



CDAO

Talent and Workforce

FY 2023 Training Catalog

Updated 2.1.23

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Training Calendar



In –Person Senior Leader Training	FY 2023								
	QTR2			QTR3			QTR4		
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept
Leading Data and AI –Enabled Organizations (formerly Lead AI GOFO) For General and Flag Officers and Senior Executive Service	MIT Sloan Jan 30-Feb 1		MIT Sloan Mar 15-17	JHU Apr 12-13 MIT Sloan Apr 3-5		JHU June 13-14	MIT Sloan Jul 31-Aug 2		JHU Sept 6-7
Leading Data and AI –Enabled Organizations (formerly Lead AI Senior) For O-6, E9, and GS-15s		NPS Feb 13-15			JHU May 23-24		JHU	JHU Aug 30-31	

Virtual Training*

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept
Operating Data and AI Solutions (formerly Embed AI) No rank requirements								FedLearn Dates TBD	
Coding Boot Camp No rank requirements						TBD			
Exploring Data & AI (formerly AI 101) No rank requirements		MIT Horizon Dates TBD							

Provider/Platform Legend:

MIT Sloan: Cambridge, MA (Registration & eligibility: radovan@mit.edu)
 NPS: Naval Post Graduate School and Stanford, Monterey, CA and Palo Alto, CA
 JHU: John Hopkins University, Laurel, MD
 MIT Horizon: Online content provider
 FedLearn: Online content provider

The Chief Digital and Artificial Intelligence Office (CDAO) Talent and Workforce Division develops, directs and coordinates digital, data analytics and AI training opportunities across the Department of Defense.

* Beginning in 2023, the CDAO is looking for Commands across DoD to pilot courses .

Registration: osd.pentagon.cdao.mbx.human-capital-team@mail.mil

CDAO-Led Training

To increase Education outreach and impact across the Department, CDAO is ***transitioning*** ownership and execution of these courses in 2023:

- Applying Data Science and Machine Learning,
- Enabling Data and AI Adoption, and
- Managing Data and AI Solutions.

We are currently seeking Commands to pilot an iteration of these courses with the assistance of CDAO-developed resources.

Let us know if you'd like to participate as a Command pilot partner.

CDAO ***will continue to lead*** the following training:

- Leading Data and AI-Enabled Organizations
- Operating Data and AI Solutions
- Exploring Data and AI

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Leading Data & AI-Enabled Organizations (formerly Lead AI)



Who Should Take this Training

There are two courses named 'Leading Data and AI-Enabled Organizations' with different target audiences. *Executive* - General and Flag Officer level personnel and Senior Executive Service Civilian equivalents and *Senior* - O-6, E-9 and GS-15 equivalents.

Course Summary

Participants will cover national security implications of AI, building an AI-ready enterprise and workforce, acquisition and infrastructure requirements, and examine the future of AI. Case studies consider the lifecycle of data and AI Operations with the DoD context.

Learning Objectives

Both senior leader courses have the same learning outcomes, with the Executive focus on strategy and Senior focus on operations.

- Explain the differences between machine learning, computer vision, and natural language processing
- Evaluate the impact of obtaining and cleaning data on the time, cost and development of AI project impact
- Discuss change management and adaptive leadership to prepare the workforce for AI adoption
- Apply benefits and limitations of AI/ML to evaluate current and future use cases in the DoD
- Explain and implement basic steps of funding, building, and operating an AI solution
- Gain knowledge of advancements in the DoD Ethical AI Principles and Responsible AI, and recognize appropriate application when planning, developing and deploying solutions

Modality

Each course (Executive, Senior) is offered in-person for two or three-days, depending on the academic partner. The course requires a time commitment of 3 hours of pre-course reading and being onsite two full days.

Operating Data and AI Solutions (formerly Embed AI)



Who Should Take this Training

The course is for DoD personnel with an interest in operationalizing AI, managing data streams, and troubleshooting AI models and infrastructure.

Course Summary

Participants will learn how to ensure AI tools are used to support mission. Participants will learn how to manage data, troubleshoot models, and provide feedback to designers and developers.

Learning Objectives

- Support use case development by solving down-range infrastructure constraints
- Analyze and aggregate data in preparation of ethical AI application development
- Solve AI application issues down-range to maintain functionality

Modality

This course is offered asynchronously and virtually and requires a time commitment of 4-5 hours per week for 12 weeks.

Who Should Take this Training

The course is for DoD personnel with an interest in AI development and data science.

Course Summary

Participants will build foundational skills in AI methods, machine learning, and data science using tools like Python and SQL as you earn an industry-accepted Udacity nanodegree. This course introduces learners to predictive modeling, neural networks, and deep learning with TensorFlow.

Learning Objectives

- Develop and put into production ethical AI applications
- Translate business questions into technical, data-driven solutions
- Rapidly prototype analytic solutions, such as predictive models using supervised and unsupervised learning techniques

Modality

This course is offered asynchronously and virtually and requires a time commitment of 4-5 hours per week for 12 weeks.

Exploring Data and AI (formerly AI 101)



Who Should Take this Training

This course is for non-technical personnel that appreciate the value that AI-enabled solutions can bring.

Course Summary

Participants will learn foundational concepts of data and AI. The course covers the benefits, limitations and common misconceptions of AI and data analytics, how AI and data are used in industry, the AI Industry ecosystem and the future of AI and big data.

Learning Objectives

- Understand basic data and AI concepts
- Recognize current and potential future applications of big data and AI

Modality

This course is offered asynchronously and virtually and requires a total time commitment of 6-8 hours over 6 weeks.

Applying Data Science and Machine Learning (formerly Create AI)



Who Should Take this Training

The course is for a technical audience who will develop and deliver AI-enabled solutions and tools within the DoD.

Course Summary

Participants will build AI tools using Python, Spark and AWS and develop a greater understanding of AI methods and frameworks.

Learning Objectives

- Develop and produce a wide-array of ethical AI applications.
- Determine which AI capability is most applicable to the use case.
- Industrialize solutions to support enterprise-scale application using DoD platforms and tools.

Modality

This course is offered asynchronously and virtually and requires a time commitment of 4-6 hours per week for 14 weeks.

Enabling Data and AI Adoption (formerly Facilitate AI)



Who Should Take this Training

This course is for subject matter experts who want to be a key contributor in bringing AI to your organization. Product owners, UI and UX designers, as well as other technical experts are great fits for this course.

Course Summary

Participants will learn how to advocate for AI-driven technology and liaise between AI developers and the end-users of AI tools. A learner will determine how to integrate AI tools into their business and operational processes.

Learning Objectives

- Select the most appropriate AI tool for a given problem
- Discuss strengths and limitations of AI for specific use cases
- Distinguish ethical from unethical implementations of AI
- Identify ways data can add value to a business process, team, or organization
- Evaluate the quality of data inputs and outputs
- Select the best ways to present data
- Describe User Experience design principles
- Incorporate design thinking principles into AI tools
- Create a change management plan for AI adoption
- Identify the training needs of end users
- Describe techniques for bridging the gap between business and technology communications
- Demonstrate best practices in gathering AI tool requirements

Modality

This course is offered virtually with both synchronous and asynchronous portions and requires a time commitment of 5-7 hours per week for 7 weeks.

Managing Data and AI Solutions (formerly Drive AI)



Who Should Take this Training

This course is for those involved in testing, iterating, or selecting AI tools and technologies, or for managers interested in leveraging AI strategy in their work.

Course Summary

Participants will learn how to ensure the appropriate AI tools and capabilities are acquired, developed, and sustained across the DoD.

Learning Objectives

- Understand trends and future use cases of AI
- Categorize and evaluate AI ethical use cases
- Prototype, test, and iterate on an AI product

Modality

This course is offered asynchronously and virtually and requires a time commitment of 5-7 hours a week for 12 weeks.