

Courses/Seminars for PhD students (Electronic Engineering and others)

The Courses/Seminars will be held in English.

1. *Scientific Writing*

Prof. Thomas M. Brown

Expectations for PhD students, Careers for PhD students in and outside Academia in Engineering and Sciences, Understanding the publication process for peer-reviewed scientific articles: metrics, impact and impact factors, open access, selecting a journal, submission, cover letter, manuscript, peer review, response to reviewers, revisions, editorial processes. Understanding what makes research and your results publishable. Scientific communication: writing, presentations, finding information. Writing of a scientific article (with class exercises): structure of an article (title, abstract, introduction, results, discussion, conclusions etc.), graphing and images, writing a PhD thesis, writing a proceeding, preparing a poster, preparing an abstract for conferences.

2. *Project Management - Leadership and Communication in the Management of Advanced Projects*

Ing. Fabrizio Tedone

1. Part One: The Project - Definitions, basic project management and advanced project management.
2. Part Two: Communication in Projects - Basic theory of communication, method and areas of communication in projects.
3. Part Three: Leadership in Projects - Stakeholder management, leadership & management, leadership models.
4. Part Four: An overview - Leadership and Communication for managing complexity and personal and professional excellence.

3. *Exploitation of Research – Some inter-disciplinary elements for the Ph.D. students in Electronic and Telecommunication Engineering*

Fabio Del Frate, Roberto Giuliani, Mario Nardi

3.1 The GEO-K spin-off and the Space Economics opportunities

Prof. Fabio Del Frate, ing. Marcello Maranesi

- The case study of “GEO-K”, a University spin-off for Remote Sensing applications.
- The Opportunities in the Space sector .

3.2 Design Your Start-Up -

Dr. Roberto Giuliani

- Introduction: Better before what is needed rather than I am able to offer
- Idea generation & team composition
- Design your Business Model Canvas: your company in one slide!
- The Business Plan structure
- Financial Pills: basic instructions about the economic and financial aspects of budgeting and control for the management of your enterprise.
- Funding: The start-up fund raising activities for launching your enterprise is in the spotlight: ESA BIC Lazio Open Call

3.3 Introduction to Patents and related procedures (national and international) ; the role of the IPR consultant –

Ing. Antonio Celona

3.4. “Intangible Asset and Intellectual Property Management: an Enterprise approach” –

Ing. Mario Nardi

Intangible Asset (IA) management and Intellectual Property (IP) management are widely recognized as important aspects of the correct evaluation of companies' strength. They are generally acknowledged as important factors of competitive advantage for the companies (i.e. part of their capital) as they describe marketability of the IP and the ability to produce economic benefits. We describe the overall mission of IA management in a Large Enterprise and in particular the challenge of how to evaluate non-material capabilities, know-how, innovation and inventions. Human Capital and Relational Capital are mentioned but are not part of this presentation.

SEMINARS:

- “Animal Monitoring by Wireless Sensor Network with Experiments in Galapagos (Ecuador)”, by Pierpaolo Loreti, Lorenzo Bracciale, Gabriele Gentile, *Tor Vergata University*.
- “Learning in the 5G Edge Cloud” by Sergio Barbarossa, *Sapienza University, Roma*
- “The redefinition of the International System of Units” by Luca Callegaro, INRIM
- “Not- promised realizations and not-realized promises in the technical-scientific world” by Gaspare Galati
- “Introduction to Reliability and Maintenance Criteria” by Francesco Caltagirone and Gaspare Galati