

ENERGY as an introduction to engineering jobs in :

Production, transportation and distribution, energy efficiency

		minor lecture	Major lecture	minor TU-EX	Major TU-EX	Total Major	Ind. work	Possible projects minor: 40h, Major: 100h	
ISSUES & PROBLEMS	Economic, political, social and ethical.	4h p				4h		m: energy policies of countries and companies	
PRODUCTION	Energy from oil & gas : Operation	8h p				24h		M: Dimensioning	
	Renewable energy : presentation of the different current and future sources.	8h p		8h i					
TRANSPORTATION & DISTRIBUTION	HV Electricity network : lines and sub-stations LV Electricity network : HV/LV sub-stations, customer connection, protection of people and property.	8h p		16h i		24h			
ENERGY EFFICIENCY	Approaching energy efficiency by case studies. Improving energy performance of products, buildings and services. Improving production and distribution efficiency.	4h p	+ 12h p	8 h i	+ 16h i	40h		M: energy audits M: simulations	
REGULATIONS & STANDARDS	Safety regulations	4h p				4h			
	Energy management (NF IN 16001 standard)								
		36h	+ 12h	32h	+ 16h	96h			
		i Internal p Partner							