

ROMANIAN ACADEMY - SCOSAAR
DOCTORAL SCHOOL OF ENGINEERING, MECHANICAL, COMPUTER SCIENCES

DISCIPLINE SHEET

Name of subject: Artificial Vision
Course holder: Cristian Sminchişescu
Year of studies: I

Number of hours per week/Verification/Credits		
Course	Form of examination	Credits
2 hours per week	Exam	15

A. OBJECTIVES OF THE COURSE (The objectives are formulated in terms of professional skills):

General objective of the subject	Acquiring general knowledge about artificial vision (computer vision)
Specific objectives:	1. Acquiring the material taught in the course; 2. The ability to use the presented results in new contexts; 3. The knowledge and skills acquired in this discipline will form the basis of future scientific and didactic research activities.

B. TERMS (where applicable)

of the course	•
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C. SPECIFIC COMPETENCES ACCUMULATED

(Regards the competences ensured by the study program of which the discipline is a part)

Professional skills	Knowing and mastering the principles of artificial vision - The ability to use the acquired knowledge in subsequent professional activities.
Transversal skills	Knowledge of the major implications of artificial vision in the wider field of computer science, with preferred application to the field of robotics.

D. THE CONTENT OF THE DISCIPLINE

a) Course

Chapter	Contents	Nr. ore
1.	Structure from motion	4
2.	Image segmentation	6
3.	Object recognition	6
4.	2D/3D estimation of human posture	6
5.	Recognition of shapes	6
Total hours		28

E. ASSESSMENT (The methods, forms of assessment and their weight in determining the final grade are specified. The minimum performance standards are indicated, related to the skills defined in point A. Objectives of the discipline)

Type of activity	Evaluation criterias	Evaluation methods	Weight of the final grade
Course	Acquiring the knowledge acquired in the course	Written exam	100
The results of the subject evaluation are expressed by the following qualifications: "Very good"; "Good"; "Satisfactorily"; "Unsatisfactory". The grades "Very good", "Good" and "Satisfactory" allow the doctoral student to obtain the credits.			

F. METHODOLOGICAL REMARKS

Lecture combined with dialogue. Use of modern teaching aids (ppt). Course support.

G. BIBLIOGRAPHY

D. Forsyth, J Ponce, *Computer Vision: A Modern Approach*, Pearson, 2011

Course holder:

C.S. I. Dr. Cristian Sminchişescu

Director

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