

ROMANIAN ACADEMY**School of Advanced Studies of the Romanian Academy (SCOSAAR)****BRIEF COURSE DESCRIPTION: "HARD PROBLEMS IN POST-QUANTUM CRYPTOGRAPHY"
2025****1. Program information**

1.1 Department	Doctoral School of Mathematics and Informatics
1.2 Institution	Romanian Academy
1.3 Field of study	Informatics
1.4 Study cycle	Doctoral studies

2. Course information

2.1 Course title	Hard Problems in Post-Quantum Cryptography						
2.2 Course instructor	Prof. Dr. Ferucio-Laurențiu Țiplea						
2.3 Seminar instructor	Prof. Dr. Ferucio-Laurențiu Țiplea						
2.4 Laboratory instructor							
2.5 Year of study	I	2.6 Semester	I	2.7 Type of assessment	E*	2.8 Course category	DF**

3. Estimated total time (hours per semester of teaching activities)

3.1 Number of hours per week	4	Of which:			
3.2 course	2	3.3 seminar	2	3.4 laboratory	0
3.5 Total hours in the curriculum	56	Of which:			
3.6 course	28	3.7 seminar	28	3.8 laboratory	0
Allocation of time:					hours
Study based on textbook, course materials, bibliography and notes					60
Additional study in the library, on specialized electronic platforms and in the field					100
Preparation for seminars/laboratories, assignments, reports, portfolios and essays					100
Tutoring					55
Examinations					4
Other activities:					—
3.9 Total individual study hours	319				
3.10 Total hours per semester	375				
3.11 Number of credits	15				

4. Learning outcomes and specific competencies acquired

1. Mastery of the material taught in the course;
2. Ability to use the presented results in new contexts;
3. The knowledge and skills acquired in this course will form the basis for future scientific research and teaching activities.

5. Assessment

Type of activity	5.1 Assessment criteria	5.2 Assessment methods	5.3 Weight in final grade
5.4 Course	Acquired knowledge	Written examination	65%
5.5 Seminar	Activity	Case study presentations	35%
5.6 Laboratory			
5.7 Minimum performance standard: Knowledge of 70% of the information contained in the course			

Course instructor signature
Prof. Dr. Ferucio-Laurențiu Țiplea

Seminar instructor signature
Prof. Dr. Ferucio-Laurențiu Țiplea

Laboratory instructor signature

*E = Examination. C = Colloquium.

**DF = Fundamental Course. DS = Specialized Course.