



Professional Development Specializations in Engineering Management & Leadership

Rice Online Learning is offering three 100% online professional development specializations in **Engineering Management and Leadership**. Now on Coursera.org, these courses are designed and presented by Rice University's Center for Engineering Leadership.

The in-depth learning program is designed to teach students how to lead teams, communicate effectively, and manage projects efficiently. Through the unique specializations, students develop strategies for using influence, exerting power effectively, developing problem-solving techniques, building strong interpersonal relationships, leading projects, and much more.

Why are these specializations different?

These professional development courses are designed for engineers who want to advance into leadership and management roles. By basing leadership, communication, and project management in an engineering and technical context, students develop skills immediately applicable to their careers.

What are the three specializations?



Leadership Development for Engineers

Engineers wanting to advance their careers must be able to lead teams effectively



Communication Skills for Engineers

Build a toolkit of communication skills that will give you the knowledge and confidence to be an effective engineering leader



Engineering Project Management

Master strategies and tools to more effectively manage projects

Each specialization consists of three courses, which can be taken individually or in sequence to meet a student's needs and scheduling limitations.

Created for working professionals, timing to complete each specialization is flexible. All coursework is online and can be accomplished in as little as three to five hours of study per week.

Three industry-leading specializations

Courses are taught by faculty from the Rice Center for Engineering Leadership (RCEL). RCEL is focused on developing engineering leaders at Rice University's George R. Brown School of Engineering.

Specialization 1: Leadership Development for Engineers

Engineers wanting to advance their careers must be able to lead teams effectively



Designed for professional engineers interested in advancing into leadership and management roles. Students explore their personal strengths and weaknesses as leaders and learn how to leverage and control these attributes when placed in charge of teams or projects. Participants learn to manage relationships with colleagues through proven coaching, mentoring, and conflict resolution techniques. The specialization includes goal-setting, planning and motivational methods, as well as tips on how to set up a creative team environment.

Course 1: Self Awareness and the Effective Leader

Course 2: Relationship Management

Course 3: Action Planning

To learn more, visit: <https://www.coursera.org/specializations/leadership-development-engineers>

Specialization 2: Communication Skills for Engineers

Build a toolkit of communication skills that will give you the knowledge and confidence to be an effective engineering leader



Professional career advancement requires the ability to clearly communicate complex ideas and technical plans, and engineers need to be strong "persuaders" to be recognized by both supervisors and clients. Instruction includes: designing and giving strong presentations; handling difficult conversations and crisis communications; communicating across cultures, genders, and generations; holding effective meetings; creating a personal brand and leadership presence; and developing writing skills immediately applicable in daily activities.

Course 1: Oral Communication for Engineering Leaders

Course 2: Interpersonal Communication for Engineering Leaders

Course 3: Writing Skills for Engineering Leaders

To learn more, visit: <https://www.coursera.org/specializations/leadership-communication-engineers>

Specialization 3: Engineering Project Management

Master strategies and tools to more effectively and successfully manage projects



Today's professional environment is highly competitive, continuously changing, and difficult to manage. Employees rarely attain leadership positions without heading one or more projects or project segments early in their careers. Designed as an introduction to project management, students will prepare key project execution documents using a variety of proven templates. This specialization is targeted for engineers advancing to their first leadership positions, as well as those interested in moving up the leadership scale.

Course 1: Initiating and Planning

Course 2: Scope, Time and Cost Management

Course 3: Project Risk and Quality Management

To learn more, visit: <https://www.coursera.org/specializations/engineering-project-management>