

Transilvania University of Brașov, Romania

Study program: Modern Technologies in Software Systems Engineering

Faculty: **Mathematics and Computer Science**
Study period: **2 years**
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
01	Arhitecture of Enterprise Software Systems. .NET Platform	ASSEN	2	-	2		8					
02	Advanced Elements in WEB Applications Developing with PHP and My SQL	EAWPS	2	-	2		7					
03	Distributed Programming Techniques	TEHPD	2	-	2		8					
04	Mobile Devices Programming. Android Perspective.	PDMPA	2	-	2		7					
05	Algorithms in Combinatorial Optimization	AOCOM						2	1	1		8
06	Advanced Elements in Software Systems Engineering	EAISS						2	-	2		8
07	Component oriented development	DOCOM						2	-	2		7
07	Aspect oriented development	DOASP						2	-	2		7
07	ORM technologies	TEORM						2	-	2		7
07	Software testing methods	METTS						2	-	2		7
08	Programming of mobile devices. Windows Mobile perspective	PDMPW						2	-	2		7
08	Big Data and Machine Learning	BDAML						2	-	2		7

2nd Year

No. crt.	Course	Code	3 rd Semester					4 th Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
01	Non-sequential functional programming	PROFU	2	-	2	-	7					
02	Advanced elements of computational graphics	EAGCO	2	-	2	-	8					
03	Management of computer networks	ARETC	2	-	2	-	7					
03	Security of IT systems	SESTIT	2	-	2	-	7					
04	Grid computing	GRDCO	2	-	2	-	8					
04	Cloud computing	CLCOM	2	-	2	-	8					
05	Specialized practice	PRACT									4	8
06	Practice for dissertation writing	ELABD									4	8
07	Introduction to Natural Language Processing	INLP						2	-	2	-	7
08	Image processing using intelligent algorithms	IPIA						2	-	2	-	7