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

CURRICULUM   2023 – 2025

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	4	2	–	2	–	56 / 44	E
Digital Video Analysis and Processing	5	3	–	1	–	56 / 69	E
Forensic Expertise Methodology	3	2	–	–	1	42 / 33	E
Research and Documentation Project S1	2	–	–	–	2	28 / 22	V
Ethics and Academic Integrity	2	1	–	–	–	14 / 36	V
Research Activity and Practical Work S1	10	11				0 / 250	V
ECTS, Total hours, Assessments	30	10	0	4	3	238 / 512	4E, 3V
		11					
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	3	–	2	–	70 / 55	E
Personal Computer and Mobile Terminal Security	5	2	–	1	1	56 / 69	E
Voice Communication Interfaces with Intelligent Systems	4	2	–	1	–	42 / 58	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	8	0	4	4	224 / 526	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

Second year of study – 3rd Semester

Course name	ECTS	3rd Semester (14 weeks)				Hours/ sem.	Exam. type
		Class hours/week					
		LE	S	L	P		
		Res.					
Artificial Intelligence III: Advanced Techniques for Developing Machine Learning Systems	**5**	3	–	1	–	56 / 69	E
Security in Computer Networks	**5**	2	–	2	–	56 / 69	E
Audio-Video Forensics	**4**	2	–	1	–	42 / 58	E
Artificial Intelligence for Embedded Systems	**3**	1	–	1	1	42 / 33	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**	**8**	**0**	**5**	**3**	**224 / 526**	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)				Hours/ sem.	Exam. type
		Class hours/week					
		Res.					
Practical Work for the Elaboration of the Dissertation Thesis	**30**	28				0 / 750	V
ECTS, Total hours, Assessments	**30**	**0**	**0**	**0**	**0**	**0 / 750**	1V
		28					
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. Dragoş BURILEANU