MASTER PROGRAM – *Multimedia Technologies in Biometrics and Information Security Applications*

CURRICULUM   2024 – 2026

First year of study – 1st Semester

Course name	ECTS	1st Semester (14 weeks)				Hours/ sem. (dir / indiv)	Exam. type
		Class hours/week					
		LE	S	L	P		
		Res.					
Biometric Technologies. Speech and Biological Signals Analysis	4	2	–	1	–	42 / 58	E
Artificial Intelligence I: Classical Machine Learning Systems	5	2	–	2	–	56 / 69	E
Digital Video Analysis and Processing	4	2	–	1	–	42 / 58	E
Forensic Expertise Methodology	3	2	–	–	–	28 / 47	E
Research and Documentation Project S1	2	–	–	–	1	14 / 36	V
Ethics and Academic Integrity	2	1	–	–	–	14 / 36	V
Research Activity and Practical Work S1	10	– 12				0 / 250	V
ECTS, Total hours, Assessments	30	9 0 4 1 / 12				196 / 554	4E, 3V
Facultative subjects							
Design and Management of Educational Programs	5	2	1	–	–	42 / 83	E

First year of study – 2nd Semester

Course name	ECTS	2nd Semester (14 weeks)				Hours/ sem. (dir / indiv)	Exam. type
		Class hours/week					
		LE	S	L	P		
		Res.					
Artificial Intelligence II: Deep Neural Networks	5	2	–	1	1	56 / 69	E
Personal Computer and Mobile Terminal Security	4	2	–	1	–	42 / 58	E
Voice Communication Interfaces with Intelligent Systems	5	2	–	1	–	42 / 83	E
Artificial Intelligence Applied in Speech Forensics	3	1	–	–	1	28 / 47	E
Research Project in Speech Technology	3	–	–	–	2	28 / 47	V
Research Activity and Practical Work S2	10	– 12				0 / 250	V
ECTS, Total hours, Assessments	30	7 0 3 4 / 12				196 / 554	4E, 2V
Facultative subjects							
Psychopedagogy of Young People and Adults	5	2	1	–	–	42 / 83	E
Counseling and Guidance	5	1	2	–	–	42 / 83	E

Second year of study – 3rd Semester

Course name	ECTS	3rd Semester (14 weeks) Class hours/week				Hours/ sem.	Exam. type
		LE	S	L	P		
				Res.			
Artificial Intelligence III: Advanced Techniques for Developing Machine Learning Systems	4	2	–	–	1	42 / 58	E
Security in Computer Networks	5	2	–	2	–	56 / 69	E
Audio-Video Forensics	4	1	–	1	–	28 / 72	E
Artificial Intelligence for Embedded Systems	4	1	–	1	1	42 / 58	E
Integrated Research Project in Computer Security	3	–	–	–	2	28 / 47	V
Scientific Research and Practical Work S3	10	– 12				0 / 250	V
ECTS Credits, Total hours, Assessments	30	6	0	4	4	196 / 554	4E, 2V
		12					
Facultative subjects							
Field-specific and Specialization Development Didactics	5	2	1	–	–	42 / 83	E
Intercultural Education	5	1	2	–	–	42 / 83	E

Second year of study – 4th Semester

Course name	ECTS	4th Semester (14 weeks) Class hours/week Res.	Hours/ sem.	Exam. type
Practical Work for the Elaboration of the Dissertation Thesis	30	– 26	0 / 750	V
ECTS, Total hours, Assessments	30	0 0 0 0	0 / 750	1V
		26		
Facultative subjects				
Teaching practice	5	3	0 / 125	V
Graduation exam – Level II	5	–	0 / 125	E

Acronyms:

LE – Lecture, **S** – Seminar, **L** – Laboratory, **P** – Project
E – Examination (end-of-semester), **V** – Verification (during the semester)

Program Coordinator,

Prof. Dragoș BURILEANU