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ORDINE
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UNIVERSITAT
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DE VALÈNCIA



NTT DATA



Istituto di Calcolo
e Reti ad Alte Prestazioni

ENROLLMENT REQUIREMENTS

Candidates should have one of the following MSc-level (1st level Master) degrees:

1. *Laurea magistrale ex D.M. 270/04 or specialistica ex D.M. 509/99* in the class of Information Engineering or in the class of Information Science and Technologies.
2. *Laurea magistrale ex D.M. 270/04 or specialistica ex D.M. 509/99* in one of the following classes: Electronics Engineering, Telecommunication Engineering, Electrical Engineering, Automation Engineering, Management Engineering, Mechanical Engineering, Energy and/or Nuclear Engineering, Biomedical Engineering, Civil Engineering, Systems Building Engineering, Security Engineering, Environmental Engineering, Materials Science and Engineering, Physics, Mathematics, Statistics.
3. *Laurea vecchio ordinamento (antecedente D.M. 509/99) or Master of Science degree at foreign universities* of a duration of at least 4 years, equivalent to one of the degrees at points 1 or 2.

TUITION FEE: 2000 EURO

WEB LINK: CALL AND APPLICATION

- https://unical.portaleamministrazionetrasparente.it/archivio22_bandi-di-concorso_0_6353_874_1.html
- <https://unical.esse3.cineca.it/>

HEADQUARTERS AND CONTACTS

Administrative headquarters

Via Pietro Bucci, cubo 41C
Department of Informatics, Modeling, Electronics, and Systems (DIMES), University of Calabria
87036 Rende (Cosenza) ITALY
Tel. +39.0984.494063, Fax. +39.0984.494713
g.fortino@unical.it

Location of Classes

On-line via MS Teams and DOMUS District - University of Calabria, Centro Residenziale Chiodo 2 - Rende (CS)

2nd Level Master Postgraduate Course Degree

INTER-IoT

(Third Edition)

Integrator & Manager of Internet of Things Systems

The goal of our 2nd level Master is the professional training of a new ICT expert: **the integrator and manager of systems based on Internet of Things (IoT) technology**. The new professional will have high technical skills as well as business competences in the ICT area, being responsible of the technical management (including analysis, design, implementation and maintenance) of complex IoT systems and their integration. Such new professional is emerging both at National and International levels due to the pervasive and fast diffusion of the IoT technology in the context of strategic application domains such as e-Health, Smart City, Automotive, Logistics, Smart Home and Buildings, wearables and in all those sectors and subsectors that will be enabled by IoT technologies. The specific skills of such trained professionals will allow them to be easily inserted in large enterprises, small-medium enterprises, utility companies, city councils, and research institutions that are involved (or will be involved in the near future) in the development and/or management of IoT Systems, as it is evident from the state of the art and current trends in the ICT sector.



interiot

<http://labs.dimes.unical.it/speme/master-inter-iot/>

Organization

Our 2nd level Master is organized by the DIMES department of the University of Calabria in collaboration with the ICAR-CNR Institute of the Italian National Research Council.

Organizing Committee

Giancarlo Fortino - Director of the Master

(Prof. of Computer Engineering - UNICAL)

Pasquale Corsonello — Prof. of Electronics Eng., UNICAL

Sergio Flesca — Prof. of Computer Eng., UNICAL

Gianluca Aloï — Prof. of Telecommunications Eng., UNICAL

Giandomenico Spezzano — Research Director, ICAR-CNR

Scientific and Technical Committee

Prof. Giancarlo Fortino, DIMES - University of Calabria

Prof. Sergio Flesca, DIMES - University of Calabria

Prof. Pasquale Corsonello, DIMES - University of Calabria

Prof. Gianluca Aloï, DIMES - University of Calabria

Prof. Giandomenico Spezzano, ICAR-CNR di Rende

Prof. Natale Arcuri, DIMEG – University of Calabria

Dr. Giorgio Scarpelli, NTT Data S.p.A.

Eng. Vincenzo D'Agostino, Omnia Energia S.p.A.

Dr. Michele De Buono, SCAI Lab

Prof. Valeria Fionda, DEMACS – University of Calabria

Prof. Mario Cannataro, University Magna Grecia of Catanzaro

Prof. Antonio Liotta, University of Bozen

Prof. Carlos Palau, Universitat Politècnica de Valencia (Spain)

Prof. Noel Crespi, Institut Mines-Telecom (France)

Prof. Wenfeng Li, Wuhan University of Technology (China)

Prof. Mengchu Zhou, New Jersey Institute of Technology (USA)

Prof. Marcello La Rosa, Univ. of Melbourne (Australia)

INFORMATION

Duration	12 months
Start date	February 2021
End date	January 2022
N. students	[n. max 20 – n. min 12]
N. non-examination students	[max n. 3]
Frontal lessons (lessons, exercises, use cases, etc)	[n. hours 220 (n. Credits 30)]
Asynchronous Learning	[n. hours 100 (n. Credits 10)]
Training on the job (TOJ)	[n. hours 300 (n. Credits 12)]
Final Report	[n. hours 180 (n. Credits 8)]
Total amount of hours	n. hours 1500 (n. Credits 60) including individual study

TEACHING MODULES

Module 1: IoT Systems Development: Programming, Engineering Methods and Big Data Analytics:

- 1.1 IoT Systems Programming – Software level (resp. Prof. Fortino)
- 1.2 IoT Systems Implementation – Hardware level (resp. Prof. Corsonello)
- 1.3 Big data analytics for IoT systems (resp. Prof. Flesca)
- 1.4 Techniques and Tools for the Development of IoT Applications (resp. Prof. Spezzano)

Module 2: Methodologies for IoT Systems Management: Security, Integration Methods, Business Processes Management and Models:

- 2.1 Security of IoT Communications (resp. Prof. Aloï)
- 2.2 Integration and Interoperability of IoT Systems (resp. Prof. Gravina)
- 2.3 Business Process Management and IoT (resp. Prof. Guzzo)
- 2.4 Business Models for IoT (resp. Dr. Scarpelli)

Module 3: Training on-the-job:

Development of a project in a partner organization.

GOALS AND PROFESSIONAL OUTLETS

Our degree course is oriented to train **experts of development and management of IoT systems** able to understand the main management, technical, technological, and business aspects of the Internet of Things in the context of different application domains such as e-Health, building automation, Smart Grid, Smart City, Industry 4.0.

The 2nd level Master allows to acquire conceptual tools and technical/scientific skills suitable to satisfy the needs of several professional figures such as:

- Professionals able to define and manage the main organization processes, policies and models in the IoT context inside an organization.
- Professionals able to develop innovative IoT systems in various application domains.
- Professionals able to integrate even heterogeneous IoT systems in various application domains.
- Professionals able to develop and manage business models for IoT systems.

The expert of integration and management of IoT systems finds employment in enterprises, research institutions, public companies, and in all those organizations that directly or indirectly focus on the development, integration, and management of IoT systems.

