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

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
Module of Scientific Research S1	10	– / 12				168 / 82	V
ECTS, Total hours, Assessments	**30**	**9**	**0**	**4**	**1**	**364 / 386**	4E, 3V
		12					
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
Module of Scientific Research S2	10	– / 12				168 / 82	V
ECTS, Total hours, Assessments	**30**	**7**	**0**	**3**	**4**	**364 / 386**	4E, 2V
		12					
Facultative subjects							
Psychopedagogy of Young People and Adults	5	2	1	–	–	42 / 83	E
Counseling and Guidance	5	1	2	–	–	42 / 83	E

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Second year of study – 3rd Semester

Course name	ECTS	LE	S	L	P	Hours/ sem.	Exam. type
		Class hours/week (Res.)				3rd Semester (14 weeks)	
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
Module of Scientific Research S3	10	– / 12				168 / 82	V
ECTS Credits, Total hours, Assessments	30	6 / 12	0	4	4	364 / 386	4E, 2V
Facultative subjects							
Field-specific and Specialization Development Didactics (High-school and Post-high-school Education)	5	2	1	–	–	42 / 83	E
Intercultural Education	5	1	2	–	–	42 / 83	E

Second year of study – 4th Semester

Course name	ECTS	LE	S	L	P	Hours/ sem.	Exam. type
		Class hours/week (Res.)				4th Semester (14 weeks)	
Scientific Research Methodology, Research Practice, and Thesis Development	30	– / 26				364 / 386	V
ECTS, Total hours, Assessments	30	0 / 26	0	0	0	364 / 386	1V
Facultative subjects							
Teaching practice	5	3				0 / 125	V

Graduation Activities	ECTS
Dissertation Defense	10
Graduation Exam – Level II	5

Acronyms and abbreviations:

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

Program Coordinator,

Prof. Dragoș BURILEANU