Understanding the fundamentals of innovation management in order to better comprehend the current technological environment, its trends and characteristics for grasping the entrepreneurial opportunities emerging in the knowledge economy. The course focuses on the dynamics of innovation at macro level, through the comprehension of dynamics of competitiveness related to the countries and regions on the basis of their innovation performances as well as on the organizations by exploring fundamentals of innovation strategies. A particular attention is reserved to the collaborative, open and user driven innovation approaches and the opportunities to innovate resulting from Big Data.

A basic knowledge of business management and organization is recommended although not required.
**COURSE AIMS**

**Knowledge and understanding.** At the end of the course, the students will develop a broad spectrum of basic knowledge related to the drivers and implications of technological innovation on the socio-economic performances of regions and companies by identifying areas of interventions at organizational, technological and strategic level.

**Applying knowledge and understanding.** At the end of the course, the students will be able to identify the main innovation sources and forms, to assess the value of a technology, to deploy an innovation strategy by leveraging on collaborative and open approaches, to design an organizational and technological model supporting the innovation by the organizations under the forms of product, process, marketing and organizational model.

**Making judgements.** The course develops within students the ability of independent judgment in the appropriate choice of organizational model, competitive strategy, and technological solutions to support the development of innovation.

**Communication skills.** The course provides students with the opportunity to develop effective communication skills by discussing business and technical presentations with a varied and composite audience having heterogeneous knowledge background, culture, and language. Besides, during the course, some visits nearby companies and seminars held by invited speakers are organized in order to support further the development of communication and interaction skills.

**Learning skills.** The course supports students to develop self-learning skills, in order to acquire the autonomy to deepen new topics that are related to the core contents of the course. This may happen during the discussion of case studies, or the development of the project works.

**TEACHING METHODOLOGY**

Face-to-face interactive lectures. Discussion of case studies. Elaboration of a project work.

**FULL SYLLABUS**

- Introduction and fundamentals – Learning goal: Understand the importance and the impact of technological innovation
- The source of innovation – Learning goal: Understand the process of evolution from creativity to innovation and the importance of the collaborative innovation networks
- Innovation models and types - Learning goal: Identify the main types of innovation, the fundamentals of S curve application, the concept of technological life-cycles
- Conflicts of Standards and Dominant Design - Learning goal: Understand the concept of dominant design, the dimensions of the value offered by a technology
- The timing dimension - Learning goal: Understand the importance of the timing for a market entry, identify the advantages and disadvantages of a first mover position.
- Collaborative and Open Innovation - Learning goal: Understand the fundamentals of both the collaborative and open innovation paradigms, their importance and applications
- Innovation Strategy - Learning goal: Organizational Issues and Marketing of Innovation

**REFERENCE TEXT BOOKS**

Chesbrough H. (2006) "Open Innovation: researching a new paradigm", Oxford University Press (Ch. 1-10)