

[GC102] MATERIAL EFFICIENT USE AND RECYCLING

GENERAL INFORMATION

Studies	DEGREE IN ENGINEERING IN ECO-TECHNOLOGY IN INDUSTRIAL PROCESS		Subject	WASTE MANAGEMENT AND TREATMENT	
Semester	1	Course	4	Mention / Field of specialisation	???
Character	OPTIONAL		Language	EUSKARA	
Plan	2017	Modality	Adapted Face-to-face	Total hours	56 class hours + 56.5 non-class hours = 112.5 total hours
Credits	4,5	Hours/week	3.11		

PROFESSORS

AURREKOETXEA NARBARTE, ION
 URRUTIBEASCOA IRALA, IDOIA

REQUIRED PREVIOUS KNOWLEDGE

Subjects	Knowledge
(No specific previous subjects required)	(No previous knowledge required)

SKILLS

VERIFICA SKILLS

SPECIFIC

GCES09 - To analyse and select methods and systems for the reuse and recycling of materials, focusing on their environmental impact, analysing the valuation and processing of raw materials and energy, technical, economic and environmental resources.

GENERAL

G_CB6 - To be able to respond adequately in complex situations or situations that call for innovative solutions in both the academic field and work environments within their field of study;

GCCG03 - To take the initiative in problem solving, decision making and creativity, and to communicate and share knowledge and skills, understanding the ethical and professional responsibilities of the business activity in the field of Ecotechnology Engineering in Industrial Processes.

GCCG4 - To know how to perform measurements, calculations, valuations, studies, reports, task planning, and other activities pertaining to the field of Ecotechnology Engineering in Industrial Processes

GCCG5 - To be able to analyse and assess the social and environmental impact of technical solutions.

GCCG8 - To draft and develop projects in the field of Ecotechnology Engineering in Industrial Processes, focusing on the the design and development and on the application of systems, technologies and strategies in the industrial processes which minimise their impact on the environment.

CROSS

GCCTR2 - To be able to do their job in cooperative, participatory environments, with awareness of social responsibility.

BASIC

G_CB2 - To be able to apply knowledge to occupational or professional tasks; have the necessary skills to pose and defend arguments, and to solve problems within their field of study

G_CB3 - To be capable of gathering and interpreting relevant data (normally within their field of study) in order to make judgements, reflecting on relevant matters of a social, scientific or ethical nature

G_CB4 - To be able to communicate information, ideas, problems and solutions to both expert and lay audiences

LEARNING RESULTS

RGC408 Know the methods of residue treatment.

LEARNING ACTIVITIES

	CH	NCH	TH
Presentation of the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects	24 h.	12 h.	36 h.
Individual and team exercises	32 h.	44,5 h.	76,5 h.

EVALUATION SYSTEM

Reports of solving exercises, case studies, computer practices, simulation practices and laboratory practices

W

100%

MAKE-UP MECHANISMS

Reports of solving exercises, case studies, computer practices, simulation practices and laboratory practices

CH - Class hours: 56 h.

NCH - Non-class hours: 56,5 h.

TH - Total hours: 112,5 h.

CONTENTS

- Fundamentals of the circular economy
- Recycling and reuse of critical materials
- Recycling and reuse of conventional materials

LEARNING RESOURCES AND BIBLIOGRAPHY

Learning resources

Technical articles
Class presentations
Slides of the subject

Bibliography

http://katalogoa.mondragon.edu/janium-bin/janium_login_opac_re_in_k.pl?grupo=EKOTEKNOLOGIA41&ejecuta=20