

# AI AND DATA COURSE CATALOG

### **BUILDING FOUNDATIONAL UNDERSTANDING OF AI AND DATA**

The U.S. Department of Defense is evolving into an artificial intelligence-ready and data-driven enterprise.

To achieve this critical objective, the DoD workforce must possess the right knowledge and skills to properly and effectively leverage these powerful solutions to maintain our nation's competitive edge on the battlefield and in times of peace.

The FedLearn AI and data catalog of self-paced, online courses delivers *essential training* in these critically important subject areas in support of Department mission objectives.

Our course content is *specialized* and *contextualized* to the *DoD mission space* and is *strategically aligned* to departmental *Al and data strategies*.

The courses are delivered via our online, adaptive learning platform—powered by AI. Our AI provides advanced learning metrics and personalizes the user experience.

No other online training provider to the DoD can offer this type of supercharged, online learning experience.

Seat licenses are the most cost-effective way to access the entire FedLearn AI and data course catalog.

Our learning solutions are *flexible* to address changing mission requirements and *scalable* to meet the needs of organizations of any size.

Email info@fedlearn.com or visit fedlearn.com to discover how we can advance your organization's workforce upskilling and reskilling programs.

#### AIANA104 Data Analysis

Gain new knowledge about the fundamental concepts and terminology of quantitative information and data analysis to successfully manage, analyze and use data at work.

Storage

#### AIDATA106 Introductory Concepts in Algebra & Calculus

Learn about the basic principles and techniques needed to use algebra and calculus when solving practical math, Al, data science and engineering problems.

# AICYBER101 AI Cyber Risks & Vulnerabilities

Al holds the potential for improving the and efficiency and effectiveness of the DoD and military services. However, it also is susceptible to cybersecurity risks and vulnerabilities. Explore the four aspects of Al security and their impacts on operations and the limitations of these solutions.

#### AIDATA107 Data Visualization

The use of visuals is important to sharing data-driven information and insights with customers. Gain essential knowledge and skills to design effective visualizations using data, evaluate the visualizations of your peers and tell compelling stories with data in support of decision making.

#### AIDATA108 Basic Data Management

The lifeblood of any AI, machine learning and analytics solution is data. Gain a solid understanding of the data management process, preparing data for use and interpreting outputs in support of data-driven decisions.

# AIDATA109 Introduction to AI/Machine Learning Concepts & Key Terminology

Launch your educational journey about Al and machine learning by being introduced to their fundamental concepts and key terminology. This new understanding will prepare you for use of Al systems at work.

#### AIDATA110 DoD Data Management Practices: Data Quality Dimensions

Explore data collection, analysis and management across the DoD and military services—with an emphasis on data quality.

#### AIDATA111 DoD Data Management Practices: The VAULTIS Framework

Take a deep dive into the set of goals the DoD identified to help accelerate data management efforts, called the VAULTIS framework, in the context departmental missions and operations.

## AIETHICS101 Responsible AI in the DoD

Because AI enables autonomy and decision making and system execution at incredibly fast speeds, ethical considerations must be paramount. Learn about the five DoD Ethical AI Principles and their applications to the AI lifecycle.

#### AISPT101 Design Thinking

Design thinking is a powerful and creative problem-solving tool to solve complex mission problems. Explore the design thinking process and how to utilize it to address potential Al-related and other challenges.

### AISPT105 AI Use Cases in the DoD

The DoD is working to rapidly develop and deploy AI and machine learning solutions to advance different mission initiative areas. Examine current AI use cases in the Department and services to aid in your understanding of these technologies how to use potential use these systems in your organization.

#### **Micro-Courses**

# Grow your understanding about critical AI and data-related topics with a minimal investment of time.

All micro-courses are included when purchasing IC catalog seat licenses.

- AIETHICS102 DoD's AI Ethical Principles & Responsible AI\*
- AIETHICS103 Applying Ethical Principles to Machine Learning\*
- AIML106 What Is AI?\*
- AISPT131 Campaign for an Al-Ready Workforce & the Four Pillars of Al Readiness\*
- GENAI102 Using Large Language Models in the DoD Context\*
- GENAI103 Al on Al in the DoD: An Interview with ChatGPT\*
- GENAI104 Difference Between Discriminative & Generative AI Models\*

#### **Courses in Development/Redesign**

# Here's a sampling of new AI and data catalog in the works...so stay tuned!

- AIETHICS104 Explainable AI
- AIML105 Insights into the Fundamentals of Simple Neural Networks
- AISPT101 Design Thinking
- AISPT106 DoD AI Hierarchy of Needs
- AISPT126 Harnessing AI 3.0: Foundation & Large Language Models
- DATAMGT101 Introduction to Data Stewardship in the DoD
- DATAMGT102 Developing a Data Dictionary in DoD
- DATAMGT107 Foundations of Data Governance in the DoD

<sup>\*</sup>Developed with publicly available information from Defense Acquisition University