

FACULTY OF Faculty of Automation and Computer Science
Domain Computer Science and Information Technology
Program Name Data Science (in English Language)
Study Level Master Research

CURRICULA Valid for the Academic Year 2026-2027

Pag. 1

COURSE CODE AND TITLE		Year: I										Method of Assessment			Nr. Of Hours/Discipline				ECTS/Sem		Discipline		
		SEM 1 14 weeks					SEM 2 14 weeks																
		C	S	L	P	Pr/Ce	C	S	L	P	Pr/Ce	E	C	V	Total	C	Apl	Indiv. St.	1	2	cat	type	
1.00	Big Data	2	1	0	0	0						Gr		100	28	14	58	4.0		DS	DOB		
2.00	Algorithms	1	0	1	1	0						Gr		100	14	28	58	4.0		DS	DOB		
3.00	Database Systems	2	0	1	0	0						Gr		100	28	14	58	4.0		DS	DOB		
4.00	Machine Learning 1	2	0	1	0	0						Gr		100	28	14	58	4.0		DS	DOB		
5.00	Mathematical Models for ML	1	1	0	0	0						Gr		100	14	14	72	4.0		DS	DOB		
6.00	Research Activity 1	0	0	0	0	14						A/R		250	0	196	54	10.0		DS	DOB		
7.10	Machine Learning 2						2	0	1	0	0	Gr		100	28	14	58	4.0		DF	DOP		
7.20	Architectures of Information Systems						2	0	1	0	0	Gr		100	28	14	58	4.0		DF	DOP		
7.30	Advanced Topics of Functional Programming						2	0	1	0	0	Gr		100	28	14	58	4.0		DF	DOP		
8.10	Data Analytics Pipeline						1	1	1	0	0	Gr		100	14	28	58	4.0		DF	DOP		
8.20	Time Series Analysis						1	1	1	0	0	Gr		100	14	28	58	4.0		DF	DOP		
9.00	Information Theory and Statistics						1	1	0	0	0	Gr		100	14	14	72	4.0		DS	DOB		
10.00	Data Warehouse and Business Intelligence						2	1	0	0	0	Gr		100	28	14	58	4.0		DS	DOB		
11.00	Image Processing and Computer Vision						2	0	1	0	0	Gr		100	28	14	58	4.0		DS	DOB		
12.00	Research Activity 2						0	0	0	0	14	A/R		250	0	196	54	10.0		DS	DOB		
TOTAL PER YEAR		8	2	3	1	14	8	3	3	0	14	sem1	4	1	1	1500	224	560	716	30.0	30.0		
												sem2	5	0	1								

201.00	Psychopedagogy of Adolescents, Youngs and Adults	2	1	0	0	0			Gr	125	28	14	83	5.0	DC	DFA						
301.00	Volunteering 1	0	1	0	0	0			A/R	50	0	14	36	2.0	DC	DFA						
202.00	Design and Management of Educational Programs						2	1	0	0	0	Gr	125	28	14	83	5.0	DC	DFA			
203.10	Educational Communication						1	2	0	0	0	Gr	125	14	28	83	5.0	DC	DFA			
203.20	Educational Research Methodology						1	2	0	0	0	Gr	125	14	28	83	5.0	DC	DFA			
203.30	Modern Trends in Assesement Theory and Practice						1	2	0	0	0	Gr	125	14	28	83	5.0	DC	DFA			
302.00	Volunteering 2						0	1	0	0	0	A/R	50	0	14	36	2.0	DC	DFA			
TOTAL YEAR		2	2	0	0	0	3	4	0	0	0	sem1	1	0	1	475	70	84	321	7.0	12.0	
					4.0					7.0		sem2	2	0	1							

Rector,
Prof. dr. ing. Vasile Topa

Dean,
Prof. dr. ing. Vlad Muresan

Department Director,
Prof. dr. ing. Rodica Potolea

FACULTY OF Faculty of Automation and Computer Science
Domain Computer Science and Information Technology
Program Name Data Science (in English Language)
Study Level Master Research

CURRICULA Valid for the Academic Year 2026-2027

Pag. 2

COURSE CODE AND TITLE		Year: II										Method of Assessment			Nr. Of Hours/Discipline				ECTS/Sem		Discipline	
		SEM 1 14 weeks					SEM 2 14 weeks															
		C	S	L	P	Pr/Ce	C	S	L	P	Pr/Ce	E	C	V	Total	C	Apl	Indiv. St.	1	2	cat	type
13.00	Blockchain	1	1	0	0	0					Gr			100	14	14	72	4.0		DA	DOB	
14.10	Data-Driven Business and Behaviour Analytics	1	1	1	0	0					Gr			100	14	28	58	4.0		DA	DOP	
14.20	NeuroScience	1	1	1	0	0					Gr			100	14	28	58	4.0		DA	DOP	
15.10	Internet of Things and Industry 4,0	1	0	1	1	0					Gr			100	14	28	58	4.0		DA	DOP	
15.20	Complex Networks	1	0	1	1	0					Gr			100	14	28	58	4.0		DA	DOP	
16.10	Natural Language Processing	2	1	0	0	0					Gr			100	28	14	58	4.0		DC	DOP	
16.20	Advanced in Computer Vision	2	1	0	0	0					Gr			100	28	14	58	4.0		DC	DOP	
17.10	Cloud computing	1	0	0	1	0					Gr			100	14	14	72	4.0		DC	DOP	
17.20	Information Security	1	0	0	1	0					Gr			100	14	14	72	4.0		DC	DOP	
18.00	Ethics and Academic Integrity	1	0	0	0	0					Gr			25	14	0	11	1.0		DC	DOB	
19.00	Research Activity 3	0	0	0	0	14					A/R			225	0	196	29	9.0		DS	DOB	
20.00	Research Practice						0	0	0	0	14			250	0	196	54	10.0		DS	DOB	
21.00	Field Specific Research for the Master Thesis						0	0	0	0	7			250	0	98	152	10.0		DS	DOB	
22.00	Dissertation Project Work						0	0	0	7	0			250	0	98	152	10.0		DS	DOB	
23.00	Presentation of Dissertation						0	0	0	0	0			0	0	0	0	10.0		DS	DOB	
TOTAL PER YEAR		7	3	2	2	14	0	0	0	7	14	sem1	5	1	1	1500	98	686	716	30.0	30.0	
												sem2	0	0	3					+ 10		

204.00	Didactics of the Field and Developments in Didactics Specialties (High School and Post High School Education)	2	1	0	0	0			Gr	125	28	14	83	5.0	DC	DFA					
205.10	School Organization Management	1	2	0	0	0			Gr	125	14	28	83	5.0	DC	DFA					
205.20	Metacognitive Education	1	2	0	0	0			Gr	125	14	28	83	5.0	DC	DFA					
205.30	Intercultural Education	1	2	0	0	0			Gr	125	14	28	83	5.0	DC	DFA					
303.00	Volunteering 3	0	1	0	0	0			A/R	50	0	14	36	2.0	DC	DFA					
206.00	Teaching Practice (in Secondary School and Tertiary Education)						0	0	0	0	3	Gr	125	0	42	83	5.0	DC	DFA		
207.00	Graduation Exam - Level II						0	0	0	0	0	Gr	125	0	0	125	5.0	DC	DFA		
304.00	Volunteering 4						0	1	0	0	0	A/R	50	0	14	36	2.0	DC	DFA		
TOTAL YEAR		3	4	0	0	0	0	1	0	0	3	sem1 sem2	2 0	0 1	1 1	600	42	112	446	12.0 + 5	7.0

Rector,
Prof. dr. ing. Vasile Topa

Dean,
Prof. dr. ing. Vlad Muresan

Department Director,
Prof. dr. ing. Rodica Potolea