Allegato A / Annexe A

Double Degree Data Science and Business Informatics /

Informatique des Organisations

First Year at UNIPI - Students with CS Bachelor Year First Year at UNIPI - CC BS SFirst Year at UNIPI - Non CS	First Semester Business Economics GR 2 Elective courses (in Italian) Computer Science Business Process Modeling Decision and Operational Research Logistics Computer Science Data Mining (Module I) Foundations Computer Science Decision Support Data Bases First Semester From G2 or G3 Programming for Data Science	6 6 6	Business Economics GR 2 Elective courses (in Italian) Computer Science GR1 Elective courses Computer Science GR1 Elective courses Computer Science Data Mining (Module II) Advanced Topics and Applications	9 6 6	
First Year at UNIPI - Students with CS Bachelor Year First Year at UNIPI - CC BS SFirst Year at UNIPI - Non CS	GR 2 Elective courses (in Italian) Computer Science Business Process Modeling Decision and Operational Research Logistics Computer Science Data Mining (Module I) Foundations Computer Science Decision Support Data Bases First Semester From G2 or G3	6 6	GR 2 Elective courses (in Italian) Computer Science GR1 Elective courses Computer Science GR1 Elective courses Computer Science Data Mining (Module II) Advanced Topics	6	
First Year at UNIPI - students with CS Bachelor Year First Year at UNIPI - CD DD	(in Italian) Computer Science Business Process Modeling Decision and Operational Research Logistics Computer Science Data Mining (Module I) Foundations Computer Science Decision Support Data Bases First Semester From G2 or G3	6 6	(in Italian) Computer Science GR1 Elective courses Computer Science GR1 Elective courses Computer Science Data Mining (Module II) Advanced Topics	6	
First Year at UNIPI - students with CS Bachelor Year First Year at UNIPI - CD DD	Computer Science Business Process Modeling Decision and Operational Research Logistics Computer Science Data Mining (Module I) Foundations Computer Science Decision Support Data Bases First Semester From G2 or G3	6 6	Computer Science GR1 Elective courses Computer Science GR1 Elective courses Computer Science Data Mining (Module II) Advanced Topics	6	
First Year at UNIPI - students with CS Bachelor Year First Year at UNIPI - CD DD	Business Process Modeling Decision and Operational Research Logistics Computer Science Data Mining (Module I) Foundations Computer Science Decision Support Data Bases First Semester From G2 or G3	6 6	GR1 Elective courses Computer Science GR1 Elective courses Computer Science Data Mining (Module II) Advanced Topics	6	
First Year at UNIPI - students with CS Bachelor Year First Year at UNIPI - CO B S S First Year at UNIPI - Non CS	Decision and Operational Research Logistics Computer Science Data Mining (Module I) Foundations Computer Science Decision Support Data Bases First Semester From G2 or G3	6	Computer Science GR1 Elective courses Computer Science Data Mining (Module II) Advanced Topics		
at UNIPI - students with CS Bachelor CD DD CD C	Computer Science Data Mining (Module I) Foundations Computer Science Decision Support Data Bases First Semester From G2 or G3	6	GR1 Elective courses Computer Science Data Mining (Module II) Advanced Topics		
at UNIPI - students with CS Bachelor CD DD CD C	Computer Science Data Mining (Module I) Foundations Computer Science Decision Support Data Bases First Semester From G2 or G3	6	GR1 Elective courses Computer Science Data Mining (Module II) Advanced Topics		
students with CS Bachelor CO D Year First Year at UNIPI - Non CS D D CO B S	Computer Science Data Mining (Module I) Foundations Computer Science Decision Support Data Bases First Semester From G2 or G3	6	GR1 Elective courses Computer Science Data Mining (Module II) Advanced Topics		
with CS Bachelor CO DD Year First Year at UNIPI - Non CS D L CO DD CO DD	Computer Science Data Mining (Module I) Foundations Computer Science Decision Support Data Bases First Semester From G2 or G3	6	Computer Science Data Mining (Module II) Advanced Topics	6	
Year First Year at UNIPI - Non CS	Data Mining (Module I) Foundations Computer Science Decision Support Data Bases First Semester From G2 or G3	6	Data Mining (Module II) Advanced Topics	6	
Year Year First Year at UNIPI - Non CS	Data Mining (Module I) Foundations Computer Science Decision Support Data Bases First Semester From G2 or G3	6	Data Mining (Module II) Advanced Topics	6	
Year Year First Year at UNIPI - Non CS	Data Mining (Module I) Foundations Computer Science Decision Support Data Bases First Semester From G2 or G3	6			
Year First Year at UNIPI - Non CS	Computer Science Decision Support Data Bases First Semester From G2 or G3				ļ
Year First Year at UNIPI - Non CS	Decision Support Data Bases First Semester From G2 or G3				i
Year First Year at UNIPI - Non CS	Decision Support Data Bases First Semester From G2 or G3				1
Year First Year at UNIPI - Non CS	First Semester From G2 or G3	33			ĺ
First Year at UNIPI - Non CS	From G2 or G3	33			First Ye
First Year at UNIPI - Non CS	From G2 or G3			27	60
First Year at UNIPI - Non CS	From G2 or G3	CFU	Second Semester	CFU	
First Year at UNIPI - Non CS		12	Elective Subjects	12	ĺ
First Year at UNIPI - Non CS	- •		Algoritmica e Laboratorio		ĺ
First Year at UNIPI - Non CS			, and the second		ĺ
First Year at UNIPI - Non CS			(in Italian)		l
First Year at UNIPI - Non CS	Computer Science	6	Elective Subjects	6	ĺ
First Year at UNIPI - Non CS	Business Process Modeling OR Decision		Basi di Dati (or exams from GR1 if Basi di Dati has		ĺ
at UNIPI - D	Support Databases		already been passed) (in Italian)		ł
Non CS					1
	Decision and Operational Research	6	Computer Science	6	ł
Bactieior	Logistics	ı o	GR1 Elective courses	"	1
	Logistios		ON Elective occurses		1
					1
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C	Computer Science	6	Computer Science	6	1
	Data Mining (Module I) Foundations		Data Mining (Module II) Advanced Topics and		ł
					First Ye
-		30		30	60
	Decision, Business economics, Computer	13	Business Economics:	6	60
	science				ĺ
_F	First semester elective course		Decision in business, use cases (3 ECTS), Low and		ĺ
			ethics (3 ECTS)		ł
					l
c	Computer Science	13	Computer Science	9	ĺ
c	Optimisation techniques for Data Science		Business Intelligence project (3 ECTS), Data		l
(3	(3 ECTS), Data Mining/Machine learning (4		Visualization (3 ECTS), Management of computer		ł
	ECTS), Sysems, Languages and		science project (3 ECTS)		ł
	Paradigms for Big Data (3 ECTS), Security of Information Systems (3 ECTS)				ĺ
Second	of information Systems (3 EC15)				ł
Year at					l
UPD D	Decision	4	Decision, Business economics, Computer science	3	l
		1	255.567, Business socioninos, Computer solence		l
	Datawarehouse (4 ECTS)		Second semester elective course		l
	Foreign language		Foreign language	3	
	oroigir iariguage		Orongin language	3	l
E	English		English (3 ECTS)		
			Internship	9	
				1	Second Y

Summary	ECTS

Computer Science 58

Business Economics 30

Decision and Operational research 20

Foreign language 3

Internship 9

Total 120