COURSE SYLLABUS AND COURSE REQUIREMENTS ACADEMIC YEAR 2024/2025 I. SEMESTER

Course title	**Programming 5.**
Course Code	**IVB338ANMI**
Hours/Week: le/pr/lab	1/2/0
Credits	3
Degree Programme	Computer Science Engineering BSc
Study Mode	*Full-time*
Requirements	Mid term exam
Teaching Period	2024/25/1
Prerequisites	
Department(s)	Systems and Software Technologies
Course Director	**Zidarics Zoltán**
Teaching Staff	*Laborci Gergely*

COURSE DESCRIPTION

This course provides an in-depth exploration of mobile development using Svelte and Capacitor.js. Designed for students with prior knowledge of Svelte, the course focuses on leveraging Capacitor.js to build cross-platform mobile applications. Students will learn to integrate native device functionalities, optimize app performance, and implement best practices in UI/UX design. Through hands-on projects and practical exercises, students will gain the skills needed to develop, test, and deploy fully functional mobile apps. The course culminates in a final project where students will create and present a mobile application, demonstrating their understanding of the concepts and techniques covered.

SYLLABUS

1. GOALS AND OBJECTIVES

The course aims to equip students with the skills to develop, optimize, and deploy mobile applications using Svelte and Capacitor.js. By the end of the course, students will have created a fully functional mobile app, demonstrating their ability to integrate native functionalities and apply UI/UX best practices.

2. COURSE CONTENT

	TOPICS
LECTURE	1. *Introduction to Capacitor.js* 2. *Capacitor Plugins* 3. *Project Planning and Setup* 4. *Building the App (Basic and Advanced Features)* 5. *Performance Optimization* 6. *UI/UX Design for Mobile Apps* 7. *Deployment and Distribution*

DETAILED SYLLABUS AND COURSE SCHEDULE

LECTURE

week	**Topic**
1.	*Introduction to Capacitor.js*
2.	*Core Capacitor Plugins*
3.	*Advanced Capacitor Plugins*
4.	*Project Planning and Setup*

5.	*Building the App - Part 1*
6.	*Building the App - Part 2*
7.	Performance Optimization
8.	UI/UX Design for Mobile Apps
9.	
10.	*Deployment and Distribution*
11.	*Final Project Work*
12.	Project Presentations and Evaluations
13.	Midterm Exam
14.	Midterm Exam Retake

3. ASSESSMENT AND EVALUATION

ATTENDANCE

In accordance with the Code of Studies and Examinations of the University of Pécs, Article 45 (2) and Annex 9. (Article 3) a student may be refused a grade or qualification in the given full-time course if the number of class absences exceeds 30% of the contact hours stipulated in the course description.

Method for monitoring attendance *(e.g.: attendance sheet / online test/ register, etc.)*

attendance sheet

ASSESSMENT

Course resulting in mid-term grade *(PTE TVSz 40§(3))*

During the semester, the task is to complete a project. The completion of the project is a fundamental requirement for passing the course. The evaluation is based on a midterm exam. If the result of the midterm exam does not reach at least 70% (grade 4), the student must orally defend their submitted project. In the case of a successful oral defense, the student can receive the grade achieved on the midterm exam. An unsuccessful defense will be considered as a non-submitted project.

Mid-term assessments, performance evaluation and their weighting as a pre-requisite for taking the final exam

Type	*Weighting as a proportion of the pre-requisite for taking the exam*
Midterm exam	*100%*
Project	*0%*

Grade calculation as a percentage

based on the aggregate performance according to the following table

Course grade	Performance in %
excellent (5)	85 % …
good (4)	70 % ... 85 %
satisfactory (3)	55 % ... 70 %
pass (2)	40 % ... 55 %
fail (1)	below 40 %

The lower limit given at each grade belongs to that grade.