liberal arts, or public health major. The minor’s three core courses, Introduction to Business, Financial Accounting, and Marketing Principles, provide a strong foundation in the fundamentals of entrepreneurial enterprises. Students can then select any three upper-level courses (plus the required work in statistics) to complete the minor or elect to focus further in Accounting and Finance, Business Law, Leadership and Organizational Behavior, or Professional Communication.

The minor in entrepreneurship and management focuses on business and management from a multidisciplinary viewpoint, with a quantitative emphasis. The program, part of the Center for Leadership Education (http://e-catalog.jhu.edu/departments-program-requirements-and-courses/engineering/leadership-education), offers students a diversified learning experience that emphasizes the concepts, practices, and skills necessary for effective leadership as managers and entrepreneurs in the public and private sectors.

The primary goal of the program is to provide Hopkins students with the knowledge and skills to become effective leaders and entrepreneurs. Individuals with excellent technical training and abilities often move into management positions or start new ventures. As their careers progress, they will be better prepared for success if they have the ability to understand financial reports, interpret statistical data, organize and effectively lead a team, design strategy, analyze and correct problems in the firm’s operations, and understand the dynamics of the marketplace.

The minor is purposely designed to serve different types of students. The program will help prepare students for entrance to law school, an MBA program, or other graduate school. After graduation, other students will start working in engineering or technical positions, then later move into management or start their own businesses. A third group of students is primarily interested in gaining knowledge to follow more generalized careers in finance and business.

**Students completing multiple minors:**

Students must take at least three unique upper level* electives for each minor they undertake. *as defined by the CLE.

**Facilities**

The CLE Full-time Faculty and staff offices are located in Whitehead Hall, suites 102, 104 and 105. Part-time Faculty and ESL Specialists offices are located in Maryland 16. Course assistants’ office hours are held in room 104.

**Minor in Entrepreneurship and Management**

The requirements of the minor in entrepreneurship and management can be downloaded from the Center for Leadership Education’s website under the "W.P. Carey Program in Entrepreneurship and Management" tab (http://eng.jhu.edu/wse/cle/page/em_minor). Students wishing to complete a minor in entrepreneurship and management may also obtain more information from the CLE Faculty Support Staff office located in Whitehead 105.

**Students completing multiple minors:**

Students must take at least three unique upper level* electives for each minor they undertake. *as defined by the CLE.

**Core Requirements**

1. Statistics - These courses expose students to the foundations of statistics that are used extensively in business decision-making. These topics include correlation, estimation, hypothesis testing, linear regression, prediction, and forecasting. Students may take either two elementary statistics courses or one intermediate/advanced calculus-based statistics course from the list below.

   Option One: Two Elementary Statistics Courses (EN.550.112 is the required second course). Credit earned for AP Statistics (equivalent to EN.550.111) will satisfy the first of the two required courses.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN.553.111</td>
<td>Statistical Analysis I</td>
<td>4</td>
</tr>
<tr>
<td>or AS.230.205</td>
<td>Introduction to Social Statistics</td>
<td></td>
</tr>
<tr>
<td>or AS.280.345</td>
<td>Public Health Biostatistics</td>
<td></td>
</tr>
</tbody>
</table>

   Option Two: One Intermediate/Calculus-Based Course (must have Calculus as a prerequisite)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN.553.211</td>
<td>Probability and Statistics for the Life Sciences</td>
<td>4</td>
</tr>
<tr>
<td>or EN.553.310</td>
<td>Probability &amp; Statistics</td>
<td></td>
</tr>
<tr>
<td>or EN.553.311</td>
<td>Probability and Statistics for the Biological Sciences and Engineering</td>
<td></td>
</tr>
<tr>
<td>or EN.553.430</td>
<td>Introduction to Statistics</td>
<td></td>
</tr>
<tr>
<td>or EN.540.305</td>
<td>Modeling and Statistical Analysis of Data for Chemical and Biomolecular Engineers</td>
<td></td>
</tr>
<tr>
<td>or EN.560.348</td>
<td>Probability &amp; Statistics in Civil Engineering</td>
<td></td>
</tr>
</tbody>
</table>

2. Entrepreneurship and Management Fundamentals - Students must complete three fundamental courses in entrepreneurship and management. These courses are:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN.660.105</td>
<td>Introduction to Business</td>
<td>4</td>
</tr>
<tr>
<td>EN.660.203</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>EN.661.110</td>
<td>Professional Writing and Communication</td>
<td>3</td>
</tr>
<tr>
<td>or EN.661.250</td>
<td>Oral Presentations</td>
<td></td>
</tr>
</tbody>
</table>

3. Upper-Level Elective Courses in Entrepreneurship and Management

   Students must complete three upper level courses in entrepreneurship and management. Courses may be chosen from a number of areas, including:

   - Accounting & Finance - These courses educate students about financial concepts, investments, and financial markets. This information is valuable for the entrepreneur starting a new venture, a manager to be effective with a corporation, and management consultants.
   - Business Law - These courses educate students about legal issues in business and how the law is used to protect intellectual property.
   - Leadership & Organizational Behavior - These courses provide knowledge of both general principles and specific practices needed for working
effectively with people in an organization. These courses focus on leadership, team building, ethics, and psychology.

Students who wish to complete a focus area in one of the areas listed above must complete three courses from that area, with at least one at the 400-level.

Lists of acceptable courses are provided below. These lists are regularly updated and may be obtained at the Center for Leadership Education office or on the center’s website (http://eng.jhu.edu/wse/cle/page/em_minor).

### Accounting and Finance Courses*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN.660.300</td>
<td>Managerial Finance</td>
<td>3</td>
</tr>
<tr>
<td>EN.660.303</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>EN.660.410</td>
<td>Computer Science Innovation and Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>EN.660.414</td>
<td>Financial Statement Analysis</td>
<td>3</td>
</tr>
<tr>
<td>EN.660.460</td>
<td>Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>AS.180.263</td>
<td>Corporate Finance</td>
<td>3</td>
</tr>
<tr>
<td>EN.570.334</td>
<td>Engineering Microeconomics</td>
<td>3</td>
</tr>
</tbody>
</table>

* The course 232.410 Corporate Finance from the Carey Business School may also be used as an Accounting and Finance course.

### Business Law Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN.660.308</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>EN.660.310</td>
<td>Case Studies in Business Ethics</td>
<td>3</td>
</tr>
<tr>
<td>EN.660.311</td>
<td>Law and the Internet</td>
<td>3</td>
</tr>
<tr>
<td>EN.660.404</td>
<td>Business Law II</td>
<td>3</td>
</tr>
<tr>
<td>EN.660.405</td>
<td>Intellectual Property Law</td>
<td>3</td>
</tr>
<tr>
<td>EN.660.460</td>
<td>Entrepreneurship</td>
<td>3</td>
</tr>
</tbody>
</table>

### Leadership and Organizational Behavior Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN.660.321</td>
<td>Managing &amp; Marketing Social Enterprises</td>
<td>3</td>
</tr>
<tr>
<td>EN.660.329</td>
<td>Social Entrepreneurship Theory and Practice. Community Based Learning</td>
<td>3</td>
</tr>
<tr>
<td>EN.660.331</td>
<td>Leading Teams</td>
<td>3</td>
</tr>
<tr>
<td>EN.660.332</td>
<td>Leadership Theory</td>
<td>3</td>
</tr>
<tr>
<td>EN.660.333</td>
<td>Leading Change</td>
<td>3</td>
</tr>
<tr>
<td>EN.660.335</td>
<td>Negotiation and Conflict Resolution</td>
<td>3</td>
</tr>
<tr>
<td>EN.660.340</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>EN.660.341</td>
<td>Business Process and Quality Management</td>
<td>3</td>
</tr>
<tr>
<td>EN.660.361</td>
<td>Engineering Business and Management</td>
<td>3</td>
</tr>
<tr>
<td>or EN.660.461 Engineering Business and Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EN.660.460</td>
<td>Entrepreneurship</td>
<td>3</td>
</tr>
</tbody>
</table>

### Marketing and Communication Courses

Students may use only one Marketing and Communications course as an upper-level elective for the Entrepreneurship and Management minor.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN.660.310</td>
<td>Case Studies in Business Ethics</td>
<td>3</td>
</tr>
<tr>
<td>EN.660.352</td>
<td>New Product Development</td>
<td>3</td>
</tr>
<tr>
<td>EN.660.355</td>
<td>Sports Marketing</td>
<td>3</td>
</tr>
<tr>
<td>EN.660.358</td>
<td>International Marketing</td>
<td>3</td>
</tr>
<tr>
<td>EN.660.420</td>
<td>Marketing Strategy</td>
<td>3</td>
</tr>
<tr>
<td>EN.660.450</td>
<td>Advertising &amp; Integrated Marketing Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

### Course and Grade Rules and Limitations

The E&M minor requires a minimum of 22 credits.

A maximum of 6 credits of courses taken from outside WSE and KSAS (including transfer course & study abroad) may be applied to the E&M minor.

One course may be taken on an S/U basis.

All courses applied to the E&M minor must be completed with a grade of C- or above.

For current faculty and contact information go to http://engineering.jhu.edu/cle/faculty

### Faculty

**Director**

Timothy Weihs  
Director of CLE, Professor of Materials Science & Engineering.

**Program Directors**

Lawrence Aronhime  
Senior Lecturer & Director of International Programs: accounting, finance, entrepreneurship, technology commercialization.

Annette Leps  
Senior Lecture and Director of Entrepreneurship & Management Program: accounting, finance, management.

Julie Reiser  
Senior Lecturer & Director of Marketing & Communications: technical communication, oral presentations, research writing, dissertation writing, American literature and critical theory.

Eric Rice  
Senior Lecturer & Director of Graduate Programs: organizational behavior, social entrepreneurship, management, negotiation and conflict management, leadership, public speaking, professional writing.

Pamela Sheff  
Senior Lecturer & Director of Master of Science in Engineering Management Program: business and technical communication, marketing, public relations, science and scientific writing, oral presentations, higher education in prisons, community-based learning, entrepreneurship.

### Full Time Faculty

Bob Graham  
Lecturer: entrepreneurship, professional communication, oral presentations.

Illysa Izenberg  
Lecturer: engineering management.

Leslie Kendrick
Senior Lecturer: marketing strategy, integrated marketing communications, sports marketing, international marketing, internships.

Charlotte O'Donnell
Lecturer: oral presentations, professional communication, visual rhetoric.

William Smedick
Senior Lecturer: leadership theory, leadership in teams.

**Part Time Faculty**

Michael Agronin
Lecturer: new product development.

Justin Beauchamp
Lecturer: Leadership

Jennifer Bernstein
Lecturer: professional communication.

Susan Conley
Lecturer: Marketing

Laura Davis
Lecturer: Professional communication for ESL and Oral presentations for ESL.

Marci DeVries
Lecturer: marketing.

Kevin Dungey
Senior Lecturer: oral presentations.

Sean Furlong
Lecturer: Financial Accounting

David Fisher
Lecturer: business law.

Mark Franceschini
Senior Lecturer: business law, business ethics, Internet law.

Mary Beth Furst
Lecturer: Introduction to Business.

Guido Galvez
Lecturer: business.

Jeremy Gorelick
Lecturer: business analytics, business development.

Christine Grillo
Lecturer: writing articles, writing technical reports.

Jason Heiserman
Lecturer: oral presentations.

Christopher Jeffers
Lecturer: business law.

Mark Kennedy
Lecturer: copywriting.

Andrew Kulanko
Senior Lecturer: oral presentations.

Andres Lares
Lecturer: sports negotiation.

Seth LeJacq
Lecturer: communication

Denise Link-Farajali
Lecturer: professional communication; financial math for ESL, research writing for ESL.

David Mahoney
Lecturer: social media, marketing.

Michael Mattia
Lecturer: leadership.

Lindsay Monti
Lecturer: business law.

Marco Priolo
Lecturer: managerial finance.

Bryan Rakes
Lecturer: business law.

Joshua J. Reiter
Senior Lecturer: business process management, total quality management, information technology management, Internet-based business applications, creativity and innovation, entrepreneurship.

Elaine Richman
Lecturer: writing articles, writing technical reports.

Tiffany Sanchez
Lecturer: leadership.

Douglas Sanchez
Lecturer: leadership.

Dennis Sullivan
Lecturer: marketing.

Jay Thompson
Lecturer: professional communication.

Adam Treiser
Lecturer: business analytics.

Tamara Warren-Chinyani
Lecturer: emotional intelligence, diversity.

Caroline Wilkins
Lecturer: professional communication.