

STUDY PLAN MASTER M1 (EPA) 2021-2023
POWER ELECTRONICS AND INTELLIGENT DRIVE SYSTEMS

1st year – Compulsory subjects

	Subject	1 st semester - 14 weeks						2 nd semester - 14 weeks						Evaluation (E/C)
		C	S	L	P	Indiv. Prep.	ECTS	C	S	L	P	Indiv. Prep.	ECTS	
EPA+SEA	Advanced Mathematics	1	2	-	-	3	4							E1
EPA+SEA	Special Topics in Electrical Engineering	2	2	-	-	3	5							E1
EPA	Modelling of Electromechanical Converters	2	-	2	-	3	5							E1
EPA	Spectral Analysis and Numerical Filtering	2	2	-	-	4	6							E1
EPA	Research/Practice 1	-	-	-	-	12	10							C1
EPA	Parameter Estimation in Electric Drives							2	-	1	-	2	4	E2
EPA	Modelling and Control of Power Converters							2	-	1	1	3	5	E2
EPA	DSP Controllers for Electric Drives							2	-	-	2	2	4	E2
EPA	Thermal Stability of Electric and Electronic Systems							2	-	1	-	2	4	E2
EPA	Electric Automobile							2	-	1	-	2	3	C2
EPA	Research/Practice 2							-	-	-	-	12	10	C2
	Total	7	6	2	0	25		10	0	4	3	23		
	Total	7	8			25	30	10	7			23	30	
		40 hours/week (of which 15 teaching hours)						40 hours/week (of which 17 teaching hours)						

1st year – Freely chosen subjects (facultative)

	Subject	1 st semester - 14 weeks						2 nd semester - 14 weeks						Evaluation (E/C)
		C	S	L	P	Indiv. Prep.	ECTS	C	S	L	P	Indiv. Prep.	ECTS	
EPA+IEIA+IPSE+ISEIA+SEA+SIIM	Design and Management of Educational Programs	2	1	-	-	2	5							E1
EPA+IEIA+IPSE+ISEIA+SEA+SIIM	Psycho-pedagogy of Adolescents, Young People and Adults							2	1	-	-	2	5	E2
EPA+IEIA+IPSE+ISEIA+SEA+SIIM	Counseling and guidance							1	2	-	-	2	5	E2
	Total	2	1	0	0	2	5	3	3	0	0	4	10	
	Total	2	1			2	5	3	3			4	10	

2nd year – Compulsory subjects

	Subject	1 st semester - 14 weeks					2 nd semester - 14 weeks					Evaluation (E/C)		
		C	S	L	P	Indiv. Prep.	ECTS	C	S	L	P		Indiv. Prep.	ECTS
EPA	Techniques and Equipments for Power Quality	2	-	2	-	3	5							E3
EPA	Motion Digital Control	2	-	2	-	2	4							E3
EPA	Control, Monitoring and Diagnosis of Electric Drives	2	-	2	-	3	5							E3
EPA	Virtual Instrumentation in Power Static Converters	1	-	1	-	2	3							C3
EPA+SEA	Legislation and Standards in Electrical Engineering	1	1	-	-	2	3							C3
EPA	Research/Practice 3	-	-	-	-	12	10							C3
EPA	Research/Practice for Dissertation Thesis Elaboration							-	-	-	-	27	28	C4
EPA+IEIA+IPSE+SEA+SIIM	Ethics and Academic Integrity							1	-	-	-	-	2	C4
	Total	8	1	7	0	24		1	0	0	0	27		
	Total	8	1	7	0	24	30	1	0	0	0	27	30	
		40 hours/week (of which 16 teaching hours)					28 hours/week (of which 1 teaching hour)							

2nd year – Freely chosen subjects (facultative)

	Subject	1 st semester - 14 weeks					2 nd semester - 14 weeks					Evaluation (E/C)		
		C	S	L	P	Indiv. Prep.	ECTS	C	S	L	P		Indiv. Prep.	ECTS
EPA+IEIA+IPSE+ISEIA+SEA+SIIM	Didactics of the domain and developments in the didactics of the specialization (in High School and Secondary and Tertiary Settings)	2	1	-	-	2	5							E3
EPA+IEIA+IPSE+ISEIA+SEA+SIIM	Intercultural Education	1	2	-	-	2	5							E3
EPA+IEIA+IPSE+ISEIA+SEA+SIIM	Teaching Practice (in High School and Secondary and Tertiary Settings)							-	-	3	-	2	5	C4
EPA+IEIA+IPSE+ISEIA+SEA+SIIM	Graduation exam, Level II							-	-	-	-	6	5	E4
	Total	3	3	0	0	4	10	0	0	3	0	8	10	
	Total	3	3	0	0	4	10	0	0	3	0	8	10	

RECTOR,

Mihnea COSTOIU

DEAN,

Assoc. Prof. PhD. Eng. Dragoş NICULAE