

Transilvania University of Braşov, Romania

Study program: Mathematics and Computer Science

Faculty: Mathematics and Computer Science
 Study period: 3 years (bachelor)
 Academic year structure: 2 semesters (14 weeks per semester)
 Examination sessions (two): winter session (January/February)
 summer session (June/July)

Courses per years (C= course; S = seminar; L = laboratory; P = project)

1st Year

No. crt.	Course	Code	1 st Semester					2 nd Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
1.	Linear Algebra	ALG1	2	2			5					
2.	Real Analysis	AMR1	3	3			7					
3.	Synthetic Geometry	GES1	2	2			5					
4.	Algorithmic and Programming	IAP1	2	1	2		6					
5.	Data Structures	ISD2	2		1		5					
6.	English Language (1)	LE01	1	1			2					
	German Language (1)	LG01										
7.	Physical Education and Sport 1	EF01		1			1					
8.	Mathematical Analysis	AMA2						3	3			7
9.	Analytical Geometry	GEA2						2	2			5
10.	Computer Architecture and Operating Systems	IAS4						2		2		5
11.	Algebraic Structures	ALG2						2	2			5
12.	Object Oriented Programming	IPO3						2		2		6
13.	English Language (2)	LE02						1	1			2
	German Language (2)	LG02										
14.	Physical Education and Sport 2	EF02							1			1

2nd Year

No. crt.	Course	Code	3 rd Semester					4 th Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
1.	Differential equations	AG14	2	2			6					
2.	Differential geometry	GED3	2	2			6					
3.	Complex Functions	AMC3	2	2			6					
4.	Logic and set theory	ALG3	2	2			5					
5.	Java Programming	IPJ6	2		2		5					
6.	English Language (3)	LE03	1	1			2					
	German Language (3)	LG03										

7.	Physical Education and Sport 3	EF03		1			1					
8.	Partial differential equations	ECP2						2	2			6
9.	Measure theory	AMM5						2	2			6
10.	Numerical calculation	AMN4						2	1	1		6
11.	Data Bases	IBD5						2		2		5
12.	Financial Mathematics/Actuarial Mathematics	MFIN/ MACT						2	2			5
13.	Physical Education and Sport 4	EF04							1			1
14.	English Language (4)	LE04						1	1			2
	German Language (4)	LG04										

3st Year

No. crt.	Course	Code	5 th Semester					6 th Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
1.	Probabilities	AMP6	2	1	1		6					
2.	Functional Analysis	AMF7	2	2			5					
3.	Theoretical Mechanics	EMT3	2	2			6					
4.	Operational research/ Mathematics software	ITO7/ IMM8	2	1	1		5					
5.	Abstract algebra/ Number theory	ALG4/ ALG5	2	2			5					
6.	Practical Placement	PRAC				4	3					
8.	Special chapters on differential equations/Calculus of variations/Differential manifolds	ESD4/ECV5/ GED4						2	2			6
9.	Complements of Mathematical Analysis/Lipschitzian analysis/Astronomy	AM10/AML9/ ASTR						2	2			6
10.	Mathematical statistics	AMS8						2	1	1		5
11.	Computer Systems/Web programming/ Mathematical models for Machine Learning	ISIN/IPRW/ MMML						2		2		5
12.	Academic writing/Writing and communication	SA/RC						1		1		2
13.	Practical Coordination for Bachelor Thesis	ELLC									4	6