uc3m | Universidad Carlos III de Madrid

Vicerrectorado de Estudios Apoyo a la docencia y gestión del grado

COURSE: Big Data and Business Analytics						
DEGREE: Business and Technology	YEAR: 3	TERM: 1				

			W	FFKI Y F	PLANNING					
WEEKLY PLANNING										
	c			CHING rk X)		WEEKLY PROGRAMMING FOR ST	UDENT			
	S E			,	SPECIAL ROOM		1	1		
W	s		E	E	FOR SESION (computer					
E	S I	DESCRIPTION	C T	M	classroom, audio			HOMEWORK		
к	0		Ü	N	visual	DESCRIPTION	CLASS HOURS	HOURS		
	N		R	Α	classroom)			(Max. Estim. 6,5h)		
			E S	R						
	1	Introduction		X		· Reading the teaching guide	1.5	_		
1	2	Topic 1: Introduction to Business Intelligence, Analytics and Big Data	Х			· Assimilation of concepts taught	1.5	2		
	2	Practice Session 1: Introduction to Python		Х		· Assimilation of concepts taught	1.5			
2	3	·		^		Formation of practice groups		6.5		
	4	Topic 2: Technologies for decision making	Х			· Assimilation of concepts taught	1.5			
	5	Practice Session 2: Introduction to Pandas (Python for Data Science)		Х		· Assimilation of concepts taught	1.5			
3	6	Topic 3: Descriptive analytics · Data warehouses	х			· Assimilation of concepts taught	1.5	6.5		
	О	Business reports and visual analytics	^			· Assimilation of concepts taught	1.5			
	7	Practice Session 3: Data files in Python		Х		Assimilation of concepts taught	1.5			
		Topic 3: Descriptive analytics								
4	8	· Business reporting and visual analytics	Х			· Assimilation of concepts taught	1.5	6.5		
		· Business performance management								
	9	Practice Session 4: Descriptive analytics and visualization in Python		Х		· Assimilation of concepts taught	1.5			
5	10	Presentation of Practice 1 (Descriptive Analytics)	Х			Assimilation of concepts taught	1.5	6.5		
		, , , , , , , , , , , , , , , , , , , ,	-			Group work in practice 1				
	11	Practice Session 5: Resolution of doubts of Practice 1		Х		Assimilation of concepts taught Group work in practice 1	1.5			
6		Topic 4: Predictive analytics and data mining	 			Assimilation of concepts taught		6.5		
	12	· Decision trees	Х			· Group work in practice 1	1.5			
						· Assimilation of concepts taught				
	13	Practice Session 6: Decision Trees with Scikit-Learn		Х		· Group work in practice 1	1.5			
7		Topic 4: Predictive analytics and data mining				· Assimilation of concepts taught		6.5		
	14	· Neuron networks	Х			· Group work in practice 1	1.5			
		· Deep learning								
8	15	Delivery and Defense of Practice 1		Х		Assimilation of concepts taught Assimilation of concepts taught	1.5	6.5		
	16	Presentation of Practice 2 (Predictive Analytics)	Х			· Individual work in practice 2	1.5			
						Assimilation of concepts taught		6.5		
	17	Practice Session 7: Deep learning with Python and Practice 2 Questions		Х		· Group work in practice 2	1.5			
9		Topic 5: Prescriptive analytics				· Assimilation of concepts taught				
	18	· Model-based decision making	Х			Group work in practice 2	1.5			
		· Expert systems and business rules management								
	19	Practice Session 8: Expert systems		Х		Assimilation of concepts taught Group work in practice 2	1.5			
10		Topic 5: Prescriptive analytics				Assimilation of concepts taught		6.5		
	20	Knowledge management and collaborative systems	Х			· Group work in practice 2	1.5			
11	21	Delivery and Defense of Practice 2		Х		Assimilation of concepts taught	1.5	6.5		
11	22	Topic 6: Big Data and Analytics (Part I)	Х			· Assimilation of concepts taught	1.5	6.5		
	23	Practice Session 8: Presentation of the final practice		х		· Assimilation of concepts taught	1.5			
12		2 The state of the first product	 	<u> </u>		· Group work in the final practice	1.5	6.5		
	24	Topic 6: Big Data and Analytics (Part II)	Х			· Assimilation of concepts taught	1.5			
			 			Group work in the final practice Assimilation of concepts taught				
	25	Practice Session 9: Work and resolution of doubts in the final practice		Х		Group work in the final practice	1.5			
13						Assimilation of concepts taught		6.5		
	26	Topic 7: Emerging trends and impact of business analytics	Х			· Group work in the final practice	1.5			
	27	Practice Session 10: Work and resolution of doubts in the final practice		х		· Assimilation of concepts taught	1.5			
14	21	r ractice 5e33ion 20. Work and resolution of doubts in the final practice	ļ	_ ^		· Group work in the final practice	1.3	6.5		
	28	Review of the subject	х			· Assimilation of concepts taught	1.5	3.5		
		<u> </u>	<u> </u>			· Group work in the final practice		00.7		
						Subtotal 1	42	86.5		
						Total 1 (Hours of class plus student homework)	12	8.5		
15		Tutorials, handing in, etc					3.6	-		
16		raconally randing inject					5.0	_		
17		Assessment					3	10		
18										
					•	Subtotal 2	6.6	10		
						Total 2 (Hours of class plus student homework)	1	17		
TOTAL (Maximun 150 horas)										
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