

CHIEF DATA OFFICER CERTIFICATE PROGRAM

The success of a modern enterprise is increasingly dependent on its ability to maximize value from data and manage large, diverse, and rapidly changing data. Most executives admit that their organizations mismanage their information assets, leading to missed business opportunities and undue



expense. To establish a data-driven culture change in an organization, management needs to engage with stakeholders across the enterprise to secure buy-in and ongoing support in treating data as an asset — not data as a byproduct.

To cope with these challenges, many organizations are appointing data governance executives, or Chief Data Officers (CDataOs), whose responsibilities span the recognition of opportunities afforded by new data sources to ensuring compliance with emerging regulations around security, privacy, and bias. The CMU Heinz College Chief Data Officer Certificate Program provides current or future CDataOs a thorough understanding of critical data management related responsibilities and the foundations for developing a robust enterprise data governance program.

The 13-module CDataO certificate program will cover key areas—data engineering, data science, decision making, emerging technology, change management, CDataO operations, communication/influencing/ leadership skills—to help data executives build important data analytical and decision-making capabilities to better support the strategic mission of their organizations.

The six-month program will be delivered via synchronous distance learning to meet the needs of these busy professionals. Distance teaching allows participants the flexibility to engage at their own pace to develop their skills to become an effective data executive. Participants can expect to develop a tight-knit cohort of their peers.

Students who complete this program will be able to:

- Describe how the nature and importance of the data landscape is changing
- Appreciate the data driven and digital innovation agendas
- Understand the evolution of analytics, decision science, and AI
- Appreciate different models of CDataO leadership archetypes and agendas
- Develop an enterprise data strategy for an organization
- List best practices of data management and data governance in the age of big data
- Identify measures to protect privacy and security and explore emergent topics like AI and Data Ethics
- Construct organizational models for data governance collaboration



heinz.cmu.edu/cdatao

PROGRAM MODULES

- EDM Foundations
- Role of the CDataO Enterprise Data Governance and Strategy
- Data Maturity: From Foundations to Leading-Edge Practices
- Data Engineering: Infrastructure and Technology
- Data-Driven Digital Transformation
- Modern Analytics for Business Intelligence
- Advanced Data Science and Machine Learning
- Demystifying Al
- CDataO Structure and Operations
- Data Monetization: The Practice of Infonomics
- Effective Executive Communication Strategies: Telling Stories with Data
- Data Privacy, Ethics, and Regulations
- Data Security Best Practices

For module descriptions, please visit https://www.heinz.cmu.edu/cdatao



PRACTICUM

The CDataO Practicum gives students the opportunity to demonstrate their knowledge, skills, and abilities as a CDataO by working in teams to develop an enterprise data strategy roadmap for a project organization and deliver a formal presentation to an executive suite.

- This unique capstone activity provides student teams a mechanism to demonstrate their knowledge, skills, and abilities in enterprise data 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 work, along with an experienced CDataO coach, to architect an enterprise data strategy 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 enterprise data strategy roadmap to gain their acceptance.



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

ABOUT HEINZ COLLEGE

The Heinz College of Information Systems and Public Policy is home to two internationally recognized graduate-level institutions at Carnegie Mellon University: the School of Information Systems and Management and the School of Public Policy and Management.

This unique colocation combined with its expertise in analytics set Heinz College apart in the areas of cybersecurity, healthcare, the future of work, smart cities, and arts & entertainment.

The Heinz College is #1 in Cybersecurity and Analytics and has been #1 in Information and Technology Management since 2001.

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PROGRAM REQUIREMENTS

What are the steps to earning the CDataO Program Certificate?

- 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:** During the CDataO Practicum, students are required to demonstrate their knowledge, skills, and abilities as a CDataO by working

in teams to develop an enterprise data management roadmap and deliver a formal presentation to an executive suite.

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

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



PROGRAM LOGISTICS

Program Dates: For program dates, please visit https://www.heinz.cmu.edu/cdatao

Program Fees:

Full Rate: \$16,250 Discounted Rate: \$13,000 Applies to CMU alumni, non-profit employees, CMU CyLab Partners, U.S. government employees, and veterans.

Application Deadline:

For application deadline, please visit <u>https://www.heinz.cmu.edu/cdatao</u>

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: https://hnz.cm/cdatao-apply



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