

UNIVERSITATEA DE VEST TIMIȘOARA
 FACULTATEA DE FIZICĂ
 MASTER SPECIALIZARE: **ASTROPHYSICS, ELEMENTARY PARTICLES AND
 COMPUTATIONAL PHYSICS**
1-st YEAR-2021/2022

CURRICULLUM

Nr. crt.	Course	Cod	1-st Semester (14 weeks)					2-nd Semester (14 weeks)				
			C	S	L/P	ex	cr	C	S	L/P	ex	Cr
1.	Complements of Theoretical Physics	AP 1101	2	2	-	E	7	-	-	-	-	-
2.	Complements of Solid State Physics	AP 1102	2	2	-	E	7	-	-	-	-	-
3.	Complements of Atom and Molecule Physics	AP 1103	2	2	-	E	7	-	-	-	-	-
4.	Ethics of the research. Methodology of scientific work	AP 1104	1	1	-	E	3	-	-	-	-	-
5.	Optional course 1 (chose 1 of 3):	AP 1105	2	2	-	E	6	-	-	-	-	-
	1. Magnetic active materials											
	2. Symmetries in physics											
	3. Complements of biophysics with applications in medicine											
6.	Standard Model	AP 1201	-	-	-	-	-	2	2	-	E	8
7.	Gravitation and cosmology	AP 1202	-	-	-	-	-	2	1	-	E	6
8.	Optional course 2 (chose 1 of 2):	AP 1203	-	-	-	-	-	2	1	-	E	6
	1. Particle physics at accelerators											
	2. Quantum fields											
9.	Introduction in astronomy	AP 1204	-	-	-	-	-	1	-	2	E	6
10.	Computational Physics	AP 1205	-	-	-	-	-	1	-	2	E	4
Total hours/week			9	9	-	5E	30	8	4	4	5E	30
			18					16				

Decan,
 Conf. univ. dr. habil. Mihail Lungu

Director department
 Conf univ. dr. Nicoleta Stefu

Director program de studii,
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2-nd YEAR-2022/2023

CURRICULLUM

Nr. crt.	Courses	Cod	3 rd Semester (14 weeks)					4 th Semester (14 weeks)				
			C	S	L/P	ex	cr	C	S	L/P	ex	Cr
1.	Fields in interaction	AP 2301	2	2	-	E	7	-	-	-	-	-
2.	Stellar astrophysics	AP 2302	2	2	-	E	6	-	-	-	-	-
3.	Astrophysics and elementary particles	AP 2303	2	2	-	E	7	-	-	-	-	-
4.	Statistical methods for data analyzing in astrophysics	AP 2304	2	2	-	E	5	-	-	-	-	-
5.	Solar resources in space	AP2305	2	1	-	E	5	-	-	-	-	-
6.	Specialization practice (projects, etc)	AP 2401	-	-	-	-	-	-	-	8	E	14
7.	Scientific research internship	AP 2402	-	-	-	-	-	-	-	4	E	8
8.	Practice for elaboration of dissertation	AP 2403	-	-	-	-	-	-	-	4	E	8
Total hours/ week			10	9	-	5E	30	-	-	16	3E	30
			19					16				

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