

Facultatea de Automatică și Calculatoare

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Master's Degree Program **Cloud Computing and Internet of Things**

General Information

Requirements:Bachelor's degree; foundations of Computer and Information TechnologyDuration:4 semesters (3 semesters coursework + 1 semester Dissertation thesis)ECTS credits:120Program language:EnglishMore information:https://cs.upt.ro/education/master

Competencies and Knowledge Acquired

- Advanced knowledge of the main topics and problems in the converged field of Cloud Computing and Internet of Things
- Knowledge of current approaches in Cloud Computing and IoT, ability to select and apply them in project development
- Skills to critically analyze, innovate, and research
- · Advanced abilities of communication, interdisciplinary cooperation, and team project management

Curriculum

The curriculum is simple and flexible. It is structured into three components:

- **Core component** each semester, at least 2 courses must be elected out of the following:
 - Semester 1: IoT and Cloud Architectures and Communication Technologies; Algorithms and Protocols in IoT and Cloud; Smart Sensors and Sensor Networks; Cyber Physical Systems; Hardware Acceleration Techniques for Cloud Computing
 Semester 2: Mobile Cloud Computing and Applications; Advanced Embedded Systems; Big Data in Cloud and
 - Semester 2: Mobile Cloud Computing and Applications; Advanced Embedded Systems; Big Data in Cloud and IoT; Cloud Based AI Services; Fault-Tolerance of IoT and Dependable Cloud Computing
 - Semester 3: Security and Privacy in IoT and Cloud; Advanced DSP Systems; Operating Systems for IoT; Vehicle to X Communication; Development of IoT Products
- Elective component each semester, 1 course must be elected out of the course list of *any Master program in the field of Computer and Information Technology*
- **Research component** develops the research skills of the Master student over the four semesters of the program. It contains courses and activities directly related to research and Master Thesis development

Why Master of Cloud Computing and Internet of Things

- Cloud Computing and IoT are a ubiquitous part of our living and working environment, and of the upcoming digital society
- Become a highly qualified specialist in Cloud Computing and IoT
- Master the most recent technologies, with direct impact in intelligent transportation, smart cities, Industry 4.0, smart grids and so on
- Specialty of high demand at national and international level
- Stand out from the crowd in a highly competitive field, any edge counts!
- Learn new concepts in one of the most important engineering fields
- First step in a possible research career

Benefits and Opportunities

- Cloud Computing and Internet of Things jobs are among the highest paid and have the highest job satisfaction
- Up-to-date and flexible curriculum choose your own path
- · Well equipped laboratories, good infrastructure, latest technologies

Contact

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