

UNIVERSITATEA DIN BUCUREȘTI
FACULTATEA DE FIZICĂ
DOMENUL DE STUDII UNIVERSITARE DE MASTER : FIZICĂ
PROGRAMUL DE STUDII UNIVERSITARE DE MASTER: PHOTONICS, PLASMA AND LASERS
DURATA STUDIILOR: 2 ANI (120 ECTS)
FORMA DE ÎNVĂȚĂMÂNT: CU FRECVENȚĂ

ANUL I – PLAN DE ÎNVĂȚĂMÂNT (anul universitar 2024-2025)

Nr. crt.	Cod	Discipline obligatorii	Tipul disciplinei	SEMESTRUL I					SEMESTRUL II						
				Tip			Forma de verificare	Număr de credite	Tip predare	Tip			Forma de verificare	Număr de credite	Tip predare
				c.t.	I.p.	sem.				c.t.	I.p.	sem.			
1	DI.101	Quantum Statistical Physics	thoroughgoing	1		1	exam	5	Face to face						
2	DI.102	Group Theory and Applications in Physics	thoroughgoing	1		1	exam	5	Face to face						
3	DI.103	Experimental Methods in Physics	synthesis	2	1		exam	5	Face to face						
4	DI.104	Optical properties of surfaces and nanostructures	synthesis	2	2		exam	6	Face to face						
5	DI.105	Ethics and academic integrity	thoroughgoing	1			oral exam	3	Face to face						
6	DI.108	Interferential and polarimetric methods in photonics	synthesis							2	2		exam	8	Face to face
				7	3	2				2	2	0			
		Total ore discipline obligatorii / săptămână:		12				24		4				8	
		Discipline opționale													
1	DO.106.1	Spectroscopy of condensed states and of materials for energy conversion	synthesis	2	2		exam	6	Face to face						
	DO.106.2	Processing with laser beams													
2	DO.109.1	Quantum optics	synthesis							2	2		exam	8	Face to face
	DO.109.2	Applications of modeling and simulations in photonics													
3	DO.110.1	High-power ultrashort-pulse lasers	synthesis							2	1		exam	7	Face to face
	DO.110.2	Modern computational methods in spectroscopy and imaging													
4	DO.111.1	Digital processing of images and optical fields	synthesis							2	2		exam	7	Face to face
	DO.111.2	Photonics and optically anisotropic media													
				2	2	0		6		6	5	0		22	
		Total ore discipline opționale / săptămână:		4				6		11				22	
		Total ore / săptămână		16				30		15				30	
		Total ore / an:		434											
		Total ore de curs: (din care 0% online)		238											
		Total ore activități practice: (din care 0% online)		196											

Activități didactice cu credite peste cele prevăzute de legislație

	Discipline facultative														
DFC.107	Volunteering	complementară				verificare	1								
DFC.112	Fundamental processes in ionized gases	thoroughgoing								2	2		oral	3	Face to face
DFC.113	Elemenets of Complexity theory	thoroughgoing								2		2	oral	3	Face to face
DFC.114	Volunteering	complementară											verificare	1	

RECTOR,
Prof.dr. Marian Preda

DECAN,
Prof.dr. Lucian Ion

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FORMA DE ÎNVĂȚĂMÂNT: CU FRECVENȚĂ

ANUL II – PLAN DE ÎNVĂȚĂMÂNT (anul universitar 2024-2025)

Nr. crt.	Cod	Discipline obligatorii	Tipul disciplinei	SEMESTRUL I						SEMESTRUL II					
				Tip			Forma de verificare	Număr de credite	Tip predare	Tip			Forma de verificare	Număr de credite	Tip predare
				c.t.	I.p.	sem.				c.t.	I.p.	sem.			
1	DI.201	Nonlinear optics	synthesis	2	2		exam	5	Face to face						
2	DI.202	Physical processes in intense laser fields	thoroughgoing	2		2	exam	6	Face to face						
3	DI.203	Research activity (84 hours)	thoroughgoing		6		exam	8	Face to face						
4	DI.209	Research activity (180 hours)	thoroughgoing								18		oral exam	15	Face to face
5	DI.210	Research activity for dissertation thesis	thoroughgoing										oral exam	5	Face to face
				4	8	2				0	18	0			
		Total ore discipline obligatorii / săptămână:		14				19		18				20	
		Discipline opționale													
1	DO.204.1	Plasma spectroscopy	synthesis	2	2		exam	6	Face to face						
	DO.204.2	Advanced plasma physics													
2	DO.205.1	Thin films optics	thoroughgoing	2	2		exam	5	Face to face						
	DO.205.2	Design of optical systems													
3	DO.211.1	Quantum optics	synthesis							2	2		exam	5	Face to face
	DO.211.2	Applications of modeling and simulations in photonics													
4	DO.212.1	Modeling methods in plasma physics	thoroughgoing							2	2		exam	5	Face to face
	DO.212.2	Homogeneous and inhomogeneous waveguides. Applications													
				4	4	0		11		4	4	0		10	
		Total ore discipline opționale / săptămână:		8				11		8				10	
		Total ore / săptămână		22				30		26				30	
		Total ore / an:	672												
		Total ore de curs: (din care 0% online)	168												
		Total ore activități practice: (din care 0% online)	504												

Activități didactice cu credite peste cele prevăzute de legislație

Susținerea publica a lucrării de disertație

10 Face to face

Discipline facultative															
1	DFC.206	Volunteering	complementară				verificare	1							
2	DFC.207	Applied optics	thoroughgoing	2	2		exam	3	Face to face						
3	DFC.208	Plasmonics and metamaterials	thoroughgoing	2		2	exam	3	Face to face						
4	DFC.213	Volunteering	complementară										verificare	1	

RECTOR,
Prof.dr. Marian PredaDECAN,
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