

Course guide

320124 - IMQSA - Quality Measurement of Audio-Visual Signals

Last modified: 28/09/2023

Unit in charge: Terrassa School of Industrial, Aerospace and Audiovisual Engineering
Teaching unit: 710 - EEL - Department of Electronic Engineering.

Degree: BACHELOR'S DEGREE IN AUDIOVISUAL SYSTEMS ENGINEERING (Syllabus 2009). (Optional subject).

Academic year: 2023 **ECTS Credits:** 6.0 **Languages:** Catalan, Spanish

LECTURER

Coordinating lecturer: Manuel Lamich Arocas

Others: Lluís Ferrer Arnau

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Transversal:

1. SELF-DIRECTED LEARNING - Level 3. Applying the knowledge gained in completing a task according to its relevance and importance. Deciding how to carry out a task, the amount of time to be devoted to it and the most suitable information sources.
2. EFFICIENT ORAL AND WRITTEN COMMUNICATION - Level 3. Communicating clearly and efficiently in oral and written presentations. Adapting to audiences and communication aims by using suitable strategies and means.
3. ENTREPRENEURSHIP AND INNOVATION - Level 3. Using knowledge and strategic skills to set up and manage projects. Applying systemic solutions to complex problems. Devising and managing innovation in organizations.
4. TEAMWORK - Level 3. Managing and making work groups effective. Resolving possible conflicts, valuing working with others, assessing the effectiveness of a team and presenting the final results.

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

STUDY LOAD

Type	Hours	Percentage
Self study	90,0	60.00
Hours large group	30,0	20.00
Hours small group	30,0	20.00

Total learning time: 150 h

CONTENTS

(ENG) TEMA 1. INTRODUCCIO

Full-or-part-time: 6h

Theory classes: 2h

Self study : 4h



(ENG) TEMA 2. SISTEMES D'INSTRUMENTACIÓ

Full-or-part-time: 17h

Theory classes: 4h

Laboratory classes: 4h

Self study : 9h

(ENG) TEMA 3. MESURA DE VARIABLES FÍSQUES

Full-or-part-time: 20h

Theory classes: 8h

Self study : 12h

(ENG) TEMA 4. CARACTERITZACIÓ AUTOMÀTICA D'EQUIPS

Full-or-part-time: 39h

Theory classes: 2h

Laboratory classes: 16h

Self study : 21h

(ENG) TEMA 5. INTERFERÈNCIES ALS SISTEMES AUDIOVISUALS

Full-or-part-time: 40h

Theory classes: 10h

Self study : 24h

Self study : 6h

(ENG) TEMA 6. SMART SENSORS

Full-or-part-time: 20h

Theory classes: 4h

Laboratory classes: 4h

Self study : 12h

GRADING SYSTEM

BIBLIOGRAPHY

Basic:

- Pérez García, M. A. [et al.]. Instrumentación electrónica. 2ª ed. Madrid: Thomson, 2004. ISBN 84-9732-166-9.
- Pallás Areny, R. Adquisición y distribución de señales. Barcelona: Marcombo, 1993. ISBN 8426709184.

Complementary:

- Meijer, Gerard C. M. Smart sensor systems. Chichester: John Wiley & Sons, 2008. ISBN 9780470866917.