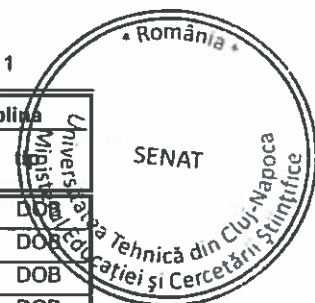
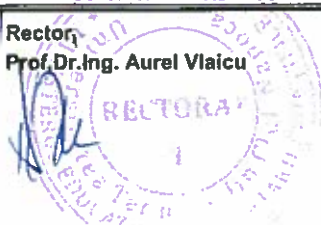


CODUL SI DENUMIREA DISCIPLINEI	Anul : I								Forma de verificare			Nr.ore/disciplina			Credite/sem		Disciplina					
	SEM 1 14 sapt				SEM 2 14 sapt				E	C	V	Total	C	Apl	St. Ind	1	2	cat	Disciplina			
	C	S	L	P	PR	C	S	L												P	PR	
1.00 Analiza matematica I	2	1	0	0	0						Nota	104	28	14	62	4.0		DF	DOB			
2.00 Algebra liniara, geometrie analitica si diferentia	2	1	0	0	0						Nota	78	28	14	36	3.0		DF	DOB			
3.00 Materiale de instalatii si chimie aplicata I	2	0	1	0	0						Nota	78	28	14	36	3.0		DF	DOB			
4.00 Fizica	2	0	2	0	0						Nota	126	28	28	70	5.0		DF	DOB			
5.00 Geometrie descriptiva	2	1	0	0	0						Nota	104	28	14	62	4.0		DF	DOB			
6.00 Tehnologie mecanica si organe de masini	2	0	2	0	0						Nota	126	28	28	70	5.0		DID	DOB			
7.00 Desen tehnic si infografica I	0	0	2	0	0						Nota	52	0	28	24	2.0		DF	DOB			
8.00 Utilizarea calculatoarelor I	1	0	2	0	0						Nota	78	14	28	36	3.0		DF	DOB			
9.00 Educatie fizica si sport I	0	2	0	0	0						A/R	28	0	28	0	1.0		DC	DOB			
10.00 Analiza matematica II						2	1	0	0	0	Nota	78	28	14	36		3.0	DF	DOB			
11.00 Desen tehnic si infografica II						0	0	2	0	0	Nota	52	0	28	24		2.0	DF	DOB			
12.00 Utilizarea calculatoarelor II						0	0	2	0	0	Nota	52	0	28	24		2.0	DF	DOB			
13.00 Topografie						2	0	1	0	0	Nota	104	28	14	62		4.0	DID	DOB			
14.00 Materiale de instalatii si chimie aplicata II						2	0	1	0	0	Nota	104	28	14	62		4.0	DID	DOB			
15.00 Mecanica						3	2	0	0	0	Nota	128	42	28	58		5.0	DID	DOB			
16.00 Rezistenta I						2	1	0	0	0	Nota	78	28	14	36		3.0	DID	DOB			
17.00 Proiectare asistata de calculator I						1	0	1	0	0	Nota	52	14	14	24		2.0	DF	DOB			
18.00 Limbi straine I						0	1	0	0	0	Nota	52	0	14	38		2.0	DC	DOB			
19.00 Ecologie						1	0	0	0	0	Nota	26	14	0	12		1.0	DID	DOB			
20.00 Practica I ( 2 sapt )						0	0	0	0	30	A/R	60	0	60	0		2.0	DF	DOB			
<b>TOTAL AN</b>	<b>13</b>	<b>5</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>5</b>	<b>7</b>	<b>0</b>	<b>30</b>	sem1	<b>5</b>	<b>3</b>	<b>1</b>	<b>1560</b>	<b>364</b>	<b>424</b>	<b>772</b>	<b>30.0</b>	<b>30.0</b>		
											sem2	<b>5</b>	<b>5</b>	<b>1</b>								



100.00 Tehnici de comunicare	1	1	0	0	0						Nota	52	14	14	24	2.0		DC	FAC
101.00 Psihologia educatiei	2	2	0	0	0						Nota	130	28	28	74	5.0		DC	FAC
102.00 Limbi straine avansati (I)						0	2	0	0	0	Nota	42	0	28	14		2.0	DC	FAC
103.00 Pedagogie I (Fundamentele pedagogiei, Teoria si metodologia curriculumului)						2	2	0	0	0	Nota	130	28	28	74		5.0	DC	FAC

Rector,  
Prof. Dr. Ing. Aurel Vlaicu



Decan,  
Conf. dr. Ing. Mircea Ion Buzdugan



Director departament,  
Conf. dr. ing. Carmen Marza

*C. Marza*

**EXEMPLAR UNIC**  
 Originalul se allă la PRORECTORATUL DIDACTIC  
 Data: 02.07.2015  
 Semnătura: *[Signature]*

VARO

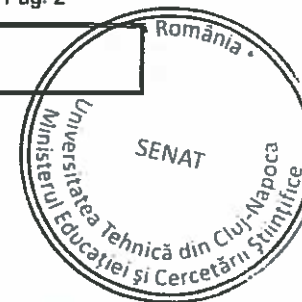
UNIVERSITATEA TEHNICA CLUJ-NAPOCA  
 FACULTATE FACULTATEA DE INSTALATII  
 DOMENIU INGINERIA INSTALATIILOR  
 SPECIALIZARE INSTALATII PENTRU CONSTRUCTII  
 Nivel de studii LICENTA

Listat la : 30/04/2015

PLAN DE INVATAMANT PENTRU ANUL UNIVERSITAR 2015-2016

Pag. 2

TOTAL AN	3	3	0	0	0	2	4	0	0	0	sem1	1	1	0	354	70	98	186	7.0	7.0	
	6.00					6.00					sem2	1	1	0							



Rector,  
 Prof.Dr.Ing. Aurel Vlaicu

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 Conf. dr. Ing. Mircea Ion Buzdugan



Director departament,  
 Conf. dr. ing. Carmen Marza

*C. Marza*

**EXEMPLAR UNIC**

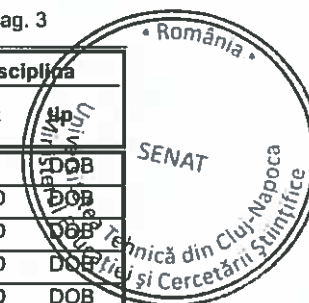
Originalul se află la PROCTORATUL DIDACTIC

Data: 02.07.2015

Semnătura: *[Signature]*

*VARO*

CODUL SI DENUMIREA DISCIPLINEI	Anul : II										Forma de verificare			Nr.ore/disciplina				Credite/sem		Disciplina	
	SEM 1 14 sapt					SEM 2 14 sapt					E	C	V	Total	C	Apl	St. Ind	1	2	cat	tip
	C	S	L	P	PR	C	S	L	P	PR											
21.00	Matematici speciale	2	1	0	0	0						Nota	78	28	14	36	3.0		DF	DOB	
22.00	Rezistenta II	2	2	0	0	0						Nota	128	28	28	72	5.0		DID	DOB	
23.00	Termotehnica I	2	1	0	0	0						Nota	128	28	14	86	5.0		DID	DOB	
24.00	Hidraulica I	3	1	0	0	0						Nota	128	42	14	72	5.0		DID	DOB	
25.00	Electrotehnica I	2	0	2	0	0						Nota	128	28	28	72	5.0		DID	DOB	
26.00	Discipline socio-umane : Economie	1	1	0	0	0						Nota	52	14	14	24	2.0		DC	DOB	
27.00	Utilizarea calculatoarelor III	0	0	2	0	0						Nota	52	0	28	24	2.0		DID	DOB	
28.00	Limbi straine II	0	1	0	0	0						Nota	26	0	14	12	1.0		DC	DOB	
29.00	Legislatie in instalatii si constructii	2	0	0	0	0						Nota	52	28	0	24	2.0		DID	DOB	
30.00	Termotehnica II						3	1	1	0	0	Nota	126	42	28	56		5.0	DID	DOB	
31.00	Hidraulica II						2	1	1	0	0	Nota	104	28	28	48		4.0	DID	DOB	
32.00	Electrotehnica II						2	0	1	0	0	Nota	78	28	14	36		3.0	DID	DOB	
33.00	Limbi straine III						0	1	0	0	0	Nota	26	0	14	12		1.0	DC	DOB	
34.00	Elemente de arhitectura						1	0	0	0	0	Nota	26	14	0	12		1.0	DID	DOB	
35.00	Educatie fizica si sport II						0	2	0	0	0	A/R	52	0	28	24		2.0	DC	DOB	
36.10	Constructii						2	0	0	2	0	Nota	104	28	28	48		4.0	DID	DOP	
36.20	Sisteme si echipamente pentru depoluarea apelor uzate						2	0	0	2	0	Nota	104	28	28	48		4.0	DID	DOP	
37.00	Proiectare asistata de calculator II						0	0	2	0	0	Nota	52	0	28	24		2.0	DID	DOB	
38.00	Tehnologia si montajul instalatiilor I						2	0	1	0	0	Nota	78	28	14	36		3.0	DID	DOB	
39.00	Analiza numerica						1	0	1	0	0	Nota	52	14	14	24		2.0	DF	DOB	
40.00	Practica II ( 3 sapt )						0	0	0	0	30	A/R	90	0	90	0		3.0	DID	DOB	
TOTAL AN		14	7	4	0	0	13	5	7	2	30	sem1 5 4 0 sem2 5 4 2	1560	378	440	742	30.0	30.0			



104.00	Limbi straine avansate (II)	0	2	0	0	0						Nota	42	0	28	14	2.0		DC	FAC
105.00	Pedagogie II (Teoria si metodologia Instruirii, Teoria si metodologia evaluarii)	2	2	0	0	0						Nota	130	28	28	74	5.0		DC	FAC

Rector,  
 Prof.Dr.Ing. Aurel Vlaicu

Decan,  
 Conf. dr. Ing. Mircea Ion Buzdugan

Director departament,  
 Conf. dr. ing. Carmen Marza

**EXEMPLAR UNIC**

Originalul se afla la PROCTORATUL DIDACTIC

Data: 02.07.2015

Semnatura: \_\_\_\_\_

VARO

*C. Marza*

UNIVERSITATEA TEHNICA CLUJ-NAPOCA  
 FACULTATE FACULTATEA DE INSTALATII  
 DOMENIU INGINERIA INSTALATIILOR  
 SPECIALIZARE INSTALATII PENTRU CONSTRUCTII

Listat la : 30/04/2015

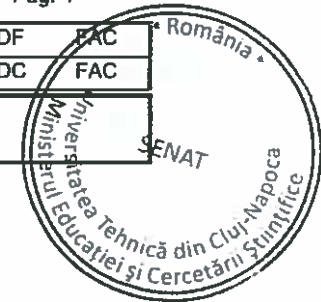
Nivel de studii LICENTA

PLAN DE INVATAMANT PENTRU ANUL UNIVERSITAR

2015-2016

Pag. 4

106.00	Limbaje de programare				2	0	2	0	0	Nota		104	28	28	48	4.0	DF	FAC	
107.00	Didactica specialitatii tehnice				2	2	0	0	0	Nota		130	28	28	74	5.0	DC	FAC	
TOTAL AN		2	4	0	0	0	4	2	2	0	0	406	84	112	210	7.0	9.0		
																		6.00	



Rector,  
 Prof. Dr. Ing. Aurel Vlaicu

Decan,  
 Conf. dr. Ing. Mircea Ion Buzaugan

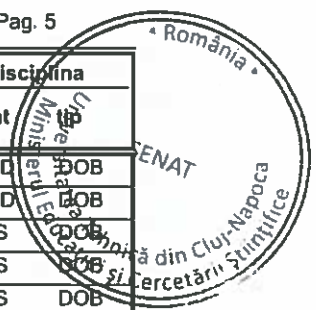


Director departament,  
 Conf. dr. ing. Carmen Marza

*Carmen Marza*

**EXEMPLAR UNIC**  
 Originalul se află la PROCTORATUL DIDACTIC  
 Data: 02.07.2015  
 Semnătura: *[Signature]*

CODUL SI DENUMIREA DISCIPLINEI	Anul : III										Forma de verificare			Nr.ore/disciplina				Credite/sem		Disciplina		
	SEM 1 14 sapt					SEM 2 14 sapt					E	C	V	Total	C	Apl	St. ind	1	2	cat	cat	
	C	S	L	P	PR	C	S	L	P	PR												
41.00 Masini hidraulice	2	0	1	0	0							Nota	78	28	14	36	3.0		DID	DOB		
42.00 Masini electrice	2	0	1	0	0							Nota	78	28	14	36	3.0		DID	DOB		
43.00 Instalatii sanitare I	2	0	0	2	0							Nota	128	28	28	72	5.0		DS	DOB		
44.00 Instalatii de incalzire I	2	0	0	2	0							Nota	128	28	28	72	5.0		DS	DOB		
45.00 Instalatii frigorifice I	2	0	0	1	0							Nota	104	28	14	62	4.0		DS	DOB		
46.00 Termotehnica constructiilor	1	0	0	0	0							Nota	26	14	0	12	1.0		DID	DOB		
47.00 Aparate termice	2	0	0	2	0							Nota	126	28	28	70	5.0		DID	DOB		
48.00 Surse neconventionale de energie	1	0	0	0	0							Nota	26	14	0	12	1.0		DID	DOB		
49.00 Instalatii hidroedilitare	2	0	0	0	0							Nota	52	28	0	24	2.0		DID	DOB		
50.00 Marketing	1	0	0	0	0							Nota	26	14	0	12	1.0		DID	DOB		
51.00 Instalatii sanitare II						3	0	0	2	0		Nota	128	42	28	58	5.0		DS	DOB		
52.00 Instalatii de incalzire II						2	0	0	3	0		Nota	128	28	42	58	5.0		DS	DOB		
53.00 Instalatii frigorifice II						2	0	0	2	0		Nota	104	28	28	48	4.0		DS	DOB		
54.00 Instalatii de ventilare si conditionare I						2	0	0	3	0		Nota	130	28	42	60	5.0		DS	DOB		
55.00 Instalatii electrice I						3	0	0	2	0		Nota	130	42	28	60	5.0		DS	DOB		
56.00 Asigurarea calitatii in instalatii						1	0	1	0	0		Nota	78	14	14	50	3.0		DID	DOB		
57.00 Practica III ( 3 sapt )						0	0	0	0	30		A/R	90	0	90	0	3.0		DS	DOB		
<b>TOTAL AN</b>	<b>17</b>	<b>0</b>	<b>2</b>	<b>7</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>1</b>	<b>12</b>	<b>30</b>	sem1	5	5	0	<b>1560</b>	<b>420</b>	<b>398</b>	<b>742</b>	<b>30.0</b>	<b>30.0</b>		
											sem2	5	1	1								



108.00 Reducerea emisiilor si epurarea gazelor de ardere	2	0	0	2	0							Nota	104	28	28	48	4.0		DS	FAC
109.00 Didactica specialitatii tehnice	2	2	0	0	0							Nota	130	28	28	74	5.0		DC	FAC
110.00 Practica pedagogica I	0	0	0	0	3							Nota	58	0	42	16	3.0		DC	FAC
111.00 Instalatii si echipamente pentru asigurarea calitatii aerului						2	0	0	2	0		Nota	104	28	28	48	4.0		DS	FAC
112.00 Instruire asistata de calculator						1	1	0	0	0		Nota	52	14	14	24	2.0		DC	FAC
113.00 Practica pedagogica II ( 12 sapt )						0	0	0	0	3		Nota	52	0	36	16	2.0		DC	FAC

Rector,  
Prof. Dr. Ing. Aurel Vlaicu

Decan,  
Conf. dr. Ing. Mircea Ion Bozdugan

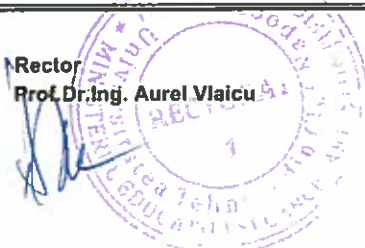
Director departament,  
Conf. dr. ing. Carmen Marza

**EXEMPLAR UNIC**

Originalul se află la PRORECTORATUL DIDACTIC

Data: 02.07.2015

Semnătura: \_\_\_\_\_



Handwritten signature of Conf. dr. ing. Carmen Marza.

VARO

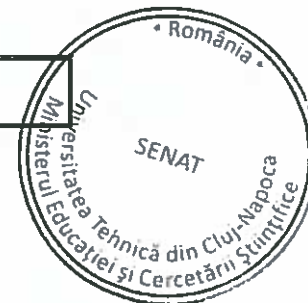
UNIVERSITATEA TEHNICA CLUJ-NAPOCA  
 FACULTATE FACULTATEA DE INSTALATII  
 DOMENIU INGINERIA INSTALATIILOR  
 SPECIALIZARE INSTALATII PENTRU CONSTRUCTII  
 Nivel de studii LICENTA

Listat la : 30/04/2015



PLAN DE INVATAMANT PENTRU ANUL UNIVERSITAR 2015-2016

Pag. 6



TOTAL AN	4	2	0	2	3	3	1	0	2	3	sem1	2	1	0	500	98	176	226	12.0	8.0
	8.00				6.00				sem2	1	2	0								




Rector,  
 Prof. Dr. Ing. Aurel Vlaicu

Decan,  
 Conf. dr. ing. Mircea Ion Buzdugan

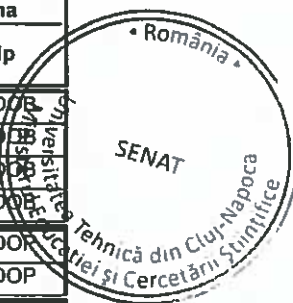



Director departament,  
 Conf. dr. ing. Carmen Marza



**EXEMPLAR UNIC**  
 Originalul se află la PROCTORATUL DIDACTIC  
 Data: 02.07.2015  
 Semnătura: \_\_\_\_\_

CODUL SI DENUMIREA DISCIPLINEI	Anul : IV										Forma de verificare			Nr.ore/disciplina				Credite/sem		Disciplina	
	SEM 1 14 sapt					SEM 2 14 sapt					E	C	V	Total	C	Apl	St. ind	1	2	cat	tip
	C	S	L	P	PR	C	S	L	P	PR											
58.00 Instalatii de ventilare si conditionare II	2	0	1	0	0						Nota			126	28	14	84	5.0		DS	D/B
59.00 Instalatii electrice II	2	0	0	1	0						Nota			126	28	14	84	5.0		DS	D/B
60.00 Sisteme de alimentare cu gaze	2	0	1	0	0						Nota			104	28	14	62	4.0		DS	D/B
61.00 Management si resurse umane	1	0	1	0	0						Nota			52	14	14	24	2.0		DID	DOB
62.10 Gestionarea automata a instalatiilor in cladiri	2	0	2	0	0						Nota			104	28	28	48	4.0		DS	DOP
62.20 Gospodaria apelor	2	0	2	0	0						Nota			104	28	28	48	4.0		DS	DOP
63.10 Fiabilitatea instalatiilor	2	0	0	2	0						Nota			104	28	28	48	4.0		DS	DOP
63.20 Pompe de caldura	2	0	0	2	0						Nota			104	28	28	48	4.0		DS	DOP
64.10 Instalatii electrice industriale	2	0	0	1	0						Nota			78	28	14	36	3.0		DS	DOP
64.20 Sisteme de ventilare si climatizare industriala	2	0	0	1	0						Nota			78	28	14	36	3.0		DS	DOP
65.00 Automatizarea instalatiilor I	2	0	2	0	0						Nota			104	28	28	48	4.0		DS	DOB
66.00 Gestiunea economico-financiara a intreprinderii si marketing						1	0	1	0	0	Nota			52	14	14	24		2.0	DID	DOB
67.00 Automatizarea instalatiilor II						2	0	0	1	0	Nota			104	28	14	62		4.0	DS	DOB
68.00 Retele termice						2	0	0	1	0	Nota			104	28	14	62		4.0	DS	DOB
69.00 Tehnologia si montajul instalatiilor II						1	0	1	0	0	Nota			104	14	14	76		4.0	DS	DOB
70.10 Masurari in instalatii						2	0	2	0	0	Nota			104	28	28	48		4.0	DS	DOP
70.20 Instalatii hidraulice industriale						2	0	2	0	0	Nota			104	28	28	48		4.0	DS	DOP
71.10 Procese si instalatii termice industriale						2	0	0	2	0	Nota			104	28	28	48		4.0	DS	DOP
71.20 Cogenerare si transport energie termica						2	0	0	2	0	Nota			104	28	28	48		4.0	DS	DOP
72.00 Activitate de cercetare/proiectare						0	0	0	8	0	A/R			130	0	112	18		5.0	DS	DOB
73.00 Practica pentru elaborarea proiectului de diploma ( 2 sapt )						0	0	0	0	30	A/R			60	0	60	0		2.0	DS	DOB
74.00 Susținerea proiectului de diploma						0	0	0	0	0	Nota			0	0	0	0		10.0	DS	DOB




Rector,  
 Prof. Dr. Ing. Aurel Vlaicu




Decan,  
 Conf. dr. Ing. Mircea Ion Buzdugan



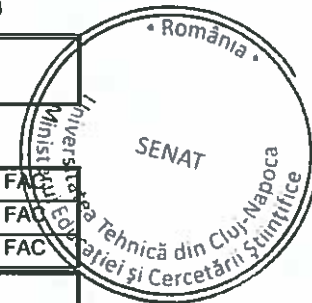

Director departament,  
 Conf. dr. Ing. Carmen Marza



**EXEMPLAR UNIC**  
 Originalul se află la PROCTORATUL DIDACTIC  
 Data: 02.04.2015  
 Semnătura: \_\_\_\_\_

PLAN DE INVATAMANT PENTRU ANUL UNIVERSITAR 2015-2016

TOTAL AN	15	0	7	4	0	10	0	4	12	30	sem1	5	3	0	1560	350	438	772	31.0	29.0	
			26.00					26.00			sem2	3	3	2						+ 10	
114.00 Instalatii si echipamente pentru desprafuire	2	0	0	3	0						Nota				130	28	42	60	5.0		DS
115.00 Managementul clasei de elevi	1	1	0	0	0						Nota				78	14	14	50	3.0		DC
116.00 Examen absolvire nivel I						0	0	0	0	0	Nota				0	0	0	0		5.0	DC
TOTAL AN	3	1	0	3	0	0	0	0	0	0	sem1	2	0	0	208	42	56	110	8.0	0.0	
			7.00					0			sem2	0	0	0						+ 5	



Rector,  
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Director departament,  
 Conf. dr. ing. Carmen Marza

*C. Marza*

**EXEMPLAR UNIC**

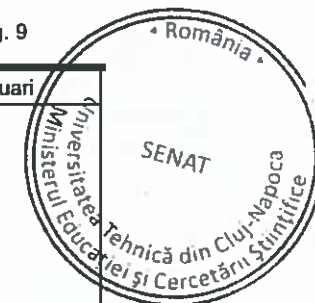
Originalul se află la PROCTORATUL DIDACTIC

Data: 02.07.2015

Semnătura: \_\_\_\_\_

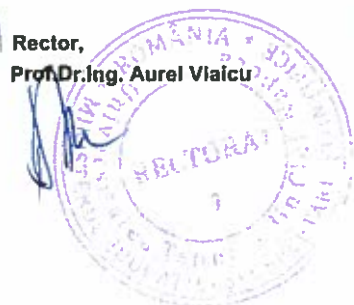


Nivel de studii	LICENTA	PLAN DE INVATAMANT PENTRU ANUL UNIVERSITAR							Total evaluari	Nr.examene/tot.evaluari	
		C	S	L	P	PR	Credite	Examene			Colocvii si verificari
Anul I		364	140	224	0	60	60	10	10	20	50 %
Anul II		378	168	154	28	90	60	10	10	20	50 %
Anul III		420	0	42	266	90	60	10	7	17	59 %
Anul IV		350	0	154	224	60	60	8	8	16	50 %
TOTAL		1512	308	574	518	300	240	38	35	73	52 %



NUMAR ORE TOTAL	3212	DIN CARE	300.00	ORE PRACTICA
TOTAL ORE CURS, SEMINAR, LAB., PROIECT	2912			
TOTAL ORE DISCIPLINE FUNDAMENTALE - TIP DF	538	17 %	din tot.activ.didactice oblig	min. 17%
NR.DISC.FUNDAMENTALE/NR.TOT.DISCIPLINE	19	%		
TOTAL ORE DISCIPLINE IN DOMENIU - TIP DID	1206	38 %	din tot.activ.didactice oblig	min. 38%
NR.DISC.IN DOMENIU/NR.TOT.DISCIPLINE	41	%		
TOTAL ORE DISCIPLINE DE SPECIALITATE - TIP DS	1282	41 %	din tot.activ.didactice oblig	min. 25%
NR.DISC.DE SPECIALITATE/NR.TOT.DISCIPLINE	32	%		
TOTAL ORE DISCIPLINE COMPLEMENTARE - TIP DC	126	4 %	din tot.activ.didactice oblig	max 8%
NR.DISC.COMPLEMENTARE/NR.TOT.DISCIPLINE	8	%		
TOTAL ORE DISCIPLINE OPTIONALE - CAT OP	322	10 %	din tot.activ.didactice oblig	min. 10%
TOTAL ORE DISCIPLINE FACULTATIVE - CAT F	736	23 %	din tot.activ.didactice oblig	min. 10%
TOTAL ORE CURS	1512			
TOTAL ORE ACTIVITATI APLICATIVE calc. cu 240 ore practica	1640			
RAPORT CURS / ACTIVITATI PRACTICE calc. cu 240 ore practica	0.92	1 +/- 0.2		
TOTAL ORE DE PREGATIRE INDIVIDUALA	3028			

Rector,  
 Prof.Dr.Ing. Aurel Vlaicu



Decan,  
 Conf. dr. ing. Mitea Ion Buzdugan



Director departament,  
 Conf. dr. Ing. Carmen Marza

*Carmen Marza*

**EXEMPLAR UNIC**

Originalul se află la PRORECTORATUL DIDACTIC

Data: 02.07.2015

Semnătura: \_\_\_\_\_

*VARO*