

## Laurea Magistrale

### ELECTRICAL ENGINEERING FOR SUSTAINABLE GREEN ENERGY TRANSITION

Primo Anno	SSD		CFU																
Primo Semestre	ING-INF/07	MEASUREMENTS FOR AUTOMATION AND INDUSTRIAL PRODUCTION	9																
	ING-IND/31	NUMERICAL METHODS FOR ELECTROMAGNETIC FIELDS	9																
	ING-IND/33	ELECTRIC POWER UTILIZATION AND SAFETY	9																
		ALTRE ATTIVITÀ	3																
		tot I semestre	30																
Secondo Semestre	ING-IND/32	FUNDAMENTAL OF POWER ELECTRONICS	9																
	ING-IND/31	ADVANCED CIRCUIT ANALYSIS AND DESIGN	6																
	ING-IND/33 (6) ING-IND/32 (3)	RENEWABLE ENERGY SOURCES, GENERATION, TRANSMISSION AND FACTS	9																
	ING-INF/04	INDUSTRIAL AUTOMATION	6																
		tot II semestre	30																
Secondo Anno																			
Terzo Semestre	ING-IND/32	DYNAMICS OF ELECTRICAL MACHINES (OBBLIGATORIA)	9	Gruppo Opzionale															
	ING-INF/07	SYSTEMS AND TRANSDUCERS FOR ENERGY HARVESTING FROM RENEWABLES	9																
		ELECTIVE COURSE	9																
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #d3d3d3;"> <th colspan="3" style="text-align: left;">curriculum <b>Smart Power Systems (24 CFU)</b></th> </tr> </thead> <tbody> <tr> <td style="width: 15%;">ING-IND/33</td> <td style="width: 55%;">ELECTRICITY MARKET AND GREEN ENERGY ECONOMY</td> <td style="width: 30%; text-align: center;">9</td> </tr> <tr> <td colspan="3" style="text-align: center;">Quarto Semestre</td> </tr> <tr> <td>ING-IND/33</td> <td>SMART GRIDS AND ADVANCED POWER DISTRIBUTION</td> <td style="text-align: center;">9</td> </tr> <tr> <td>ING-IND/33 (3) ING-IND/11 (3)</td> <td>CLIMATE CHANGE IMPACTS ON ENERGY GENERATION AND DEMAND</td> <td style="text-align: center;">6</td> </tr> </tbody> </table>					curriculum <b>Smart Power Systems (24 CFU)</b>			ING-IND/33	ELECTRICITY MARKET AND GREEN ENERGY ECONOMY	9	Quarto Semestre			ING-IND/33	SMART GRIDS AND ADVANCED POWER DISTRIBUTION	9	ING-IND/33 (3) ING-IND/11 (3)	CLIMATE CHANGE IMPACTS ON ENERGY GENERATION AND DEMAND	6
curriculum <b>Smart Power Systems (24 CFU)</b>																			
ING-IND/33	ELECTRICITY MARKET AND GREEN ENERGY ECONOMY	9																	
Quarto Semestre																			
ING-IND/33	SMART GRIDS AND ADVANCED POWER DISTRIBUTION	9																	
ING-IND/33 (3) ING-IND/11 (3)	CLIMATE CHANGE IMPACTS ON ENERGY GENERATION AND DEMAND	6																	
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #d3d3d3;"> <th colspan="3" style="text-align: left;">curriculum <b>Power Electronics (24 CFU)</b></th> </tr> </thead> <tbody> <tr> <td style="width: 15%;">ING-IND/31</td> <td style="width: 55%;">INDUSTRIAL ELECTROMAGNETIC COMPATIBILITY</td> <td style="width: 30%; text-align: center;">9</td> </tr> <tr> <td colspan="3" style="text-align: right;">tot III semestre</td> </tr> <tr> <td>ING-IND/32</td> <td>ADVANCED POWER CONVERTERS AND CONTROL</td> <td style="text-align: center;">9</td> </tr> <tr> <td>ING-IND/32</td> <td>ELECTRICAL DRIVES FOR E-MOBILITY AND ENERGY EFFICIENCY</td> <td style="text-align: center;">6</td> </tr> </tbody> </table>					curriculum <b>Power Electronics (24 CFU)</b>			ING-IND/31	INDUSTRIAL ELECTROMAGNETIC COMPATIBILITY	9	tot III semestre			ING-IND/32	ADVANCED POWER CONVERTERS AND CONTROL	9	ING-IND/32	ELECTRICAL DRIVES FOR E-MOBILITY AND ENERGY EFFICIENCY	6
curriculum <b>Power Electronics (24 CFU)</b>																			
ING-IND/31	INDUSTRIAL ELECTROMAGNETIC COMPATIBILITY	9																	
tot III semestre																			
ING-IND/32	ADVANCED POWER CONVERTERS AND CONTROL	9																	
ING-IND/32	ELECTRICAL DRIVES FOR E-MOBILITY AND ENERGY EFFICIENCY	6																	
		FINAL THESIS	18																
		tot IV semestre	33																
		<b>Total</b>	<b>120</b>																