

COURSE SYLLABUS AND COURSE REQUIREMENTS

ACADEMIC YEAR 2022 SEMESTER 2022/23/1

<i>Course title</i>	<i>Visual Programming</i>
<i>Course Code</i>	IVB268AN
<i>Hours/Week: le/pr/lab</i>	1/0/2
<i>Credits</i>	4
<i>Degree Programme</i>	Computer Science Engineering BSc
<i>Study Mode</i>	Fulltime
<i>Requirements</i>	-
<i>Teaching Period</i>	2022/23/1
<i>Prerequisites</i>	-
<i>Department(s)</i>	Department of Technical Informatics
<i>Course Director</i>	Zoltán Sári dr.
<i>Teaching Staff</i>	Szabolcs Szajcsán

COURSE 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 need to accomplish a written Theoretical Test about the lecture material, they need to make a project work and accomplish a final practice test to get their final mark. 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

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	
	<ol style="list-style-type: none">1. <i>Introduction to visual programming</i>2. <i>Basics of LabVIEW</i>3. <i>Hotkeys, Random, Array</i>4. <i>Sequences, Charts, Graphs</i>5. <i>Nodes and Variables</i>6. <i>Event-Driven structure</i>7. <i>File Open, Read, Write</i>
AND LABORATORY PRACTICE	

DETAILED SYLLABUS AND COURSE SCHEDULE

ACADEMIC HOLIDAYS INCLUDED

Lectures

week	Topic
1.	General information
2.	Introduction to visual programming
3.	Basics of LabVIEW
4.	Hotkey, Random, Array
5.	-
6.	Sequences, Charts, Graphs
7.	Nodes and Variables
8.	-
9.	Autumn Break
10.	Event-Driven structure
11.	File Open, Read, Write
12.	-
13.	-
14.	-
15.	-

Practices and Tests

week	Topic
1.	General information
2.	Introduction tasks
3.	Basics of LabVIEW
4.	Hotkey, Random, Array tasks
5.	Previous week task
6.	Sequences, Charts, Graphs tasks
7.	Nodes and Variables tasks
8.	Theoretical Test
9.	Autumn Break
10.	Event-Driven structure tasks
11.	File tasks
12.	Prepare for final Exam
13.	Final Test
14.	Final Test re-take 1
15.	Final Test re-take 2

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

Attendance sheet

ASSESSMENT

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
<i>Theoretical Test</i>	<i>20 points</i>	<i>20%</i>
<i>Personal Project Work</i>	<i>20 points</i>	<i>20%</i>
<i>Final Test</i>	<i>60 points</i>	<i>60%</i>

Opportunity and procedure for re-takes (PTE TVSz 47§(4))

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.

4. SPECIFIED LITERATURE

COMPULSORY READING AND AVAILABILITY

[1.] LabVIEW Core 1 Course Manual