

Field of study: Computer and Information Technology/ Calculatoare si tehnologia informatiei
Programme of study: INFORMATION TECHNOLOGY/ TEHNOLOGIA INFORMATIEI

Form of education: with frequency
Length of study: 2 years

Fundamental domain of study (DFI): Engineering Sciences/ Stiinte ingineresti
Branch of science (RSI): System Engineering, Computer and Information Technology/ Ingineria sistemelor, calculatoare si tehnologia informatiei
Domain of study of master (DSU_M): Computer and Information Technology/ Calculatoare si tehnologia informatiei

Cod DFI	Cod RSI	Cod DSU_M
20	60	10

level	c1c2c3	a1a2
M	002	19

CURRICULUM
Academic year 2019 - 2020
1st YEAR

		SEMESTER 1										SEMESTER 2										
1	Core 1 (choose one from positions 1-5)																					
	M002.19.01.*1-ij	8	E	28	0	28	0	0	0	0	***	49	M002.19.02.*1-ij	8	E	28	0	28	0	0	0	***
2	Core 2 (choose one from positions 1-5)																					
	M002.19.01.*2-ij	8	E	28	0	28	0	0	0	0	***	49	M002.19.02.*2-ij	8	E	28	0	28	0	0	0	***
3	Elective 1 (choose one from Master IT/ SE)																					
	M002.19.01.*3-ij	8	E	28	0	28	0	0	0	0	***	49	M002.19.02.*3-ij	8	E	28	0	28	0	0	0	***
4	Research Topics in IT																					
	M002.19.01.V4	6	D	28	0	0	0	0	168	DCAV	35	M002.19.02.V4	4	D	28	0	0	0	0	140	DCAV	14
5	Academic Ethics and Integrity																					
	M002.19.02.C5	2	D	14	7	0	0	0	0	0	DC	21										
6																						
7																						
total / semester	VAi:	196	VPI:	182	VAi:	217	VPI:	182														
	VA (VAi+VAp):	364	VCA (VA+VPI):	546	VA (VAi+VAp):	357	VCA (VA+VPI):	539														
	credits	30	evaluations:	3E, 1D	credits	30	evaluations:	3E, 2D														
total / week	VAi:	14	VPI:	13	VAi:	16	VPI:	13														
	VA (VAi+VAp):	26	VCA (VA+VPI):	39	VA (VAi+VAp):	26	VCA (VA+VPI):	39														
	distribution	8	0	6	0	12	(c, s, l, p, VAp)	distribution	9	1	6	0	10	(c, s, l, p, VAp)								

Academic year 2019 - 2020
2nd YEAR

		SEMESTER 3										SEMESTER 4									
1	Elective 3																				
	M002.19.03.*1-ij	9	E	28	0	28	0	0	0	0	***	49	M002.19.04.S1	10	C					168	DS
2	Elective 4																				
	M002.19.03.*2-ij	9	E	28	0	28	0	0	0	0	***	49	M002.19.04.S2	10	C					196	DS
3	Elective 5																				
	M002.19.03.*3-ij	9	E	28	0	28	0	0	0	0	***	49	M002.19.04.S3	10	E						DS
4	Directed Thesis Research																				
	M002.19.03.S4	3	D	0	0	0	28	168	DS	35											
5																					
6																					
7																					
total / semester	VAi:	196	VPI:	182	VAi:	0	VPI:	168													
	VA (VAi+VAp):	364	VCA (VA+VPI):	546	VA (VAi+VAp):	364	VCA (VA+VPI):	532													
	credits	30	evaluations:	3E, 1D	credits	30	evaluations:	1E, 2C													
total / week	VAi:	14	VPI:	13	VAi:	0	VPI:	12													
	VA (VAi+VAp):	26	VCA (VA+VPI):	39	VA (VAi+VAp):	26	VCA (VA+VPI):	38													
	distribution	6	0	6	2	12	(c, s, l, p, VAp)	distribution	0	0	0	0	26	(c, s, l, p, VAp)							

Competences:

- Advanced knowledge of the main topics and problems in the field of Information Technologies;
- Knowledge of the current technologies and abilities to select and apply them in the development of IT projects;
- Skills to critically analyze, innovate and research;
- Advanced abilities of communication, interdisciplinary cooperation and team project management.

ELECTIVE COURSES
Academic year 2019 - 2020
1st YEAR

SEMESTER 1											SEMESTER 2										
01	Data Transmission, Coding and Compression										Integrated Information Systems										
	8	E	28	0	28	0	0	DCAV	49	8	E	28	0	28	0	0	DCAV	49			
02	Bioinformatics										Optic Fiber Transmissions										
	8	E	28	0	28	0	0	DCAV	49	8	E	28	0	28	0	0	DCAV	49			
03	Cellular Data Networks										Emergent and Collective Intelligence Systems										
	8	E	28	0	28	0	0	DA	49	8	E	28	0	28	0	0	DCAV	49			
04	Deep Learning										Fault Diagnosis and Design for Testability										
	8	E	28	0	28	0	0	DCAV	49	8	E	28	0	28	0	0	DA	49			
05	Smart Sensors and Sensor Networks										Advanced Embedded Systems										
	8	E	28	0	28	0	0	DA	49	8	E	28	0	28	0	0	DA	49			
06																					

ELECTIVE COURSES
Academic year 2019 - 2020
2nd YEAR

SEMESTER 3											SEMESTER 4										
01	Cellular Data Networks																				
	9	E	28	0	28	0	0	DA	49												
02	Advanced Web Programming																				
	9	E	28	0	28	0	0	DA	49												
03	Evolvable Hardware																				
	9	E	28	0	28	0	0	DCAV	49												
04	Advanced Artificial Intelligence																				
	9	E	28	0	28	0	0	DCAV	49												
05																					
06																					

Legenda

Title of discipline										
Code	nc	FE	c	s	l	p	VAp	CF	VPI	

Code = code of discipline
 nc = no. of the subject transferable credits
 FE = forma de evaluare
 FE ∈ {E, D, C}
 E=exam
 D=distributive assessment
 C=colloquy
 c=no. of course hours/semester
 s=no. of seminar hours
 l=no. of laboratory hours
 p=no. of project hours
 VAp = no. of hours needed for partially assisted activities

Example										
Advanced measuring technologies										
M170.17.01.V1	8	E	28	0	28	0	49	DCAV	50	

CF=the category the discipline belongs to
 CF={DA, DCAV, DS, DC}
 DA - thoroughgoing study discipline
 DCAV - advanced knowledge discipline
 DS - synthesis discipline
 DC - complementary discipline
 VPI=no. of unattended hours during a 14 weeks semester plus 4 weeks of examination session
 VAI- no. of hours needed for entirely assisted activities=c+s+l+p
 VA - no. of hours needed for entirely assisted activities and partially assisted activities=VAi+Vap
 VCA - cumulated no. of hours for all activities= VA+VPI

Notes

- The first two independent electives ("Core x") in each semester will be selected from the table "ELECTIVE COURSES", corresponding semester, and can be of the types DCAV, DA, or DS, as specified in the cell marked with ***.
- The third independent elective ("Elective y") in each semester will be selected from the the Master programs in the CTI field (Master IT/ CI/ ML/ SE), corresponding semester, and can be of the types DCAV, DA, or DS, as specified in the cell marked with ***.
- The electives in the table "ELECTIVE COURSES" will be activated based on student options, number of students and financial coverage.

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

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