HawkAI Level-3 – OneIT Preparation Courses

Dates, Descriptions, Enrollment Links - Summer/Fall 2025

Enrollment:

- Workshops are open to current University of Iowa faculty, staff, and students, who are employed by the university or enrolled in a class at the university at the time of the workshop.

HawkAI-ITS-1: Python for Data Analysis: Python Fundamentals (with Pandas)

- Asynchronous, self-directed via ICON
    - Available between August 1 and September 30, 2025
- *Description:* This is: a slow-paced introduction to the Python programming language for data analysis, with an emphasis on the module *pandas*. This short course is for learners who have *no* experience with Python *and no* experience with computer programming.
- **Enroll to HawkAI-ITS-1:**
    - University members can subscribe to the following email list to receive an email announcement when OneIT-ITS workshop registrations open: https://apps.its.uiowa.edu/dispatch/subscriptionLists/1065936313/signup

HawkAI-ITS-2: Python for Data Analysis: Machine Learning Using Scikit-Learn with Python

- Asynchronous, self-directed via ICON
    - Available between August 1 and September 30, 2025
- *Description:* This is a gentle introduction to **practical** applications of machine learning, primarily using the Python package *scikit-learn*. This is **neither** a theoretical (mathematical) introduction to machine learning, **nor** a comprehensive introduction to machine learning algorithms. This course is for learners who are already familiar with Python and JupyterLab. Theoretical (mathematical) knowledge of machine learning concepts is *not* required.
- **Enroll to HawkAI-ITS-2:**
    - University members can subscribe to the following email list to receive an email announcement when OneIT-ITS workshop registrations open: https://apps.its.uiowa.edu/dispatch/subscriptionLists/1065936313/signup

HawkAI-ITS-3: Basic Linux Commands on Clusters

- MS Teams
    - Week of June 23, 2025
    - Wednesday, August 27, 2025 | 12:00 to 13:30
- *Description:* This course will introduce participants to the basics of using Linux Commands. It covers essential command-line skills, including file management and text editing in the Linux environment. To synchronize the platform, we will utilize our high-performance computing environment, Argon for hands-on activities, providing practical experience in conducting computational research on Argon.
- **Enroll to HawkAI-ITS-3:**
    - LINK - XXXXXXXXXXXXXXXXX

HawkAI-ITS-4: Introduction to High Performance Computing (Using Argon)

- MS Teams
    - Week of June 23, 2025
    - Thursday, August 28th | 12:00 to 14:00
- *Description:* This course is designed to help participants gain insight into High-Performance Computing (HPC) through the Argon cluster. It includes an overview of supercomputing resources and storage available to researchers at the University of Iowa. Attendees will learn the fundamentals of HPC, including job scheduling, resource allocation, and data management, tailored specifically for the Argon environment.
- **Enroll to HawkAI-ITS-4:**
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HawkAI-ITS-5: Programming for AI/ML – Coding with AI

- MS Teams
    - Tuesday, July 22, 2025 | 2:00–3:00 p.m.
    - Tuesday, August 26, 2025 | 2:00–3:00 p.m.
- *Description:* This course addresses how Generative AI enables users to write, debug, and execute code with minimal to no prior programming knowledge. Use-cases will demonstrate real-world scenarios such as automating tasks and creating web applications using natural language prompts. Focus areas include prompt design, interactive coding interfaces, and ensuring efficiency in generating and correcting code. Familiarity with using IDEs or code editors is helpful but not required.
- **Enroll to HawkAI-ITS-5:**
    - LINK - XXXXXXXXXXXXXXXXX

HawkAI-ITS-6: Fundamentals of Cloud Computing with MS Azure

- Asynchronous - pre-recorded, 2 hours
    - Available after June 15, 2025
- *Description:* This course introduces the fundamentals of cloud computing using Microsoft Azure, focusing on core concepts essential for Machine Learning and Research applications. You will explore Azure's architecture, including key components like subscriptions and resource groups, alongside essential identity management and security practices using Role-Based Access Control (RBAC). The course provides an overview of Azure's AI and ML services, such as Cognitive Services and Azure OpenAI, and demonstrates practical applications like Retrieval-Augmented Generation (RAG). By the end, you'll understand cloud service models, deployment options, and the benefits Azure offers for scalability, cost efficiency, and collaboration in technical projects.
- **Enroll to HawkAI-ITS-6:**
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