

RISK ANALYSIS CERTIFICATE

Program Description

Across all industries, understanding risk is critical. From business, human resources, and insurance to healthcare, manufacturing, and information technology, risk management provides you with the necessary skills to protect your organization and your work in today's ever-changing threat landscape.

In this certificate program, you will explore the principles and applications of risk analysis and management. Using either Python or R programming, you will master risk analysis and modeling methods and practice applying technical risk mitigation strategies to common problems that could affect your organization. You'll also have the opportunity to examine the heuristics and biases associated with risk behaviors, setting you up to better understand and predict risk in your work. By the end of this program, you will be equipped with the tools you need to quantitatively identify risks and apply strategies that protect you and your hard work, no matter your industry.

Key Takeaways

- Identify risk and describe the steps involved in creating a risk analysis
- Apply fault and event trees to analyze the probability of various risks
- Characterize and quantify risk by applying modeling tools such as failure mode and effects analysis
- Quantify and analyze risk by creating a Monte Carlo simulation and a Bayesian network
- Identify what portion of risk mitigation, diversification, and transfer are most appropriate to a given situation
- Identify how perception of risk varies among individuals and how its influence affects decision making and potential biases

What You'll Earn

- Risk Analysis Certificate from Cornell's College of Engineering
- 120 Professional Development Hours (12 CEUs)

Who Should Enroll

- Risk managers and analysts
- Finance and insurance professionals
- Project managers
- Supply chain managers
- Computer and information security engineers
- Software developers
- Engineers
- Executives
- Professionals across industries interested in understanding risk management

Total Investment

3 months to complete all the courses.

How to Enroll

For more information on how to enroll, please visit Risk Analysis Certificate.

The courses in this certificate program are required to be completed in the order that they appear. This certificate program requires students to have a basic understanding of high school-level statistics and either Python or R programming.

Courses

Code	Title	Hours
eCornell CEEM611	Risk Analysis Foundations	0
eCornell CEEM612	Risk Evaluation	0
eCornell CEEM613	Risk Modeling	0
eCornell CEEM614	Risk Perception	0