

PhD in Experimental Research Through Design, Art and Technologies

Course title	Introduction to printing technologies and flexible components
Course code	95207
Academic Year	2024/25 (the course will be offered in Nov. and Dec. 2024)
Credits	2
Total lecturing hours	10
Course description	This course provides an introduction to a variety of innovative technologies that can be used to produce flexible, bendable, or invisible electronic components. They include various types of printing techniques (e.g. spin coating, spray coating, ink-jet printing, screen printing) as well as other vacuum techniques such as evaporation or sputtering. The details of each technique will be provided, outlining drawbacks and advantages with respect to more standard solutions. A series of applications will be illustrated. The objective is to make the students familiar with technologies that might help them in their carrier.
List of topics covered	<ul style="list-style-type: none"> • Review of printing techniques • Review of deposition techniques • Properties of flexible electronics components • Applications
Lecturer	Prof. Paolo Lugli
Scientific sector	ING-INF/01
Teaching language	English
Assessment	The students will prepare a ppt presentation on a topic of choice related to the course.
Evaluation criteria	The course is Pass or Fail. The presentation of around 10 minutes will be evaluated based on its clarity, the understanding of the topics, and the depth of analysis.
Required readings	Readings will be provided during the lecture
Supplementary readings	Readings will be provided during the lecture