

## [MNA001] BASIC OF MACHINE LEARNING

### GENERAL INFORMATION

<b>Studies</b>	MASTER DEGREE IN DATA ANALYSIS, CYBERSECURITY AND CLOUD COMPUTING		<b>Subject</b>	Data Analysis
<b>Semester</b>	1	<b>Course</b>	1	<b>Mention / Field of specialisation</b>
<b>Character</b>	COMPULSORY		<b>Language</b>	CASTELLANO
<b>Plan</b>	2019	<b>Modality</b>	Adapted Face-to-face	
<b>Credits</b>	3	<b>Hours/week</b>	0	<b>Total hours</b> 34 class hours + 41 non-class hours = <b>75 total hours</b>

### PROFESSORS

AGUIRRE ORTUZAR, AITOR

### REQUIRED PREVIOUS KNOWLEDGE

Subjects	Knowledge
STATISTICAL METHODS	Knowledge of the basic foundations of statistical reasoning, in the design of studies, collection of information, analysis of data, and extraction of conclusions.

### SKILLS

#### VERIFICA SKILLS

##### SPECIFIC

**MNCE01** - Knowing, understanding and selecting the fundamentals of machine learning.

##### CROSS

**MNCTR1** - Ability to work in multidisciplinary teams and in a multilingual environment (Basque/Spanish/English) and to communicate, both orally and in writing, knowledge, procedures, results and ideas related to the life cycle of the data, cybersecurity, and development and operations.

##### BASIC

**M\_CB9** - To share knowledge, conclusions and their rationale with specialised and lay audiences in a clear, unambiguous manner

### CONTENTS

- Introduction
- Algebra and maths review
  - numpy bases
- Data analysis process
  - Pandas
  - Statistics review
  - Exploratory data analysis
- Metrics and evaluation methods

### LEARNING RESOURCES AND BIBLIOGRAPHY

Learning resources	Bibliography
Subject notes	<a href="http://katalogoa.mondragon.edu/janium-bin/janium_login_opac_re_in k.pl?grupo=MASTERDATUANALISIA11&amp;ejecuta=5&amp;">http://katalogoa.mondragon.edu/janium-bin/janium_login_opac_re_in k.pl?grupo=MASTERDATUANALISIA11&amp;ejecuta=5&amp;</a>
Topic related web quires	
Technical articles	
Moodle Platform	
Labs	
Class presentations	
Computer practical training	