

Sem. I		Sem. II
14	Weeks no./sem. if ≠ 14	14

CURRICULUM-First year (2023-2024)

Subject	Cod	A	OB	Opt.	C1	S1	L1	P1	CT1	FV1	C2	S2	L2	P2	CT2	FV2	SI
S	C	OP	0/≥1														
MANDATORY AND OPTIONAL SUBJECTS																	
Nonlinear dynamical systems	D2MAPHM101	S	OB	1	2	2			8	E							144
Many-particle physics	D2MAPHM102	S	OB	1	2	2			8	E							144
Laser matter interaction	D2MAPHM103	S	OB	1	2		1		6	E							108
Optics of anisotropic materials	D2MAPHM104	S	OB	1	2		1		6	E							108
Ethics and academic integrity	D2MAPHM105	S	OB	1	1				2	C							36
Atmospheric air flow phenomena	D2MAPHM206	A	OB	1							2		1		6	E	108
Advanced semiconductors, dielectrics and ferroelectrics	D2MAPHM207	S	OB	1							2		2		8	E	144
The physical bases of radiation therapy with photons	D2MAPHM208	S	OB	1							2		2		8	E	144
Investigation methods applied in medical imaging/ Acquisition and processing of experimental data	D2MAPHM209/ D2MAPHM210	A	OP	1							2		1		5	C	83
Practice (2 weeks x 40 hours = 80 hours)	D2MAPHM211	S	OB	2										5.7	3	V	
TOTAL					9	4	2	0	30		8	0	6	0	30		
FACULTATIVE SUBJECTS																	
TOTAL					0	0	0	0	0		0	0	0	0	0		

Sem. I		Sem. II
14	Weeks no./sem. if ≠ 14	12

CURRICULUM-Second year (2024-2025)

Subject	Cod	A S C	OB OP F	Opt. 0/≥1	C1	S1	L1	P1	CT1	FV1	C2	S2	L2	P2	CT2	FV2	SI
MANDATORY AND OPTIONAL SUBJECTS																	
Electromagnetic interactions in material media	D2MAPHM301	S	OB	1	2	2			8	E							144
Methods and multiscale problems in numerical simulations	D2MAPHM302	S	OB	1	2		2		8	E							144
Methods and techniques for nanomaterial characterization/ Thermal processes in materials	D2MAPHM303/ D2MAPHM304	A	OP	1	2		1		7	E							133
Modern techniques for advanced materials	D2MAPHM305	A	OB	1	2		1		7	E							133
Kinetic equations	D2MAPHM406	S	OB	1							2	2			8	E	152
Nonlinear optics	D2MAPHM407	A	OB	1							2		1		6	E	114
Physical bases of the applications of the lasers in medicine/ Coherent optics	D2MAPHM408/ D2MAPHM409	A	OP	1							2		1		6	E	114
Scientific research laboratory	D2MAPHM410	A	OB	1									3		5	C	89
Elaboration of master dissertation (2 weeks x 40 hours = 80 hours)	D2MAPHM411	A	OB	2										6.66	5	V	45
TOTAL					8	2	4	0	30		6	2	5	0	30		
FACULTATIVE SUBJECTS																	
TOTAL					0	0	0	0	0		0	0	0	0	0		