

Domeniul fundamental (DFI): ȘTIINȚE INGINERESTI
Ramura de știință (RSI): INGINERIA SISTEMELOR, CALCULATORARE SI TEHNOLOGIA INFORMATIEI
Domeniul de licență (DL): COMPUTERS AND INFORMATION TECHNOLOGY
Specializarea (S): COMPUTERS

Cod DFI	CodRS	CodDL	CodS
20	60	10	10

ci1	ci2	ci3	a1	a2
L	002	18		

CURRICULA
Academic year 2018 - 2019

	3 th YEAR										4 th YEAR																																													
	SEMESTER 5					SEMESTER 6					SEMESTER 7					SEMESTER 8																																								
1	Artificial Intelligence Fundamentals					Elective 5 (selected from positions 1 to 5 of list)					Elective 7 (is selected from positions 1-4 of list)					Elective 13 (is selected from positions 1-4 of list)																																								
	L002.18.05.D1	6	E	42	0	14	14	DD	74	L002.18.06.DX-ij	4	E	28	0	14	14	DD	40	L002.18.07.SX-ij	5	E	28	0	28	0	DS	64	L002.18.08.SX-ij	4	E	28	0	14	0	DS	52																				
2	Databases					Elective 6 (selected from positions 1 to 9 of list)					Elective 8 (is selected from positions 1-7 of list)					Elective 14 (is selected from positions 1-8 of list)																																								
	L002.18.05.D2	4	D	28	0	14	14	DD	40	L002.18.06.SY-ij	4	E	28	0	28	0	DS	40	L002.18.07.SY-ij	5	E	28	0	28	0	DS	64	L002.18.08.SY-ij	4	E	28	0	14	0	DS	52																				
3	Elective 1 (selected from positions 1 and 2 of list)					Elective 7 (selected from positions 1 to 9 of list)					Elective 9 (is selected from positions 1-7 of list)					Elective 15 (is selected from positions 1-8 of list)																																								
	L002.18.05.DX-ij	5	E	28	0	28	14	DD	50	L002.18.06.SZ-ij	4	E	28	0	28	0	DS	40	L002.18.07.SZ-ij	5	E	28	0	28	0	DS	64	L002.18.08.SZ-ij	4	E	28	0	14	0	DS	52																				
4	Elective 2 (selected from positions 1 to 8 of list)					Elective 8 (selected from positions 1 to 9 of list)					Elective 10 (is selected from positions 1-7 of list)					Elective 16 (is selected from positions 1-8 of list)																																								
	L002.18.05.SY-ij	5	E	28	0	28	0	DS	64	L002.18.06.SU-ij	4	E	28	0	28	0	DS	40	L002.18.07.SU-ij	5	E	28	0	28	0	DS	64	L002.18.08.SU-ij	4	E	28	0	14	0	DS	52																				
5	Elective 3 (selected from positions 1 to 8 of list)					Elective 9 (selected from positions 1 to 9 of list)					Elective 11 (is selected from positions 8-10 of list)					Development of diploma thesis ¹⁾																																								
	L002.18.05.SZ-ij	5	E	28	0	28	0	DS	64	L002.18.06.SV-ij	4	D	28	0	28	0	DS	40	L002.18.07.SV-ij	5	D	28	0	28	0	DS	64	L002.18.08.S5	4	D			196	DS																						
6	Elective 4 (selected from positions 1 to 8 of list)					Microeconomics					Elective 12 (is selected from positions 8-10 of list)					Diploma exam ²⁾																																								
	L002.18.05.SU-ij	5	D	28	0	28	0	DS	64	L002.18.06.C6	3	D	28	14	0	0	DC	30	L002.18.07.SW-ij	5	D	28	0	28	0	DS	64	L002.18.08.S6	10	E			0	DS																						
7	Optional - choose from any specialization curriculum					Professional and Ethical Issues in IT					Diploma project					Optional - choose from other specialization's curricula																																								
	L002.18.05.f7-ij								f	L002.18.06.S7	3	D	28	14	0	0	DS	30	L002.18.07.S7		0	0	0	28	DS		L002.18.08.f7						f																							
8						Domain-specific Practicum																																																		
										L002.18.06.D8	4	C					DD	150																																						
9						Optional - choose from any specialization curricula																																																		
										L002.18.06.f9-ij							f																																							
total/sem.	ore:		364		VPI:		356		ore:		364		VPI:		410		ore:		364		VPI:		384		ore:		364		VPI:		208																									
	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						ore:		26																													
	din care:				13		0		10		3		(c, s, l, p)		din care:				14		2		9		1		(c, s, l, p)		din care:				12		0		12		2		(c, s, l, p)		din care:				8		0		4		14		(c, s, l, p)	

1) lasting 7 weeks x 28 hours of which 2 weeks x 28 hours internship
2) consists of: fundamental and speciality knowledge assesment, diploma exam

Professional competencies:

- C1 - Operating with the scientific, engineering and IT fundamentals.
- C2 - Designing hardware, software and communication components.
- C3 - Problem solving by using computer science and engineering tools.
- C4 - Improving the performance of hardware, software and communication systems.
- C5 - Designing, managing the life cycle, integrating and managing the integrity of hardware, software and communication systems.
- C6 - Designing intelligent systems.

Transversal competencies:

- CT1 - Behaving honorably, responsibly and ethical, according to the law, to ensure problem solving.
- CT2 - 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.
- CT3 - Proving action and initiative spirit to get current with the knowledge at professional, economic and management levels.

DISCIPLINE OPȚIONALE (ELECTIVE DISCIPLINES)

Academic year 2018 - 2019

	3 th YEAR										4 th YEAR																								
	SEMESTER 5					SEMESTER 6					SEMESTER 7					SEMESTER 8																			
01	Elective 1,2,3,4 - Digital Microsystems Design					Digital Signal Processing					Elective 7,8,9,10 - Peripheral interfaces and devices					Elective 13,14,15,16 - Reconfigurable computing																			
	L002.18.05.D#-01	5	E/D	28	0	28	14	DD	50	L002.18.06.D#-01	4	E/D	28	0	14	14	DD	40	L002.18.07.S#-01	5	E	28	0	28	0	DS	64	L002.18.08.S#-01	4	E	28	0	14	0	DS
02	Elective 1,2,3,4 - Software Systems Design					Compilation Techniques					Elective 7,8,9,10 - Digital telecommunication					Elective 13,14,15,16 - Computer systems reliability																			
	L002.18.05.D#-02	5	E/D	28	0	28	14	DD	50	L002.18.06.D#-02	4	E/D	28	0	14	14	DD	40	L002.18.07.S#-02	5	E	28	0	28	0	DS	64	L002.18.08.S#-02	4	E	28	0	14	0	DS
03	Elective 2,3,4 - Mechanical Engineering and Robotics					Microprocessor Systems					Elective 7,8,9,10 - Modeling and simulation					Elective 13,14,15,16 - Expert systems																			
	L002.18.05.S#-03	5	E/D	28	0	28	0	DS	64	L002.18.06.D#-03	4	E/D	28	0	14	14	DD	40	L002.18.07.S#-03	5	E	28	0	28	0	DS	64	L002.18.08.S#-03	4	E	28	0	14	0	DS
04	Elective 2,3,4 - Fundamental Concepts of Programming Languages					Database Design					Elective 7,8,9,10 - Software verification and validation					Elective 13,14,15,16 - Software project management																			
	L002.18.05.S#-04	5	E/D	28	0	28	0	DD	64	L002.18.06.D#-04	4	E/D	28	0	14	14	DD	40	L002.18.07.S#-04	5	E	28	0	28	0	DS	64	L002.18.08.S#-04	4	E	28	0	14	0	DS
05	Elective 2,3,4 - Large Scale Integrated Circuits					Computer graphics					Elective 8,9,10 Mobile systems and applications					Elective 14,15,16 - Data mining																			
	L002.18.05.S#-05	5	E/D	28	0	28	0	DS	64	L002.18.06.D#-05	4	E/D	28	0	14	14	DD	40	L002.18.07.S#-05	5	E	28	0	28	0	DS	64	L002.18.08.S#-05	4	E	28	0	14	0	DS
06	Elective 2,3,4 - Computer Engineering					Data Mining					Elective 8,9,10 - Computer aided design					Elective 14,15,16 - Fuzzy logic and applications																			
	L002.18.05.S#-06	5	E/D	28	0	28	0	DS	64	L002.18.06.S#-06	4	E/D	28	0	28	0	DS	40	L002.18.07.S#-06	5	E	28	0	28	0	DS	64	L002.18.08.S#-06	4	E	28	0	14	0	DS
07	Elective 2,3,4 - Web Application Design					Embedded Systems					Elective 8,9,10 - Database design					Elective 14,15,16 - Distributed Programming																			
	L002.18.05.S#-07	5	E/D	28	0	28	0	DS	64	L002.18.06.S#-07	4	E/D	28	0	28	0	DS	40	L002.18.07.S#-07	5	E	28	0	28	0	DS	64	L002.18.08.S#-07	4	E	28	0	14	0	DS
08	Elective 2,3,4 - Computer Security					Complexity and Computability					Elective 11,12 - Computer security					Elective 14,15,16 - Multimedia systems																			
	L002.18.05.S#-08	5	E/D	28	0	28	0	DS	64	L002.18.06.S#-08	4	E/D	28	0	28	0	DS	40	L002.18.07.S#-08	5	D	28	0	28	0	DS	64	L002.18.08.S#-08	4	E	28	0	14	0	DS
09						Design and Architecture of Complex Software Systems					Elective 11,12 - Concurrent and event-based programming																								
										L002.18.06.S#-09	4	E/D	28	0	28	0	DS	40	L002.18.07.S#-09	5	D	28	0	28	0	DS	64								
10											Elective 11,12 - Verification and validation of hardware systems																								
																			L002.18.07.S#-10	5	D	28	0	28	0	DS	64								
11																																			
12																																			

Nota: Din fiecare dintre grupurile de **Discipline opționale** 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.univ.dr.ing.Radu-Emil PRECUP

DISCIPLINE OPTIONALE (ELECTIVE DISCIPLINES)

Academic year 2018 - 2019

	3 th YEAR										4 th YEAR																									
	SEMESTER 5					SEMESTER 6					SEMESTER 7					SEMESTER 8																				
01	Computer assisted instruction					Classroom management										Volunteering																				
	L002.18.05.9-01	2	C	14	14	0	0	f	24	L002.18.06.f9-01	3	E	14	14	0	0	f	40								L002.18.08.f7	2	C	0	0	28	0	f			
02	Pedagogical practice in compulsory secondary school (1)					Pedagogical practice in compulsory secondary school (2)																														
	L002.18.05.9-02	3	C	0	0	0	42	f	26	L002.18.06.f9-02	2	C	0	0	0	36	f	6																		
03						Volunteering																														
										L002.18.06.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	

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

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	

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

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