

Domeniul fundamental (DFI): STIINTE INGINERESTI  
Ramura de stiinta (RSI): INGINERIA SISTEMELOR, CALCULATOARE SI TEHNOLOGIA INFORMATIEI  
Domeniul de licenta (DL): COMPUTERS AND INFORMATION TECHNOLOGY  
Specializarea (S): COMPUTERS

Cod DFI:	CodRSI:	CodDL:	CodS:
20	60	10	10

cicl	c1c	a1a
L	002	19

CURRICULA  
Academic year 2019 - 2020

3 <sup>th</sup> YEAR											4 <sup>th</sup> YEAR																																																											
SEMESTER 5					SEMESTER 6						SEMESTER 7					SEMESTER 8																																																						
1	Artificial Intelligence Fundamentals					Elective 5 (selected from positions 1 to 5 of list)						Elective 10 (selected from positions 1 to 8 of list)					Elective 15 (is selected from positions 1 to 7 of list)																																																					
	L002.19.05.D1	6	E	42	0	14	14	DD	74	L002.19.06.DX-ij	4	E	28	0	14	14	DD	40	L002.19.07.SX-ij	6	E	28	0	28	0	DS	64	L002.19.08.SX-ij	4	E	28	0	14	0	DS	40																																		
2	Databases					Elective 6 (selected from positions 1 to 9 of list)						Elective 11 (selected from positions 1 to 8 of list)					Elective 16 (is selected from positions 1 to 7 of list)																																																					
	L002.19.05.D2	4	D	28	0	14	14	DD	40	L002.19.06.SY-ij	4	E	28	0	28	0	DS	40	L002.19.07.SY-ij	6	E	28	0	28	0	DS	64	L002.19.08.SY-ij	4	E	28	0	14	0	DS	40																																		
3	Elective 1 (selected from positions 1 and 2 of list)					Elective 7 (selected from positions 1 to 9 of list)						Elective 12 (selected from positions 1 to 8 of list)					Elective 17 (is selected from positions 1 to 7 of list)																																																					
	L002.19.05.DX-ij	5	E	28	0	28	14	DD	50	L002.19.06.SZ-ij	4	E	28	0	28	0	DS	40	L002.19.07.SZ-ij	6	E	28	0	28	0	DS	64	L002.19.08.SZ-ij	4	E	28	0	14	0	DS	40																																		
4	Elective 2 (selected from positions 1 to 8 of list)					Elective 8 (selected from positions 1 to 9 of list)						Elective 13 (selected from positions 1 to 8 of list)					Elective 18 (is selected from positions 1 to 7 of list)																																																					
	L002.19.05.SY-ij	5	E	28	0	28	0	DS	64	L002.19.06.SU-ij	4	E	28	0	28	0	DS	40	L002.19.07.SU-ij	6	E	28	0	28	0	DS	64	L002.19.08.SU-ij	4	E	28	0	14	0	DS	40																																		
5	Elective 3 (selected from positions 1 to 8 of list)					Elective 9 (selected from positions 1 to 9 of list)						Management and Marketing					Entrepreneurship in IT																																																					
	L002.19.05.SZ-ij	5	E	28	0	28	0	DS	64	L002.19.06.SV-ij	4	D	28	0	28	0	DS	40	L002.19.07.C5	3	D	28	14	0	0	DC	54	L002.19.08.S5	2	D	14	14	0	0	DS	20																																		
6	Elective 4 (selected from positions 1 to 8 of list)					Microeconomics						Specialized Practicum for Diploma*					Development of Diploma Thesis																																																					
	L002.19.05.SU-ij	5	D	28	0	28	0	DS	64	L002.19.06.C6	3	D	28	14	0	0	DC	30	L002.19.07.S6	3	C	0	0	0	98	DS	48	L002.19.08.S6	2	C	0	0	0	168	DS	64																																		
7	Optional - choose from any specialization curriculum					Professional and Ethical Issues in IT						Optional - choose from any specialization curricula					Diploma Exam**																																																					
	L002.19.05.f7-ij								f	L002.19.06.S7	3	D	28	14	0	0	DS	30	L002.19.07.f7-ij							f	L002.19.08.7	10	E				0																																					
8						Domain-specific Practicum											Optional - choose from any specialization curricula																																																					
										L002.19.06.D8	4	C					DD	150									L002.19.08.f8							f																																				
9						Optional - choose from any specialization curricula																																																																
										L002.19.06.f9-ij							f																																																					
total/ sem.	ore:		364			VPI:		356			ore:		364			VPI:		410			ore:		364			VPI:		358			ore:		364			VPI:		244																																
	credite:		30			evaluări:		4E, 2D			credite:		30			evaluări:		4E, 3D, 1C			credite:		30			evaluări:		4E, 2D			credite:		30			evaluări:		5E, 1D																																
total/ săpt.	ore:		26								ore:		26								ore:		26																																															
	din care:					13		0			10		3		(c, s, l, p)			din care:					14		2			9			1		(c, s, l, p)			din care:					10		1			8			7		(c, s, l, p)			din care:					9		1			4			12		(c, s, l, p)	

- lasting 7 weeks x 28 hours of which 2 weeks x 28 hours internship
- consists of: fundamental and speciality knowledge assessment, diploma exam

**Professional competencies:**

- Operating with scientific, engineering and IT fundamentals
- Designing hardware, software and communication components
- Problem solving by using computer science and engineering tools
- Improving the performance of hardware, software and communication systems
- Designing, managing the life cycle, integrating and managing the integrity of hardware, software and communication systems
- Designing intelligent systems

**Transversal competencies:**

- Behaving honorably, responsibly and ethical, according to the law, to ensure problem solving
- Identifying, describing and executing the processes of project management, by fulfilling various roles within the team, and describing the results in the field of activity, in a clear and concise manner, verbal and in writing, using the Romanian language and an international language
- Proving action and initiative spirit to get current with the knowledge at professional, economic and management levels

**DISCIPLINE OPTIONALE (ELECTIVE DISCIPLINES)**  
Academic year 2019 - 2020

		3 <sup>th</sup> YEAR										4 <sup>th</sup> YEAR																							
		SEMESTER 5					SEMESTER 6					SEMESTER 7					SEMESTER 8																		
01	Digital Microsystems Design						Digital Signal Processing					Peripheral Interfaces and Devices - nu se activeaza					Reconfigurable Computing																		
	L002.19.05.D#-01	5	E/D	28	0	28	14	DD	50	L002.19.06.D#-01	4	E/D	28	0	14	14	DD	40	L002.19.07.S#-01	6	E	28	0	28	0	DS	64	L002.19.08.S#-01	4	E	28	0	14	0	DS
02	Software Systems Design						Compilation Techniques					Digital Telecommunication					Computer Systems Reliability																		
	L002.19.05.D#-02	5	E/D	28	0	28	14	DD	50	L002.19.06.D#-02	4	E/D	28	0	14	14	DD	40	L002.19.07.S#-02	6	E	28	0	28	0	DS	64	L002.19.08.S#-02	4	E	28	0	14	0	DS
03	Mechanical Engineering and Robotics						Introduction to IoT and Cloud Architectures					Image Processing and Recognition					Expert Systems																		
	L002.19.05.S#-03	5	E/D	28	0	28	0	DS	64	L002.19.06.D#-03	4	E/D	28	0	14	14	DD	40	L002.19.07.S#-03	6	E	28	0	28	0	DS	64	L002.19.08.S#-03	4	E	28	0	14	0	DS
04	Fundamental Concepts of Programming Languages						Database Design					Software Verification and Validation					Software Project Management																		
	L002.19.05.S#-04	5	E/D	28	0	28	0	DD	64	L002.19.06.D#-04	4	E/D	28	0	14	14	DD	40	L002.19.07.S#-04	6	E	28	0	28	0	DS	64	L002.19.08.S#-04	4	E	28	0	14	0	DS
05	Large Scale Integrated Circuits						Computer graphics					Mobile Systems and Applications					Multimedia Systems																		
	L002.19.05.S#-05	5	E/D	28	0	28	0	DS	64	L002.19.06.D#-05	4	E/D	28	0	14	14	DD	40	L002.19.07.S#-05	6	E	28	0	28	0	DS	64	L002.19.08.S#-05	4	E	28	0	14	0	DS
06	Computer Engineering						Data Mining					Computer Aided Design					Fuzzy Logic and Applications																		
	L002.19.05.S#-06	5	E/D	28	0	28	0	DS	64	L002.19.06.S#-06	4	E/D	28	0	28	0	DS	40	L002.19.07.S#-06	6	E	28	0	28	0	DS	64	L002.19.08.S#-06	4	E	28	0	14	0	DS
07	Web Application Design						Embedded Systems					Verification and Validation of Hardware Systems					Distributed Programming																		
	L002.19.05.S#-07	5	E/D	28	0	28	0	DS	64	L002.19.06.S#-07	4	E/D	28	0	28	0	DS	40	L002.19.07.S#-07	6	E	28	0	28	0	DS	64	L002.19.08.S#-07	4	E	28	0	14	0	DS
08	Computer Security						Complexity and Computability					Concurrent and Event-Based Programming																							
	L002.19.05.S#-08	5	E/D	28	0	28	0	DS	64	L002.19.06.S#-08	4	E/D	28	0	28	0	DS	40	L002.19.07.S#-08	6	E	28	0	28	0	DS	64								
09							Design and Architecture of Complex Software Systems																												
										L002.19.06.S#-09	4	E/D	28	0	28	0	DS	40																	
10							Distributed Programming																												
										L002.19.06.S#-10	4	E/D	28	0	28	0	DS	40																	
11																																			
12																																			

**Nota:** Din fiecare dintre grupurile de **Discipline optionale** se activează un număr de discipline în funcție de opțiunile studenților, de numărul studenților și de acoperirea financiară.

**RECTOR,**  
Prof.univ.dr.ing.Viorel-Aurel ȘERBAN

**DECAN,**  
Prof.dr.ing.Radu-Emil PRECUP

**DISCIPLINE OPTIONALE (ELECTIVE DISCIPLINES)**  
Academic year 2019 - 2020

		3 <sup>th</sup> YEAR										4 <sup>th</sup> YEAR																																				
		SEMESTER 5					SEMESTER 6					SEMESTER 7					SEMESTER 8																															
01	Computer assisted instruction						Classroom management										Volunteering																															
	L002.19.05.9-01	2	C	14	14	0	0	f	24	L002.19.06.f9-01	3	E	14	14	0	0	f	40						L002.19.08.7	2	C	0	0	28	0	f																	
02	Pedagogical practice in compulsory secondary school (1)						Pedagogical practice in compulsory secondary school (2)																																									
	L002.19.05.9-02	3	C	0	0	0	42	f	26	L002.19.06.f9-02	2	C	0	0	0	36	f	6																														
03							Volunteering																																									
							L002.19.06.f9-03	2	C	0	0	28	0	f																																		
total/sem.	ore:	70					VPI:	50					ore:	92					VPI:	46					ore:	0					VPI:	0					ore:	28					VPI:	0				
	credite:	5					evaluări:	2C					credite:	7					evaluări:	1E, 2C					credite:	0					evaluări:						credite:	2					evaluări:	1C				
total/săpt.	ore:	5											ore:	7											ore:	0											ore:	2										
	din care:	1 1 0 3 (c, s, l, p)											din care:	1 1 2 3 (c, s, l, p)											din care:	0 0 0 0 (c, s, l, p)											din care:	0 0 2 0 (c, s, l, p)										

**Legenda**

Nume disciplina									
Cod	nc	FE	c	s	l	p	CF	VPI	

s=nr.ore seminar  
l=nr.ore laborator  
p=nr.ore proiect  
CF=categorii formative careia ii apartine disciplina  
CF∈{DC, DD, DF, DS}  
DC - disciplina complementara  
DD - disciplina in domeniu  
DF - disciplina fundamentala  
DS - disciplina de specialitate  
VPI = volum de ore necesar pregatirii individuale

**Exemplu**

Analiza matematica									
Cod	4	E	28	28	0	0	DF	60	

Cod = cod disciplina  
nc = nr. credite transferabile  
FE = forma de evaluare  
FE ∈ {E, D, C, P-E, P-D}  
E=examen  
D=evaluare distribuita  
C=colocviu  
P - E - proiect autonom cu examinare ca si in cazul disciplinelor cu examen  
P - D - proiect autonom cu examinare ca si in cazul disciplinelor cu evaluare distribuita  
c=nr.ore curs/semestru

RECTOR,  
Prof.univ.dr.ing.Viorel-Aurel ȘERBAN

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