

Faculty of Engineering and Technology Electrical and Computer Engineering Department First Semester 2024/2025

#### **SYLLABUS**

Course Number and Name: ENCS5150- Advanced Computer Systems Engineering Laboratory

**Credits and Contact Hours:** 1 credit hour, three practical hours per week.

Instructor	Section	Class Time and Venue
Dr. Aziz Qaroush	1	M 14:00 - 16:50 WKS215
Dr. Yazan Abu Farha	2	T 11:00 - 13:50 WKS215
	3	S 14:00 - 16:50 WKS215
Dr. Mohammed Hussein	4	S 11:00 - 13:50 WKS215
	5	W 14:00 - 16:50 WKS215

**References**: The LAB Manual

#### **BZU** Catalogue Description

#### ENCS5150 | ADVANCED COMPUTER SYSTEMS ENGINEERING LABORATORY

Selected experiments on smart systems and robotics, experiments on small devices using the new web technologies and its application in developing innovative solutions in computer systems engineering field (3 practical hours).

#### **Course Objectives**

After completing this course, the students should be able to:

- 1. Build and deploy various types of Android applications.
- 2. Design graphical user interface (UI) for Android applications using various UI components.
- 3. Understand SQLite database.
- 4. Use REST API in Android Applications.

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## **List of Experiments**

Experiment No.	Experiment Title
1	Introduction to Android Programming
2	Android Layouts
3	Using Intents and Notifications
4	SQLite Database
5	Frame Animation and Tween Animation in Android
6	Singleton and Shared Preferences
7	Fragments
8	Integrating REST API into Android Application
9	Spring Boot Part 1
10	Spring Boot Part 2

### **Assessment Plan**

<b>Assessment Tool</b>	Weight
4 To-do's	20
Midterm Exam	15
Project	40
Final Exam	15
Lab Performance	10
Total	100

# **General Policies**:

- No late submissions will be accepted.
- All students are expected to comply with university rules and regulations on academic Integrity and honesty.
- Students are expected to abide by Birzeit University honor code on all aspects of their academic work. Please review that on Ritaj.
- The maximum number of absences with an acceptable official excuse is 2 absences

Good Luck!