



Universidad
Carlos III de Madrid

SUBJECT: Datos Masivos y Encadenados

MASTER: Master in Informatics Engineering

COURSE: 1

SEMESTER: 1

SCHEDULE

WEEK	SESSION	DESCRIPTION	GROUP		SPECIAL ROOM FOR SESSION (Computer class room, audio- visual class room)	TWO PROFESSORS	WEEKLY PROGRAMMING FOR STUDENT		
			LECTURE	SEMINAR			DESCRIPTION	CLASS HOURS	HOMEWORK HOURS
1	1	PRESENTATION OF THE SUBJECT. PUBLICATION AND EXPLANATION OF THE PRACTICE STATEMENT. CREATION OF WORKING GROUPS.	X			NO	Presentation of the subject, contents, rules, evaluation, etc. Introduction to the practical work.	1,67	5
2	2	PRACTICAL SESSION. Presentation of the practical case. Work in practice: PART 1. Analysis and selection of data sources		X	COMPUTER ROOM	NO	PRACTICAL SESSION. Work in practice: PART 1. Analysis and selection of data sources to be integrated	1,67	5
3	3	BLOCK 1. MASS DATA INTEGRATION. 1.1. Integration of data sources and the concept of Big Data.	X			YES	Motivation for data and system integration	1,67	5

4	4	PRACTICAL SESSION. I work in practice: PART 1. Data Integration		X	COMPUTER ROOM	NO	PRACTICAL SESSION. Work in practice: PART 1. Integration of data.	1,67	5
5	5	BLOCK 1. MASS DATA INTEGRATION. 1.2. Distributed architectures for data integration and analysis.	X			NO	Distributed architectures for data integration and analysis.	1,67	5
6	6	PRACTICAL SESSION. Work in practice: PART 1. Data analysis.		X	COMPUTER ROOM	NO	PRACTICAL SESSION. Work in practice: PART 1. Data analysis.	1,67	5
7	7	BLOCK 1. MASS DATA INTEGRATION. 1.3. Main applications	X			NO	Study of main applications for the integration of data from multiple sources and their exploitation in massive environments.	1,67	5
8	8	PRACTICAL SESSION. Case study presentation. Work in practice: BLOCK 2. Study of the practical case. Presentation of the development environment		X	COMPUTER ROOM	YES	PRACTICAL SESSION. Case study presentation. Work in practice: BLOCK 2. Study of the practical case. Presentation of the development environment	1,67	5
9	9	BLOCK 2. CHAINED DATA. 2.1. Blockchain origin.	X			NO	Introduction to the concept of Blockchain, motivation and justification for its appearance	1,67	5

10	10	PRACTICAL SESSION. Work in practice: Blockchain application in practical case (shared database).		X	COMPUTER ROOM	NO	PRACTICAL SESSION. Work in practice: Blockchain application in practical case (shared database).	1,67	5
11	11	BLOCK 2. CHAINED DATA. 2.2. Operation of block chains	X				Study of the functioning of block chains.	1,67	5
12	12	PRACTICAL SESSION. Work in practice: Blockchain application in practical case (shared database).		X	COMPUTER ROOM	NO	PRACTICAL SESSION. Work in practice: Blockchain application in practical case (shared database).	1,67	5
13	13	BLOCK 2. CHAINED DATA. 2.3. Consensus algorithm 2.4. Types of Blockchain. 2.5 Main applications	X			NO	Study of the Consensus Algorithm and definition of the different types of blockchain	1,67	5
14	14	PRACTICAL SESSION. Work in practice: Blockchain application in practical case (shared database).		X	COMPUTER ROOM	NO	PRACTICAL SESSION. Work in practice: Blockchain application in practical case (shared database).	1,67	5

SUBTOTAL								11,69 + 70 = 81,69	
15		Delivery and defense of the practice.				YES	Delivery and defense of the practice.	6	
16-18		Evaluation				YES	Evaluation	2	
TOTAL								89,69	