



IEEE | Rutgers Online Mini-MBA for Engineers

Empower your workforce
with trusted executive education.



RUTGERS

Rutgers Business School
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 engineers and technical professionals.

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 engineers and technical professionals.

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.

Contact us to learn more about this program:

Mini-MBA@ieee.org | innovate.ieee.org/rutgers-mini-mba-for-engineers

Who should participate in this program?



EXPERIENCE

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



KNOWLEDGE / PREVIOUS EXPERIENCE

- Generally 5 to 15 years of experience
- Previous experience largely focused on the technology side, now looking for a broader understanding of business operations

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.



CONVENIENT self-paced on-demand class format

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



FLEXIBLE

learning anytime,
anywhere

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

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

- 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 badge that can be shared to personal social platforms

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



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**

Provides a **shared experience and knowledgebase**

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

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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

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 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. In 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 and 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."

Data Driven Problem Solving

Problem-solving is an essential skill in today's fast-paced and ever-changing workplace. This module provides a systemic multi-step problem-solving for consequential business decisions with significant outcomes in a diverse global workforce. The course utilizes case scenarios giving specific examples to illustrate the steps in problem-solving and decision-making. It provides frameworks to mitigate and avoid common mistakes at each stage to ensure successful problem-solving. It aims to make you an effective business manager who proactively solves business problems using data and anecdotes.

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

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The teachings discussed in the Negotiations, Leadership, and Business Strategy modules have enabled me to transition from working primarily on operational assignments to overseeing ongoing IT/ Distribution projects at my organization by negotiating more managerial responsibilities, identifying the right technical leads to work with across groups, and planning the requirements to define project success.”

Sudeep Sureshbabu

Employee at PSE&G

“

I enjoyed all of the courses offered in the IEEE | Rutgers Online Mini-MBA for Engineers. I learned a lot about strategy and how all of the courses interact when creating a strategy for managing a product or service. The courses provided a refresher in my knowledge in economics, the ability to effectively read a balance sheet and theoretical understanding of Agile. As someone who is responsible for my organization's development budget, the information presented in the program will help me make better decisions and better communicate with the finance teams. I already used some of the course material to help one of the teams I support to create an internal customer satisfaction survey.”

Joyce Henry

AT&T, Principal Network Planning Engineer

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One important component of research and development is to envision and understand the business and market components of the work. Without this essential component, great ideas never become reality. The world of business and finance are often seen as after-thoughts, to be conducted by a future marketing team, but in practice, these are essential elements of success for R&D. The Rutgers Business School program integrated with IEEE offered a solid professional integration between our technical world and product development, innovation, and fundamentals of business practice.”

Rebecca O'Neil

PNNL, Electricity Infrastructure

“

The Mini-MBA program was extremely beneficial to me because I did not take any business courses during my undergraduate engineering education. This course provided the flexibility and overview that was needed for topics like marketing and finance that I need as I grow in my career. The course registration fee and condensed timeframe make this course an easy choice for an engineer transitioning to a management role.”

Joshua Austin

Product Manager at Toshiba

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In line with our company, Aramco Americas' continuous efforts to promote workforce self-development, I was happy to participate in and successfully complete the IEEE | Rutgers Business School co-branded mini-MBA program for Engineers & Technology Managers. This certification illustrates our organization's attention towards talent development, empowering employees to be prepared to capitalize on opportunities to contribute to strategic company initiatives.”

Brian Binoy

Mechanical Engineer at Aramco Americas

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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

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 427,000 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 in Employment Outcomes in the U.S. (MBA)—*U.S. News & World Report*, 2023
- #2 Executive MBA in North America —*CEO Magazine*, 2023
- #6 Business School for Diversity and Inclusion in the World—*Find-MBA*, 2023
- #7 Top Public College for Finance Salaries in the U.S., *Wall Street Journal*, 2023
- #13 Top Public College for Accounting Salaries in the U.S.—*Wall Street Journal*, 2023
- Top 10 Provider of Executive Education in the U.S. (Open Enrollment)—*Financial Times*, 2023
- Top 25 Public MBA in the nation—*U.S. News & World Report*, 2023
- 1st Place Social Impact Real Estate Case Competition—*University of Miami*, 2023
- 1st Place Digital Marketing Global Case Competition—*Purdue University-Northwest's College of Business*, 2023
- 1st Place Enactus National Competition —*University of Texas-Dallas*, 2023



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