



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

AI244 Artificial Intelligence Programming

Second Semester 2025-2026

Course Catalog

2 Credit Hours. This course is designed to introduce students to Python programming language. Students will explore the concepts of programming and scripting, including basic syntax, variables, logical structures, and debugging. The course emphasizes structured programming, algorithmic and object thinking in a problem-driven way after teaching fundamental concepts and structures. Key topics include elementary programming, data types, strings, selections, iteration, functions, GUIs (graphical user interfaces), object-oriented paradigm, lists, sets and dictionaries, files, exceptions and recursion. By the end of the course, students will have a solid foundation in programming and gain practical experience in applying several techniques in practical tasks using various Python libraries.

Teaching Method: On Campus

Text Book

Title	Introduction to Programming Using Python
Author(s)	Y. Daniel Liang
Edition	1st Edition
Short Name	Textbook 1
Other Information	

Course References

Short name	Book name	Author(s)	Edition	Other Information
Textbook 2	Python Crash Course: A Hands-On, Project-Based Introduction to Programming	Eric Matthes	3rd Edition	
Ref #1	Introduction to Computation and Programming Using Python	John V. Guttag	3rd Edition	
Ref #2	Think Python: How to Think Like a Computer Scientist	Allen Downey	2nd Edition	

Instructor

Name	Dr. Farah AlShanik
Office Location	-
Office Hours	
Email	fmalshanik@just.edu.jo

Class Schedule & Room	
Section 1:	Lecture Time: Sun, Tue : 10:00 - 11:00 Room: M3305
Section 2:	Lecture Time: Sun, Tue : 12:00 - 13:00 Room: G2121

Prerequisites		
Line Number	Course Name	Prerequisite Type
8210111	HSS101CS Introduction To Programming	Prerequisite / Study

Tentative List of Topics Covered		
Weeks	Topic	References
Weeks 1, 2	Basics of Python Programming	Chapter 2 From Textbook 1 , Chapter 1 From Textbook 2
Weeks 3, 4, 5	Selections and Loops	Chapter 4 & 5 From Textbook 1 , Chapter 5 & 7 From Textbook 2
Weeks 6, 7, 8	Introducing Lists	Chapters 10, 11, 14 From Textbook 1 , Chapters 3, 4, 6 From Textbook 2
Weeks 9, 10, 11	Functions	Chapters 3 & 6 From Textbook 1 , Chapter 8 From Textbook 2
Weeks 11, 12, 13	Object-Oriented Programming	Chapter 7 From Textbook 1 , Chapter 9 From Textbook 2
Weeks 13, 14	GUI Programming Using Tkinter	Chapter 9 From Textbook 1
Weeks 15, 16	Files and Exception Handling	Chapter 13 From Textbook 1 , Chapter 10 From Textbook 2
Week 16	Finalizing Projects Work	Chapter 18 From Textbook 2

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

Policy	
Attendance	Attendance is very important for the course. In accordance with university policy, students missing more than 20% of total classes are subject to failure. Penalties may be assessed without regard to the student's performance. Attendance will be recorded at the beginning or end of each class.
LAB Quizzes	No makeup.
Assignments	Cheating is prohibited under JUST strict laws. No late submissions are accepted.
Exams	The format of exams is theoretical and practical including multiple-choice and problem solving questions.

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