

## Syllabus

### Course description

<b>Course title</b>	Introduction to printing technologies and flexible components
<b>Course code</b>	46025
<b>Scientific sector</b>	ING-INF01
<b>Degree</b>	PhD in Sustainable Energy and Technologies
<b>Semester</b>	2
<b>Year</b>	1
<b>Academic year</b>	2017/2018
<b>Credits</b>	3
<b>Modular</b>	NO

<b>Total lecturing hours</b>	20
<b>Total lab hours</b>	10
<b>Total exercise hours</b>	
<b>Attendance</b>	
<b>Prerequisites</b>	none
<b>Course page</b>	

<b>Specific educational objectives</b>	Basic understanding of printing technologies; experimental praxis with different techniques
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<b>Lecturer</b>	Paolo Lugli
<b>Scientific sector of the lecturer</b>	ING-INF01
<b>Teaching language</b>	English
<b>Office hours</b>	9
<b>Teaching assistant (if any)</b>	
<b>Office hours</b>	
<b>List of topics covered</b>	Introduction to nanostructures, ink formulations, printing techniques, additive manufacturing, introduction to passive and active electronic components; overview of the application fields (production, sensing, agriculture, health, energy)
<b>Teaching format</b>	Frontal lectures, blended learning, individual literature review, presentation on a given topic, small practical project

<b>Learning outcomes</b>	<p><b>Knowledge and understanding:</b> theoretical know-how on printing technologies for electronic components</p> <p><b>Applying Knowledge and understanding:</b> practical know-how on printing technologies for electronic components</p>
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	<p><b>Making judgments:</b></p> <p><b>Communication skills:</b> ability to give a presentation supported by power-point</p> <p><b>Learning skills:</b> performing a literature review on a given topic; extracting the most valuable information and embedding it in a presentation</p>
<b>Assessment</b>	Presentation and project
<b>Assessment language</b>	English
<b>Evaluation criteria and criteria for awarding marks</b>	Quality of the presentation, engagement in the lab project
<b>Required readings</b>	Assigned in class
<b>Supplementary readings</b>	Assigned in class