CHIEF TECHNOLOGY OFFICER | Program Curriculum

The Berkeley CTO program delivers learning that will take your technology career to the next level. You will learn through lectures by faculty experts and specialists, case studies, group and individual exercises, and panel discussions with global leaders. The curriculum includes three core modules. Additionally, you can choose to specialize in specific areas by selecting two electives from a range of topical modules in line with your learning and career goals. The program culminates with a Capstone Strategy Project in which you will develop a roadmap for your organization’s technology strategy—either individually or as part of a team.

**Topic 1 | Enterprise Technology Strategy**
- Enterprise Technology Architecture
- Connecting IT to Business Strategy
- IT Strategy Framework
- IT Strategy Processes
- AI & ML: Implications to Enterprise
- Technology Strategy

**Topic 2 | Leading Digital Transformation**
- Frameworks for Technology Transformation
- Building a Digital Business Case
- IoT and Strategy Implications
- Future of Technology Trends and Strategy Implications
- Strategic Applications of Blockchain
- Technology in Existing Businesses
- Future of Blockchain Technology
- Technology Transformation in the Digital Age
- Implementation Methodologies for Complex Technical Projects

**Topic 3 | Technology Policy, Privacy, and Security**
- Security and Privacy Concerns—Strategy Considerations
- Technical and Policy Aspects of Security and Surveillance
- Where Cyber Policy and Technology Interact
- Corporate Cybersecurity
- Risk Modeling and Social Engineering
- Privacy, Security, and Technical Systems

**Topic 4 | Elective Modules**
During the CTO program, you will be able to choose two areas of specialization by selecting from a range of topical elective modules. These modules have been

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designed to enhance your technical skills, widen your business lens, and help you take the next step in your career. The elective modules will begin after the core modules are completed and will be covered over 6-8 weeks (each).

- Business Analytics for Leaders: Understand how Big Data can give your organization a strategic advantage in today's data-driven business environment.
- Leading Complex Projects: Combine the latest research and case studies to get a new perspective on project management tools and techniques.
- Financial Data Analysis: Enhance your ability to interpret and apply financial data to your operational and strategic decision-making processes.
- Data Strategy: Learn how quantitative analytics can be used to refine your organization's data strategy and innovate business models.
- Digital Marketing Analytics: Develop an end-to-end understanding of using web analytics tools to improve customer acquisition and engagement.

**Topic 5 | Capstone Strategy Project**

Across the CTO program experience, participants will complete a Capstone Strategy Project (small groups). The project asks participants to take the next steps in their organization's technology strategy. Group coaching sessions will be led by an industry expert serving in a learning facilitator role and include high-touch discussions, office hours, and review sessions. Participants submit a presentation that covers the following:

- Summarize the opportunity
- List the prioritization criteria for the opportunity. Include, data alignment, cultural alignment, and success metrics
- Submit data inventory
- Use experimental techniques to test your technology strategy
- Assess the strategy implementation and propose next steps
- Participants have the opportunity to present their project outcomes during a final day showcase with faculty