[MMD104] DATA ENGINEERING

GENERAL INFORMATION

Studies	MASTER'S DEGREE IN BIOMEDICAL TECHNOLOGIES			**Subject**	?
Semester	1	**Course**	1	**Mention / Field of specialisation**	???
Character	OPTIONAL				
Plan	2023	**Modality**	Face-to-face	**Language**	ENGLISH
Credits	3	**Hours/week**	2.6	**Total hours**	46.8 class hours + 28.2 non-class hours = **75 total hours**

PROFESSORS

GARITANO GARITANO, IÑAKI

REQUIRED PREVIOUS KNOWLEDGE

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

LEARNING RESULTS

LEARNING RESULTS	KC	SK	AB	ECTS
MMRA20 - Understanding the process of data intake, storage and display	x			2,1
MMRA26 - To apply the knowledge acquired and your problem-solving skills in new, little-known or changing environments within broader (or multidisciplinary) contexts related to your area of study		x		0,72
MMRA28 - To communicate your conclusions and the knowledge and ultimate reasons that support them to specialized and non-specialized audiences in a clear and unambiguous way		x		0,18
			Total:	3

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

CONTENTS

1.- Data engineering concepts

2.- Big Data, definition, evolution and objective

3.- Data engineering challenges

4.- Data sources

5.- Distributed data ingestion

6.- Distributed data storage

7.- Result visualization

LEARNING RESOURCES AND BIBLIOGRAPHY

Learning resources

Subject notes

Topic related web quires

Bibliography

Kafka [Libro] : the definitive guide: real-time data and stream processing at scale.ISBN: 978-1-4919-3613-9 (online) 978-1-4919-3616-0 (papel) O'Reilly Media, 2017. Neha Narkhede, Gwen Shapira, Todd Palino

Designing data intensive applications : the big ideas behind reliable, scalable, and maintainable systems. Kleppmann, Martin. O'Reilly, 2017. ISBN: 978-1-491-90311-7 (online) 978-1-449-37332-0 (papel)