

Facultatea: Automatica si Calculatoare

Domeniul de licenta: **Calculatoare si Tehnologia Informatiei**

Programul de studii univ. de masterat: **INGINERIA CALCULATOARELOR/COMPUTER ENGINEERING**

Forma de invatamant: **cu frecventa**

Durata studiilor: **2 ani**

Domeniul fundamental de ierarhizare (**DFI**): Stiinte ingineresti

Ramura de stiinta (**RSI**): Ingineria sistemelor, calculatoare si tehnologia informatiei

Domeniul de studii universitare de masterat (**DSU_M**): Calculatoare si tehnologia informatiei

| |
|---------------------------|
| Cod DFI.Cod RSI.Cod DSU_M |
| 20 60 10 10 |

CURRICULA
Academic year 2014 - 2015
1st YEAR

| | SEMESTER 1 | | | | | | | SEMESTER 2 | | | | | | | |
|-------------------|--|-----|---|----------------------|---|--------|---|-------------------------------|-----|---|----------------------|----|-----|----|---|
| 1. | Optional 1 (choose from 9L1 or 11L1) | | | | | | | Optional 1 (choose from 10L1) | | | | | | | |
| | | 9 | E | 28 | 0 | 28 | 0 | 170 | | 9 | E | 28 | 0 | 28 | 0 |
| 2. | Optional 2 (choose from 9L1 or 11L1) | | | | | | | Optional 2 (choose from 10L1) | | | | | | | |
| | | 9 | E | 28 | 0 | 28 | 0 | 170 | | 9 | E | 28 | 0 | 28 | 0 |
| 3. | Optional 3 (choose from 9L1 or 11L1) | | | | | | | Optional 3 (choose from 10L1) | | | | | | | |
| | | 9 | E | 28 | 0 | 28 | 0 | 170 | | 9 | E | 28 | 0 | 28 | 0 |
| 4. | Research topics in computer systems | | | | | | | Introduction to research | | | | | | | |
| | | 3 | D | 28 | 0 | 0 | 0 | 45 | | 3 | D | 28 | 0 | 0 | 0 |
| 5. | | | | | | | | | | | | | | | |
| 6. | | | | | | | | | | | | | | | |
| 7. | | | | | | | | | | | | | | | |
| 8. | | | | | | | | | | | | | | | |
| 9. | 9 optional disciplines must be chosen (see the attached document containing optional disciplines): - at least 3 Breadth Coverage (BC) disciplines; - at least 3 Advanced Electives (AE); - remaining disciplines from BC, AE or other Master's curricula | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| total / semestru | ore: | 196 | | VPI: | | 555 | | ore: | 196 | | VPI: | | 555 | | |
| | credite: | 30 | | evaluări: | | 3E, 1D | | credite: | 30 | | evaluări: | | | | |
| total / săptămână | ore: | 14 | | | | | | ore: | 14 | | | | | | |
| | din care: | | | 8 0 6 0 (c, s, l, p) | | | | din care: | | | 8 0 6 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=nr.ore curs/semestru

s=nr.ore seminar

l=nr.ore laborator

p=nr.ore proiect

CF=categorie formativa careia ii apartine disciplina

CF ∈ {DA, DCA, DS}

DA - disciplina de aprofundare

DCA - disciplina de cunoastere avansata

DS- disciplina de sinteza

VPI = volum de ore necesar pregatirii individuale pentru un semestru de 14 sapt. plus 4 sapt. de sesiune

Exemplu

| Tehnologii Internet | | | | | | | | | |
|---------------------|---|---|----|---|---|----|----|----|--|
| Cod | 8 | E | 28 | 0 | 0 | 28 | DS | 70 | |

(*) - discipline optionale activate in anul universitar 2014 / 2015

ELECTIVE DISCIPLINES

1st YEAR

| | | SEMESTER 1 | | | | | | | | SEMESTER 2 | | | | | | | |
|----|---|------------|---|----|---|----|---|-----|-----|--|---|----|---|----|---|-----|-----|
| 1. | Optional 9L1 - Testing of computer systems (BC)* | | | | | | | | | Optional 10L1 - Advanced embedded systems (BC)* | | | | | | | |
| | | 9 | E | 28 | 0 | 28 | 0 | DS | 170 | 9 | E | 28 | 0 | 28 | 0 | DS | 170 |
| 2. | Optional 9L1 - Image processing and recognition (BC)* | | | | | | | | | Optional 10L1 - Integrated information systems (BC)* | | | | | | | |
| | | 9 | E | 28 | 0 | 28 | 0 | DS | 170 | 9 | E | 28 | 0 | 28 | 0 | DS | 170 |
| 3. | Optional 9L1 - Smart sensors and sensor networks (BC)* | | | | | | | | | Optional 10L1 - Cellular data networks (BC)* | | | | | | | |
| | | 9 | E | 28 | 0 | 28 | 0 | DS | 170 | 9 | E | 28 | 0 | 28 | 0 | DS | 170 |
| 4. | Optional 9L1 - Data transmission, coding and compression (AE) | | | | | | | | | Optional 10L1 - Optic fiber transmissions (AE)* | | | | | | | |
| | | 9 | E | 28 | 0 | 28 | 0 | DCA | 170 | 9 | E | 28 | 0 | 28 | 0 | DCA | 170 |
| 5. | Optional 9L1 - Emerging systems (AE)* | | | | | | | | | Optional 10L1 - Automatic design and optimization of VLSI circuits (AE)* | | | | | | | |
| | | 9 | E | 28 | 0 | 28 | 0 | DCA | 170 | 9 | E | 28 | 0 | 28 | 0 | DCA | 170 |
| 6. | Optional 9L1 - High-end interface and equipments (AE)* | | | | | | | | | Optional 10L1 - Virtual measurement systems (AE) | | | | | | | |
| | | 9 | E | 28 | 0 | 28 | 0 | DCA | 170 | 9 | E | 28 | 0 | 28 | 0 | DCA | 170 |
| 7. | | | | | | | | | | | | | | | | | |
| 8. | | | | | | | | | | | | | | | | | |

CURRICULA

Academic year 2014 - 2015

2nd YEAR

| | | SEMESTER 3 | | | | | | | | SEMESTER 4 | | | | | | | |
|----------------------|--------------------------------------|------------|---|-----------|----|--------------|---|----------|----|---------------------------------------|----|--------------|--|---|-----|--|--|
| 1. | Optional 1 (choose from 9L1 or 11L1) | | | | | | | | | Research activity and internship | | | | | | | |
| | | 9 | E | 28 | 0 | 28 | 0 | 170 | 15 | | | | | | 133 | | |
| 2. | Optional 2 (choose from 9L1 or 11L1) | | | | | | | | | Master Thesis Development and Defense | | | | | | | |
| | | 9 | E | 28 | 0 | 28 | 0 | 170 | 15 | | | | | | 63 | | |
| 3. | Optional 3 (choose from 9L1 or 11L1) | | | | | | | | | | | | | | | | |
| | | 9 | E | 28 | 0 | 28 | 0 | 170 | | | | | | | | | |
| 4. | Directed thesis research | | | | | | | | | | | | | | | | |
| | | 3 | D | 0 | 28 | 0 | 0 | 45 | | | | | | | | | |
| 5. | | | | | | | | | | | | | | | | | |
| 6. | | | | | | | | | | | | | | | | | |
| 7. | | | | | | | | | | | | | | | | | |
| 8. | | | | | | | | | | | | | | | | | |
| 9. | | | | | | | | | | | | | | | | | |
| total / semestru | ore: | 196 | | VPI: | | 555 | | ore: | | 196 | | VPI: | | 0 | | | |
| | credite: | 30 | | evaluări: | | | | credite: | | 30 | | evaluări: | | | | | |
| total / săptămână | ore: | 14 | | din care: | | | | ore: | | 14 | | din care: | | | | | |
| | | 6 | 2 | 6 | 0 | (c, s, l, p) | | 0 | 0 | 0 | 14 | (c, s, l, p) | | | | | |

ELECTIVE DISCIPLINES

2nd YEAR

| | SEMESTER 3 | SEMESTER 4 |
|----|---|------------|
| 1. | Optional 11L1 - Advanced digital signal processing (BC)* 9 E 28 0 28 0 DS 170 | |
| 2. | Optional 11L1 - Robotic systems (BC) 9 E 28 0 28 0 DS 170 | |
| 3. | Optional 11L1 - Emergent and collective intelligence systems (AE)* 9 E 28 0 28 0 DCA 170 | |
| 4. | Optional 11L1 - Evolvable hardware (AE)* 9 E 28 0 28 0 DCA 170 | |
| 5. | Optional 11L1 - Advanced artificial intelligence (AE)* 9 E 28 0 28 0 DCA 170 | |
| 6. | | |
| 7. | | |
| 8. | | |

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

DECAN,
Prof.dr.ing. Horia CIOCÂRLIE