Advances in Electronic Systems Engineering (Seminar)

Course Description

- *María Jesús Ledesma Carbayo*
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Departamento de
Ingeniería
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Universidad Politécnica de Madrid

Máster Oficial en Ingeniería
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www.die.upm.es

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Advances in Electronic Systems Engineering (Seminar)

Semester: 1 and 2 (anual)

Number of credits: 3

Type: mandatory

Objectives

This seminar is a source of contact with the latest developments and applications of electronic systems in both academia and the business world. It is intended that students in the seminar are the source of knowledge and inspiration for the future development of their careers. Be promoted particularly contact with companies facing business experience and learn about different business models and explore the demand for professionals in these companies. The business experience will be complemented by experiences from the academic world in recent research advances in high-impact projects.

Skills development:

• Knowledge of the latest developments in electronic circuits and systems in the context of both academic and business

• Ability to apply the latest technologies from academia innovation in electronic systems.

Program

The program will consist of one session every two weeks during the academic year in which they will be covering the various business and academic experiences throughout the course. As an example is presented below type a talk held last term:

Pedro Echeverría BBVA	High Performance Computation for Financial Simualtion

Abstract

Financial simulation is one of the hotspots for High Performance Computation (HPC). Traditionally, financial simulation has relied on software solutions solutions based on grids and clusters of state of the art microprocessors. However, in the last years computational requirements has increased much faster than the performance improvements obtained with new microporcessor families opening financial simuation to new techonolgies related to Hardware acceleration as FPGAs and GPGPUs.

Bibliography

There is no general bibliography given the nature of the subject but will provide specific bibliography facing the personal work on selected topics.

Teachers

Coordinator: María Jesús Ledesma Carbayo

Teachers:

- *Marisa López Vallejo*
- *Elías Muñoz Merino*
- *Ricardo de Córdoba*

Teaching Methodology

The teaching methodology will consist of talks from industry experts (1h) boosted by teachers of the subject. The participation and interaction between the speaker and the students in a discussion following the lecture exposure (20-30 min). Such participation will be assessed in the evaluation of the subject.

Evaluation

The evaluation of the seminar will be based on:

- Mandatory attendance at all lectures (only allowed two absences) and participation in seminars (20%).

- Presentation of a paper to flesh out one of the issues addressed in the talks (June) at the option of the student during a testing session (80%). The delivery of this work consist of a written document about 10-15 leaves as well as the exhibition of the same for 12 minutes followed by 5 minutes of questions from teachers. The choice of topic should contact the team of teachers during the month of April and will require the approval of the same.

Contact

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Moodle: **AVANCES EN INGENIERÍA DE SISTEMAS ELECTRÓNICOS (Seminario)**

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