

SUBJECT TEACHING GUIDE

G832 - Multimedia Electronic Systems

Degree in Telecommunication Technologies Engineering
 First Degree in Telecommunication Technologies Engineering

Academic year 2024-2025

1. IDENTIFYING DATA					
Degree	Degree in Telecommunication Technologies Engineering First Degree in Telecommunication Technologies Engineering			Type and Year	Optional. Year 4 Optional. Year 4
Faculty	School of Industrial Engineering and Telecommunications				
Discipline	Subject Area: Applied Electronics				
Course unit title and code	G832 - Multimedia Electronic Systems				
Number of ECTS credits allocated	6	Term	Semester based (1)		
Web	http://moodle.unican.es/course/view.php?id=1171				
Language of instruction	Spanish	English Friendly	Yes	Mode of delivery	Face-to-face

Department	DPTO. TECNOLOGIA ELECTRONICA E INGENIERIA DE SISTEMAS Y AUTOMATICA				
Name of lecturer	PABLO PEDRO SANCHEZ ESPESO				
E-mail	pablo.sanchez@unican.es				
Office	E.T.S. de Ingenieros Industriales y de Telecomunicación. Planta: - 3. DESPACHO PROFESOR (S3002)				
Other lecturers	JESUS MIGUEL PEREZ LLANO				

3.1 LEARNING OUTCOMES
- Participants acquire the ability to understand the operation of the audio and video capture systems.
- Participants acquire basic knowledge about the development of audio/video compression systems
- To learn implementation techniques of multimedia systems

4. OBJECTIVES

Study audio/image capture and reproduction systems
Know basic techniques for multimedia systems
Understand the functional behavior of electronics systems that process audio and image signals
Know basic artificial intelligence techniques applied to multimedia systems.

6. SUBJECT PROGRAM

CONTENTS

1	Hardware platforms for multimedia systems
2	Sound
3	image
4	Multimedia systems
5	Artificial intelligence techniques for multimedia systems

7. ASSESSMENT METHODS AND CRITERIA

Description	Type	Final Eval.	Reassessn	%
Continuous evaluation	Others	No	Yes	20,00
Final exam	Written exam	Yes	Yes	50,00
Laboratory exercises	Work	No	Yes	30,00
TOTAL				100,00
Observations				
If a student cannot participate in a continuous evaluation exercise or the exercise grade is less than the final exam grade the continuous evaluation exercise will not be taken into account and its grade percentage will be added to the final exam percentage.				
Observations for part-time students				
Partial time students can complete continuous evaluation exercises and laboratory practices virtually. Common assessment criteria shall apply to all assessment tests.				

8. BIBLIOGRAPHY AND TEACHING MATERIALS

BASIC

Z-N Li, M Drew, J Liu, "Fundamentals of Multimedia". Springer. 2nd Edition. 2014.

R. Steinmetz, K. Nahrstedt, "Multimedia Fundamentals", Volumen 1. Prentice Hall. 2002.

Computer vision: Principles and Practice. P. Azad et all. Elektor.