[GJK207] INSTRUMENTATION LABORATORY

GENERAL INFORMATION

Studies	DEGREE IN MECHATRONICS ENGINEERING			**Subject**	INDUSTRIAL ELECTRONICS
Semester	1	**Course**	4	**Mention / Field of specialisation**	???
Character	OPTIONAL				
Plan	2022	**Modality**	Face-to-face	**Language**	CASTELLANO
Credits	4,5	**Hours/week**	2.81	**Total hours**	50.5 class hours + 62 non-class hours = **112.5 total hours**

PROFESSORS

ANZOLA GARCIA, JON

REQUIRED PREVIOUS KNOWLEDGE

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

LEARNING RESULTS

LEARNING RESULTS	KC	SK	AB	ECTS
GJR406 - To know and apply principles of electronic instrumentation			*x*	4,02
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*		0,24
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:	**4,5**

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

CONTENTS

The course consists of two laboratory practicals:Practical 1: Design of a temperature alarmPractical 2: D
esign of a speed controller for a DC motor.

LEARNING RESOURCES AND BIBLIOGRAPHY

Learning resources

Topic related web quires
Moodle Platform
Class presentations
Lab practical training

Bibliography

[1] P. Arruti, J. Errasti and J. C. Lizarbe. (2001, Logika Digitala Eta Mikroprogramagarria Available: www.elhuyar.org/edizioak/produktuak/LOGIKA-DIGITALA.pdf

[2] C. Cole. (2011, 2011). Real Digital - A Hands-on Approach to Digital Design Available: http://www.digilentinc.com/classroom/realdigital/.

[3] B. Holdsworth and R. C. Woods, Digital Logic Design. Oxford: Newnes, 2003. http://ezproxy.mondragon.edu:81/login?url=http://www .engineeringvillage.com/controller/servlet/OpenURL?genre=book&is b n=9780750645829

[4] R. F. Tinder, R. F. Tinder and Referex, Engineering Digital Design. San Diego: Academic Press, 2000. ezproxy.mondragon.edu:81/login? url=http://www.engineeringvillage. com/controller/servlet/OpenURL?ge nre=book&isbn=9780126912951