Goi Eskola Politeknikoa | Mondragon Unibertsitatea
Course: 2023 / 2024 - Course planning

Mondragon Unibertsitatea
Goi Eskola Politeknikoa
Escuela Politécnica Superior

[GAK202] ENERGY PROJECTS WORKSHOP I

GENERAL INFORMATION

Studies	DEGREE IN ENERGY ENGINEERING			**Subject**	?
Semester	1	**Course**	3	**Mention / Field of specialisation**	
Character	COMPULSORY				
Plan	2022	**Modality**	Face-to-face	**Language**	ENGLISH
Credits	3	**Hours/week**	1.67	**Total hours**	30 class hours + 45 non-class hours = **75 total hours**

PROFESSORS

AZPI-LIZAUR BEITIA, XABIER

DOKBE-AGIRREZABALA IRADI, ENEKO

REQUIRED PREVIOUS KNOWLEDGE

Subjects	Knowledge
(No specific previous subjects required)	Matlab and Simulink

LEARNING RESULTS

LEARNING RESULTS	KC	SK	AB	ECTS
GAR308 - Plans projects to improve energy efficiency in housing, industry and services, taking into account current legislation and sustainable development objectives.		x		2,56
G-RTR1 - To develop interdisciplinary projects specific to their specialty and of gradual complexity, - becoming aware of respect for human rights and fundamental rights, and analyzing and assessing the impact of the proposed solutions on the SDGs - to acquire and/or apply basic, advanced and /or avant-garde, demonstrating the ability to work in multidisciplinary teams and/or undertake further studies with a high degree of autonomy		x		0,2
G-RTR2 - To express information, ideas and the arguments that support them in an orderly, clear and coherent manner, orally and in writing, based on quality information, self-made or obtained from different sources, using inclusive and non-discriminatory language		x		0,24
			Total:	3

KC: Knowledge or Content / SK: Skills / AB: Abilities

CONTENTS

Topic1: Smart gridTopic2: Renewable energies (for buildings)

–Generation: PV, solar thermal and wind

–Storage and control: BSS and MPPT

–Consumption (profiles and loads) and electric market

Topic3: Electric mobility

Topic4: NZEB and smart building

Topic5: Energy Performance Certification

–Regulations and legislation

–CE3X software

–How to do measurements

LEARNING RESOURCES AND BIBLIOGRAPHY	
Learning resources	**Bibliography**
Subject notes Moodle Platform Class presentations Technical articles	http://katalogoa.mondragon.edu/janium-bin/janium_login_opac_re_ln k.pl?grupo=ENERGIA31&ejecuta=30

–How to do measurements