



Jordan University of Science and Technology
Faculty of Computer & Information Technology
Artificial Intelligence Department

AI381 Machine Learning Operations

First Semester 2025-2026

Course Catalog

3 Credit Hours. This course provides an in-depth exploration of Machine Learning Operations (MLOps), focusing on the practices and tools essential for deploying, managing, and scaling machine learning models in production environments. Students will learn how to bridge the gap between data science and IT operations, covering topics such as version control, containerization, continuous integration and deployment (CI/CD), monitoring, and model lifecycle management. The curriculum emphasizes practical skills, enabling students to implement automated workflows for model training, validation, and deployment, as well as strategies for ensuring model performance and reliability post-deployment. By the end of the course, students will be proficient in MLOps methodologies and equipped with the skills to effectively manage machine learning projects from development through to production, ensuring that they are robust, scalable, and maintainable. The course includes projects or assignments focusing on practical use cases related to course topics, or hands-on learning aligned with globally recognized professional certifications related to the subject area

Teaching Method: Blended

Instructor

Name	Prof. Yaser Jararweh
Office Location	-
Office Hours	Sun : 14:00 - 15:00 Mon : 12:00 - 14:00 Tue : 14:00 - 15:00 Thu : 14:00 - 15:00
Email	yijararweh@just.edu.jo

Class Schedule & Room

Section 1:
Lecture Time: Sun, Tue : 15:00 - 16:00
Room: M5127

Prerequisites		
Line Number	Course Name	Prerequisite Type
1792490	AI249 Machine Learning	Prerequisite / Study
1793280	AI328 Big Data Processing	Prerequisite / Study

Relationship to Program Student Outcomes (Out of 100%)					
SO1	SO2	SO3	SO4	SO5	SO6

Date Printed: 2026-02-16