

# ACADEMY



## Digital Transformation for Scientists & Engineers

### About This Course

This is a series of three seminars, 2 hours each.

Each seminar comprises a lecture, questions, and discussion.  
Please come prepared to join the discussion.

This course counts toward the Manager Track certification in Enthought Academy.

### Certificate Awarded Upon Completion Of Course



### Course Overview

**Digital Transformation for Scientists & Engineers** is a series of three discussion-intensive seminars on digital transformation (DTX) for science R&D.

**The first seminar** focuses on the definition of digital transformation in the context of scientific research and development. From there it narrows its focus on the digital skills and infrastructure needed. The seminar closes with a discussion of the governance requirements for DTX.

**The second seminar** shifts to the cultural requirements for digital transformation. For DTX, the organization needs to shift to a mindset that encourages and supports experimentation and agility. Here, change and change management become key elements.

**The third seminar** takes the concepts learned in the first two and blends them into a recipe for practical digital transformation. How does an organization mix the right blend of top-down and bottom-up approaches? How is the change inherent in DTX best managed in an incremental fashion to minimize risk, reduce time to value, and maximize learning? What kinds of goals and timeframes are reasonable to expect when embarking on DTX?

### Seminars

#### Seminar 1

#### Technical Prerequisites for DTX

Skills, Infrastructure, Governance

#### Seminar 2

#### Cultural Prerequisites for DTX

Experimentation, Agility, Change

#### Seminar 3

#### Practical DTX

Top-Down vs Bottom-Up, Incremental DTX

### Prerequisites

This course has no formal prerequisites.

However, general knowledge about scientific programming, data management, machine learning, and/or software engineering will be useful context in this course.

This knowledge can be built by following the Manager Track in Enthought Academy.

### About Our Instructors

Enthought instructors have advanced degrees in scientific fields such as physics engineering, computer science, and mathematics, and all have extensive experience through research and consulting in applying Python to solve complex problems across a range of industries allowing them to bring their real world experience to the classroom every day.