



Subject: Audio and Video Systems and Services
Code: 18487
Institution: Escuela Politécnica Superior
Degree: Telecommunication Technologies and Services Engineering
Level: Graduate
Type: Specific Technology in Sound and Image
ECTS: 6

COURSE

Audio and Video Systems and Services

1.1. Code

18487

1.2. Course Area

Sound and Image

1.3. Course Type

Specific Technology in Sound and Image

1.4. Level

Graduate

1.5. Year

3rd

1.6. Semester

1st

1.7. ECTS

6

1.8. Prerequisites

1.9. Minimum attendance requirements

1.10. Faculty data

Add @uam.es to all email addresses below.

Theory:



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To be assigned
Departamento de Tecnología Electrónica y de las Comunicaciones
Escuela Politécnica Superior

1.11. Objectives

The main objective of this course is to provide the fundamentals for designing and developing audio and video systems and services.

The skills to obtain during this course are part of the specific skills of the specific technology in Sound and Image specified in the curricula of the Telecommunication Technologies and Services Engineering Degree, which are:

- SI1: Skills for building, deploying and managing telecommunication services and applications, namely capture systems, analog and digital processing, coding, transport, representation, processing, storage, delivery, management and presentation of audiovisual services and multimedia information.
- SI5: Skills for creating, coding, managing, broadcast and deliver multimedia content, taking into account usability and accessibility criteria within audiovisual services, both broadcast and interactive ones.



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The objectives to be reached during this course are:

GENERAL OBJECTIVES	
G1	To get and understand the fundamentals of audio and video systems and services
G2	To design and develop audio and video systems and services

1.12. Contents

Short Program

1. Introduction
2. Source and Channel Coding Fundamentals
3. Audio and Video Coding and Representation
4. Indexing, Access and Management of Repositories
5. Content Creation and Distribution
6. Interactive and Broadcast Services

1.13. References

Nota: The course slides are the main reference of the course.

Basic Bibliography

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- M. vd. Schaar, P.Chou, “*Multimedia over IP and Wireless Networks: Compression, Networking, and Systems*”, Academic Press, 2007.
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Complementary bibliography



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