

FINANCE FOR ENGINEERS CERTIFICATE

Program Description

While scientists, engineers, and other technical personnel may not have received formal instruction in financial principles, they are often held accountable for the costs of operation and production in their labs, teams, and organizations. Whether you are estimating the cost of a new project for an employer or recruiting investors to a new venture, being able to accurately project the financial viability of the work is critical to success.

In this certificate program, you will gain techniques to help you assess the financial impacts of processes and projects in your work. You'll begin with budgeting, informing your personal and professional endeavors with accurate, inclusive estimations. You will then explore how to estimate the value of an asset and determine whether new capital investments are advisable. Throughout the courses, you'll gain familiarity with the most common types of financial statements and investigate the impact of technical advances on an organization's balance sheet, income statement, and statement of cash flows. Finally, you'll have the opportunity to investigate how the value of money changes with time and use these skills to project the cash flows. By the end of this program, you will have the necessary foundations to determine the financial viability of a new process, project, or business.

You will be required to use Microsoft Excel to complete your coursework.

The courses in this certificate program are required to be completed in the order that they appear.

Key Takeaways

- Explore fundamental financial principles and mathematical models to improve budgeting
- Identify basic types of assets and determine their value
- Estimate the cost of manufacturing and production
- Extract key measures from financial statements
- Investigate the time value of money to calculate the worth of assets in the future
- Examine cash flows to determine the financial viability of new projects and identify sources of risk

What You'll Earn

- Finance for Engineers Certificate from Cornell College of Engineering
- 40 Professional Development Hours (4 CEUs)

Who Should Enroll

- Undergraduate and graduate engineers
- Professional engineers
- Engineers moving into a finance career
- Career starters in financial analysis and consulting
- Computer scientists looking to specialize
- Research scientists
- Personal investors

- Business professionals in STEM teams
- Engineers interested in entrepreneurship

Total Investment

- 2 months with 3-5 hours of study per week

How To Enroll

For more information on how to enroll, please visit Finance For Engineers Certificate (<https://ecornell.cornell.edu/certificates/engineering/finance-for-engineers/>).

Courses

Code	Title	Hours
eCornell CHEME120	Creating a Budget	0
eCornell CHEME121	Determining the Value of an Asset	0
eCornell CHEME122	Interpreting Financial Statements and Ratios	0
eCornell CHEME123	Assessing the Financial Viability of a Project or Business	0