This six-month program delivers what CROs need to flourish in their current positions and further develop in their risk management careers. These skill sets include cultivating strategies for effectively communicating risks to executive leadership professionals and identifying tools for analyzing and addressing enterprise risks.

The CRO Program imparts applicable training, including topical discussion on current risk challenges and mitigation practices. Learning objectives are met through a combination of expert faculty instruction, business case analyses, and active exchanges with thought leaders in the field. As part of this certificate program, you will develop or enhance an enterprise risk plan for an organization. This plan is designed for you to apply several of the methods, tools, and techniques taught during the modules of the program.

The CRO Program is developed and administered by Carnegie Mellon University’s Heinz College of Information Systems and Public Policy, CMU’s Risk and Regulatory Services Innovation Center, and the CERT Division of the Software Engineering Institute (SEI).
PROGRAM MODULES

Role of the CRO
Brian Schwartz | Partner and Primary Author of the Global Risk Study, Risk Assurance, PwC U.S. – PwC
Jonathan Schwartz | Chief Audit Executive – DXC Technology

Enterprise Risk Governance
Brett Tucker | Technical Manager of Cyber Risk – CERT Division of SEI
James Traut | Associate VP of ERM (CRO) – Clemson University

Enterprise Risk Models and Frameworks
Brett Tucker | Technical Manager of Cyber Risk – CERT Division of SEI

Landscape of Enterprise Risks – Part I: Financial, Compliance, Legal
John Forlines | CRO

Landscape of Enterprise Risks – Part II: Operational
David Dunn | EVP and Assistant General Auditor, Information Technology – PNC Financial

Landscape of Enterprise Risks – Part III: Cyber
Shaun Khalfan | SVP and CISO – Discover

Cyber Risk Quantification
Jack Jones | Chairman – FAIR Institute

Risk Assessment and Audit
Dr. Earl Crane | Cybersecurity Executive/Risk Advisor; Co-Founder – Emergynt

CRO Function and Operations – Part I & Part II
Paul Wojcik | CRO (ret.) – T. Rowe Price
Ryan Zanin | CRO – Fannie Mae

Strategic Risk Management – Part I: Business Alignment
James Lam | President – James Lam & Associates

Leadership and Team Building
David Lassman | Distinguished Service Professor – CMU Heinz College

CRO Metrics and Reporting
Summer Fowler | CIO – Argo AI

How to Develop Organizational Resilience: BC/DR Best Practices
Matt Butkovic | Technical Director of Cybersecurity Risk and Resilience – CERT Division of SEI

Risk Response Techniques
Laurie Champion | Managing Director & Client Executive – Marsh & McLennan Companies

Strategic Risk Management – Part II: Emerging Tech and Disruptive Risks
James Lam | President – James Lam & Associates

For module descriptions, please visit www.heinz.cmu.edu/cro

INSTRUCTOR TESTIMONIAL

“In my first book published in 2003, I made 10 predictions about the future of risk management. One was: CROs will become prevalent in risk-intensive businesses. A recent survey indicated that most large and public companies have appointed a CRO or equivalent. As organizations face the aftershock of the global pandemic, as well as elevated strategic, operational, cybersecurity, and financial risks, the role of the CRO has never been more important. Another one of my 10 predictions: Risk education will be part of corporate training and college programs. Carnegie Mellon’s CRO Program is exactly the kind of best-in-class curriculum that I had envisioned. This program is training the next generation of CROs by delivering content from industry leaders, practical experience through case exercises, and networking opportunities with peers and mentors.”

– James Lam | Widely noted as the first-ever CRO, globally recognized ERM expert, best-selling author, and keynote speaker

heinz.cmu.edu/cro
PRACTICUM

The CRO Practicum is the capstone activity demonstration by the student of their knowledge, skills, and abilities as a CRO. You must work in teams to conceive, develop and deliver an enterprise risk plan for an organization that is applicable in today's business environment.

• This unique capstone activity provides student teams a mechanism to demonstrate their knowledge, skills, and abilities in enterprise risk management.

• In order to be successful, teams need to demonstrate command of the material through focusing on application of the methods, tools, and techniques taught in the modules and throughout the program.

• Practicum projects are designed for small teams of students to develop, along with an experienced CRO coach, an enterprise risk management (ERM) improvement roadmap for a project company.

• Teams must also make an executive presentation to a simulated “C-suite”, thus communicating to their peers (and board) of the project company the benefits of the new ERM plan to gain their acceptance.

• The CRO Program committee assembles teams to ensure that they consist of individuals from different industries/backgrounds to provide a unique learning experience for each student.

ALUMNUS TESTIMONIAL

“Risk, according to Elroy Dimson, a professor at the London Business School, simply means more things can happen than will happen. The simplicity of this statement obscures the complexity of understanding and effectively managing risks.

As a risk practitioner, I was interested in a program that not only reinforced the foundational elements of risk management, but also offered real-world experiences and insights from current and former CROs and thought leaders. The final Practicum presentation, in front of an executive board, strengthens the soft and hard skills, a key attribute for influencing decision-makers. The program offers a collaborative learning environment, a thriving alumni network, and a diverse group of intellectually curious peers who not only challenge your thinking, but also offer diverse perspectives and key insights.

The CRO Program at Carnegie Mellon University exceeded all my expectations and equipped me with the latest skills, best practices, and provided a tool kit that facilitates risk-informed decisioning across an enterprise—a key deliverable for an effective CRO.”

PROGRAM REQUIREMENTS

What are the steps to earning the CRO Program Certificate?

1. **Candidate Acceptance**: Each applicant must have sufficient practical experience (five years) with increasing responsibility in a managerial capacity. An undergraduate or advanced degree in a relevant field is preferred.

2. **Participation**: Participants must complete all certificate modules and assignments and attend all coaching sessions.

3. **Practicum Project**: The CRO Practicum is the capstone activity demonstration by the student of their knowledge, skills, and abilities as a CRO. You must work in teams to conceive, develop and deliver an enterprise risk plan for an organization that is applicable in today’s business environment.

Receive Your Certificate! The CRO Program Certificate includes the following benefits:

- Free entry to any future CRO Program modules (prior approval is required)
- Path to a Master’s Degree: Students who complete the CRO Certificate are eligible for a tuition discount scholarship equal to the total amount paid to complete the CRO Program
- Official CRO Program logo for display

PROGRAM LOGISTICS

**Program Dates:**
For program dates, please visit [www.heinz.cmu.edu/cro](http://www.heinz.cmu.edu/cro)

**Program Fees:**
- Full Rate: $16,500
- Discounted Rate: $13,750
Applies to CMU alumni, non-profit employees, CMU CyLab Partners, U.S. government employees, and veterans.

**Enrollment:**
Maximum of 25 students per cohort.

**Application Deadline:**
For application deadline, please visit [www.heinz.cmu.edu/cro](http://www.heinz.cmu.edu/cro)

Please submit your application as soon as possible for consideration.

*If space remains in the cohort after the given deadline, we will continue to accept applications on a first-come, first-served basis.*

**To Apply:**
[hnz.cm/cro-apply](http://hnz.cm/cro-apply)