FINAL PROGRAM OF STUDY

for the program

Computer Science (3 academic years, 240 ECTS, Doctorate, PhD)»

STRUCTURE OF THE PROGRAM OF STUDY

PROGRAM REQUIREMENTS	ECTS
Compulsory courses	4
Elective courses (α) Courses of specialization (β) General Education courses / Free Electives	56
Research part and PhD Thesis preparation	180
Practical training	
Total ECTS	**240**

For the completion of the program, students are required to complete 240 ECTS as follows:

- at least 60 ECTS for the teaching part of the program (successful completion of at least 60 ECTS in courses at the graduate level). A master's level diploma or equivalent title partially or completely exempt students from this requirement
- at least 120 ECTS for the research part of the program (research stage – 4 semesters, 30 ECTS per semester).
- at least 60 ECTS for the comprehensive examination, preparation and presentation of the research proposal and the writing of a Doctoral Thesis (dissertation stage – at least 2 semesters, 30 ECTS per semester).

COURSE DISTRIBUTION PER SEMESTER

A/A	Course Type	Course Name	Course Code	Periods per week	Period duration	Number of weeks/ Academic semester	Total periods/ Academic semester	Number of ECTS
1st Semester								
1.	Elective	Elective course I	CS 6XX			13		8
2.	Elective	Elective course II	CS 6XX			13		8
3.	Elective	Elective course III	CS 6XX			13		8
4.	Elective	Elective course IV	CS 6XX			13		8
2nd Semester								
1	Compulsory	Research Methodologies and Professional Practices in Computer Science	CS 670	3	3, 0, 0	13	42	4
2	Elective	Elective course V	CS 6XX			13		8
3	Elective	Elective course VI	CS 6XX			13		8
4	Elective	Elective course VII	CS 6XX			13		8
3rd Semester								
1.	Compulsory	Thesis Research I	CS 701			13		30
4th Semester								
1	Compulsory	Thesis Research II	CS 702			13		30

2	Compulsory	Comprehensive Examination	CS 777					0
5th Semester								
1	Compulsory	Thesis Research III	CS 703			13		30
6th Semester								
1	Compulsory	Thesis Research IV	CS 704			13		30
2	Compulsory	PhD Thesis Proposal						0
7th Semester								
1	Compulsory	Thesis Writing I	CS 705			13		30
8th Semester								
1	Compulsory	Thesis Writing II	CS 706			13		30
2	Compulsory	PhD Thesis Defense	CS 708			13		0

The details of the offered courses (per semester) are shown in the following table:

A/A	Course Type	Course Name	Course Code	Periods per week	Hour duration[1]	Number of weeks/ Academic semester	Total Hours/ Academic semester	Number of ECTS
FALL Semester								
1.	Elective	Distributed Systems	CS601	6	3, 1, 2	13	78	8
2.	Elective	Advanced Software Engineering	CS603	5	3, 0, 2	13	65	8
3.	Elective	Artificial Intelligence	CS604	5	3, 0, 2	13	65	8
4.	Elective	Advanced Computer Architecture	CS605	6	3, 1, 2	13	78	8
5.	Elective	Computer Networks and the Internet	CS606	6	3, 1, 2	13	78	8
6.	Elective	Visual Computing	CS607	5	3, 0, 2	13	65	8
7.	Elective	Programming for Games and Interactive Technologies	CS608	5	3, 0, 2	13	65	8
8.	Elective	Advanced Topics in Databases	CS646	5	3, 0, 2	13	65	8
9.	Elective	Computational Logic	CS663	4	3, 1, 0	13	52	8
10.	Elective	Temporal Information Systems in Medicine	CS678	4	3, 1, 0	13	52	8
11.	Elective	Electronic Health	CS679	4	3, 1, 0	13	52	8
SPRING Semester								

[1] The type of periods of contact with the students are three: Lecture(s), Recitation, Laboratory. For consistency and full information disclosure, the duration (in hours) is given for all three types and zero time is indicated when one of the three types is not applicable.

1.	Elective	Computer Games Software Technology	CS653	5	3, 0, 2	13	65	8
2.	Elective	Advanced Parallel Processing II	CS655	6	3, 1, 2	13	78	8
3.	Elective	Computer Graphics - Modelling and Realism	CS656	5	3, 0, 2	13	65	8
4.	Elective	Wireless Networks	CS657	6	3, 1, 2	13	78	8
5.	Elective	Digital Video Processing	CS658	5	3, 0, 2	13	65	8
6.	Elective	Design with Embedded Processors	CS659	6	3, 1, 2	13	78	8
7.	Elective	Information Retrieval and Search Engines	CS660	6	3, 1, 2	13	78	8
8.	Elective	Systems Analysis and Verification	CS664	6	3, 1, 2	13	78	8
9.	Elective	Constraint Solving Methods	CS665	4	3, 1, 0	13	52	8
10.	Elective	Neuroinformatics	CS667	6	3, 1, 2	13	78	8
11.	Elective	Mechanical Vision	CS668	5	3, 0, 2	13	65	8
12.	Compulsory	Research Methodologies and Professional Practices in Computer Science	CS670	3	3, 0, 0	13	39	4
13.	Elective	Algorithmic Game Theory	CS673	4	3, 1, 0	13	52	8
14.	Elective	System and Network Security	CS674	6	3, 1, 2	13	78	8
15.	Elective	Cognitive programming	CS680	4	3, 1, 0	13	52	8
16.	Elective	Advanced Topics in Software Reuse	CS681	6	3, 1, 2	13	78	8

17.	Elective	Advanced Security Topics	CS682	4	3, 1, 0	13	52	8
18.	Elective	Special Topics in Computer Science	CS699	3	3, 0, 0	13	39	8