

UNIVERSITY OF ORADEA
FACULTY OF INFORMATICS AND SCIENCES
Cycle's Master Degree
Master's Degree Program: **FUNDAMENTAL MATHEMATICAL STRUCTURES**
Fundamental Field:
Master's Field: **MATHEMATICS**
Secondary Master Field:
Master Type:
Duration of studies / no. of credits: **4 semestre/120 credits**
Type of education: **Full-time learning (IF)**

Valid from academic year
2024-2025
Beginning with 1st year of study

CURRICULUM **
Year of study I

Code	Disciplines*	Type	Sem. I [hours / week]				Total of hours / sem.	Type of Exami- nation	Cre- dits	IS [hours / sem.]	Condi- tioning
			C	S	L	P					
	OBLIGATORII IMPUSE										
STII-0801	Algebra chapters I	THD	2	2	-	-	56	Ex	8	0	
STII-0802	Mathematical analysis chapters I	THD	1	2	-	-	42	Ex	6	0	
STII-0803	Geometry chapters I	THD	2	1	-	-	42	Ex	6	0	
STII-0027	Special chapters of modern didactics I	SYD	2	2	-	-	56	Cv	8	0	
STII-0766	Ethics and integrity in scientific research	SYD	1	-	-	-	14	Cv	2	0	
	TOTAL		8	7	-	-	210		30		

Code	Disciplines*	Type	Sem. II [hours / week]				Total of hours / sem.	Type of Exami- nation	Cre- dits	IS [hours / sem.]	Condi- tioning
			C	S	L	P					
	OBLIGATORII IMPUSE										
STII-0805	Algebra chapters II	THD	2	2	-	-	56	Ex	8	0	
STII-0806	Computer assisted mathematics I	SYD	1	2	-	-	42	Ex	7	0	
STII-0807	Probabilities and statistics chapters	SYD	2	2	-	-	56	Ex	8	0	
STII-0808	Mechanics and astronomy chapters I	SYD	1	2	-	-	42	Cv	7	0	
	TOTAL		6	8	-	-	196		30		

Legend: C - Course; S - Seminar; L - Practical (laboratory); P - Project; IS - Individual Study;

THD - Thoroughgoing Disciplines; SYD - Synthesis Disciplines;

Type of Examination - Verification Form, Ex. - examination; Cv. - Colloquium, Vp. - Continuous Assessment, Pr - Project; A/R- Passed/Failed; Credits - number of ECTS credits; IS - Individual study.

Head of department ,
Head of Department PhD. Sorin Nicolae MUREȘAN

RECTOR,
Professor Dr. BUNGĂU Constantin

DEAN,
Professor Dr. MACOCIAN Eugen-Victor

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Year of study II

Code	Disciplines*	Type	Sem. III [hours / week]				Total of hours / sem.	Type of Exami- nation	Cre- dits	IS [hours / sem.]	Condi- tioning
			C	S	L	P					
	OBLIGATORII IMPUSE										
STII-0809	Applied mathematics chapters	THD	1	2	-	-	42	Ex	7	0	
STII-0810	Geometry chapters II	THD	2	2	-	-	56	Ex	8	0	
STII-0811	Mathematical analysis chapters II	THD	1	2	-	-	42	Ex	7	0	
STII-0734	Specialty practice	SYD	-	4	-	-	56	Cv	8	0	
	TOTAL		4	10	-	-	196		30		

Code	Disciplines*	Type	Sem. IV [hours / week]				Total of hours / sem.	Type of Exami- nation	Cre- dits	IS [hours / sem.]	Condi- tioning
			C	S	L	P					
	OBLIGATORII IMPUSE										
STII-0057	Problem solving techniques	THD	1	2	-	-	36	Ex	7	0	
STII-0814	Algebra chapters III	SYD	2	1	-	-	36	Ex	7	0	
STII-0819	Methodic-scientific project- theses elaboration	SYD	-	2	-	-	24	A/R	4	0	
	TOTAL		3	5	-	-	96		18		
	OBLIGATORII OPȚIONALE										
	PACHET 1										
STII-0815	Mathematical analysis chapters III	SYD	2	1	-	-	36	Ex	6	0	
STII-0816	The role of examples and counterexamples in teaching Mathematics	SYD	2	1	-	-	36	Ex	6	0	
	PACHET 2										
STII-0817	History of Mathematics	SYD	1	2	-	-	36	Cv	6	0	
STII-0818	Fundamentals of Mathematics	SYD	1	2	-	-	36	Cv	6	0	
	TOTAL		3	3	-	-	72		12	72	

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VIII. DISTRIBUTION OF CREDITS ACCORDING TO COMPETENCES (TABLES NRQHE /ARACIS - Grid 1 *)

No.	Discipline**	Sem.	Number of credits	Professional Competences						Transversal Competences		
				C1	C2	C3	C4	C5	C6	CT1	CT2	CT3
1.	Capitole de algebră I	I	8	2	2		1			1	1	1
2.	Capitole de analiză matematică I	I	6	1	1		1			1	1	1
3.	Capitole de geometrie I	I	6	1	1		1			1	1	1
4.	Capitole speciale de didactică modernă I	I	8					2	2	2	2	
5.	Etică și integritate în cercetarea științifică	I	2								2	
6.	Capitole de algebră II	II	8	2	1		2			1	1	1
7.	Matematica asistată de calculator I	II	7		2	3	2					
8.	Capitole de probabilități și statistică	II	8	2	2		2				1	1
9.	Capitole de mecanică și astronomie I	II	7	2	3						1	1
10.	Capitole de matematică aplicată	III	7	2	2		1				1	1
11.	Capitole de geometrie II	III	8	2	1		2			1	1	1
12.	Capitole de analiză matematică II	III	7	2	1		1			1	1	1
13.	Practica de specialitate	III	8		2			2	2		2	
14.	Tehnici de rezolvare a problemelor	IV	7	2	1		2	2				
15.	Capitole de algebră III	IV	7	2			1			1	2	1
16.	Proiect metodic-științific - elaborarea lucrării de disertație	IV	4					1	1	1		1
17.	Capitole de analiză matematică III	IV	6	1			1			1	2	1
18.	Rolul exemplelor și contraexemplelor în predarea matematicii	IV	6	2			2		1			1
19.	Istoria matematicii	IV	6	2				1	1	1	1	
20.	Fundamentele matematicii	IV	6	2				1	1	1	1	

Legendă: C1 ÷ C5 sau C6 - Competențe profesionale; CT1 ÷ CT3 - Competențe transversale

* Se va utiliza Grila 1 (G1) care prezintă variantele: G1L și G1M corepunzătoare ciclurilor de studii de licență și masterat, în conformitate cu Ordinul MECS nr. 5703 / 18.10.2011.

** Se vor trece toate disciplinele din Planul de Învățământ