# 1-st IEEE ITALY SECTION SUMMER SCHOOL
## Perugia, June 21-28, 2015

### Advanced course for graduated students and industrial research

The IEEE Italy Section, in cooperation with the Dipartimento di Ingegneria of the University of Perugia, organizes the 1-st IEEE Italy Section Summer School: Advanced Course for Graduate Students and Industrial Research. The School is mainly dedicated to graduated students (Ph.D., Dottorato di Ricerca) in technical or scientific fields dealing with the IEEE topics and related areas. Young graduates (MSc , Laurea Magistrale) are also admitted. The school consists of lectures by international experts coming from industry, academia and other research centres. The program covers fundamentals and advanced topics in the following areas:

**Antenna & microwaves**
**Biomechanics and bio-robotics**
**Communication and networking**
**Computational electromagnetics**
**Data treatment**
**Electrical machines and drives**
**Electromagnetic compatibility**
**Electronic components, devices and systems**
**Ethic issues in research and technology**
**Instrumentation, measurement and sensors**
**Intelligent systems, knowledge discovery and management**
**Magnetic and electric materials**
**Mechatronics**
**Nanotechnology**
**Nondestructive evaluation**
**Photonics**
**Power electronics**
**Power quality**
**Power systems, renewable energy and storage**
**Real-time and embedded systems**
**Robotics**
**Security and safety**
**Signal and image processing**
**Smart energy systems**
**Software technologies**

The School is also aimed at providing a basic overview about the modern industrial approaches to research and development, including organization and people management. The School provides a great chance not only for learning new skills but also for networking and sharing experiences.The 1-st IEEE Italy Section Summer School will be held at the School of Engineering, via G. Duranti, Perugia. A maximum of **50** participants will be admitted to the School. A **Qualifyng IEEE Certificate of Attendance** will be issued.

### PRELIMINARY PROGRAM

Sunday, June 21-st Welcome and reception

Monday, June 22-nd - Saturday, June 27-th

**Distinguished Lecturers**

**R. Baldoni**, Univ. La Sapienza, Rome, *Cybersecurity*

**M, Ceraolo**, Univ. Pisa, *Object-Oriented Simulations with Modelica*

**F. Cianetti**, Univ. of Perugia, *Modeling and simulation of mechatronic systems*

**P. Civalleri**, Politecnico di Torino, *The circuital approach in R&D*

**F. Fiorillo**, INRIM Turin, *Magnetic Materials and Measurements*

**A. Fernández**, Univ. of Vigo, *Digital image processing: some basic concepts and applications*

**P. Liò,** Cambridge University, *Bioinformatics algorithms and predictive models*

**G. Rubinacci**, Univ. Neaples Federico II, *The constitutive error approach in the computation of the electric and magnetic fields*

**D. Scaramuzza**, Tech. Univ. of Zurich, *Computer vision for robotic and UAV applications*

**J. Schoukens**, Vrije Univ. Brussel, *Non-linear system identification*

**R. Sorrentino**, Univ. of Perugia, *Electromagnetic fields and their applications in the everyday's life*

**More lectures (Power Systems, Power Electronics, Telecomunication Systems, etc.) will be announced**

A guided tour is expected in the afternoon of Thursday, June 25-th

Saturday, June 27-th, 2015 Final evaluation test and Closing ceremony

**STEERING COMMITTEE**
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| **Regular admission Member IEEE** | **190 euro** |
| **Regular admission Non-Member** | **240 euro** |
| **One-day admission Member IEEE** | **70 euro** |
| **One-day admission Non-Member** | **90 euro** |

**The deadline for applying is: May 15th, 2015**

More details in: ***http://ieeess2015.tr.unipg.it/***

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