

## [MTA003] DATA MINING

### GENERAL INFORMATION

<b>Studies</b>	MASTER'S DEGREE IN ARTIFICIAL INTELLIGENCE		<b>Subject</b>	?	
<b>Semester</b>	1	<b>Course</b>	1	<b>Mention / Field of specialisation</b>	
<b>Character</b>	COMPULSORY				
<b>Plan</b>	2024	<b>Modality</b>	Face-to-face	<b>Language</b>	CASTELLANO/ENGLISH
<b>Credits</b>	3	<b>Hours/week</b>	0	<b>Total hours</b>	32 class hours + 43 non-class hours = <b>75 total hours</b>

### PROFESSORS

TELLERIA ALLIKA, XABIER

### REQUIRED PREVIOUS KNOWLEDGE

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

### LEARNING RESULTS

LEARNING RESULTS	KC	SK	AB	ECTS
<b>M1T107</b> - Know, understand and apply the fundamentals of data mining to understand the nature, relationship and distribution of data	x			2,6
<b>M1T122</b> - Possess and understand knowledge that provides a basis or opportunity to be original in the development and/or application of ideas, often in a research context.		x		0,4
<b>Total:</b>				<b>3</b>

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

### SECONDARY LEARNING RESULTS

#### **MIRA05** [!] *Conocer y comprender los fundamentos básicos de la minería de datos*

##### LEARNING ACTIVITIES

	CH	NCH	TH
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	6 h.	21 h.	27 h.
Conducting tests, giving presentations, presenting defences, taking examinations and/or doing checkpoints	2 h.		2 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	2 h.	14 h.	16 h.

##### EVALUATION SYSTEM

	W
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems	70%
Individual written and/or oral tests or individual coding/programming tests	30%

##### MAKE-UP MECHANISMS

Individual written and/or oral tests or individual coding/programming tests

**CH - Class hours:** 30 h.

**NCH - Non-class hours:** 35 h.

**TH - Total hours:** 65 h.

#### **MIRA06** [!] *Poseer y comprender conocimientos que aporten una base u oportunidad de ser originales en el desarrollo y/o aplicación de ideas, a menudo en un contexto de investigación.*

##### LEARNING ACTIVITIES

	CH	NCH	TH
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	2 h.	8 h.	10 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

100%

*(No mechanisms)*

**CH - Class hours:** 2 h.

**NCH - Non-class hours:** 8 h.

**TH - Total hours:** 10 h.

## CONTENTS

Exploratory data analysis

Statistical data analysis

Knowledge extraction from data

## LEARNING RESOURCES AND BIBLIOGRAPHY

### Learning resources

Moodle Platform

Technical articles

### Bibliography

Layton, R. (2015). Learning data mining with python. Packt Publishing Ltd.