COURSE SYLLABUS AND COURSE REQUIREMENTS
ACADEMIC YEAR 2024 SEMESTER 2024/25/1

Course title	*Visual Programming*
Course Code	**IVB268AN**
Hours/Week: le/pr/lab	**1/0/2**
Credits	**4**
Degree Programme	**Computer Science Engineering BSc**
Study Mode	
Requirements	**-**
Teaching Period	**2024/25/1**
Prerequisites	**-**
Department(s)	**Department of Technical Informatics**
Course Director	**Zoltán Sári dr.**
Teaching Staff	**Szabolcs Szajcsán**

COURSE DESCRIPTION

Neptun: Instruction/Subjects/Subject Details/Basic data/Subject description

This is a beginner introduction class about visual programming and the usage of NI LabVIEW. In this semester we will mostly focus on practices and to get as much practical knowledge as possible. We will not only focus on the visual programming principles but on normal programming methods also, so the students can utilize their knowledge on other classes too. The students needs to accomplish a written theoretical test about the lecture material, and accomplish a final practice test to get their final mark. The students have a chance to make a project work, which will grant them bonus percentages in the final grade. It is necessary to take part in the classes because we will talk about a lot of details, which otherwise won't be presented to the class in other ways.

SYLLABUS

Neptun: Instruction/Subjects/Subject Details/Syllabus

1. GOALS AND OBJECTIVES

The main goal of the class is to get students familiar with visual programming and to help them master the bare basics of NI LabVIEW. This class is a smaller step towards a National Instruments Certificate and provides most of the fundamental informations needed for the intermediate courses. Another aim of the class is to provide more experience and useful tips about programming in general and to widen the aspect of the IT scientific field for the students.

2. COURSE CONTENT

TOPICS	
LECTURE	1. *Introduction to visual programming*
	2. *Basics of LabVIEW*
	3. *Hotkeys, Random, Array*
	4. *Sequences, Charts, Graphs*
	5. *Nodes and Variables*
	6. *Event-Driven structure*

DETAILED SYLLABUS AND COURSE SCHEDULE

ACADEMIC HOLIDAYS INCLUDED

LECTURE

week	Topic	Compulsory reading; page number (from … to …)	Required tasks (assignments, tests, etc.)	Completion date, due date
1.	-	-	-	-
2.	Introduction to visual programming	-	-	-
3.	Basics of LabVIEW	Lecture I. ppt	-	-
4.	Hotkey, Random, Array	Lecture I-II. ppt	-	-
5.	Sequences, Charts, Graphs	Lecture I-III. ppt	-	-
6.	Nodes and Variables	Lecture I-IV. ppt	-	-
7.	Theoretical Test	Lecture I-V. ppt	Theoretical Test	-
8.	Event-Driven structure	Lecture I-VI. ppt		-
9.	Autumn Break	-	-	-
10.	File Open, Read, Write	Lecture I-VI. ppt	-	-
11.	Prepare for final Exam	Lecture I-VII. ppt	-	-
12.	Final Exam	Lecture I-VII. ppt	Final Exam	-
13.	Final Exam retake	Lecture I-VII. ppt	Final Exam retake	-

PRACTICE, LABORATORY PRACTICE

week	Topic	Compulsory reading; page number (from … to …)	Required tasks (assignments, tests, etc.)	Completion date, due date
1.	-	-	-	-
2.	Introduction to visual programming tasks	-	-	-
3.	Basics of LabVIEW tasks	-	Previous tasks done	-
4.	Hotkey, Random, Array tasks	-	Previous tasks done	-
5.	Sequences, Charts, Graphs tasks	-	Previous tasks done	-
6.	Nodes and Variables tasks	-	Previous tasks done	-
7.	Theoretical Test	-	Previous tasks done	-
8.	Event-Driven structure tasks	-	Theoretical Test	-
9.	Autumn Break	-	-	-
10.	File Open, Read, Write tasks	-	Previous tasks done	-
11.	Prepare for final Exam	-	-	-
12.	Final Exam	-	Final Exam	-
13.	Final Exam retake	-	-	-

3. ASSESSMENT AND EVALUATION

(Neptun: Instruction/Subjects/Subject Details/Syllabus/Examination and Evaluation System)

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
Attendance sheet

ASSESSMENT
Cells of the appropriate type of requirement is to be filled out (course-units resulting in mid-term grade or examination). Cells of the other type can be deleted.

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

Mid-term assessments, performance evaluation and their ratio in the final grade

Type	Assessment	Ratio in the final grade
Theoretical Test	*30 points*	*30%*
Personal Project Work	*15 points*	*15%*
Final Test	*70 points*	*70%*

Opportunity and procedure for re-takes (PTE TVSz 47§(4))
The specific regulations for improving grades and resitting tests must be read and applied according to the general Code of Studies and Examinations. E.g.: all tests and assessment tasks can be repeated/improved at least once every semester, and the tests and home assignments can be repeated/improved at least once in the first two weeks of the examination period.

A re-take time will be discussed after the Theoretical Test if necessary. There will be one chance to retake the Theoretical Test and two times when a student can retake the Final Test.

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.

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4. SPECIFIED LITERATURE
In order of relevance. (In Neptun ES: Instruction/Subject/Subject details/Syllabus/Literature)

COMPULSORY READING AND AVAILABILITY
[1.] Primary compulsory reading and its availability
[2.] Compulsory literature and its availability

RECOMMENDED LITERATURE AND AVAILABILITY
[3.] LabVIEW User Manual