

Anno Accademico 2021/2022

ENERGY MARKETS AND SUPPLY STRUCTURE	
Enrollment year	2020/2021
Academic year	2021/2022
Regulations	DM270
Academic discipline	ING-IND/32 (POWER ELECTRONIC CONVERTERS, ELECTRICAL MACHINES AND DRIVES)
Department	DEPARTMENT OF ELECTRICAL,COMPUTER AND BIOMEDICAL ENGINEERING
Course	ELECTRICAL ENGINEERING
Curriculum	Energetica
Year of study	2°
Period	1st semester (27/09/2021 - 21/01/2022)
ECTS	6
Lesson hours	45 lesson hours
Language	English
Activity type	WRITTEN AND ORAL TEST
Teacher	CANAZZA VIRGINIA - 3 ECTS CUZZOLI MAURIZIO - 3 ECTS
Prerequisites	For this course is required an adequate knowledge of electrical engineering, electrical systems, electrical production plants, electrical plants
Learning outcomes	The target of the course is to provide training in the energy supply sector, from the study of the economic energy markets to the delivery and management of energy supply for industries
Course contents	The free energy market, Structure of the supply, Quality of the electrical service, Electricity billing structure, Energy balance in Italy. Structure of demand and supply, Power exchange organization, Historical trends on italian day ahead market, Thermal power units costs and definition of offer curves, Introduction to the ancillary services markets in Europe,

	Recent trends on italian ancillary services market, The reform of the ancillary services market in Europe, Modelling techniques for the simulation electricity markets, Risk Management and Traders strategies, Balance Management, Natural gas supplies.
Teaching methods	The course is organized into face-to-face lessons through on-screen power point presentations and insights using the whiteboard
Reccomended or required readings	Notes on the teacher's lessons
Assessment methods	The exam consists of a written test and an oral test. The written test relates to the lessons carried out by Prof. Canazza (energy markets), the oral test the lessons of Prof. Cuzzoli (supply structure).
Further information	
Sustainable development goals - Agenda 2030	<u>\$Ibl_legenda_sviluppo_sostenibile_</u>