

ROMANIAN ACADEMY
SCHOOL OF ADVANCED STUDIIES OF THE ROMANIAN ACADEMY (SCOSAAR)

COURSE SHEET: „STATIC AND VIDEO IMAGE PROCESSING AND ANALYSIS TECHNIQUES”

1. About the program

1.1 Department	Iași Branch
1.2 Institution	Romanian Academy
1.3 Domain	INFORMATICS
1.4 The study cycle	Doctoral studies

2. Discipline data

2.1 Name	Static and Video Image Processing and Analysis Techniques						
2.2 The holder of the course activities	CS I. Dr. habil TUDOR BARBU						
2.3 The holder of the seminar activities							
2.4 Holder of laboratory activities	CS I. Dr. habil TUDOR BARBU						
2.5 Year of study	I	2.6 Semester	I	2.7 Evaluation type	E	2.8 Discipline regime	DS

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

3.1 Number of hours per week	4	From which:			
3.2 course	2	3.3 seminary		3.4 laboratory	2
3.5 Total hours in the curriculum	56	From which:			
3.6 course	28	3.7 seminary		3.8 laboratory	28
Distribution of time fund:					hours
Study by textbook, course support, bibliography and notes					60
Additional documentation in the library, on specialized electronic platforms					100
Prenaration of seminars					100
Tutoring					55
Exams					4
Other activities:					–
3.9 Total individual study hours					319
3.10 Total hours per semester	375				
3.11 Number of credits	20				

4. Learning outcomes and specific skills acquired

1. Learning the digital image processing techniques, especially the image acquiring, enhancement, filtering and compression
2. Knowledge of the static image segmentation methods
3. Knowledge of the main texture analysis and recognition metods
4. Learning the main image shape description tehniques
5. Knowledge of the video sequence analysis methods
6. The ability to apply the deep neural networks in static and video image processing and analysis
7. The ability to implement the digital image processing and analysis algorithms

5. Evaluation

Type of activity	5.1 Evaluation criteria	5.2 Evaluation methods	5.3 Weight of the final grade
5.4 Course	Acquired knowledge	Oral exam	60%
5.5 Seminary			40%
5.6 Laboratory		Implementations presented	
5.7 Minimum standard of performance: Knowledge of 70% of the information contained in the course			

Course holder signature
 CS I. Dr. habil TUDOR BARBU

Seminary holder signature

Laboratory holder signature
 CS I. Dr. habil TUDOR BARBU

*E = Exam. C = Colloquy

**DF = Fundamental Discipline. DS = Specialized Discipline.