

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

CURRICULUM-First year (2020-2021)

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																	
Quantum field theory	D2MTPM101	S	OB	1	2	2			8	E							144
Dynamics of degenerate systems	D2MTPM102	S	OB	1	2	2			8	E							144
Methods and multiscale problems in numerical simulations	D2MTPM103	S	OB	1	2		1		6	E							108
Introduction to General Relativity	D2MTPM104	S	OB	1	2	1			6	E							108
Ethics and academic integrity	D2MTPM105	S	OB	1	1				2	V							36
Theory and modeling of instabilities in plasma	D2MTPM206	A	OB	1							2	1			6	E	108
Hamiltonian BRST symmetry	D2MTPM207	S	OB	1							2	2			8	E	144
Kinetic equations	D2MTPM208	S	OB	1							2	2			8	E	144
Mathematical Physics I/ Coherent optics	D2MTPM209/ D2MTPM210	A	OP	1							2	1			5	V	83
Practice (2 weeks x 40 hours = 80 hours)	D2MTPM211	S	OB	2										5.7	3	V	
TOTAL					9	5	1	0	30		8	6	0	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 (2021-2022)

Subject	Cod	A	OB	Opt.	C1	S1	L1	P1	CT1	FV1	C2	S2	L2	P2	CT2	FV2	SI
MANDATORY AND OPTIONAL SUBJECTS																	
Nonlinear dynamical systems	D2MTPM301	S	OB	1	2	2			8	E							144
Many-particle physics	D2MTPM302	S	OB	1	2	2			8	E							144
Mathematical Physics II/ Partially ordered systems	D2MTPM303/ D2MTPM304/	A	OP	1	2	1			7	E							133
Introduction to supersymmetries and supergravity	D2MTPM305	A	OB	1	2	1			7	V							133
Lagrangian BRST symmetry	D2MTPM406	S	OB	1							2	2			8	E	152
Extended BRST symmetries	D2MTPM407	A	OB	1							2	1			6	E	144
Interactions in field theory/ Theory of solid state	D2MTPM408/ D2MTPM409/	A	OP	1							2	1			6	E	114
Scientific research laboratory	D2MTPM410	A	OB	1									3		5	V	89
Elaboration of master dissertation (2 weeks x 40 hours = 80 hours)	D2MTPM411	A	OB	2										6.66	5	V	45
TOTAL					8	6	0	0	30		6	4	3	0	30		
FACULTATIVE SUBJECTS																	
TOTAL					0	0	0	0	0		0	0	0	0	0		