

[GCA304] STATISTICS

GENERAL INFORMATION

Studies	DEGREE IN ENGINEERING IN ECO-TECHNOLOGY IN INDUSTRIAL PROCESS		Subject	MATHEMATICS
Semester	2	Course	2	Mention / Field of specialisation
Character	BASIC TRAINING		Language	EUSKARA
Plan	2022	Modality	Face-to-face	Total hours 59 class hours + 91 non-class hours = 150 total hours
Credits	6	Hours/week	3.28	

2030 AGENDA GOALS



PROFESSORS

LIZARRIBAR MORAIZ, JATSU

REQUIRED PREVIOUS KNOWLEDGE

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

LEARNING RESULTS

LEARNING RESULTS	KC	SK	AB	ECTS
GCR202 - To solve mathematical problems in the field of engineering using statistical methods			x	5,4
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		0,36
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: 6

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

SECONDARY LEARNING RESULTS

2RGC290 (2 sem)

LEARNING ACTIVITIES

Development and writing of records, reports, presentations, audiovisual material, etc. on projects/work experience/challenges/case studies/experimental investigations carried out individually and/or in teams

CH **NCH** **TH**
3 h. 3 h.

EVALUATION SYSTEM

Self-assessment 50%
Co-assessment 50%

MAKE-UP MECHANISMS

(No mechanisms)

CH - Class hours: 0 h.
NCH - Non-class hours: 3 h.
TH - Total hours: 3 h.

2RGC294 (2 sem)

LEARNING ACTIVITIES

Development and writing of records, reports, presentations, audiovisual material, etc. on projects/work experience/challenges/case studies/experimental investigations carried out individually and/or in teams

CH **NCH** **TH**
3 h. 3 h.

EVALUATION SYSTEM

W

MAKE-UP MECHANISMS

Presentation and defence of exercises, case studies, computer practical work, simulation practical work, laboratory practical work, term projects, end of degree project, master's thesis, challenges and problems

100%

(No mechanisms)

CH - Class hours: 0 h.

NCH - Non-class hours: 3 h.

TH - Total hours: 3 h.

2RGC292 (2 sem)

LEARNING ACTIVITIES

Carrying out/resolving projects/challenges/cases, etc. to provide solutions to problems in interdisciplinary contexts, real and/or simulated, individually and/or in teams

CH

1 h.

NCH

2 h.

TH

3 h.

EVALUATION SYSTEM

W

Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems

100%

MAKE-UP MECHANISMS

(No mechanisms)

CH - Class hours: 1 h.

NCH - Non-class hours: 2 h.

TH - Total hours: 3 h.

2RGC293 (2 sem)

LEARNING ACTIVITIES

Development and writing of records, reports, presentations, audiovisual material, etc. on projects/work experience/challenges/case studies/experimental investigations carried out individually and/or in teams

CH

NCH

3 h.

TH

3 h.

EVALUATION SYSTEM

W

Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems

100%

MAKE-UP MECHANISMS

(No mechanisms)

CH - Class hours: 0 h.

NCH - Non-class hours: 3 h.

TH - Total hours: 3 h.

2RGC291 (2 sem)

LEARNING ACTIVITIES

Development and writing of records, reports, presentations, audiovisual material, etc. on projects/work experience/challenges/case studies/experimental investigations carried out individually and/or in teams

CH

NCH

3 h.

TH

3 h.

EVALUATION SYSTEM

W

Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems

100%

MAKE-UP MECHANISMS

(No mechanisms)

CH - Class hours: 0 h.

NCH - Non-class hours: 3 h.

TH - Total hours: 3 h.

RGC203 [!] *Emplea los modelos de probabilidad en la resolución de problemas de Ingeniería y analiza la eficiencia de los métodos empleados*

LEARNING ACTIVITIES	CH	NCH	TH
Conducting tests, giving presentations, presenting defences, taking examinations and/or doing checkpoints	2 h.		2 h.
Carrying out/resolving projects/challenges/cases, etc. to provide solutions to problems in interdisciplinary contexts, real and/or simulated, individually and/or in teams		10 h.	10 h.
Computer simulation exercises, individually and/or in teams	2 h.	2 h.	4 h.
Presentation by the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects	10 h.		10 h.
Carrying out exercises and solving problems individually and/or in teams	8 h.	16 h.	24 h.
EVALUATION SYSTEM	W	MAKE-UP MECHANISMS	
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems	20%	(No mechanisms)	
Individual written and/or oral tests or individual coding/programming tests	80%		

CH - Class hours: 22 h.

NCH - Non-class hours: 28 h.

TH - Total hours: 50 h.

RGC204 [!] *Utiliza técnicas estadísticas para sintetizar la información gráfica o analíticamente y para validar hipótesis previamente establecidas*

LEARNING ACTIVITIES	CH	NCH	TH
Conducting tests, giving presentations, presenting defences, taking examinations and/or doing checkpoints	2 h.		2 h.
Carrying out/resolving projects/challenges/cases, etc. to provide solutions to problems in interdisciplinary contexts, real and/or simulated, individually and/or in teams		17 h.	17 h.
Computer simulation exercises, individually and/or in teams	4 h.	4 h.	8 h.
Presentation by the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects	20 h.		20 h.
Carrying out exercises and solving problems individually and/or in teams	10 h.	28 h.	38 h.
EVALUATION SYSTEM	W	MAKE-UP MECHANISMS	
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems	20%	(No mechanisms)	
Individual written and/or oral tests or individual coding/programming tests	80%		

CH - Class hours: 36 h.

NCH - Non-class hours: 49 h.

TH - Total hours: 85 h.

CONTENTS

1. Combinatorics
2. Probability calculus
3. Descriptive statistics
4. Random variables
5. Normal distribution

6. Inferential statistics

LEARNING RESOURCES AND BIBLIOGRAPHY

Learning resources

- [!] *Apuntes de la asignatura*
- [!] *Plataforma Moodle*
- [!] *Software específico de la titulación*

Bibliography

http://katalogoa.mondragon.edu/janium-bin/janium_login_opac_re_in k.pl?grupo=EKOTEKNOLOGIA22&ejecuta=5&_ST