

# IEEE | Rutgers Online Mini-MBA for Engineers

Empower your workforce with trusted executive education.









## **IEEE** | Rutgers Online Mini-MBA for Engineers

IEEE subject matter experts partnered with Rutgers Business School to develop a Mini-MBA program specifically for groups of engineers working at organizations.

IEEE | Rutgers Online Mini-MBA for Engineers was created to help corporate learners bridge the gap between business and engineering as they prepare for growth into management roles. It is the only online Mini-MBA program specifically designed for teams of engineers.

#### WHAT IS A MINI-MBA?

A Mini-MBA is a training regimen focused on the fundamentals of business management. The program provides an introductory insight into business, preparing learners for a foundational understanding of traditional MBA content such as accounting, business communication, business ethics, finance, managerial economics, management, entrepreneurship, marketing, operations, and strategic management but in shorter introductory modules.

For more information https://innovate.ieee.org/rutgers-mini-mba-for-engineers/

## Who should participate in this program?

### **EXPERIENCE**

- Manager or director
- Individual contributor
- Team leader
- Mid-career

- related to field of expertise



## **EDUCATION**

- Bachelor's degree



### **KNOWLEDGE / PREVIOUS EXPERIENCE**

• Generally 5-15 years of experience Professional development and continuing education

 Advanced degree, such as a master's degree in an engineering or technology discipline





## Program Highlights

### **TEN SELF-PACED ONLINE MODULES**

Approximately 3.5 hours of instruction each

**TOPICS INCLUDE:** Strategy, Product Development, Negotiation, and Economics





LIVE interactive sessions with engineering and business faculty



**ONLINE** discussion forum for additional collaboration



**CUSTOMIZABLE** capstone project to synthesize and apply learning



#### **HIGHLY SPECIALIZED** course curriculum

Developed by top-rated IEEE subject matter experts and Rutgers Business School faculty and based upon real-world business and engineering best practices.

In 15 weeks or less, learners study timely topics and develop applicable skills through the powerful combination of expert-led instruction and peer interaction.

### **OBJECTIVES**

Upon successful completion of the Mini-MBA program, learners will:

- Discern how organizational decisions are made, with both technical and operational considerations.
- Understand how different functional groups interact to achieve overall goals.
- Apply their newly developed business skills to better align their technical capabilities with business strategy.

### EARN CERTIFICATES AND CREDITS

- One co-branded IEEE | Rutgers Executive Education certificate • Three credit waiver that may count toward a future MBA degree CEU/PDH credits toward Professional Engineering license • Digital badging available that can be affiliated with personal social platforms

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### **CONVENIENT** self-paced on-demand class format



#### **FLEXIBLE** learning anytime, anywhere

Video lessons are self-paced, helping learners maintain that critical work-life balance. When combined with live office hours and a team-based capstone project, learners get the benefits of flexible learning as well as interactive sessions.







## Benefits for Managers

Provides a *cost-effective* way for learners to develop management/business skills

Easy access to course content via an online portal—learners do not have to travel

Customizable capstone project can be tailored to suit your organization's needs

Encourages innovative problem solving and *team building* 

Offers *online*, *perpetual access* to course materials for reference as learners are pulled into projects on the job

Demonstrates *commitment to* developing and retaining learners

Provides *tactics immediately applicable* to current job roles or functions

Offers *learning opportunities* in small increments that can be incorporated into a workday

## Benefits for Learners

Provides *fundamental business theories* and best practices

Encourages opportunities to acquire knowledge from fellow learners and industry experts

Allows learners to *acquire* a unique skill set that is fundamental to many organizations' product and service lines

Offers a *lower cost and shorter time commitment* compared to traditional graduate programs

Offers *learning opportunities in small increments* that can be incorporated into daily work

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Provides *tactics immediately* applicable to current job roles or functions

Provides *academic credits that* can be applied toward future education goals, as well as credits for Professional Engineering licenses

Typically qualifies for funding assistance through existing reimbursement programs for continuing education





## Module Outlines & Descriptions

#### **Business Ventures and Innovation**

Creating and launching new technology ventures and introducing novel products and new services to fresh markets, and doing so successfully, are based on creating new opportunities and implementing innovations within existing organizations. This module introduces participants to entrepreneurial thinking and different methods of effectively executing new ideas. Topics include evaluating opportunities to recognize the good ideas, forming great teams, preparing business and technology commercialization plans, pinpointing and obtaining necessary resources, designing test scenarios, and developing and knowing when to use exit strategies.

#### Managing New Product Development

Technology product development has become somewhat of an arcane art. A visionary invents the spreadsheet or the iPhone—or some other better mousetrap—and millions beat a path to the door. But is that all it is—a stroke of genius? Lean Product Development shows us a new way based on the realization that making the technology work is usually the easy part of technology product development. Finding something people actually want to buy—that's the real challenge. Whether you build for internal clients or external customers, you must test with your user base throughout the development process to make sure your technology actually meets the mark.

#### **Analyzing Financial Statements**

Understanding technical descriptions, complex schematics, and engineering models are a given for today's technical professionals. But when presented with financial reports, some/many technical professionals might as well be reading in another language. This module will acquaint participants with how to read and analyze financial statements, as well as understand the underlying story they tell. Topics include balance sheets and income and cash flow statements, as well as fundamental financial analysis using net present value, time value of money, rate of return, and other measures of investment attractiveness, trade-offs between risk and return, and making effective capital budgeting decisions.

#### Keys to Successful Negotiation

This module could be subtitled "How to Get What You Want and Move the Relationship Forward." Using discussions, exercises, and humor in a relaxed atmosphere, each participant will have the opportunity to evaluate and improve their communication skills. The premise of this module is that although everyone has been negotiating to obtain satisfaction of their wants since they were infants, they usually have not considered the reasons why they succeed or fail. During this module, each participant will individually evaluate their goals, strategies, and tactics to learn how they can be employed to achieve a successful negotiation.

#### **Impacts of Global Economics**

This highly-applied and real world module is designed primarily for participants who have technical backgrounds. It will demystify the role of the Federal Reserve and of national fiscal policies not just in the U.S., but also in the Eurozone, India, and China. Given the global supply chains, any macroeconomic analysis that is not global would be seriously deficient. Engineers and scientists today wear many hats and are key players in the design of global R&D strategy, which necessitates a thorough analysis of the global/monetary backdrop. This module will ensure that technical professionals and engineers alike will be well-equipped to thrive in today's multi-faceted workplace.

#### **Customer Experience**

Being a customer-centric organization isn't just about having the best customer service people. It's also about ensuring that every function in the organization is aligned to this goal. And in our fast-paced world of tweets and texts, keeping all functions aligned to that goal is necessary and challenging at the same time. Topics in this module include understanding the value of CX and building an effective business case for investing in it—an overview of journey mapping and various measurements used to monitor your CX results.

#### Sales Marketing in Practice

Just because you built something cool doesn't guarantee customers will come. However, sales and marketing can often be seen as, at best, a "necessary evil" among technology teams. That shouldn't be the case. Products and promotion should work hand-in-hand to help you reach your best customers and provide them the products that solve their problems. A number of useful frameworks exist that will help you integrate all the components of sales and marketing throughout your product development and management process—and move marketing from a "necessary evil" to simply "necessary."

#### Intellectual Property Strategy

Managing and protecting Intellectual Property Rights (IPR) is key to success in technology businesses. This module includes a look at IPR both inside and outside the U.S. Other specific topics include: patents, copyrights, and trademarks; in- and out-licensing, materials transfers, and cross licensing; technology management; and enforcement. Participants will also discuss FTC/anti-trust laws, patent reform and challenges to exclusivity, technology licensing, and identifying critical Go/No Go decision points for intellectual property.

#### Leadership

As organizations constantly transform in an effort to maintain competitiveness in a dynamic and uncertain business environment, effective leadership often makes the distinguishing difference between success and failure. This module explores the human dimension of work and considers both the theory and practice of leading and managing people in contemporary, successful organizations.

#### **Business Strategy**

For technology firms, business strategy is about how to create value for shareholders. This module provides the tools necessary for you to make key decisions about which markets to compete in and how to surpass the competition in those markets. Gaining a competitive advantage is critical to winning. This module will also help you determine the capabilities and management systems that are necessary for you to execute the strategy.





## **Testimonials**

### "

The reason I joined this course was to get a better understanding of 'the other side'. Being an engineer, our world mostly revolves around technical elements and sometimes it is a bit hard to break the ceiling and move towards the management side without first understanding their concepts, jargon, and processes.

This course was well-structured to give us a taste of the world outside of the engineering realm and has helped me get a better understanding of various other dimensions associated with our business and products."



#### Sohaib Sheikh

Almedin Kavaz

Technology Associate at the Largest Commercial Property Development and Investment Company in the United Kinadom.

## "

The program was super interesting, covering different topics presented by experts as well as professors with deep knowledge and hands-on experience. Videos of lectures were of good quality.

The overall program gives a perfect insight into what a full MBA program looks like, and this is a nice preparation on what knowledge, competences, and skills we as engineers will need to be successful as future managers and to develop our careers.

## Operations Manager at a Leading Regional Security Coordinators (RSCs) Company.

## "

My overall program experience was excellent and I have learned a lot which I apply to my day to day work! Not only did this program teach me the proper techniques of the negotiation process, but it also taught me different ways of managing the development of a new product and the importance of understanding the reason people want something and not only knowing what they want. Perhaps, most significantly the program helped me understand how important it is to have a good strategy in advance by knowing where to play and how to win before proceeding to commit to any plan and take actions. Program materials were excellent, the videos are fabulous and just the right length for a mini-MBA program for engineers.

This program enhanced my skills in the engineering and management field. It was really valuable as I learned many things which I apply in my daily routine."

#### Maria Efthymiou

IT / Web Developer at a Public Utility Company.

## "

It was a great opportunity to be part of such an amazing program which helped me advance my career by learning about new areas in management and business-like financial management, intellectual property, and global economics. It's a highly recommended program for mid-career professionals who are looking to reach the next level."

#### Hossam Ali

Project Manager at a Cyber Security Company.

## **About IEEE & Rutgers Business School**

#### IEEE

IEEE, a not-for-profit organization, is the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity. Through its more than 417,000 members in over 160 countries, IEEE is a leading authority on areas ranging from aerospace systems, computers, and telecommunications to biomedical engineering, electric power, and consumer electronics, among other technologies.

#### **RUTGERS BUSINESS SCHOOL**

Rutgers Business School stands on the principles of academic excellence, cutting-edge research, and public service that have defined Rutgers, the State University of New Jersey, for more than 250 years. Rutgers Business School faculty, staff, and student body come from many diverse cultures, backgrounds, and perspectives, to create an environment that fosters traits which reflect the essence of our brand.

#### Rutgers is a Top Ranked Business School:

- #1 Public Business School in the Northeast U.S. - Financial Times (2018)
- #1 ROI in the U.S. based on salary increase (%) - Financial Times (2017)
- #1 MBA employment among the Big 10 Schools - Financial Times, U.S. News & World Report (2017, 2016)



- #1 Public Business School in NY/ NJ/CT - U.S. News & World Report (2017, 2016)
- #1 MBA Job Placement Rate in the U.S. - Bloomberg Businessweek (2016)
- #1 Most women students among the Big 10 business schools - U.S. News & World Report (2016)









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