



AI AND DATA SCIENCE COURSE CATALOG

BUILDING A FOUNDATION IN AI AND DATA LITERACY

The U.S. Department of Defense is evolving to become 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 tools to maintain our nation's competitive edge on the battlefield and in times of peace.

The FedLearn AI and data science 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 the *Department's AI and Data Strategies*.

AI-Powered Learning

AI is the backbone of the FedLearn online learning platform.

Our patented AI *provides advanced learning analytics* in real time and *quantifiable learning outcomes*. Its capabilities also *enhance the online user experience*.

In addition, FedLearn delivers a unique benefit: *exposing learners to the power of AI on a first-hand basis*.

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

Cost-Effective and Scalable Training

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

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

AIANA104 Introduction to 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.

AIDATA106 Introductory Concepts in Algebra & Calculus

Learn about the basic principles and techniques needed to use algebra and calculus when solving practical math, AI, data science and engineering problems. Practice applying your new knowledge while working on a variety of exercises and problems.

AICYBER101 AI Cyber Risks & Vulnerabilities

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

AIDATA107 **Data Visualization**

The use of visuals is central to the ability to share data-driven information and insights with customers. Gain the 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 DoD AI or machine learning solution is data. Gain a solid understanding of the data management process, how to prepare data for use and how to interpret outputs in support of data-driven decisions.

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

Launch your educational journey about AI and machine learning via an introduction to their fundamental concepts and key terms and definitions. This new understanding will help prepare you for the use of AI applications at work.

AIETHICS101 **Responsible AI in the DoD**

Because AI enables autonomy and decision making and system execution at incredibly fast speeds, strong ethical considerations must go into its design and deployment. Learn about the five ethical AI principles adopted by DoD and their applications to the AI lifecycle: the design, development and test and evaluation of solutions.

AISPT101 **Design Thinking**

Complex mission problems require innovative and creative solutions. Design thinking is a powerful problem-solving system. Explore the design thinking process and how to utilize it to address potential AI-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 across its enterprise to advance different mission initiative areas. Examine current AI use cases in the Department and services to aid in your understanding of these technologies and the identification of potential solutions for your organization to adopt in the future.

Intermediate-Level Courses in Development

FedLearn is developing a series of intermediate-level courses in AI and data science to be launched in fourth quarter of 2023.

The courses are designed to *further advance learner literacy* in these important topics and are also *aligned to the DoD AI and Data Strategies*.

- AIDATA110 – Data in AI
- AIDATA111 – Data Preparation for MLOps
- AIPROPLAN103 – Introduction to Programming & Languages
- AIPROPLAN105 – DevOps
- AIANA104 – Statistics & Probability I: Probability & Distributions
- AIANA108 – Statistics & Probability II: Statistical Analysis

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