Online Program Series

Berkeley ENGINEERING
EXECUTIVE & PROFESSIONAL EDUCATION

Digital Transformation in the 21st Century

The Digital Transformation revolution is well underway. Providing targeted employee education will ensure your organization has the tools to meet the challenges of the 21st century marketplace.

Tools for the 21st-century Marketplace

Digital Transformation (DT) is the ability to use technology to transform the way your organization interacts with your existing client base develop new clients. DT can enhance the client experience and improve corporate operations. From simple client purchases to more in-depth personalized encounters, DT enables organizations to pinpoint individual needs in real time and at scale. However, most organizations lack an employee base with the skill set needed to create the infrastructure, technical or strategic, required to meet the ever-changing value propositions and shifting profit pools of the 21st-century marketplace.

Program Overview

Not all companies are the same. DT Executive Education should augment and build upon existing capabilities and skillsets. One size program does not fit all! The Berkeley program was created with this reality in mind. The program consists of three weeks of instruction and a final week with a panel discussion or participant presentations with industry experts. The three weeks of instruction can be highly customized. Clients who know their target training areas can simply choose the content modules they need. If clients are unsure of their needs, the Berkeley team can lead prospective clients through a discovery process and build a DT program specifically tailored to your organization.

People have a diversity of learning styles – reading, listening, and participating. The Berkeley DT program, while delivered online, is built to address as many learning styles as possible. Participants will not only have reading and online work, but also will engage in weekly interactive live lectures, work in teams, and develop a project.

Participants will be able to

1. Choose the right transformational technology or strategy to promote your value proposition in the post-COVID economy
2. Refine and retool organizational procedures to enhance existing DT efficiencies or create new DT opportunities while driving down costs.
3. Use DT to gain customer and product market insight and increase market share.

Program Director

Matthew P. Sherburne

Dr. Sherburne is the Director of International programs for the College of Engineering at UC Berkeley. His research focuses on applying computational techniques to the discovery, design and development of materials for a sustainable world: solar energy, catalytic reaction and CO2 reduction, for example.

For More Information, Contact

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Online Program

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Program Modules

The DT Program presently offers ten modules to choose from – however, we continue to develop new content areas based on market feedback and new research. The present modules are shown below.

AI for Digital Transformation

AI has become an unprecedented and universally powerful tool with applications to a plethora of domains with problems ranging from vision, speech, natural language processing, robotics, and several other areas. This module will provide select important advances in AI and introduce topics such as convolutional neural networks, deep learning and reinforcement learning.

Customer Insight to Action - Marketing in the Digital Age

Digital transformation has raised the stakes for marketers by setting new customer expectations and enabling organizations to fulfill those expectations through new capabilities. Topics explored in this module include ways digital transformation has changed customers' expectations, where your organization's marketing is leading in adopting tools to transform the customer experience, and where it is lagging, your brand's customer centricity, and how to have a customer-centric view of your brand.

Digital Transformation and Change Management

When implementing digital transformation projects, it is critical to think about the best strategies for managing the resulting changes within the organization. In this course we discuss the main challenges specific to digital transformation projects. Some of the topics you will explore include how to build trust, how to manage resistance to digital transformation projects, and ways of creating positive energy when moving through a digital transformation project.

Digital Transformation: A history of digital transformation and the stages of transformation

The one common thread that runs through all digital transformation is the predictions of change. This change has impacted the way corporations interact with their customers and with other companies. We will examine the path that has led to digital transformation being implemented across industries. Then the students will be exposed to the different stages of digital transformation and examine their companies progress in digital transformation.

Robotics for Digital Technology

Robotics are increasingly entering society in the form of delivery robots, autonomous cars, and even robotic cooks in restaurants. This module will provide select important advances in robotics and introduce topics such as perception, planning and autonomy with several application domains.

Creating Ethical Organizations for the 21st Century

Over the past decade organizations have experienced ethical challenges. The result is behavior that is focused on the common good which translates into reputation and financial loss for the organization. This module looks at the subject of organizational ethics. What is the difference between ethics and morality? How do people make ethical decisions and what are some of the psychological underpinnings that are involved in that decision making.

Artificial Intelligence – A Primer for Decision Makers

Advances of Information Technology are ushering new concepts and applications that are changing the world around us, a phenomenon often described as the Digital Transformation. Big Data, Data Mining, Machine Learning and Artificial Intelligence are terms often used, but rarely understood at an intuitive level, even by people with some technical sophistication. This course will explain how AI emerged and is evolving, will provide an intuitive understanding of key terminology and common-sense concepts behind it, and will communicate basic knowledge and strategic insight, so that decision makers can effectively collaborate with deep AI experts.

Digital Transformation and Sensor Optimization

This module covers methods used in additive manufacturing including printing, 3D printing and in mold electronics. The students would have projects on identifying areas in manufacturing that are impacted by digital transformation.

Featured Faculty

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