

**Compulsory courses 1st year (A)****Number of courses: 8 credits: 38**

| Abbreviation | Course name                             | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|-------------|-------------------|-----------------------|--------------|-------------------|
| KIT/NNADS    | Architecture and Techn. of Dat. Systems | Profilující | 5                 | 2+3+0                 | Zp,Zk        | 1 ZS              |
| KMF/NNAST    | Mathematical Statistics                 | Teoretický  | 6                 | 2+3+0                 | Zp,Zk        | 1 ZS              |
| KST/NNPSW    | Designing of Software Systems           | Profilující | 4                 | 2+3+0                 | Zp,Zk        | 1 ZS              |
| KST/NNPTP    | Advanced Programming Techniques         | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KMF/NNTEI    | Theoretical Informatics                 | Teoretický  | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KST/NAPIS    | Architecture and Design of Inf. Systems | Profilující | 4                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KST/NNDSA    | Data Structures and Algorithms          | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KST/NNPIA    | Programming of Internet Applications    |             | 4                 | 2+3+0                 | Zp,Zk        | 1 LS              |

Anglický jazyk je v souladu s akreditací předmětem povinným. Student splní během studia 1 předmět z bloku Anglický jazyk odborný.

**Elective courses 1st year - type A (B)****Volba min.: 2 př.**

| Abbreviation | Course name                              | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|-------------|-------------------|-----------------------|--------------|-------------------|
| KRP/NNUI1    | Introduction to Artific. Intelligence 1  | Profilující | 5                 | 2+3+0                 | Zp,Zk        | 1 ZS              |
| KST/NOBD     | Data Protection and Security             | Profilující | 5                 | 2+1+0                 | Zp,Zk        | 1 ZS              |
| KIT/NNBOD    | Security and Data Protection in Mob. ICT | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KRP/NNUI2    | Introduction to Artific. Intelligence 2  | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KST/NNPAR    | Parallel Programming                     | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |

Student splní v každém semestru min. 1 předmět z uvedené nabídky.

**Elective courses 1st year - type B (B)****Volba min.: 2 př.**

| Abbreviation | Course name                       | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|-----------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KIT/NBPS     | Network Security                  |         | 5                 | 1+3+0                 | Zp,Zk        | 1 ZS              |
| KIT/NS3DS    | Scripting in 3D Graphics Software |         | 5                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KIT/NNPI     | Business Informatics              |         | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KST/NNPG2    | Computer Graphics 2D              |         | 5                 | 2+3+0                 | Zp,Zk        | 1 LS              |

Student splní v každém semestru min. 1 předmět z uvedené nabídky.

**Optional courses 1st year (C)**

| Abbreviation | Course name                             | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|---------|-------------------|-----------------------|--------------|-------------------|
| FEI/NNAKO    | English Conversation                    |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KIT/BZPO     | Basics of Business                      |         | 3*                | 0+2+0                 | Zp           | ZS                |
| KIT/INMRF    | Marketing Management                    |         | 3                 | 1+1+0                 | Zp,Zk        | ZS                |
| KIT/NNEPD    | Electronic Document Preparation         |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KMF/IZMF     | Basics of Modern Physics                |         | 2                 | 2+0+0                 | Zp           | ZS                |
| KRP/ZNUI1    | Introduction to Artific. Intelligence 1 |         | 5*                | 2+3+0                 | Zp,Zk        | ZS                |
| USII/FGIS3   | Geographic Information Systems III      |         | 5                 | 2+2+0                 | Zp,Zk        | ZS                |
| FEI/INAK2    | English conversation for follow-ups     |         | 2                 | 0+2+0                 | Zp           | LS                |
| KIT/INBDS    | Wireless Network                        |         | 3                 | 1+2+0                 | Zp,Zk        | LS                |
| KIT/INPPD    | PR and Presentation Skills              |         | 3                 | 1+1+0                 | Zp,Zk        | LS                |
| KMF/IZMF2    | Basics of Modern Physics 2              |         | 2                 | 2+0+0                 | Zp           | LS                |
| KRP/IDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |
| KRP/ZDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |

Student si vybírá volitelné předměty k doplnění kreditového minima 60 kreditů za rok. Student má možnost si zapsat tělesnou výchovu

dle nabídky Katedry tělovýchovy a sportu.

### Compulsory courses 2nd year (A)

Number of courses: 8 credits: 50

| Abbreviation | Course name                       | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|-----------------------------------|-------------|-------------------|-----------------------|--------------|-------------------|
| KIT/NNOS1    | Operating Systems 1               | Profilující | 6                 | 2+3+0                 | Zp,Zk        | 2 ZS              |
| KMF/NNTEF    | Queueing Theory                   | Teoretický  | 6                 | 2+2+0                 | Zp,Zk        | 2 ZS              |
| KST/NNPDA    | Programming Database Applications |             | 4                 | 1+3+0                 | Zp,Zk        | 2 ZS              |
| KST/NNPRO    | Year's Project                    |             | 4                 | 0+3+0                 | Zp,Zk        | 2 ZS              |
| KIT/NNDSK    | Data Warehousing                  |             | 4                 | 1+2+0                 | Zp,Zk        | 2 LS              |
| KIT/NNOS2    | Operating Systems 2               | Profilující | 6                 | 2+3+0                 | Zp,Zk        | 2 LS              |
| KST/NNNDIP   | Diploma Thesis                    |             | 18                | 0+1+0                 | Zp           | 2 LS              |
| KST/NNDIS    | Diploma Seminar                   |             | 2                 | 0+0+2                 | Zp           | 2 LS              |

Anglický jazyk je v souladu s akreditací předmětem povinným. Student splní během studia 1 předmět z bloku Anglický jazyk odborný.

### Elective courses 2nd year - type A (B)

Volba min.: 1 př.

| Abbreviation | Course name                              | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|-------------|-------------------|-----------------------|--------------|-------------------|
| KST/NNBSW    | Software Safety and Reliability          | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 2 ZS              |
| KST/NNTMS    | Advanced Techniques of Model. and Simul. | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 2 ZS              |

Student splní v zimním semestru min. 1 předmět z uvedené nabídky.

### Elective courses 2nd year - type B (B)

Volba min.: 1 př.

| Abbreviation | Course name                           | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KST/NNPG3    | 3D Comp. Graphics and the Graphic API |         | 5                 | 2+2+0                 | Zp,Zk        | 2 ZS              |
| KST/NNTPS    | Modern Trends of Computer Networks    |         | 5                 | 1+3+0                 | Zp,Zk        | 2 ZS              |

Student splní v zimním semestru min. 1 předmět z uvedené nabídky.

### Optional courses 2nd year (C)

| Abbreviation | Course name                             | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|---------|-------------------|-----------------------|--------------|-------------------|
| FEI/NNAKO    | English Conversation                    |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KIT/BZPO     | Basics of Business                      |         | 3*                | 0+2+0                 | Zp           | ZS                |
| KIT/INMRF    | Marketing Management                    |         | 3                 | 1+1+0                 | Zp,Zk        | ZS                |
| KIT/INTWA    | Automated Web Application Testing       |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KIT/NNEPD    | Electronic Document Preparation         |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KRP/ZNU11    | Introduction to Artific. Intelligence 1 |         | 5*                | 2+3+0                 | Zp,Zk        | ZS                |
| KST/INPOD    | Post-relational database systems        |         | 4                 | 2+2+0                 | Zp           | ZS                |
| USII/FGIS3   | Geographic Information Systems III      |         | 5                 | 2+2+0                 | Zp,Zk        | ZS                |
| FEI/INAK2    | English conversation for follow-ups     |         | 2                 | 0+2+0                 | Zp           | LS                |
| KIT/INBDS    | Wireless Network                        |         | 3                 | 1+2+0                 | Zp,Zk        | LS                |
| KIT/INPPD    | PR and Presentation Skills              |         | 3                 | 1+1+0                 | Zp,Zk        | LS                |
| KRP/IDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |
| KRP/ZDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |

Student si vybírá volitelné předměty k doplnění kreditového minima 60 kreditů za rok. Student má možnost si zapsat tělesnou výchovu dle nabídky Katedry tělovýchovy a sportu.

### Předměty státní závěrečné zkoušky povinné (A)

Number of courses: 2 credits: 0

| Abbreviation | Course name                           | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KST/NDASY    | Database Systems                      |         | 0                 | 0+0+0                 | Szv          | LS                |
| KST/NNPRT    | Programming Techniques and Algorithms |         | 0                 | 0+0+0                 | Szv          | LS                |

Předmět Databázové systémy zahrnuje vybraná témata z předmětů: Architektura a techniky databázových systémů, Architektura a projektování informačních systémů, Projektování softwarových systémů. Předmět Programovací techniky a algoritmy zahrnuje vybraná

témata z předmětů: Datové struktury a algoritmy, Pokročilé techniky programování, Teoretická informatika.

### Předměty státní závěrečné zkoušky povinně volitelné (B)

Volba min.: 0 cr.

| Abbreviation | Course name                           | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KST/NBPSY    | Computer System Safety                |         | 0                 | 0+0+0                 | Szv          | LS                |
| KST/NNOSY    | Operating Systems                     |         | 0                 | 0+0+0                 | Szv          | LS                |
| KST/NUIMO    | Artificial Intelligence and Modelling |         | 0                 | 0+0+0                 | Szv          | LS                |

Student si vybere jeden z uvedených předmětů. Předmět Bezpečnost počítačových systémů zahrnuje vybraná témata z předmětů: Ochrana a bezpečnost dat, Bezpečnost a spolehlivost softwaru, Bezpečnost a ochrana dat v mobilních ICT. Předmět Operační systémy zahrnuje vybraná témata z předmětů: Operační systémy 1 a 2, Paralelní programování. Předmět Umělá inteligence a modelování zahrnuje vybraná témata z předmětů: Pokročilé techniky modelování a simulace a Základy umělé inteligence 1. a 2.

### Anglický jazyk odborný pro obory elektro a IT (B)

Volba min.: 1 př.

| Abbreviation | Course name                          | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/IPAIU     | English for IT - B1+                 |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIV     | English for Electro/IT Careers - B2  |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIW     | English for Electr.Engineering - B2+ |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIX     | English for Electro/IT Careers - C1  |         | 2                 | 0+2+0                 | Zk           |                   |

Student během navazujícího magisterského studia splní alespoň 1 předmět tohoto bloku.

### Anglický jazyk - volitelný (C)

| Abbreviation | Course name                          | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/IPAIV     | English for Electro/IT Careers - B2  |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIW     | English for Electr.Engineering - B2+ |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIX     | English for Electro/IT Careers - C1  |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUF     | English - B1+                        |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUT     | English - B1                         |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUX     | English - C1                         |         | 2                 | 0+2+0                 | Zk           |                   |

### Ruský jazyk - volitelný (C)

| Abbreviation | Course name   | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPRUA     | Russian - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPRUB     | Russian - A1+ |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPRUC     | Russian - A2  |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPRUD     | Russian - A2+ |         | 2                 | 0+2+0                 | Zk           |                   |

### Německý jazyk - volitelný (C)

| Abbreviation | Course name  | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPNUA     | German - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUB     | German - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUC     | German - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUD     | German - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUT     | German - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUU     | German - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |

### Francouzský jazyk - volitelný (C)

| Abbreviation | Course name  | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPFUP     | French - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUQ     | French - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUR     | French - A2  |         | 2*                | 0+2+0                 | Zk           |                   |

|          |              |    |       |    |
|----------|--------------|----|-------|----|
| JC/UPFUS | French - A2+ | 2* | 0+2+0 | Zk |
| JC/UPFUT | French - B1  | 2* | 0+2+0 | Zk |
| JC/UPFUU | French - B1+ | 2  | 0+2+0 | Zk |

### Španělský jazyk - volitelný (C)

| Abbreviation | Course name   | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPSUP     | Spanish - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUQ     | Spanish - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUR     | Spanish - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUS     | Spanish - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUT     | Spanish - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUU     | Spanish - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |

### P.E. Optional - WS (C)

| Abbreviation | Course name                      | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KTS/AER1     | Aerobic 1                        |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/ATP1     | Athletics ZS                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BAD1     | Badminton 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BAS1     | Basketball 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BCH1     | Beach Volleyball 1               |         | 1                 | 0+10+0                | Zp           | ZS                |
| KTS/FLO1     | Floorball 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/FOT1     | Football 1                       |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/HOK1     | Ice hockey 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/INC1     | Indoorcycling 1                  |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/KCV1     | Conditional training 1           |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/LEZ1     | Climbing 1                       |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/PLA1     | Swimming 1                       |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/POS1     | Strengthening 1                  |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/PWJ1     | Poweryoga 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SEB1     | Self defence and combat sports 1 |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SPV1     | Sports for all 1                 |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SQU1     | Squash 1                         |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/STOL1    | Table tennis ZS                  |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/TEN1     | Tennis 1                         |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/VES1     | Rowing 1                         |         | 1                 | 0+12+0                | Zp           | ZS                |
| KTS/VOL1     | Volleyball 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/ZZS1     | Healthy lifestyle ZS             |         | 1                 | 0+2+0                 | Zp           | ZS                |

Student si volí pouze jeden předmět z nabídky.

### P.E. Optional - SS (C)

| Abbreviation | Course name            | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KTS/AER2     | Aerobic 2              |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/ATP2     | Athletics LS           |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BAD2     | Badminton 2            |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BAS2     | Basketball 2           |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BCH2     | Beach Volleyball 2     |         | 1                 | 0+10+0                | Zp           | LS                |
| KTS/FLO2     | Floorball 2            |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/FOT2     | Football 2             |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/HOK2     | Ice hockey 2           |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/INC2     | Indoorcycling 2        |         | 1                 | 0+1+0                 | Zp           | LS                |
| KTS/KCV2     | Conditional training 2 |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/LEZ2     | Climbing 2             |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/PLA2     | Swimming 2             |         | 1                 | 0+1+0                 | Zp           | LS                |
| KTS/POS2     | Strengthening 2        |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/PWJ2     | Poweryoga 2            |         | 1                 | 0+2+0                 | Zp           | LS                |

|           |                                  |   |        |    |    |
|-----------|----------------------------------|---|--------|----|----|
| KTS/SEB2  | Self defence and combat sports 2 | 1 | 0+2+0  | Zp | LS |
| KTS/SPV2  | Sports for all 2                 | 1 | 0+2+0  | Zp | LS |
| KTS/SQU2  | Squash 2                         | 1 | 0+1+0  | Zp | LS |
| KTS/STOL2 | Table tennis LS                  | 1 | 0+2+0  | Zp | LS |
| KTS/TEN2  | Tennis 2                         | 1 | 0+2+0  | Zp | LS |
| KTS/VES2  | Rowing 2                         | 1 | 0+12+0 | Zp | LS |
| KTS/VOL2  | Volleyball 2                     | 1 | 0+2+0  | Zp | LS |
| KTS/ZZS2  | Healthy lifestyle LS             | 1 | 0+2+0  | Zp | LS |

Student si volí pouze jeden předmět z nabídky.

### Compulsory courses 1st year (A)

Number of courses: **8** credits: **38**

| Abbreviation | Course name                             | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|-------------|-------------------|-----------------------|--------------|-------------------|
| KIT/NNADS    | Architecture and Techn. of Dat. Systems | Profilující | 5                 | 2+3+0                 | Zp,Zk        | 1 ZS              |
| KMF/NNAST    | Mathematical Statistics                 | Teoretický  | 6                 | 2+3+0                 | Zp,Zk        | 1 ZS              |
| KST/NNPSW    | Designing of Software Systems           | Profilující | 4                 | 2+3+0                 | Zp,Zk        | 1 ZS              |
| KST/NNPTP    | Advanced Programming Techniques         | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KMF/NNTEI    | Theoretical Informatics                 | Teoretický  | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KST/NAPIS    | Architecture and Design of Inf. Systems | Profilující | 4                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KST/NNDSA    | Data Structures and Algorithms          | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KST/NNPIA    | Programming of Internet Applications    |             | 4                 | 2+3+0                 | Zp,Zk        | 1 LS              |

Anglický jazyk je v souladu s akreditací předmětem povinným. Student splní během studia 1 předmět z bloku Anglický jazyk odborný.

### Elective courses 1st year - type A (B)

Volba min.: **2 př.**

| Abbreviation | Course name                              | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|-------------|-------------------|-----------------------|--------------|-------------------|
| KRP/NNUI1    | Introduction to Artific. Intelligence 1  | Profilující | 5                 | 2+3+0                 | Zp,Zk        | 1 ZS              |
| KST/NOBD     | Data Protection and Security             | Profilující | 5                 | 2+1+0                 | Zp,Zk        | 1 ZS              |
| KIT/NNBOD    | Security and Data Protection in Mob. ICT | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KRP/NNUI2    | Introduction to Artific. Intelligence 2  | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KST/NNPAR    | Parallel Programming                     | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |

Student splní v každém semestru min. 1 předmět z uvedené nabídky.

### Elective courses 1st year - type B (B)

Volba min.: **2 př.**

| Abbreviation | Course name                       | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|-----------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KIT/NBPS     | Network Security                  |         | 5                 | 1+3+0                 | Zp,Zk        | 1 ZS              |
| KIT/NS3DS    | Scripting in 3D Graphics Software |         | 5                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KIT/NNPI     | Business Informatics              |         | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KST/NNPG2    | Computer Graphics 2D              |         | 5                 | 2+3+0                 | Zp,Zk        | 1 LS              |

Student splní v každém semestru min. 1 předmět z uvedené nabídky.

### Optional courses 1st year (C)

| Abbreviation | Course name                             | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|---------|-------------------|-----------------------|--------------|-------------------|
| FEI/NNAKO    | English Conversation                    |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KIT/BZPO     | Basics of Business                      |         | 3*                | 0+2+0                 | Zp           | ZS                |
| KIT/INMRF    | Marketing Management                    |         | 3                 | 1+1+0                 | Zp,Zk        | ZS                |
| KIT/NNEPD    | Electronic Document Preparation         |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KMF/IZMF     | Basics of Modern Physics                |         | 2                 | 2+0+0                 | Zp           | ZS                |
| KRP/ZNUI1    | Introduction to Artific. Intelligence 1 |         | 5*                | 2+3+0                 | Zp,Zk        | ZS                |
| USII/FGIS3   | Geographic Information Systems III      |         | 5                 | 2+2+0                 | Zp,Zk        | ZS                |
| FEI/INAK2    | English conversation for follow-ups     |         | 2                 | 0+2+0                 | Zp           | LS                |
| KIT/INBDS    | Wireless Network                        |         | 3                 | 1+2+0                 | Zp,Zk        | LS                |
| KIT/INPPD    | PR and Presentation Skills              |         | 3                 | 1+1+0                 | Zp,Zk        | LS                |
| KMF/IZMF2    | Basics of Modern Physics 2              |         | 2                 | 2+0+0                 | Zp           | LS                |
| KRP/IDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |
| KRP/ZDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |

Student si vybírá volitelné předměty k doplnění kreditového minima 60 kreditů za rok. Student má možnost si zapsat tělesnou výchovu dle nabídky Katedry tělovýchovy a sportu.

**Compulsory courses 2nd year (A)****Number of courses: 8 credits: 50**

| Abbreviation | Course name                       | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|-----------------------------------|-------------|-------------------|-----------------------|--------------|-------------------|
| KIT/NNOS1    | Operating Systems 1               | Profilující | 6                 | 2+3+0                 | Zp,Zk        | 2 ZS              |
| KMF/NNTEF    | Queueing Theory                   | Teoretický  | 6                 | 2+2+0                 | Zp,Zk        | 2 ZS              |
| KST/NNPDA    | Programming Database Applications |             | 4                 | 1+3+0                 | Zp,Zk        | 2 ZS              |
| KST/NNPRO    | Year's Project                    |             | 4                 | 0+3+0                 | Zp,Zk        | 2 ZS              |
| KIT/NNDSK    | Data Warehousing                  |             | 4                 | 1+2+0                 | Zp,Zk        | 2 LS              |
| KIT/NNOS2    | Operating Systems 2               | Profilující | 6                 | 2+3+0                 | Zp,Zk        | 2 LS              |
| KST/NNNDIP   | Diploma Thesis                    |             | 18                | 0+1+0                 | Zp           | 2 LS              |
| KST/NNDIS    | Diploma Seminar                   |             | 2                 | 0+0+2                 | Zp           | 2 LS              |

Anglický jazyk je v souladu s akreditací předmětem povinným. Student splní během studia 1 předmět z bloku Anglický jazyk odborný.

**Elective courses 2nd year - type A (B)****Volba min.: 1 př.**

| Abbreviation | Course name                              | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|-------------|-------------------|-----------------------|--------------|-------------------|
| KST/NNBSW    | Software Safety and Reliability          | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 2 ZS              |
| KST/NNNTMS   | Advanced Techniques of Model. and Simul. | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 2 ZS              |

Student splní v zimním semestru min. 1 předmět z uvedené nabídky.

**Elective courses 2nd year - type B (B)****Volba min.: 1 př.**

| Abbreviation | Course name                           | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KST/NNPG3    | 3D Comp. Graphics and the Graphic API |         | 5                 | 2+2+0                 | Zp,Zk        | 2 ZS              |
| KST/NNTPS    | Modern Trends of Computer Networks    |         | 5                 | 1+3+0                 | Zp,Zk        | 2 ZS              |

Student splní v zimním semestru min. 1 předmět z uvedené nabídky.

**Optional courses 2nd year (C)**

| Abbreviation | Course name                             | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|---------|-------------------|-----------------------|--------------|-------------------|
| FEI/NNAKO    | English Conversation                    |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KIT/BZPO     | Basics of Business                      |         | 3*                | 0+2+0                 | Zp           | ZS                |
| KIT/INMRF    | Marketing Management                    |         | 3                 | 1+1+0                 | Zp,Zk        | ZS                |
| KIT/INTWA    | Automated Web Application Testing       |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KIT/NNEPD    | Electronic Document Preparation         |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KRP/ZNU11    | Introduction to Artific. Intelligence 1 |         | 5*                | 2+3+0                 | Zp,Zk        | ZS                |
| KST/INPOD    | Post-relational database systems        |         | 4                 | 2+2+0                 | Zp           | ZS                |
| USII/FGIS3   | Geographic Information Systems III      |         | 5                 | 2+2+0                 | Zp,Zk        | ZS                |
| FEI/INAK2    | English conversation for follow-ups     |         | 2                 | 0+2+0                 | Zp           | LS                |
| KIT/INBDS    | Wireless Network                        |         | 3                 | 1+2+0                 | Zp,Zk        | LS                |
| KIT/INPPD    | PR and Presentation Skills              |         | 3                 | 1+1+0                 | Zp,Zk        | LS                |
| KRP/IDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |
| KRP/ZDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |

Student si vybírá volitelné předměty k doplnění kreditového minima 60 kreditů za rok. Student má možnost si zapsat tělesnou výchovu dle nabídky Katedry tělovýchovy a sportu.

**Předměty státní závěrečné zkoušky povinné (A)****Number of courses: 2 credits: 0**

| Abbreviation | Course name                           | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KST/NDASY    | Database Systems                      |         | 0                 | 0+0+0                 | Szv          | LS                |
| KST/NNPRT    | Programming Techniques and Algorithms |         | 0                 | 0+0+0                 | Szv          | LS                |

Předmět Databázové systémy zahrnuje vybraná témata z předmětů: Architektura a techniky databázových systémů, Architektura a projektování informačních systémů, Projektování softwarových systémů. Předmět Programovací techniky a algoritmy zahrnuje vybraná témata z předmětů: Datové struktury a algoritmy, Pokročilé techniky programování, Teoretická informatika.

**Předměty státní závěrečné zkoušky povinně volitelné (B)****Volba min.: 0 cr.**

| Abbreviation | Course name                           | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KST/NBPSY    | Computer System Safety                |         | 0                 | 0+0+0                 | Szv          | LS                |
| KST/NNOSY    | Operating Systems                     |         | 0                 | 0+0+0                 | Szv          | LS                |
| KST/NUIMO    | Artificial Intelligence and Modelling |         | 0                 | 0+0+0                 | Szv          | LS                |

Student si vybere jeden z uvedených předmětů. Předmět Bezpečnost počítačových systémů zahrnuje vybraná témata z předmětů: Ochrana a bezpečnost dat, Bezpečnost a spolehlivost softwaru, Bezpečnost a ochrana dat v mobilních ICT. Předmět Operační systémy zahrnuje vybraná témata z předmětů: Operační systémy 1 a 2, Paralelní programování. Předmět Umělá inteligence a modelování zahrnuje vybraná témata z předmětů: Pokročilé techniky modelování a simulace a Základy umělé inteligence 1. a 2.

**Anglický jazyk odborný pro obory elektro a IT (B)****Volba min.: 1 př.**

| Abbreviation | Course name                          | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/IPAIU     | English for IT - B1+                 |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIV     | English for Electro/IT Careers - B2  |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIW     | English for Electr.Engineering - B2+ |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIX     | English for Electro/IT Careers - C1  |         | 2                 | 0+2+0                 | Zk           |                   |

Student během navazujícího magisterského studia splní alespoň 1 předmět tohoto bloku.

**Anglický jazyk - volitelný (C)**

| Abbreviation | Course name                          | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/IPAIV     | English for Electro/IT Careers - B2  |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIW     | English for Electr.Engineering - B2+ |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIX     | English for Electro/IT Careers - C1  |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUF     | English - B1+                        |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUT     | English - B1                         |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUX     | English - C1                         |         | 2                 | 0+2+0                 | Zk           |                   |

**Ruský jazyk - volitelný (C)**

| Abbreviation | Course name   | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPRUA     | Russian - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPRUB     | Russian - A1+ |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPRUC     | Russian - A2  |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPRUD     | Russian - A2+ |         | 2                 | 0+2+0                 | Zk           |                   |

**Německý jazyk - volitelný (C)**

| Abbreviation | Course name  | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPNUA     | German - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUB     | German - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUC     | German - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUD     | German - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUT     | German - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUU     | German - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |

**Francouzský jazyk - volitelný (C)**

| Abbreviation | Course name  | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPFUP     | French - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUQ     | French - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUR     | French - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUS     | French - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUT     | French - B1  |         | 2*                | 0+2+0                 | Zk           |                   |



JC/UPFUU French - B1+ 2 0+2+0 Zk

### Španělský jazyk - volitelný (C)

| Abbreviation | Course name   | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPSUP     | Spanish - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUQ     | Spanish - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUR     | Spanish - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUS     | Spanish - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUT     | Spanish - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUU     | Spanish - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |

### P.E. Optional - WS (C)

| Abbreviation | Course name                      | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KTS/AER1     | Aerobic 1                        |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/ATP1     | Athletics ZS                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BAD1     | Badminton 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BAS1     | Basketball 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BCH1     | Beach Volleyball 1               |         | 1                 | 0+10+0                | Zp           | ZS                |
| KTS/FLO1     | Floorball 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/FOT1     | Football 1                       |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/HOK1     | Ice hockey 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/INC1     | Indoorcycling 1                  |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/KCV1     | Conditional training 1           |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/LEZ1     | Climbing 1                       |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/PLA1     | Swimming 1                       |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/POS1     | Strengthening 1                  |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/PWJ1     | Poweryoga 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SEB1     | Self defence and combat sports 1 |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SPV1     | Sports for all 1                 |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SQU1     | Squash 1                         |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/STOL1    | Table tennis ZS                  |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/TEN1     | Tennis 1                         |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/VES1     | Rowing 1                         |         | 1                 | 0+12+0                | Zp           | ZS                |
| KTS/VOL1     | Volleyball 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/ZZS1     | Healthy lifestyle ZS             |         | 1                 | 0+2+0                 | Zp           | ZS                |

Student si volí pouze jeden předmět z nabídky.

### P.E. Optional - SS (C)

| Abbreviation | Course name                      | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KTS/AER2     | Aerobic 2                        |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/ATP2     | Athletics LS                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BAD2     | Badminton 2                      |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BAS2     | Basketball 2                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BCH2     | Beach Volleyball 2               |         | 1                 | 0+10+0                | Zp           | LS                |
| KTS/FLO2     | Floorball 2                      |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/FOT2     | Football 2                       |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/HOK2     | Ice hockey 2                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/INC2     | Indoorcycling 2                  |         | 1                 | 0+1+0                 | Zp           | LS                |
| KTS/KCV2     | Conditional training 2           |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/LEZ2     | Climbing 2                       |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/PLA2     | Swimming 2                       |         | 1                 | 0+1+0                 | Zp           | LS                |
| KTS/POS2     | Strengthening 2                  |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/PWJ2     | Poweryoga 2                      |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/SEB2     | Self defence and combat sports 2 |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/SPV2     | Sports for all 2                 |         | 1                 | 0+2+0                 | Zp           | LS                |

|           |                      |   |        |    |    |
|-----------|----------------------|---|--------|----|----|
| KTS/SQU2  | Squash 2             | 1 | 0+1+0  | Zp | LS |
| KTS/STOL2 | Table tennis LS      | 1 | 0+2+0  | Zp | LS |
| KTS/TEN2  | Tennis 2             | 1 | 0+2+0  | Zp | LS |
| KTS/VES2  | Rowing 2             | 1 | 0+12+0 | Zp | LS |
| KTS/VOL2  | Volleyball 2         | 1 | 0+2+0  | Zp | LS |
| KTS/ZZS2  | Healthy lifestyle LS | 1 | 0+2+0  | Zp | LS |

Student si volí pouze jeden předmět z nabídky.

### Compulsory courses 1st year (A)

Number of courses: **8** credits: **38**

| Abbreviation | Course name                             | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|-------------|-------------------|-----------------------|--------------|-------------------|
| KIT/NNADS    | Architecture and Techn. of Dat. Systems | Profilující | 5                 | 2+3+0                 | Zp,Zk        | 1 ZS              |
| KMF/NNAST    | Mathematical Statistics                 | Teoretický  | 6                 | 2+3+0                 | Zp,Zk        | 1 ZS              |
| KST/NNPSW    | Designing of Software Systems           | Profilující | 4                 | 2+3+0                 | Zp,Zk        | 1 ZS              |
| KST/NNPTP    | Advanced Programming Techniques         | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KMF/NNTEI    | Theoretical Informatics                 | Teoretický  | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KST/NAPIS    | Architecture and Design of Inf. Systems | Profilující | 4                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KST/NNDSA    | Data Structures and Algorithms          | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KST/NNPIA    | Programming of Internet Applications    |             | 4                 | 2+3+0                 | Zp,Zk        | 1 LS              |

Anglický jazyk je v souladu s akreditací předmětem povinným. Student splní během studia 1 předmět z bloku Anglický jazyk odborný.

### Elective courses 1st year - type A (B)

Volba min.: **2 př.**

| Abbreviation | Course name                              | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|-------------|-------------------|-----------------------|--------------|-------------------|
| KRP/NNUI1    | Introduction to Artific. Intelligence 1  | Profilující | 5                 | 2+3+0                 | Zp,Zk        | 1 ZS              |
| KST/NOBD     | Data Protection and Security             | Profilující | 5                 | 2+1+0                 | Zp,Zk        | 1 ZS              |
| KIT/NNBOD    | Security and Data Protection in Mob. ICT | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KRP/NNUI2    | Introduction to Artific. Intelligence 2  | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KST/NNPAR    | Parallel Programming                     | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |

Student splní v každém semestru min. 1 předmět z uvedené nabídky.

### Elective courses 1st year - type B (B)

Volba min.: **2 př.**

| Abbreviation | Course name                       | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|-----------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KIT/NBPS     | Network Security                  |         | 5                 | 1+3+0                 | Zp,Zk        | 1 ZS              |
| KIT/NS3DS    | Scripting in 3D Graphics Software |         | 5                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KIT/NNPI     | Business Informatics              |         | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KST/NNPG2    | Computer Graphics 2D              |         | 5                 | 2+3+0                 | Zp,Zk        | 1 LS              |

Student splní v každém semestru min. 1 předmět z uvedené nabídky.

### Optional courses 1st year (C)

| Abbreviation | Course name                             | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|---------|-------------------|-----------------------|--------------|-------------------|
| FEI/NNAKO    | English Conversation                    |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KIT/BZPO     | Basics of Business                      |         | 3*                | 0+2+0                 | Zp           | ZS                |
| KIT/INMRF    | Marketing Management                    |         | 3                 | 1+1+0                 | Zp,Zk        | ZS                |
| KIT/NNEPD    | Electronic Document Preparation         |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KMF/IZMF     | Basics of Modern Physics                |         | 2                 | 2+0+0                 | Zp           | ZS                |
| KRP/ZNUI1    | Introduction to Artific. Intelligence 1 |         | 5*                | 2+3+0                 | Zp,Zk        | ZS                |
| USII/FGIS3   | Geographic Information Systems III      |         | 5                 | 2+2+0                 | Zp,Zk        | ZS                |
| FEI/INAK2    | English conversation for follow-ups     |         | 2                 | 0+2+0                 | Zp           | LS                |
| KIT/INBDS    | Wireless Network                        |         | 3                 | 1+2+0                 | Zp,Zk        | LS                |
| KIT/INPPD    | PR and Presentation Skills              |         | 3                 | 1+1+0                 | Zp,Zk        | LS                |
| KMF/IZMF2    | Basics of Modern Physics 2              |         | 2                 | 2+0+0                 | Zp           | LS                |
| KRP/IDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |
| KRP/ZDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |

Student si vybírá volitelné předměty k doplnění kreditového minima 60 kreditů za rok. Student má možnost si zapsat tělesnou výchovu dle nabídky Katedry tělovýchovy a sportu.

**Compulsory courses 2nd year (A)****Number of courses: 8 credits: 50**

| Abbreviation | Course name                       | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|-----------------------------------|-------------|-------------------|-----------------------|--------------|-------------------|
| KIT/NNOS1    | Operating Systems 1               | Profilující | 6                 | 2+3+0                 | Zp,Zk        | 2 ZS              |
| KMF/NNTEF    | Queueing Theory                   | Teoretický  | 6                 | 2+2+0                 | Zp,Zk        | 2 ZS              |
| KST/NNPDA    | Programming Database Applications |             | 4                 | 1+3+0                 | Zp,Zk        | 2 ZS              |
| KST/NNPRO    | Year's Project                    |             | 4                 | 0+3+0                 | Zp,Zk        | 2 ZS              |
| KIT/NNDSK    | Data Warehousing                  |             | 4                 | 1+2+0                 | Zp,Zk        | 2 LS              |
| KIT/NNOS2    | Operating Systems 2               | Profilující | 6                 | 2+3+0                 | Zp,Zk        | 2 LS              |
| KST/NNNDIP   | Diploma Thesis                    |             | 18                | 0+1+0                 | Zp           | 2 LS              |
| KST/NNDIS    | Diploma Seminar                   |             | 2                 | 0+0+2                 | Zp           | 2 LS              |

Anglický jazyk je v souladu s akreditací předmětem povinným. Student splní během studia 1 předmět z bloku Anglický jazyk odborný.

**Elective courses 2nd year - type A (B)****Volba min.: 1 př.**

| Abbreviation | Course name                              | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|-------------|-------------------|-----------------------|--------------|-------------------|
| KST/NNBSW    | Software Safety and Reliability          | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 2 ZS              |
| KST/NNNTMS   | Advanced Techniques of Model. and Simul. | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 2 ZS              |

Student splní v zimním semestru min. 1 předmět z uvedené nabídky.

**Elective courses 2nd year - type B (B)****Volba min.: 1 př.**

| Abbreviation | Course name                           | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KST/NNPG3    | 3D Comp. Graphics and the Graphic API |         | 5                 | 2+2+0                 | Zp,Zk        | 2 ZS              |
| KST/NNTPS    | Modern Trends of Computer Networks    |         | 5                 | 1+3+0                 | Zp,Zk        | 2 ZS              |

Student splní v zimním semestru min. 1 předmět z uvedené nabídky.

**Optional courses 2nd year (C)**

| Abbreviation | Course name                             | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|---------|-------------------|-----------------------|--------------|-------------------|
| FEI/NNAKO    | English Conversation                    |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KIT/BZPO     | Basics of Business                      |         | 3*                | 0+2+0                 | Zp           | ZS                |
| KIT/INMRF    | Marketing Management                    |         | 3                 | 1+1+0                 | Zp,Zk        | ZS                |
| KIT/INTWA    | Automated Web Application Testing       |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KIT/NNEPD    | Electronic Document Preparation         |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KRP/ZNU11    | Introduction to Artific. Intelligence 1 |         | 5*                | 2+3+0                 | Zp,Zk        | ZS                |
| KST/INPOD    | Post-relational database systems        |         | 4                 | 2+2+0                 | Zp           | ZS                |
| USII/FGIS3   | Geographic Information Systems III      |         | 5                 | 2+2+0                 | Zp,Zk        | ZS                |
| FEI/INAK2    | English conversation for follow-ups     |         | 2                 | 0+2+0                 | Zp           | LS                |
| KIT/INBDS    | Wireless Network                        |         | 3                 | 1+2+0                 | Zp,Zk        | LS                |
| KIT/INPPD    | PR and Presentation Skills              |         | 3                 | 1+1+0                 | Zp,Zk        | LS                |
| KRP/IDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |
| KRP/ZDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |

Student si vybírá volitelné předměty k doplnění kreditového minima 60 kreditů za rok. Student má možnost si zapsat tělesnou výchovu dle nabídky Katedry tělovýchovy a sportu.

**Předměty státní závěrečné zkoušky povinné (A)****Number of courses: 2 credits: 0**

| Abbreviation | Course name                           | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KST/NDASY    | Database Systems                      |         | 0                 | 0+0+0                 | Szv          | LS                |
| KST/NNPRT    | Programming Techniques and Algorithms |         | 0                 | 0+0+0                 | Szv          | LS                |

Předmět Databázové systémy zahrnuje vybraná témata z předmětů: Architektura a techniky databázových systémů, Architektura a projektování informačních systémů, Projektování softwarových systémů. Předmět Programovací techniky a algoritmy zahrnuje vybraná témata z předmětů: Datové struktury a algoritmy, Pokročilé techniky programování, Teoretická informatika.

**Předměty státní závěrečné zkoušky povinně volitelné (B)****Volba min.: 0 cr.**

| Abbreviation | Course name                           | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KST/NBPSY    | Computer System Safety                |         | 0                 | 0+0+0                 | Szv          | LS                |
| KST/NNOSY    | Operating Systems                     |         | 0                 | 0+0+0                 | Szv          | LS                |
| KST/NUIMO    | Artificial Intelligence and Modelling |         | 0                 | 0+0+0                 | Szv          | LS                |

Student si vybere jeden z uvedených předmětů. Předmět Bezpečnost počítačových systémů zahrnuje vybraná témata z předmětů: Ochrana a bezpečnost dat, Bezpečnost a spolehlivost softwaru, Bezpečnost a ochrana dat v mobilních ICT. Předmět Operační systémy zahrnuje vybraná témata z předmětů: Operační systémy 1 a 2, Paralelní programování. Předmět Umělá inteligence a modelování zahrnuje vybraná témata z předmětů: Pokročilé techniky modelování a simulace a Základy umělé inteligence 1. a 2.

**Anglický jazyk odborný pro obory elektro a IT (B)****Volba min.: 1 př.**

| Abbreviation | Course name                          | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/IPAIU     | English for IT - B1+                 |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIV     | English for Electro/IT Careers - B2  |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIW     | English for Electr.Engineering - B2+ |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIX     | English for Electro/IT Careers - C1  |         | 2                 | 0+2+0                 | Zk           |                   |

Student během navazujícího magisterského studia splní alespoň 1 předmět tohoto bloku.

**Anglický jazyk - volitelný (C)**

| Abbreviation | Course name                          | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/IPAIV     | English for Electro/IT Careers - B2  |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIW     | English for Electr.Engineering - B2+ |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIX     | English for Electro/IT Careers - C1  |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUF     | English - B1+                        |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUT     | English - B1                         |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUX     | English - C1                         |         | 2                 | 0+2+0                 | Zk           |                   |

**Ruský jazyk - volitelný (C)**

| Abbreviation | Course name   | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPRUA     | Russian - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPRUB     | Russian - A1+ |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPRUC     | Russian - A2  |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPRUD     | Russian - A2+ |         | 2                 | 0+2+0                 | Zk           |                   |

**Německý jazyk - volitelný (C)**

| Abbreviation | Course name  | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPNUA     | German - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUB     | German - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUC     | German - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUD     | German - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUT     | German - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUU     | German - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |

**Francouzský jazyk - volitelný (C)**

| Abbreviation | Course name  | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPFUP     | French - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUQ     | French - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUR     | French - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUS     | French - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUT     | French - B1  |         | 2*                | 0+2+0                 | Zk           |                   |

JC/UPFUU French - B1+ 2 0+2+0 Zk

### Španělský jazyk - volitelný (C)

| Abbreviation | Course name   | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPSUP     | Spanish - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUQ     | Spanish - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUR     | Spanish - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUS     | Spanish - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUT     | Spanish - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUU     | Spanish - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |

### P.E. Optional - WS (C)

| Abbreviation | Course name                      | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KTS/AER1     | Aerobic 1                        |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/ATP1     | Athletics ZS                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BAD1     | Badminton 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BAS1     | Basketball 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BCH1     | Beach Volleyball 1               |         | 1                 | 0+10+0                | Zp           | ZS                |
| KTS/FLO1     | Floorball 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/FOT1     | Football 1                       |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/HOK1     | Ice hockey 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/INC1     | Indoorcycling 1                  |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/KCV1     | Conditional training 1           |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/LEZ1     | Climbing 1                       |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/PLA1     | Swimming 1                       |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/POS1     | Strengthening 1                  |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/PWJ1     | Poweryoga 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SEB1     | Self defence and combat sports 1 |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SPV1     | Sports for all 1                 |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SQU1     | Squash 1                         |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/STOL1    | Table tennis ZS                  |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/TEN1     | Tennis 1                         |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/VES1     | Rowing 1                         |         | 1                 | 0+12+0                | Zp           | ZS                |
| KTS/VOL1     | Volleyball 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/ZZS1     | Healthy lifestyle ZS             |         | 1                 | 0+2+0                 | Zp           | ZS                |

Student si volí pouze jeden předmět z nabídky.

### P.E. Optional - SS (C)

| Abbreviation | Course name                      | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KTS/AER2     | Aerobic 2                        |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/ATP2     | Athletics LS                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BAD2     | Badminton 2                      |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BAS2     | Basketball 2                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BCH2     | Beach Volleyball 2               |         | 1                 | 0+10+0                | Zp           | LS                |
| KTS/FLO2     | Floorball 2                      |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/FOT2     | Football 2                       |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/HOK2     | Ice hockey 2                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/INC2     | Indoorcycling 2                  |         | 1                 | 0+1+0                 | Zp           | LS                |
| KTS/KCV2     | Conditional training 2           |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/LEZ2     | Climbing 2                       |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/PLA2     | Swimming 2                       |         | 1                 | 0+1+0                 | Zp           | LS                |
| KTS/POS2     | Strengthening 2                  |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/PWJ2     | Poweryoga 2                      |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/SEB2     | Self defence and combat sports 2 |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/SPV2     | Sports for all 2                 |         | 1                 | 0+2+0                 | Zp           | LS                |

|           |                      |   |        |    |    |
|-----------|----------------------|---|--------|----|----|
| KTS/SQU2  | Squash 2             | 1 | 0+1+0  | Zp | LS |
| KTS/STOL2 | Table tennis LS      | 1 | 0+2+0  | Zp | LS |
| KTS/TEN2  | Tennis 2             | 1 | 0+2+0  | Zp | LS |
| KTS/VES2  | Rowing 2             | 1 | 0+12+0 | Zp | LS |
| KTS/VOL2  | Volleyball 2         | 1 | 0+2+0  | Zp | LS |
| KTS/ZZS2  | Healthy lifestyle LS | 1 | 0+2+0  | Zp | LS |

Student si volí pouze jeden předmět z nabídky.

**Povinné 1. ročník (A)****Number of courses: 10 credits: 48**

| Abbreviation | Course name                       | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|-----------------------------------|-------------|-------------------|-----------------------|--------------|-------------------|
| KE/RANSY     | Antena Design                     | Teoretický  | 5                 | 0+0+24                | Zp,Zk        | 1 ZS              |
| KE/RNRKE     | Radio-Communication Systems       | Profilující | 5                 | 0+0+24                | Zp,Zk        | 1 ZS              |
| KE/RNSSE     | Signals and Systems               | Teoretický  | 5                 | 0+0+24                | Zp,Zk        | 1 ZS              |
| KE/RPEO      | Advanced Electronic Circuits      | Profilující | 4                 | 0+0+24                | Zp,Zk        | 1 ZS              |
| KMF/RNASI    | Statistical Signal Processing     |             | 5                 | 0+0+24                | Zp,Zk        | 1 ZS              |
| JC/IKAKV     | ESP Comm. and Radar Technology B2 |             | 2                 | 0+2+0                 | Zp           | 1 LS              |
| KE/RDKTE     | Digital Communication             | Profilující | 6                 | 0+0+24                | Zp,Zk        | 1 LS              |
| KE/RNUPE     | Positioning Systems               | Profilující | 5                 | 0+0+24                | Zp,Zk        | 1 LS              |
| KE/RNZSE     | Digital Signal Processing         | Teoretický  | 6                 | 0+0+24                | Zp,Zk        | 1 LS              |
| KRP/RNZMS    | Multimedia Signal Processing      | Profilující | 5                 | 0+0+24                | Zp,Zk        | 1 LS              |

**Povinně volitelné 1. ročník - typ B (B)****Volba min.: 2 př.**

| Abbreviation | Course name                             | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|---------|-------------------|-----------------------|--------------|-------------------|
| KE/RMIPR     | Microprocessors                         |         | 4                 | 0+0+20                | Zp,Zk        | 1 ZS              |
| KE/RNASE     | Acoustic Signal Processing              |         | 4                 | 0+0+24                | Zp,Zk        | 1 ZS              |
| KRP/RNUI1    | Introduction to Artific. Intelligence 1 |         | 5                 | 0+0+20                | Zp,Zk        | 1 ZS              |
| KE/RNLOE     | Programmable Logic Circuits             |         | 4                 | 0+0+20                | Zp,Zk        | 1 LS              |
| KE/RNZOE     | Image Processing                        |         | 4                 | 0+0+20                | Zp,Zk        | 1 LS              |
| KRP/RNUI2    | Introduction to Artific. Intelligence 2 |         | 5                 | 0+0+20                | Zp,Zk        | 1 LS              |

Student splní v každém semestru minimálně 1 předmět z uvedené nabídky.

**Volitelné (C)**

| Abbreviation | Course name                            | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|---------|-------------------|-----------------------|--------------|-------------------|
| KE/ZNSSE     | Signals and Systems                    |         | 2                 | 1+1+0                 | Zp,Zk        |                   |
| KE/INAPE     | Personal Data and Copyright Protection |         | 2                 | 2+0+0                 | Zp           | ZS                |

**Compulsory courses 2nd year (A)****Number of courses: 9 credits: 52**

| Abbreviation | Course name                               | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|-------------|-------------------|-----------------------|--------------|-------------------|
| JC/IKAKW     | ESP Comm. and Radar Technology B2+        |             | 3                 | 0+2+0                 | Zk           | 2 ZS              |
| KE/RKOTE     | Communication Technology                  | Profilující | 5                 | 0+0+24                | Zp,Zk        | 2 ZS              |
| KE/RMIOB     | Microwave Engineering                     | Profilující | 5                 | 0+0+24                | Zp,Zk        | 2 ZS              |
| KE/RNSDE     | Signal Processing in Digit. Communication | Profilující | 6                 | 0+0+24                | Zp,Zk        | 2 ZS              |
| KE/RRASY     | Radar Systems                             | Profilující | 5                 | 0+0+24                | Zp,Zk        | 2 ZS              |
| KE/RELKE     | Electromagnetic Compatibility and Measur  | Profilující | 4                 | 0+0+24                | Zp,Zk        | 2 LS              |
| KE/RNDPE     | Diploma Thesis                            |             | 18                | 0+0+24                | Zp           | 2 LS              |
| KE/RNDSE     | Diploma Seminar                           |             | 2                 | 0+0+24                | Zp           | 2 LS              |
| KE/RNSBE     | Reliability and Safety                    | Profilující | 4                 | 0+0+24                | Zp,Zk        | 2 LS              |

**Elective courses 2nd year - type B (B)****Volba min.: 1 př.**

| Abbreviation | Course name                              | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|---------|-------------------|-----------------------|--------------|-------------------|
| KE/RDISP     | Digital Signal Processors                |         | 4                 | 0+0+20                | Zp,Zk        | 2 ZS              |
| KE/ROTZM     | Parallel Processing with Multimed. Sign. |         | 4                 | 0+0+20                | Zp,Zk        | 2 ZS              |
| KRP/RSTVI    | Machine Vision                           |         | 4                 | 0+0+20                | Zp,Zk        | 2 ZS              |



Student splní v zimním semestru minimálně 1 předmět z uvedené nabídky.

### Optional courses (C)

| Abbreviation | Course name                            | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|---------|-------------------|-----------------------|--------------|-------------------|
| KE/ZNSSE     | Signals and Systems                    |         | 2                 | 1+1+0                 | Zp,Zk        |                   |
| KE/INAPE     | Personal Data and Copyright Protection |         | 2                 | 2+0+0                 | Zp           | ZS                |

### Povinné předměty SZZ (A)

Number of courses: 3 credits: 0

| Abbreviation | Course name           | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|-----------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KE/RKOSY     | Communication Systems |         | 0                 | 0+0+0                 | Szv          | 2 LS              |
| KE/RRSYS     | Radar Systems         |         | 0                 | 0+0+0                 | Szv          | 2 LS              |
| KE/RSISO     | Signals and Systems   |         | 0                 | 0+0+0                 | Szv          | 2 LS              |

### Anglický jazyk - volitelný (C)

| Abbreviation | Course name   | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPAUE     | English - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPAUF     | English - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUI     | English - C1  |         | 2                 | 0+2+0                 | Zk           |                   |

### Německý jazyk - volitelný (C)

| Abbreviation | Course name                | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPNKD     | German Speaking Skills A2+ |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPNUA     | German - A1                |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUB     | German - A1+               |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUC     | German - A2                |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUD     | German - A2+               |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUE     | German - B1                |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUF     | German - B1+               |         | 2                 | 0+2+0                 | Zk           |                   |

### Ruský jazyk - volitelný (C)

| Abbreviation | Course name   | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPRUA     | Russian - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPRUB     | Russian - A1+ |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPRUC     | Russian - A2  |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPRUD     | Russian - A2+ |         | 2                 | 0+2+0                 | Zk           |                   |

### Španělský jazyk - volitelný (C)

| Abbreviation | Course name   | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPSUA     | Spanish - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUB     | Spanish - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUC     | Spanish - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUD     | Spanish - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUE     | Spanish - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUF     | Spanish - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |

### Francouzský jazyk - volitelný (C)

| Abbreviation | Course name  | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPFUA     | French - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUB     | French - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |

|          |              |    |       |    |
|----------|--------------|----|-------|----|
| JC/UPFUC | French - A2  | 2* | 0+2+0 | Zk |
| JC/UPFUD | French - A2+ | 2* | 0+2+0 | Zk |
| JC/UPFUE | French - B1  | 2* | 0+2+0 | Zk |
| JC/UPFUF | French - B1+ | 2  | 0+2+0 | Zk |

### P.E. Optional - WS (C)

| Abbreviation | Course name                      | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KTS/AER1     | Aerobic 1                        |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/ATP1     | Athletics ZS                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BAD1     | Badminton 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BAS1     | Basketball 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BCH1     | Beach Volleyball 1               |         | 1                 | 0+10+0                | Zp           | ZS                |
| KTS/FLO1     | Floorball 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/FOT1     | Football 1                       |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/HOK1     | Ice hockey 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/INC1     | Indoorcycling 1                  |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/KCV1     | Conditional training 1           |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/LEZ1     | Climbing 1                       |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/PLA1     | Swimming 1                       |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/POS1     | Strengthening 1                  |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/PWJ1     | Poweryoga 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SEB1     | Self defence and combat sports 1 |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SPV1     | Sports for all 1                 |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SQU1     | Squash 1                         |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/STOL1    | Table tennis ZS                  |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/TEN1     | Tennis 1                         |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/VES1     | Rowing 1                         |         | 1                 | 0+12+0                | Zp           | ZS                |
| KTS/VOL1     | Volleyball 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/ZZS1     | Healthy lifestyle ZS             |         | 1                 | 0+2+0                 | Zp           | ZS                |

Student si volí pouze jeden předmět z nabídky.

### P.E. Optional - SS (C)

| Abbreviation | Course name                      | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KTS/AER2     | Aerobic 2                        |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/ATP2     | Athletics LS                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BAD2     | Badminton 2                      |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BAS2     | Basketball 2                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BCH2     | Beach Volleyball 2               |         | 1                 | 0+10+0                | Zp           | LS                |
| KTS/FLO2     | Floorball 2                      |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/FOT2     | Football 2                       |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/HOK2     | Ice hockey 2                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/INC2     | Indoorcycling 2                  |         | 1                 | 0+1+0                 | Zp           | LS                |
| KTS/KCV2     | Conditional training 2           |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/LEZ2     | Climbing 2                       |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/PLA2     | Swimming 2                       |         | 1                 | 0+1+0                 | Zp           | LS                |
| KTS/POS2     | Strengthening 2                  |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/PWJ2     | Poweryoga 2                      |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/SEB2     | Self defence and combat sports 2 |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/SPV2     | Sports for all 2                 |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/SQU2     | Squash 2                         |         | 1                 | 0+1+0                 | Zp           | LS                |
| KTS/STOL2    | Table tennis LS                  |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/TEN2     | Tennis 2                         |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/VES2     | Rowing 2                         |         | 1                 | 0+12+0                | Zp           | LS                |
| KTS/VOL2     | Volleyball 2                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/ZZS2     | Healthy lifestyle LS             |         | 1                 | 0+2+0                 | Zp           | LS                |

Student si volí pouze jeden předmět z nabídky.

**Povinné 1. ročník (A)**

**Number of courses: 10 credits: 48**

| Abbreviation | Course name                       | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|-----------------------------------|-------------|-------------------|-----------------------|--------------|-------------------|
| KE/RANSY     | Antena Design                     | Teoretický  | 5                 | 0+0+24                | Zp,Zk        | 1 ZS              |
| KE/RNRKE     | Radio-Communication Systems       | Profilující | 5                 | 0+0+24                | Zp,Zk        | 1 ZS              |
| KE/RNSSE     | Signals and Systems               | Teoretický  | 5                 | 0+0+24                | Zp,Zk        | 1 ZS              |
| KE/RPEO      | Advanced Electronic Circuits      | Profilující | 4                 | 0+0+24                | Zp,Zk        | 1 ZS              |
| KMF/RNASI    | Statistical Signal Processing     |             | 5                 | 0+0+24                | Zp,Zk        | 1 ZS              |
| JC/IKAKV     | ESP Comm. and Radar Technology B2 |             | 2                 | 0+2+0                 | Zp           | 1 LS              |
| KE/RDKTE     | Digital Communication             | Profilující | 6                 | 0+0+24                | Zp,Zk        | 1 LS              |
| KE/RNUPE     | Positioning Systems               | Profilující | 5                 | 0+0+24                | Zp,Zk        | 1 LS              |
| KE/RNZSE     | Digital Signal Processing         | Teoretický  | 6                 | 0+0+24                | Zp,Zk        | 1 LS              |
| KRP/RNZMS    | Multimedia Signal Processing      | Profilující | 5                 | 0+0+24                | Zp,Zk        | 1 LS              |

**Povinně volitelné 1. ročník - typ B (B)**

**Volba min.: 2 př.**

| Abbreviation | Course name                             | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|---------|-------------------|-----------------------|--------------|-------------------|
| KE/RMIPR     | Microprocessors                         |         | 4                 | 0+0+20                | Zp,Zk        | 1 ZS              |
| KE/RNASE     | Acoustic Signal Processing              |         | 4                 | 0+0+24                | Zp,Zk        | 1 ZS              |
| KRP/RNUI1    | Introduction to Artific. Intelligence 1 |         | 5                 | 0+0+20                | Zp,Zk        | 1 ZS              |
| KE/RNLOE     | Programmable Logic Circuits             |         | 4                 | 0+0+20                | Zp,Zk        | 1 LS              |
| KE/RNZOE     | Image Processing                        |         | 4                 | 0+0+20                | Zp,Zk        | 1 LS              |
| KRP/RNUI2    | Introduction to Artific. Intelligence 2 |         | 5                 | 0+0+20                | Zp,Zk        | 1 LS              |

Student splní v každém semestru minimálně 1 předmět z uvedené nabídky.

**Volitelné (C)**

| Abbreviation | Course name                            | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|---------|-------------------|-----------------------|--------------|-------------------|
| KE/ZNSSE     | Signals and Systems                    |         | 2                 | 1+1+0                 | Zp,Zk        |                   |
| KE/INAPE     | Personal Data and Copyright Protection |         | 2                 | 2+0+0                 | Zp           | ZS                |

**Compulsory courses 2nd year (A)**

**Number of courses: 9 credits: 52**

| Abbreviation | Course name                              | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|-------------|-------------------|-----------------------|--------------|-------------------|
| JC/IKAKW     | ESP Comm. and Radar Technology B2+       |             | 3                 | 0+2+0                 | Zk           | 2 ZS              |
| KE/RKOTE     | Communication Technology                 | Profilující | 5                 | 0+0+24                | Zp,Zk        | 2 ZS              |
| KE/RMIOB     | Microwave Engineering                    | Profilující | 5                 | 0+0+24                | Zp,Zk        | 2 ZS              |
| KE/RNSDE     | Sinal Processing in Digit. Communication | Profilující | 6                 | 0+0+24                | Zp,Zk        | 2 ZS              |
| KE/RRASY     | Radar Systems                            | Profilující | 5                 | 0+0+24                | Zp,Zk        | 2 ZS              |
| KE/RELKE     | Electromagnetic Compatibility and Measur | Profilující | 4                 | 0+0+24                | Zp,Zk        | 2 LS              |
| KE/RNDPE     | Diploma Thesis                           |             | 18                | 0+0+24                | Zp           | 2 LS              |
| KE/RNDSE     | Diploma Seminar                          |             | 2                 | 0+0+24                | Zp           | 2 LS              |
| KE/RNSBE     | Reliability and Safety                   | Profilující | 4                 | 0+0+24                | Zp,Zk        | 2 LS              |

**Elective courses 2nd year - type B (B)**

**Volba min.: 1 př.**

| Abbreviation | Course name                              | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|---------|-------------------|-----------------------|--------------|-------------------|
| KE/RDISP     | Digital Signal Processors                |         | 4                 | 0+0+20                | Zp,Zk        | 2 ZS              |
| KE/ROTZM     | Parallel Processing with Multimed. Sign. |         | 4                 | 0+0+20                | Zp,Zk        | 2 ZS              |
| KRP/RSTVI    | Machine Vision                           |         | 4                 | 0+0+20                | Zp,Zk        | 2 ZS              |

Student splní v zimním semestru minimálně 1 předmět z uvedené nabídky.

**Optional courses (C)**

| Abbreviation | Course name                            | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|---------|-------------------|-----------------------|--------------|-------------------|
| KE/ZNSSE     | Signals and Systems                    |         | 2                 | 1+1+0                 | Zp,Zk        |                   |
| KE/INAPE     | Personal Data and Copyright Protection |         | 2                 | 2+0+0                 | Zp           | ZS                |

**Povinné předměty SZZ (A)****Number of courses: 3 credits: 0**

| Abbreviation | Course name           | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|-----------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KE/RKOSY     | Communication Systems |         | 0                 | 0+0+0                 | Szv          | 2 LS              |
| KE/RRSYS     | Radar Systems         |         | 0                 | 0+0+0                 | Szv          | 2 LS              |
| KE/RSISO     | Signals and Systems   |         | 0                 | 0+0+0                 | Szv          | 2 LS              |

**Anglický jazyk - volitelný (C)**

| Abbreviation | Course name   | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPAUE     | English - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPAUF     | English - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUI     | English - C1  |         | 2                 | 0+2+0                 | Zk           |                   |

**Německý jazyk - volitelný (C)**

| Abbreviation | Course name                | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPNKD     | German Speaking Skills A2+ |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPNUA     | German - A1                |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUB     | German - A1+               |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUC     | German - A2                |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUD     | German - A2+               |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUE     | German - B1                |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUF     | German - B1+               |         | 2                 | 0+2+0                 | Zk           |                   |

**Ruský jazyk - volitelný (C)**

| Abbreviation | Course name   | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPRUA     | Russian - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPRUB     | Russian - A1+ |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPRUC     | Russian - A2  |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPRUD     | Russian - A2+ |         | 2                 | 0+2+0                 | Zk           |                   |

**Španělský jazyk - volitelný (C)**

| Abbreviation | Course name   | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPSUA     | Spanish - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUB     | Spanish - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUC     | Spanish - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUD     | Spanish - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUE     | Spanish - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUF     | Spanish - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |

**Francouzský jazyk - volitelný (C)**

| Abbreviation | Course name  | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPFUA     | French - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUB     | French - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUC     | French - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUD     | French - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |

|          |              |    |       |    |
|----------|--------------|----|-------|----|
| JC/UPFUE | French - B1  | 2* | 0+2+0 | Zk |
| JC/UPFUF | French - B1+ | 2  | 0+2+0 | Zk |

### P.E. Optional - WS (C)

| Abbreviation | Course name                      | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KTS/AER1     | Aerobic 1                        |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/ATP1     | Athletics ZS                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BAD1     | Badminton 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BAS1     | Basketball 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BCH1     | Beach Volleyball 1               |         | 1                 | 0+10+0                | Zp           | ZS                |
| KTS/FLO1     | Floorball 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/FOT1     | Football 1                       |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/HOK1     | Ice hockey 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/INC1     | Indoorcycling 1                  |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/KCV1     | Conditional training 1           |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/LEZ1     | Climbing 1                       |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/PLA1     | Swimming 1                       |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/POS1     | Strengthening 1                  |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/PWJ1     | Poweryoga 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SEB1     | Self defence and combat sports 1 |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SPV1     | Sports for all 1                 |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SQU1     | Squash 1                         |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/STOL1    | Table tennis ZS                  |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/TEN1     | Tennis 1                         |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/VES1     | Rowing 1                         |         | 1                 | 0+12+0                | Zp           | ZS                |
| KTS/VOL1     | Volleyball 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/ZZS1     | Healthy lifestyle ZS             |         | 1                 | 0+2+0                 | Zp           | ZS                |

Student si volí pouze jeden předmět z nabídky.

### P.E. Optional - SS (C)

| Abbreviation | Course name                      | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KTS/AER2     | Aerobic 2                        |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/ATP2     | Athletics LS                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BAD2     | Badminton 2                      |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BAS2     | Basketball 2                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BCH2     | Beach Volleyball 2               |         | 1                 | 0+10+0                | Zp           | LS                |
| KTS/FLO2     | Floorball 2                      |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/FOT2     | Football 2                       |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/HOK2     | Ice hockey 2                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/INC2     | Indoorcycling 2                  |         | 1                 | 0+1+0                 | Zp           | LS                |
| KTS/KCV2     | Conditional training 2           |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/LEZ2     | Climbing 2                       |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/PLA2     | Swimming 2                       |         | 1                 | 0+1+0                 | Zp           | LS                |
| KTS/POS2     | Strengthening 2                  |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/PWJ2     | Poweryoga 2                      |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/SEB2     | Self defence and combat sports 2 |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/SPV2     | Sports for all 2                 |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/SQU2     | Squash 2                         |         | 1                 | 0+1+0                 | Zp           | LS                |
| KTS/STOL2    | Table tennis LS                  |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/TEN2     | Tennis 2                         |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/VES2     | Rowing 2                         |         | 1                 | 0+12+0                | Zp           | LS                |
| KTS/VOL2     | Volleyball 2                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/ZZS2     | Healthy lifestyle LS             |         | 1                 | 0+2+0                 | Zp           | LS                |

Student si volí pouze jeden předmět z nabídky.

**Compulsory courses 1st year (A)****Number of courses: 10 credits: 48**

| Abbreviation | Course name                      | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------------|-------------|-------------------|-----------------------|--------------|-------------------|
| KE/NANSY     | Antena Design                    | Teoretický  | 5                 | 2+1+1                 | Zp,Zk        | 1 ZS              |
| KE/NNRKE     | Radio-Communication Systems      | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KE/NNSSE     | Signals and Systems              | Teoretický  | 5                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KE/NPEO      | Advanced Electronic Circuits     | Profilující | 4                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KMF/NNASI    | Statistical Signal Processing    |             | 5                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| JC/IPAKV     | ESP Comm and Radar Technology B2 |             | 2                 | 0+2+0                 | Zp           | 1 LS              |
| KE/NDKTE     | Digital Communication            | Profilující | 6                 | 2+1+1                 | Zp,Zk        | 1 LS              |
| KE/NNUPE     | Positioning Systems              | Profilující | 5                 | 2+1+1                 | Zp,Zk        | 1 LS              |
| KE/NNZSE     | Digital Signal Processing        | Teoretický  | 6                 | 2+1+2                 | Zp,Zk        | 1 LS              |
| KRP/NNZMS    | Multimedia Signal Processing     | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |

**Elective courses 1st year - type B (B)****Volba min.: 2 př.**

| Abbreviation | Course name                             | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|---------|-------------------|-----------------------|--------------|-------------------|
| KE/NMIPR     | Microprocessors                         |         | 4                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KE/NNASE     | Acoustic Signal Processing              |         | 4                 | 2+1+1                 | Zp,Zk        | 1 ZS              |
| KRP/NNUI1    | Introduction to Artific. Intelligence 1 |         | 5                 | 2+3+0                 | Zp,Zk        | 1 ZS              |
| KE/NNLOE     | Programmable Logic Circuits             |         | 4                 | 2+0+2                 | Zp,Zk        | 1 LS              |
| KE/NNZOE     | Image Processing                        |         | 4                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KRP/NNUI2    | Introduction to Artific. Intelligence 2 |         | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |

Student splní v každém semestru minimálně 1 předmět z uvedené nabídky.

**Optional courses 1st year (C)**

| Abbreviation | Course name                             | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|---------|-------------------|-----------------------|--------------|-------------------|
| FEI/NNAKO    | English Conversation                    |         | 2                 | 0+2+0                 | Zp           | 1 ZS              |
| KE/INAPE     | Personal Data and Copyright Protection  |         | 2                 | 2+0+0                 | Zp           | 1 ZS              |
| KIT/INPPD    | PR and Presentation Skills              |         | 3                 | 1+1+0                 | Zp,Zk        | 1 LS              |
| KRP/IDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | 1 LS              |
| KE/ZNSSE     | Signals and Systems                     |         | 2                 | 1+1+0                 | Zp,Zk        |                   |
| KIT/NNEPD    | Electronic Document Preparation         |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KMF/IZMF     | Basics of Modern Physics                |         | 2                 | 2+0+0                 | Zp           | ZS                |
| KRP/ZNUI1    | Introduction to Artific. Intelligence 1 |         | 5*                | 2+3+0                 | Zp,Zk        | ZS                |
| KMF/IZMF2    | Basics of Modern Physics 2              |         | 2                 | 2+0+0                 | Zp           | LS                |
| KRP/ZDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |

Student si vybírá volitelné předměty dle nabídky a má možnost si v každém semestru zapsat volitelnou tělesnou výchovu dle nabídky Katedry tělovýchovy a sportu.

**Compulsory courses 2nd year (A)****Number of courses: 9 credits: 52**

| Abbreviation | Course name                               | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|-------------|-------------------|-----------------------|--------------|-------------------|
| JC/IPAKW     | ESP Comm. and Radar Technology B2+        |             | 3                 | 0+2+0                 | Zk           | 2 ZS              |
| KE/NKOTE     | Communication Technology                  | Profilující | 5                 | 2+1+1                 | Zp,Zk        | 2 ZS              |
| KE/NMIOB     | Microwave Engineering                     | Profilující | 5                 | 2+1+1                 | Zp,Zk        | 2 ZS              |
| KE/NNSDE     | Signal Processing in Digit. Communication | Profilující | 6                 | 2+1+1                 | Zp,Zk        | 2 ZS              |
| KE/NRASY     | Radar Systems                             | Profilující | 5                 | 2+1+1                 | Zp,Zk        | 2 ZS              |
| KE/NELKE     | Electromagnetic Compatibility and Measur  | Profilující | 4                 | 2+1+1                 | Zp,Zk        | 2 LS              |
| KE/NNDPE     | Diploma Thesis                            |             | 18                | 0+0+20                | Zp           | 2 LS              |

|          |                        |             |   |       |       |   |    |
|----------|------------------------|-------------|---|-------|-------|---|----|
| KE/NNSE  | Diploma Seminar        |             | 2 | 0+0+2 | Zp    | 2 | LS |
| KE/NNSBE | Reliability and Safety | Profilující | 4 | 2+2+0 | Zp,Zk | 2 | LS |

### Elective courses 2nd year - type B (B)

Volba min.: 1 př.

| Abbreviation | Course name                              | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|---------|-------------------|-----------------------|--------------|-------------------|
| KE/NDISP     | Digital Signal Processors                |         | 4                 | 2+1+1                 | Zp,Zk        | 2 ZS              |
| KE/NOTZM     | Parallel Processing with Multimed. Sign. |         | 4                 | 1+0+3                 | Zp,Zk        | 2 ZS              |
| KRP/NSTVI    | Machine Vision                           |         | 4                 | 2+2+0                 | Zp,Zk        | 2 ZS              |

Student splní v zimním semestru minimálně 1 předmět z uvedené nabídky.

### Optional courses 2nd year (C)

| Abbreviation | Course name                             | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|---------|-------------------|-----------------------|--------------|-------------------|
| KIT/INMRF    | Marketing Management                    |         | 3                 | 1+1+0                 | Zp,Zk        | 2 ZS              |
| KIT/BPRAI    | Law of Informatics                      |         | 3                 | 2+0+0                 | Zp           | 2 LS              |
| KE/ZNSSE     | Signals and Systems                     |         | 2                 | 1+1+0                 | Zp,Zk        |                   |
| KIT/NNEPD    | Electronic Document Preparation         |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KRP/ZNUI1    | Introduction to Artific. Intelligence 1 |         | 5*                | 2+3+0                 | Zp,Zk        | ZS                |
| KRP/IDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |
| KRP/ZDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |

Student si vybírá volitelné předměty dle nabídky a má možnost si v každém semestru zapsat volitelnou tělesnou výchovu dle nabídky Katedry tělovýchovy a sportu.

### Povinné předměty SZZ (A)

Number of courses: 3 credits: 0

| Abbreviation | Course name           | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|-----------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KE/NKOSY     | Communication Systems |         | 0                 | 0+0+0                 | Szv          |                   |
| KE/NRSYS     | Radar Systems         |         | 0                 | 0+0+0                 | Szv          |                   |
| KE/NSISO     | Signals and Systems   |         | 0                 | 0+0+0                 | Szv          |                   |

### Anglický jazyk - volitelný (C)

| Abbreviation | Course name   | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPAUE     | English - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPAUF     | English - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUI     | English - C1  |         | 2                 | 0+2+0                 | Zk           |                   |

### Německý jazyk - volitelný (C)

| Abbreviation | Course name                | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPNKD     | German Speaking Skills A2+ |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPNUA     | German - A1                |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUB     | German - A1+               |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUC     | German - A2                |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUD     | German - A2+               |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUE     | German - B1                |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUF     | German - B1+               |         | 2                 | 0+2+0                 | Zk           |                   |

### Ruský jazyk - volitelný (C)

| Abbreviation | Course name   | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPRUA     | Russian - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPRUB     | Russian - A1+ |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPRUC     | Russian - A2  |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPRUD     | Russian - A2+ |         | 2                 | 0+2+0                 | Zk           |                   |



## Španělský jazyk - volitelný (C)

| Abbreviation | Course name   | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPSUA     | Spanish - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUB     | Spanish - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUC     | Spanish - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUD     | Spanish - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUE     | Spanish - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUF     | Spanish - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |

## Francouzský jazyk - volitelný (C)

| Abbreviation | Course name  | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPFUA     | French - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUB     | French - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUC     | French - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUD     | French - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUE     | French - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUF     | French - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |

## P.E. Optional - WS (C)

| Abbreviation | Course name                      | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KTS/AER1     | Aerobic 1                        |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/ATP1     | Athletics ZS                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BAD1     | Badminton 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BAS1     | Basketball 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BCH1     | Beach Volleyball 1               |         | 1                 | 0+10+0                | Zp           | ZS                |
| KTS/FL01     | Floorball 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/FOT1     | Football 1                       |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/HOK1     | Ice hockey 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/INC1     | Indoorcycling 1                  |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/KCV1     | Conditional training 1           |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/LEZ1     | Climbing 1                       |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/PLA1     | Swimming 1                       |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/POS1     | Strengthening 1                  |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/PWJ1     | Poweryoga 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SEB1     | Self defence and combat sports 1 |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SPV1     | Sports for all 1                 |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SQU1     | Squash 1                         |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/STOL1    | Table tennis ZS                  |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/TEN1     | Tennis 1                         |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/VES1     | Rowing 1                         |         | 1                 | 0+12+0                | Zp           | ZS                |
| KTS/VOL1     | Volleyball 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/ZZS1     | Healthy lifestyle ZS             |         | 1                 | 0+2+0                 | Zp           | ZS                |

Student si volí pouze jeden předmět z nabídky.

## P.E. Optional - SS (C)

| Abbreviation | Course name        | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KTS/AER2     | Aerobic 2          |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/ATP2     | Athletics LS       |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BAD2     | Badminton 2        |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BAS2     | Basketball 2       |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BCH2     | Beach Volleyball 2 |         | 1                 | 0+10+0                | Zp           | LS                |
| KTS/FLO2     | Floorball 2        |         | 1                 | 0+2+0                 | Zp           | LS                |

|           |                                  |   |        |    |    |
|-----------|----------------------------------|---|--------|----|----|
| KTS/FOT2  | Football 2                       | 1 | 0+2+0  | Zp | LS |
| KTS/HOK2  | Ice hockey 2                     | 1 | 0+2+0  | Zp | LS |
| KTS/INC2  | Indoorcycling 2                  | 1 | 0+1+0  | Zp | LS |
| KTS/KCV2  | Conditional training 2           | 1 | 0+2+0  | Zp | LS |
| KTS/LEZ2  | Climbing 2                       | 1 | 0+2+0  | Zp | LS |
| KTS/PLA2  | Swimming 2                       | 1 | 0+1+0  | Zp | LS |
| KTS/POS2  | Strengthening 2                  | 1 | 0+2+0  | Zp | LS |
| KTS/PWJ2  | Poweryoga 2                      | 1 | 0+2+0  | Zp | LS |
| KTS/SEB2  | Self defence and combat sports 2 | 1 | 0+2+0  | Zp | LS |
| KTS/SPV2  | Sports for all 2                 | 1 | 0+2+0  | Zp | LS |
| KTS/SQU2  | Squash 2                         | 1 | 0+1+0  | Zp | LS |
| KTS/STOL2 | Table tennis LS                  | 1 | 0+2+0  | Zp | LS |
| KTS/TEN2  | Tennis 2                         | 1 | 0+2+0  | Zp | LS |
| KTS/VES2  | Rowing 2                         | 1 | 0+12+0 | Zp | LS |
| KTS/VOL2  | Volleyball 2                     | 1 | 0+2+0  | Zp | LS |
| KTS/ZZS2  | Healthy lifestyle LS             | 1 | 0+2+0  | Zp | LS |

Student si volí pouze jeden předmět z nabídky.

**Compulsory courses 1st year (A)**

**Number of courses: 10 credits: 48**

| Abbreviation | Course name                      | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------------|-------------|-------------------|-----------------------|--------------|-------------------|
| KE/NANSY     | Antena Design                    | Teoretický  | 5                 | 2+1+1                 | Zp,Zk        | 1 ZS              |
| KE/NNRKE     | Radio-Communication Systems      | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KE/NNSSE     | Signals and Systems              | Teoretický  | 5                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KE/NPEO      | Advanced Electronic Circuits     | Profilující | 4                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KMF/NNASI    | Statistical Signal Processing    |             | 5                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| JC/IPAKV     | ESP Comm and Radar Technology B2 |             | 2                 | 0+2+0                 | Zp           | 1 LS              |
| KE/NDKTE     | Digital Communication            | Profilující | 6                 | 2+1+1                 | Zp,Zk        | 1 LS              |
| KE/NNUPE     | Positioning Systems              | Profilující | 5                 | 2+1+1                 | Zp,Zk        | 1 LS              |
| KE/NNZSE     | Digital Signal Processing        | Teoretický  | 6                 | 2+1+2                 | Zp,Zk        | 1 LS              |
| KRP/NNZMS    | Multimedia Signal Processing     | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |

**Elective courses 1st year - type B (B)**

**Volba min.: 2 př.**

| Abbreviation | Course name                             | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|---------|-------------------|-----------------------|--------------|-------------------|
| KE/NMIPR     | Microprocessors                         |         | 4                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KE/NNASE     | Acoustic Signal Processing              |         | 4                 | 2+1+1                 | Zp,Zk        | 1 ZS              |
| KRP/NNUI1    | Introduction to Artific. Intelligence 1 |         | 5                 | 2+3+0                 | Zp,Zk        | 1 ZS              |
| KE/NNLOE     | Programmable Logic Circuits             |         | 4                 | 2+0+2                 | Zp,Zk        | 1 LS              |
| KE/NNZOE     | Image Processing                        |         | 4                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KRP/NNUI2    | Introduction to Artific. Intelligence 2 |         | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |

Student splní v každém semestru minimálně 1 předmět z uvedené nabídky.

**Optional courses 1st year (C)**

| Abbreviation | Course name                             | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|---------|-------------------|-----------------------|--------------|-------------------|
| FEI/NNAKO    | English Conversation                    |         | 2                 | 0+2+0                 | Zp           | 1 ZS              |
| KE/INAPE     | Personal Data and Copyright Protection  |         | 2                 | 2+0+0                 | Zp           | 1 ZS              |
| KIT/INPPD    | PR and Presentation Skills              |         | 3                 | 1+1+0                 | Zp,Zk        | 1 LS              |
| KRP/IDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | 1 LS              |
| KE/ZNSSE     | Signals and Systems                     |         | 2                 | 1+1+0                 | Zp,Zk        |                   |
| KIT/NNEPD    | Electronic Document Preparation         |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KMF/IZMF     | Basics of Modern Physics                |         | 2                 | 2+0+0                 | Zp           | ZS                |
| KRP/ZNUI1    | Introduction to Artific. Intelligence 1 |         | 5*                | 2+3+0                 | Zp,Zk        | ZS                |
| KMF/IZMF2    | Basics of Modern Physics 2              |         | 2                 | 2+0+0                 | Zp           | LS                |
| KRP/ZDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |

Student si vybírá volitelné předměty dle nabídky a má možnost si v každém semestru zapsat volitelnou tělesnou výchovu dle nabídky Katedry tělovýchovy a sportu.

**Compulsory courses 2nd year (A)**

**Number of courses: 9 credits: 52**

| Abbreviation | Course name                               | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|-------------|-------------------|-----------------------|--------------|-------------------|
| JC/IPAKW     | ESP Comm. and Radar Technology B2+        |             | 3                 | 0+2+0                 | Zk           | 2 ZS              |
| KE/NKOTE     | Communication Technology                  | Profilující | 5                 | 2+1+1                 | Zp,Zk        | 2 ZS              |
| KE/NMIOB     | Microwave Engineering                     | Profilující | 5                 | 2+1+1                 | Zp,Zk        | 2 ZS              |
| KE/NNSDE     | Signal Processing in Digit. Communication | Profilující | 6                 | 2+1+1                 | Zp,Zk        | 2 ZS              |
| KE/NRASY     | Radar Systems                             | Profilující | 5                 | 2+1+1                 | Zp,Zk        | 2 ZS              |
| KE/NELKE     | Electromagnetic Compatibility and Measur  | Profilující | 4                 | 2+1+1                 | Zp,Zk        | 2 LS              |
| KE/NNDPPE    | Diploma Thesis                            |             | 18                | 0+0+20                | Zp           | 2 LS              |
| KE/NNDPSE    | Diploma Seminar                           |             | 2                 | 0+0+2                 | Zp           | 2 LS              |
| KE/NNSBE     | Reliability and Safety                    | Profilující | 4                 | 2+2+0                 | Zp,Zk        | 2 LS              |

**Elective courses 2nd year - type B (B)****Volba min.: 1 př.**

| Abbreviation | Course name                              | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|---------|-------------------|-----------------------|--------------|-------------------|
| KE/NDISP     | Digital Signal Processors                |         | 4                 | 2+1+1                 | Zp,Zk        | 2 ZS              |
| KE/NOTZM     | Parallel Processing with Multimed. Sign. |         | 4                 | 1+0+3                 | Zp,Zk        | 2 ZS              |
| KRP/NSTVI    | Machine Vision                           |         | 4                 | 2+2+0                 | Zp,Zk        | 2 ZS              |

Student splní v zinném semestru minimálně 1 předmět z uvedené nabídky.

**Optional courses 2nd year (C)**

| Abbreviation | Course name                             | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|---------|-------------------|-----------------------|--------------|-------------------|
| KIT/INMRF    | Marketing Management                    |         | 3                 | 1+1+0                 | Zp,Zk        | 2 ZS              |
| KIT/BPRAI    | Law of Informatics                      |         | 3                 | 2+0+0                 | Zp           | 2 LS              |
| KE/ZNSSE     | Signals and Systems                     |         | 2                 | 1+1+0                 | Zp,Zk        |                   |
| KIT/NNEPD    | Electronic Document Preparation         |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KRP/ZNUI1    | Introduction to Artific. Intelligence 1 |         | 5*                | 2+3+0                 | Zp,Zk        | ZS                |
| KRP/IDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |
| KRP/ZDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |

Student si vybírá volitelné předměty dle nabídky a má možnost si v každém semestru zapsat volitelnou tělesnou výchovu dle nabídky Katedry tělovýchovy a sportu.

**Povinné předměty SZZ (A)****Number of courses: 3 credits: 0**

| Abbreviation | Course name           | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|-----------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KE/NKOSY     | Communication Systems |         | 0                 | 0+0+0                 | Szv          |                   |
| KE/NRSYS     | Radar Systems         |         | 0                 | 0+0+0                 | Szv          |                   |
| KE/NSISO     | Signals and Systems   |         | 0                 | 0+0+0                 | Szv          |                   |

**Anglický jazyk - volitelný (C)**

| Abbreviation | Course name   | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPAUE     | English - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPAUF     | English - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUI     | English - C1  |         | 2                 | 0+2+0                 | Zk           |                   |

**Německý jazyk - volitelný (C)**

| Abbreviation | Course name                | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPNKD     | German Speaking Skills A2+ |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPNUA     | German - A1                |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUB     | German - A1+               |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUC     | German - A2                |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUD     | German - A2+               |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUE     | German - B1                |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUF     | German - B1+               |         | 2                 | 0+2+0                 | Zk           |                   |

**Ruský jazyk - volitelný (C)**

| Abbreviation | Course name   | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPRUA     | Russian - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPRUB     | Russian - A1+ |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPRUC     | Russian - A2  |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPRUD     | Russian - A2+ |         | 2                 | 0+2+0                 | Zk           |                   |

## Španělský jazyk - volitelný (C)

| Abbreviation | Course name   | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPSUA     | Spanish - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUB     | Spanish - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUC     | Spanish - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUD     | Spanish - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUE     | Spanish - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUF     | Spanish - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |

## Francouzský jazyk - volitelný (C)

| Abbreviation | Course name  | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPFUA     | French - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUB     | French - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUC     | French - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUD     | French - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUE     | French - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUF     | French - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |

## P.E. Optional - WS (C)

| Abbreviation | Course name                      | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KTS/AER1     | Aerobic 1                        |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/ATP1     | Athletics ZS                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BAD1     | Badminton 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BAS1     | Basketball 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BCH1     | Beach Volleyball 1               |         | 1                 | 0+10+0                | Zp           | ZS                |
| KTS/FL01     | Floorball 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/FOT1     | Football 1                       |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/HOK1     | Ice hockey 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/INC1     | Indoorcycling 1                  |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/KCV1     | Conditional training 1           |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/LEZ1     | Climbing 1                       |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/PLA1     | Swimming 1                       |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/POS1     | Strengthening 1                  |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/PWJ1     | Poweryoga 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SEB1     | Self defence and combat sports 1 |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SPV1     | Sports for all 1                 |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SQU1     | Squash 1                         |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/STOL1    | Table tennis ZS                  |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/TEN1     | Tennis 1                         |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/VES1     | Rowing 1                         |         | 1                 | 0+12+0                | Zp           | ZS                |
| KTS/VOL1     | Volleyball 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/ZZS1     | Healthy lifestyle ZS             |         | 1                 | 0+2+0                 | Zp           | ZS                |

Student si volí pouze jeden předmět z nabídky.

## P.E. Optional - SS (C)

| Abbreviation | Course name        | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KTS/AER2     | Aerobic 2          |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/ATP2     | Athletics LS       |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BAD2     | Badminton 2        |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BAS2     | Basketball 2       |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BCH2     | Beach Volleyball 2 |         | 1                 | 0+10+0                | Zp           | LS                |
| KTS/FLO2     | Floorball 2        |         | 1                 | 0+2+0                 | Zp           | LS                |

|           |                                  |   |        |    |    |
|-----------|----------------------------------|---|--------|----|----|
| KTS/FOT2  | Football 2                       | 1 | 0+2+0  | Zp | LS |
| KTS/HOK2  | Ice hockey 2                     | 1 | 0+2+0  | Zp | LS |
| KTS/INC2  | Indoorcycling 2                  | 1 | 0+1+0  | Zp | LS |
| KTS/KCV2  | Conditional training 2           | 1 | 0+2+0  | Zp | LS |
| KTS/LEZ2  | Climbing 2                       | 1 | 0+2+0  | Zp | LS |
| KTS/PLA2  | Swimming 2                       | 1 | 0+1+0  | Zp | LS |
| KTS/POS2  | Strengthening 2                  | 1 | 0+2+0  | Zp | LS |
| KTS/PWJ2  | Poweryoga 2                      | 1 | 0+2+0  | Zp | LS |
| KTS/SEB2  | Self defence and combat sports 2 | 1 | 0+2+0  | Zp | LS |
| KTS/SPV2  | Sports for all 2                 | 1 | 0+2+0  | Zp | LS |
| KTS/SQU2  | Squash 2                         | 1 | 0+1+0  | Zp | LS |
| KTS/STOL2 | Table tennis LS                  | 1 | 0+2+0  | Zp | LS |
| KTS/TEN2  | Tennis 2                         | 1 | 0+2+0  | Zp | LS |
| KTS/VES2  | Rowing 2                         | 1 | 0+12+0 | Zp | LS |
| KTS/VOL2  | Volleyball 2                     | 1 | 0+2+0  | Zp | LS |
| KTS/ZZS2  | Healthy lifestyle LS             | 1 | 0+2+0  | Zp | LS |

Student si volí pouze jeden předmět z nabídky.

**Povinné 1. ročník (A)****Number of courses: 10 credits: 48**

| Abbreviation | Course name                              | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|-------------|-------------------|-----------------------|--------------|-------------------|
| FEI/NNAKO    | English Conversation                     |             | 2                 | 0+2+0                 | Zp           | 1 ZS              |
| KMF/NNVKM    | Selected Chapters from Mathematics       |             | 5                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KRP/NMCHT    | Mechatronics                             | Profilující | 5                 | 1+1+2                 | Zp,Zk        | 1 ZS              |
| KRP/NNUI1    | Introduction to Artific. Intelligence 1  | Teoretický  | 5                 | 2+3+0                 | Zp,Zk        | 1 ZS              |
| KRP/NSPRI    | Continuous-time Control                  | Teoretický  | 6                 | 2+3+0                 | Zp,Zk        | 1 ZS              |
| KRP/NDIRI    | Discrete-time Control                    | Teoretický  | 6                 | 2+3+0                 | Zp,Zk        | 1 LS              |
| KRP/NIMDS    | Identification and Modeling of Dyn.Syst. | Teoretický  | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KRP/NLAUT    | Automation Laboratory                    |             | 4                 | 0+0+4                 | Zp           | 1 LS              |
| KRP/NNPR     | Industrial Robots                        | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KRP/NNUI2    | Introduction to Artific. Intelligence 2  | Teoretický  | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |

Anglický jazyk je v souladu s akreditací předmětem povinným. Student splní během studia 1 předmět z bloku Anglický jazyk odborný.

**Povinně volitelné 1. ročník - typ A (B)****Volba min.: 2 př.**

| Abbreviation | Course name                             | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|-------------|-------------------|-----------------------|--------------|-------------------|
| KRP/NALOP    | Algorithms of Optimization              | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KRP/NNSZD    | Statistical Methods for Data Processing | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KE/NNZSE     | Digital Signal Processing               | Profilující | 6                 | 2+1+2                 | Zp,Zk        | 1 LS              |
| KIT/NUPS     | Introduction to Industrial Networks     | Profilující | 3                 | 1+2+0                 | Zp,Zk        | 1 LS              |

Student splní v každém semestru min. 1 předmět z uvedené nabídky.

**Volitelné 1. ročník (C)**

| Abbreviation | Course name                             | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|---------|-------------------|-----------------------|--------------|-------------------|
| KE/ZNSSE     | Signals and Systems                     |         | 2                 | 1+1+0                 | Zp,Zk        |                   |
| KE/INAPE     | Personal Data and Copyright Protection  |         | 2                 | 2+0+0                 | Zp           | ZS                |
| KE/INPVE     | Parallel Computing with MATLAB          |         | 3                 | 1+2+0                 | Zp,Zk        | ZS                |
| KE/INSSE     | Signals and Systems                     |         | 5                 | 3+2+0                 | Zp,Zk        | ZS                |
| KIT/BZPO     | Basics of Business                      |         | 3*                | 0+2+0                 | Zp           | ZS                |
| KIT/INMRF    | Marketing Management                    |         | 3                 | 1+1+0                 | Zp,Zk        | ZS                |
| KIT/NNEPD    | Electronic Document Preparation         |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KMF/IZMF     | Basics of Modern Physics                |         | 2                 | 2+0+0                 | Zp           | ZS                |
| KRP/ZNUI1    | Introduction to Artific. Intelligence 1 |         | 5*                | 2+3+0                 | Zp,Zk        | ZS                |
| FEI/INAK2    | English conversation for follow-ups     |         | 2                 | 0+2+0                 | Zp           | LS                |
| KE/BBEZP     | Work Safety                             |         | 3                 | 1+0+0                 | Zp           | LS                |
| KIT/INPPD    | PR and Presentation Skills              |         | 3                 | 1+1+0                 | Zp,Zk        | LS                |
| KIT/NNPI     | Business Informatics                    |         | 5                 | 2+2+0                 | Zp,Zk        | LS                |
| KMF/INAM     | Applied Mathematics                     |         | 5                 | 2+2+0                 | Zp,Zk        | LS                |
| KRP/IDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |
| KRP/ZDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |

Student si vybírá volitelné předměty k doplnění kreditového minima 60 kreditů za rok. Student má možnost si zapsat tělesnou výchovu dle nabídky Katedry tělovýchovy a sportu.

**Compulsory courses 2nd year (A)****Number of courses: 8 credits: 50**

| Abbreviation | Course name                              | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|---------|-------------------|-----------------------|--------------|-------------------|
| KRP/NLMRS    | Measurement and Control Systems Laborato |         | 5                 | 0+0+4                 | Zp           | 2 ZS              |

|           |                                     |             |    |       |       |   |    |
|-----------|-------------------------------------|-------------|----|-------|-------|---|----|
| KRP/NLPMR | Advanced Control Methods Laboratory |             | 5  | 0+0+4 | Zp    | 2 | ZS |
| KRP/NNPSE | Industrial Control Systems          | Profilující | 5  | 2+2+0 | Zp,Zk | 2 | ZS |
| KRP/NNSEP | Semestral Project                   |             | 4  | 0+4+0 | Zp    | 2 | ZS |
| KRP/NNSPR | Software Tools for Control          | Profilující | 5  | 2+2+0 | Zp,Zk | 2 | ZS |
| KRP/NNDP  | Diploma Thesis                      |             | 18 | 0+2+4 | Zp    | 2 | LS |
| KRP/NNDS  | Diploma Thesis Seminar              |             | 3  | 0+2+0 | Zp    | 2 | LS |
| KRP/NNRS  | Design of Control Systems           |             | 5  | 2+2+0 | Zp,Zk | 2 | LS |

Anglický jazyk je v souladu s akreditací předmětem povinným. Student splní během studia 1 předmět z bloku Anglický jazyk odborný.

### Elective courses 2nd year - type A (B)

Volba min.: 2 př.

| Abbreviation | Course name                              | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|-------------|-------------------|-----------------------|--------------|-------------------|
| KIT/NZKB     | Basics of Cybersecurity                  | Profilující | 4                 | 1+3+0                 | Zp,Zk        | 2 ZS              |
| KRP/NPRER    | Predictive Control                       | Profilující | 4                 | 2+2+0                 | Zp,Zk        | 2 ZS              |
| KE/NNSBE     | Reliability and Safety                   |             | 4                 | 2+2+0                 | Zp,Zk        | 2 LS              |
| KRP/NNNSAD   | Statistic. Analysis of Multivariate Data |             | 4                 | 2+2+0                 | Zp,Zk        | 2 LS              |
| KRP/NSTVI    | Machine Vision                           |             | 4                 | 2+2+0                 | Zp,Zk        | ZS                |

Student splní v každém semestru min. 1 předmět z uvedené nabídky.

### Optional courses 2nd year (C)

| Abbreviation | Course name                             | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|---------|-------------------|-----------------------|--------------|-------------------|
| KE/ZNSSE     | Signals and Systems                     |         | 2                 | 1+1+0                 | Zp,Zk        |                   |
| KE/INAPE     | Personal Data and Copyright Protection  |         | 2                 | 2+0+0                 | Zp           | ZS                |
| KE/INPVE     | Parallel Computing with MATLAB          |         | 3                 | 1+2+0                 | Zp,Zk        | ZS                |
| KE/INSSE     | Signals and Systems                     |         | 5                 | 3+2+0                 | Zp,Zk        | ZS                |
| KIT/BZPO     | Basics of Business                      |         | 3*                | 0+2+0                 | Zp           | ZS                |
| KIT/INMRF    | Marketing Management                    |         | 3                 | 1+1+0                 | Zp,Zk        | ZS                |
| KIT/NNEPD    | Electronic Document Preparation         |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KMF/IZMF     | Basics of Modern Physics                |         | 2                 | 2+0+0                 | Zp           | ZS                |
| KRP/ZNU11    | Introduction to Artific. Intelligence 1 |         | 5*                | 2+3+0                 | Zp,Zk        | ZS                |
| FEI/INAK2    | English conversation for follow-ups     |         | 2                 | 0+2+0                 | Zp           | LS                |
| KE/BBECP     | Work Safety                             |         | 3                 | 1+0+0                 | Zp           | LS                |
| KIT/INPPD    | PR and Presentation Skills              |         | 3                 | 1+1+0                 | Zp,Zk        | LS                |
| KIT/NNPI     | Business Informatics                    |         | 5                 | 2+2+0                 | Zp,Zk        | LS                |
| KMF/INAM     | Applied Mathematics                     |         | 5                 | 2+2+0                 | Zp,Zk        | LS                |
| KRP/IDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |
| KRP/ZDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |

Student si vybírá volitelné předměty k doplnění kreditového minima 60 kreditů za rok. Student má možnost si zapsat tělesnou výchovu dle nabídky Katedry tělovýchovy a sportu.

### Předměty státní závěrečné zkoušky povinné (A)

Number of courses: 2 credits: 0

| Abbreviation | Course name             | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|-------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KRP/NTERS    | Control Theory          |         | 0                 | 0+0+0                 | Szv          | LS                |
| KRP/NUIS     | Artificial Intelligence |         | 0                 | 0+0+0                 | Szv          | LS                |

Předmět Teorie řízení zahrnuje vybraná témata z předmětů Spojité řízení + Diskrétní řízení. Předmět Umělá inteligence zahrnuje vybraná témata z předmětů Základy umělé inteligence 1+ 2.

### Předměty státní závěrečné zkoušky povinně volitelné (B)

Volba min.: 1 př.

| Abbreviation | Course name                | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KRP/NALOS    | Algorithms of Optimization |         | 0                 | 0+0+0                 | Szv          | LS                |
| KRP/NHWPS    | HW Tools for Control       |         | 0                 | 0+0+0                 | Szv          | LS                |
| KRP/NPRSS    | Industrial Networks        |         | 0                 | 0+0+0                 | Szv          | LS                |
| KRP/NSWPS    | SW Tools for Control       |         | 0                 | 0+0+0                 | Szv          | LS                |



KRP/NZSIS Signal Processing 0 0+0+0 Szv LS

Student si vybere jeden z uvedených předmětů. Předmět Algoritmy optimalizace zahrnuje vybraná témata z předmětu Algoritmy optimalizace. Předmět HW prostředky řízení zahrnuje vybraná témata z předmětů Mechatronika + Průmyslové řídicí systémy + Průmyslové roboty. Předmět Průmyslové sítě zahrnuje vybraná témata z předmětů Úvod do průmyslových sítí + Spolehlivost a bezpečnost + Základy kybernetické bezpečnosti. Předmět SW prostředky řízení zahrnuje vybraná témata z předmětů Identifikace a modelování dynamických systémů + Softwarové prostředky pro řízení + Prediktivní řízení. Předmět Zpracování signálů zahrnuje vybraná témata z předmětů Číslíkové zpracování signálů + Strojové vidění.

### Anglický jazyk odborný pro obory elektro a IT (B)

Volba min.: 1 př.

| Abbreviation | Course name                          | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/IPAIU     | English for IT - B1+                 |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIV     | English for Electro/IT Careers - B2  |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIW     | English for Electr.Engineering - B2+ |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIX     | English for Electro/IT Careers - C1  |         | 2                 | 0+2+0                 | Zk           |                   |

Student během navazujícího magisterského studia splní alespoň 1 předmět tohoto bloku.

### Anglický jazyk - volitelný (C)

| Abbreviation | Course name                          | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/IPAIV     | English for Electro/IT Careers - B2  |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIW     | English for Electr.Engineering - B2+ |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIX     | English for Electro/IT Careers - C1  |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUF     | English - B1+                        |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUT     | English - B1                         |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUX     | English - C1                         |         | 2                 | 0+2+0                 | Zk           |                   |

### Ruský jazyk - volitelný (C)

| Abbreviation | Course name   | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPRUA     | Russian - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPRUB     | Russian - A1+ |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPRUC     | Russian - A2  |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPRUD     | Russian - A2+ |         | 2                 | 0+2+0                 | Zk           |                   |

### Německý jazyk - volitelný (C)

| Abbreviation | Course name  | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPNUA     | German - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUB     | German - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUC     | German - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUD     | German - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUT     | German - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUU     | German - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |

### Francouzský jazyk - volitelný (C)

| Abbreviation | Course name  | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPFUP     | French - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUQ     | French - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUR     | French - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUS     | French - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUT     | French - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUU     | French - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |

## Španělský jazyk - volitelný (C)

| Abbreviation | Course name   | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPSUP     | Spanish - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUQ     | Spanish - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUR     | Spanish - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUS     | Spanish - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUT     | Spanish - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUU     | Spanish - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |

## P.E. Optional - WS (C)

| Abbreviation | Course name                      | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KTS/AER1     | Aerobic 1                        |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/ATP1     | Athletics ZS                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BAD1     | Badminton 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BAS1     | Basketball 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BCH1     | Beach Volleyball 1               |         | 1                 | 0+10+0                | Zp           | ZS                |
| KTS/FLO1     | Floorball 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/FOT1     | Football 1                       |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/HOK1     | Ice hockey 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/INC1     | Indoorcycling 1                  |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/KCV1     | Conditional training 1           |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/LEZ1     | Climbing 1                       |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/PLA1     | Swimming 1                       |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/POS1     | Strengthening 1                  |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/PWJ1     | Poweryoga 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SEB1     | Self defence and combat sports 1 |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SPV1     | Sports for all 1                 |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SQU1     | Squash 1                         |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/STOL1    | Table tennis ZS                  |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/TEN1     | Tennis 1                         |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/VES1     | Rowing 1                         |         | 1                 | 0+12+0                | Zp           | ZS                |
| KTS/VOL1     | Volleyball 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/ZZS1     | Healthy lifestyle ZS             |         | 1                 | 0+2+0                 | Zp           | ZS                |

Student si volí pouze jeden předmět z nabídky.

## P.E. Optional - SS (C)

| Abbreviation | Course name                      | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KTS/AER2     | Aerobic 2                        |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/ATP2     | Athletics LS                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BAD2     | Badminton 2                      |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BAS2     | Basketball 2                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BCH2     | Beach Volleyball 2               |         | 1                 | 0+10+0                | Zp           | LS                |
| KTS/FLO2     | Floorball 2                      |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/FOT2     | Football 2                       |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/HOK2     | Ice hockey 2                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/INC2     | Indoorcycling 2                  |         | 1                 | 0+1+0                 | Zp           | LS                |
| KTS/KCV2     | Conditional training 2           |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/LEZ2     | Climbing 2                       |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/PLA2     | Swimming 2                       |         | 1                 | 0+1+0                 | Zp           | LS                |
| KTS/POS2     | Strengthening 2                  |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/PWJ2     | Poweryoga 2                      |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/SEB2     | Self defence and combat sports 2 |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/SPV2     | Sports for all 2                 |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/SQU2     | Squash 2                         |         | 1                 | 0+1+0                 | Zp           | LS                |

|           |                      |   |        |    |    |
|-----------|----------------------|---|--------|----|----|
| KTS/STOL2 | Table tennis LS      | 1 | 0+2+0  | Zp | LS |
| KTS/TEN2  | Tennis 2             | 1 | 0+2+0  | Zp | LS |
| KTS/VES2  | Rowing 2             | 1 | 0+12+0 | Zp | LS |
| KTS/VOL2  | Volleyball 2         | 1 | 0+2+0  | Zp | LS |
| KTS/ZZS2  | Healthy lifestyle LS | 1 | 0+2+0  | Zp | LS |

Student si volí pouze jeden předmět z nabídky.

**Povinné 1. ročník (A)**

**Number of courses: 10 credits: 48**

| Abbreviation | Course name                              | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|-------------|-------------------|-----------------------|--------------|-------------------|
| FEI/NNAKO    | English Conversation                     |             | 2                 | 0+2+0                 | Zp           | 1 ZS              |
| KMF/NNVKM    | Selected Chapters from Mathematics       |             | 5                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KRP/NMCHT    | Mechatronics                             | Profilující | 5                 | 1+1+2                 | Zp,Zk        | 1 ZS              |
| KRP/NNUI1    | Introduction to Artific. Intelligence 1  | Teoretický  | 5                 | 2+3+0                 | Zp,Zk        | 1 ZS              |
| KRP/NSPRI    | Continuous-time Control                  | Teoretický  | 6                 | 2+3+0                 | Zp,Zk        | 1 ZS              |
| KRP/NDIRI    | Discrete-time Control                    | Teoretický  | 6                 | 2+3+0                 | Zp,Zk        | 1 LS              |
| KRP/NIMDS    | Identification and Modeling of Dyn.Syst. | Teoretický  | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KRP/NLAUT    | Automation Laboratory                    |             | 4                 | 0+0+4                 | Zp           | 1 LS              |
| KRP/NNPR     | Industrial Robots                        | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KRP/NNUI2    | Introduction to Artific. Intelligence 2  | Teoretický  | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |

Anglický jazyk je v souladu s akreditací předmětem povinným. Student splní během studia 1 předmět z bloku Anglický jazyk odborný.

**Povinně volitelné 1. ročník - typ A (B)**

**Volba min.: 2 př.**

| Abbreviation | Course name                             | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|-------------|-------------------|-----------------------|--------------|-------------------|
| KRP/NALOP    | Algorithms of Optimization              | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KRP/NNSZD    | Statistical Methods for Data Processing | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KE/NNZSE     | Digital Signal Processing               | Profilující | 6                 | 2+1+2                 | Zp,Zk        | 1 LS              |
| KIT/NUPS     | Introduction to Industrial Networks     | Profilující | 3                 | 1+2+0                 | Zp,Zk        | 1 LS              |

Student splní v každém semestru min. 1 předmět z uvedené nabídky.

**Volitelné 1. ročník (C)**

| Abbreviation | Course name                             | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|---------|-------------------|-----------------------|--------------|-------------------|
| KE/ZNSSE     | Signals and Systems                     |         | 2                 | 1+1+0                 | Zp,Zk        |                   |
| KE/INAPE     | Personal Data and Copyright Protection  |         | 2                 | 2+0+0                 | Zp           | ZS                |
| KE/INPVE     | Parallel Computing with MATLAB          |         | 3                 | 1+2+0                 | Zp,Zk        | ZS                |
| KE/INSSE     | Signals and Systems                     |         | 5                 | 3+2+0                 | Zp,Zk        | ZS                |
| KIT/BZPO     | Basics of Business                      |         | 3*                | 0+2+0                 | Zp           | ZS                |
| KIT/INMRF    | Marketing Management                    |         | 3                 | 1+1+0                 | Zp,Zk        | ZS                |
| KIT/NNEPD    | Electronic Document Preparation         |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KMF/IZMF     | Basics of Modern Physics                |         | 2                 | 2+0+0                 | Zp           | ZS                |
| KRP/ZNU11    | Introduction to Artific. Intelligence 1 |         | 5*                | 2+3+0                 | Zp,Zk        | ZS                |
| FEI/INAK2    | English conversation for follow-ups     |         | 2                 | 0+2+0                 | Zp           | LS                |
| KE/BBEZP     | Work Safety                             |         | 3                 | 1+0+0                 | Zp           | LS                |
| KIT/INPPD    | PR and Presentation Skills              |         | 3                 | 1+1+0                 | Zp,Zk        | LS                |
| KIT/NNPI     | Business Informatics                    |         | 5                 | 2+2+0                 | Zp,Zk        | LS                |
| KMF/INAM     | Applied Mathematics                     |         | 5                 | 2+2+0                 | Zp,Zk        | LS                |
| KRP/IDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |
| KRP/ZDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |

Student si vybírá volitelné předměty k doplnění kreditového minima 60 kreditů za rok. Student má možnost si zapsat tělesnou výchovu dle nabídky Katedry tělovýchovy a sportu.

**Compulsory courses 2nd year (A)**

**Number of courses: 8 credits: 50**

| Abbreviation | Course name                              | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|-------------|-------------------|-----------------------|--------------|-------------------|
| KRP/NLMRS    | Measurement and Control Systems Laborato |             | 5                 | 0+0+4                 | Zp           | 2 ZS              |
| KRP/NLPMR    | Advanced Control Methods Laboratory      |             | 5                 | 0+0+4                 | Zp           | 2 ZS              |
| KRP/NNPSE    | Industrial Control Systems               | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 2 ZS              |
| KRP/NNSEP    | Semestral Project                        |             | 4                 | 0+4+0                 | Zp           | 2 ZS              |

|           |                            |             |    |       |       |   |    |
|-----------|----------------------------|-------------|----|-------|-------|---|----|
| KRP/NNSPR | Software Tools for Control | Profilující | 5  | 2+2+0 | Zp,Zk | 2 | ZS |
| KRP/NNDP  | Diploma Thesis             |             | 18 | 0+2+4 | Zp    | 2 | LS |
| KRP/NNDS  | Diploma Thesis Seminar     |             | 3  | 0+2+0 | Zp    | 2 | LS |
| KRP/NNRS  | Design of Control Systems  |             | 5  | 2+2+0 | Zp,Zk | 2 | LS |

Anglický jazyk je v souladu s akreditací předmětem povinným. Student splní během studia 1 předmět z bloku Anglický jazyk odborný.

### Elective courses 2nd year - type A (B)

Volba min.: 2 př.

| Abbreviation | Course name                              | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|-------------|-------------------|-----------------------|--------------|-------------------|
| KIT/NZKB     | Basics of Cybersecurity                  | Profilující | 4                 | 1+3+0                 | Zp,Zk        | 2 ZS              |
| KRP/NPRER    | Predictive Control                       | Profilující | 4                 | 2+2+0                 | Zp,Zk        | 2 ZS              |
| KE/NNSBE     | Reliability and Safety                   |             | 4                 | 2+2+0                 | Zp,Zk        | 2 LS              |
| KRP/NNSAD    | Statistic. Analysis of Multivariate Data |             | 4                 | 2+2+0                 | Zp,Zk        | 2 LS              |
| KRP/NSTVI    | Machine Vision                           |             | 4                 | 2+2+0                 | Zp,Zk        | ZS                |

Student splní v každém semestru min. 1 předmět z uvedené nabídky.

### Optional courses 2nd year (C)

| Abbreviation | Course name                             | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|---------|-------------------|-----------------------|--------------|-------------------|
| KE/ZNSSE     | Signals and Systems                     |         | 2                 | 1+1+0                 | Zp,Zk        |                   |
| KE/INAPE     | Personal Data and Copyright Protection  |         | 2                 | 2+0+0                 | Zp           | ZS                |
| KE/INPVE     | Parallel Computing with MATLAB          |         | 3                 | 1+2+0                 | Zp,Zk        | ZS                |
| KE/INSSE     | Signals and Systems                     |         | 5                 | 3+2+0                 | Zp,Zk        | ZS                |
| KIT/BZPO     | Basics of Business                      |         | 3*                | 0+2+0                 | Zp           | ZS                |
| KIT/INMRF    | Marketing Management                    |         | 3                 | 1+1+0                 | Zp,Zk        | ZS                |
| KIT/NNEPD    | Electronic Document Preparation         |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KMF/IZMF     | Basics of Modern Physics                |         | 2                 | 2+0+0                 | Zp           | ZS                |
| KRP/ZNU11    | Introduction to Artific. Intelligence 1 |         | 5*                | 2+3+0                 | Zp,Zk        | ZS                |
| FEI/INAK2    | English conversation for follow-ups     |         | 2                 | 0+2+0                 | Zp           | LS                |
| KE/BBEZZP    | Work Safety                             |         | 3                 | 1+0+0                 | Zp           | LS                |
| KIT/INPPD    | PR and Presentation Skills              |         | 3                 | 1+1+0                 | Zp,Zk        | LS                |
| KIT/NNPI     | Business Informatics                    |         | 5                 | 2+2+0                 | Zp,Zk        | LS                |
| KMF/INAM     | Applied Mathematics                     |         | 5                 | 2+2+0                 | Zp,Zk        | LS                |
| KRP/IDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |
| KRP/ZDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |

Student si vybírá volitelné předměty k doplnění kreditového minima 60 kreditů za rok. Student má možnost si zapsat tělesnou výchovu dle nabídky Katedry tělovýchovy a sportu.

### Předměty státní závěrečné zkoušky povinné (A)

Number of courses: 2 credits: 0

| Abbreviation | Course name             | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|-------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KRP/NTERS    | Control Theory          |         | 0                 | 0+0+0                 | Szv          | LS                |
| KRP/NUIS     | Artificial Intelligence |         | 0                 | 0+0+0                 | Szv          | LS                |

Předmět Teorie řízení zahrnuje vybraná témata z předmětů Spojité řízení + Diskrétní řízení. Předmět Umělá inteligence zahrnuje vybraná témata z předmětů Základy umělé inteligence 1+ 2.

### Předměty státní závěrečné zkoušky povinně volitelné (B)

Volba min.: 1 př.

| Abbreviation | Course name                | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KRP/NALOS    | Algorithms of Optimization |         | 0                 | 0+0+0                 | Szv          | LS                |
| KRP/NHWPS    | HW Tools for Control       |         | 0                 | 0+0+0                 | Szv          | LS                |
| KRP/NPRSS    | Industrial Networks        |         | 0                 | 0+0+0                 | Szv          | LS                |
| KRP/NSWPS    | SW Tools for Control       |         | 0                 | 0+0+0                 | Szv          | LS                |
| KRP/NZSIS    | Signal Processing          |         | 0                 | 0+0+0                 | Szv          | LS                |

Student si vybere jeden z uvedených předmětů. Předmět Algoritmy optimalizace zahrnuje vybraná témata z předmětu Algoritmy optimalizace. Předmět HW prostředky řízení zahrnuje vybraná témata z předmětů Mechatronika + Průmyslové řídicí systémy +

Průmyslové roboty. Předmět Průmyslové sítě zahrnuje vybraná témata z předmětů Úvod do průmyslových sítí + Spolehlivost a bezpečnost + Základy kybernetické bezpečnosti. Předmět SW prostředky řízení zahrnuje vybraná témata z předmětů Identifikace a modelování dynamických systémů + Softwarové prostředky pro řízení + Prediktivní řízení. Předmět Zpracování signálů zahrnuje vybraná témata z předmětů Číslíkové zpracování signálů + Strojové vidění.

### Anglický jazyk odborný pro obory elektro a IT (B)

Volba min.: 1 př.

| Abbreviation | Course name                          | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/IPAIU     | English for IT - B1+                 |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIV     | English for Electro/IT Careers - B2  |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIW     | English for Electr.Engineering - B2+ |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIX     | English for Electro/IT Careers - C1  |         | 2                 | 0+2+0                 | Zk           |                   |

Student během navazujícího magisterského studia splní alespoň 1 předmět tohoto bloku.

### Anglický jazyk - volitelný (C)

| Abbreviation | Course name                          | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/IPAIV     | English for Electro/IT Careers - B2  |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIW     | English for Electr.Engineering - B2+ |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIX     | English for Electro/IT Careers - C1  |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUF     | English - B1+                        |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUT     | English - B1                         |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUX     | English - C1                         |         | 2                 | 0+2+0                 | Zk           |                   |

### Ruský jazyk - volitelný (C)

| Abbreviation | Course name   | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPRUA     | Russian - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPRUB     | Russian - A1+ |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPRUC     | Russian - A2  |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPRUD     | Russian - A2+ |         | 2                 | 0+2+0                 | Zk           |                   |

### Německý jazyk - volitelný (C)

| Abbreviation | Course name  | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPNUA     | German - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUB     | German - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUC     | German - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUD     | German - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUT     | German - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUU     | German - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |

### Francouzský jazyk - volitelný (C)

| Abbreviation | Course name  | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPFUP     | French - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUQ     | French - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUR     | French - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUS     | French - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUT     | French - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUU     | French - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |

### Španělský jazyk - volitelný (C)

| Abbreviation | Course name   | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPSUP     | Spanish - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUQ     | Spanish - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |

|          |               |    |       |    |
|----------|---------------|----|-------|----|
| JC/UPSUR | Spanish - A2  | 2* | 0+2+0 | Zk |
| JC/UPSUS | Spanish - A2+ | 2* | 0+2+0 | Zk |
| JC/UPSUT | Spanish - B1  | 2* | 0+2+0 | Zk |
| JC/UPSUU | Spanish - B1+ | 2  | 0+2+0 | Zk |

### P.E. Optional - WS (C)

| Abbreviation | Course name                      | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KTS/AER1     | Aerobic 1                        |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/ATP1     | Athletics ZS                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BAD1     | Badminton 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BAS1     | Basketball 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BCH1     | Beach Volleyball 1               |         | 1                 | 0+10+0                | Zp           | ZS                |
| KTS/FLO1     | Floorball 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/FOT1     | Football 1                       |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/HOK1     | Ice hockey 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/INC1     | Indoorcycling 1                  |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/KCV1     | Conditional training 1           |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/LEZ1     | Climbing 1                       |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/PLA1     | Swimming 1                       |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/POS1     | Strengthening 1                  |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/PWJ1     | Poweryoga 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SEB1     | Self defence and combat sports 1 |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SPV1     | Sports for all 1                 |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SQU1     | Squash 1                         |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/STOL1    | Table tennis ZS                  |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/TEN1     | Tennis 1                         |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/VES1     | Rowing 1                         |         | 1                 | 0+12+0                | Zp           | ZS                |
| KTS/VOL1     | Volleyball 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/ZZS1     | Healthy lifestyle ZS             |         | 1                 | 0+2+0                 | Zp           | ZS                |

Student si volí pouze jeden předmět z nabídky.

### P.E. Optional - SS (C)

| Abbreviation | Course name                      | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KTS/AER2     | Aerobic 2                        |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/ATP2     | Athletics LS                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BAD2     | Badminton 2                      |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BAS2     | Basketball 2                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BCH2     | Beach Volleyball 2               |         | 1                 | 0+10+0                | Zp           | LS                |
| KTS/FLO2     | Floorball 2                      |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/FOT2     | Football 2                       |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/HOK2     | Ice hockey 2                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/INC2     | Indoorcycling 2                  |         | 1                 | 0+1+0                 | Zp           | LS                |
| KTS/KCV2     | Conditional training 2           |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/LEZ2     | Climbing 2                       |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/PLA2     | Swimming 2                       |         | 1                 | 0+1+0                 | Zp           | LS                |
| KTS/POS2     | Strengthening 2                  |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/PWJ2     | Poweryoga 2                      |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/SEB2     | Self defence and combat sports 2 |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/SPV2     | Sports for all 2                 |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/SQU2     | Squash 2                         |         | 1                 | 0+1+0                 | Zp           | LS                |
| KTS/STOL2    | Table tennis LS                  |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/TEN2     | Tennis 2                         |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/VES2     | Rowing 2                         |         | 1                 | 0+12+0                | Zp           | LS                |
| KTS/VOL2     | Volleyball 2                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/ZZS2     | Healthy lifestyle LS             |         | 1                 | 0+2+0                 | Zp           | LS                |

Student si volí pouze jeden předmět z nabídky.



**Povinné 1. ročník (A)**

**Number of courses: 10 credits: 48**

| Abbreviation | Course name                              | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|-------------|-------------------|-----------------------|--------------|-------------------|
| FEI/NNAKO    | English Conversation                     |             | 2                 | 0+2+0                 | Zp           | 1 ZS              |
| KMF/NNVKM    | Selected Chapters from Mathematics       |             | 5                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KRP/NMCHT    | Mechatronics                             | Profilující | 5                 | 1+1+2                 | Zp,Zk        | 1 ZS              |
| KRP/NNUI1    | Introduction to Artific. Intelligence 1  | Teoretický  | 5                 | 2+3+0                 | Zp,Zk        | 1 ZS              |
| KRP/NSPRI    | Continuous-time Control                  | Teoretický  | 6                 | 2+3+0                 | Zp,Zk        | 1 ZS              |
| KRP/NDIRI    | Discrete-time Control                    | Teoretický  | 6                 | 2+3+0                 | Zp,Zk        | 1 LS              |
| KRP/NIMDS    | Identification and Modeling of Dyn.Syst. | Teoretický  | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KRP/NLAUT    | Automation Laboratory                    |             | 4                 | 0+0+4                 | Zp           | 1 LS              |
| KRP/NNPR     | Industrial Robots                        | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KRP/NNUI2    | Introduction to Artific. Intelligence 2  | Teoretický  | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |

Anglický jazyk je v souladu s akreditací předmětem povinným. Student splní během studia 1 předmět z bloku Anglický jazyk odborný.

**Povinně volitelné 1. ročník - typ A (B)**

**Volba min.: 2 př.**

| Abbreviation | Course name                         | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|-------------------------------------|-------------|-------------------|-----------------------|--------------|-------------------|
| KIT/NZKB     | Basics of Cybersecurity             | Profilující | 4                 | 1+3+0                 | Zp,Zk        | 1 ZS              |
| KRP/NALOP    | Algorithms of Optimization          | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KE/NNZSE     | Digital Signal Processing           | Profilující | 6                 | 2+1+2                 | Zp,Zk        | 1 LS              |
| KIT/NUPS     | Introduction to Industrial Networks | Profilující | 3                 | 1+2+0                 | Zp,Zk        | 1 LS              |

Student splní v každém semestru min. 1 předmět z uvedené nabídky.

**Volitelné 1. ročník (C)**

| Abbreviation | Course name                             | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|---------|-------------------|-----------------------|--------------|-------------------|
| KE/ZNSSE     | Signals and Systems                     |         | 2                 | 1+1+0                 | Zp,Zk        |                   |
| KE/INAPE     | Personal Data and Copyright Protection  |         | 2                 | 2+0+0                 | Zp           | ZS                |
| KE/INPVE     | Parallel Computing with MATLAB          |         | 3                 | 1+2+0                 | Zp,Zk        | ZS                |
| KE/INSSE     | Signals and Systems                     |         | 5                 | 3+2+0                 | Zp,Zk        | ZS                |
| KIT/BZPO     | Basics of Business                      |         | 3*                | 0+2+0                 | Zp           | ZS                |
| KIT/INMRF    | Marketing Management                    |         | 3                 | 1+1+0                 | Zp,Zk        | ZS                |
| KIT/NNEPD    | Electronic Document Preparation         |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KMF/IZMF     | Basics of Modern Physics                |         | 2                 | 2+0+0                 | Zp           | ZS                |
| KRP/ZNU11    | Introduction to Artific. Intelligence 1 |         | 5*                | 2+3+0                 | Zp,Zk        | ZS                |
| FEI/INAK2    | English conversation for follow-ups     |         | 2                 | 0+2+0                 | Zp           | LS                |
| KE/BBEZP     | Work Safety                             |         | 3                 | 1+0+0                 | Zp           | LS                |
| KIT/INPPD    | PR and Presentation Skills              |         | 3                 | 1+1+0                 | Zp,Zk        | LS                |
| KIT/NNPI     | Business Informatics                    |         | 5                 | 2+2+0                 | Zp,Zk        | LS                |
| KMF/INAM     | Applied Mathematics                     |         | 5                 | 2+2+0                 | Zp,Zk        | LS                |
| KRP/IDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |
| KRP/ZDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |

Student si vybírá volitelné předměty k doplnění kreditového minima 60 kreditů za rok. Student má možnost si zapsat tělesnou výchovu dle nabídky Katedry tělovýchovy a sportu.

**Compulsory courses 2nd year (A)**

**Number of courses: 8 credits: 50**

| Abbreviation | Course name                              | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|-------------|-------------------|-----------------------|--------------|-------------------|
| KRP/NLMRS    | Measurement and Control Systems Laborato |             | 5                 | 0+0+4                 | Zp           | 2 ZS              |
| KRP/NLPMR    | Advanced Control Methods Laboratory      |             | 5                 | 0+0+4                 | Zp           | 2 ZS              |
| KRP/NNPSE    | Industrial Control Systems               | Profilující | 5                 | 2+2+0                 | Zp,Zk        | 2 ZS              |
| KRP/NNSEP    | Semestral Project                        |             | 4                 | 0+4+0                 | Zp           | 2 ZS              |

|           |                            |             |    |       |       |   |    |
|-----------|----------------------------|-------------|----|-------|-------|---|----|
| KRP/NNSPR | Software Tools for Control | Profilující | 5  | 2+2+0 | Zp,Zk | 2 | ZS |
| KRP/NNDP  | Diploma Thesis             |             | 18 | 0+2+4 | Zp    | 2 | LS |
| KRP/NNDS  | Diploma Thesis Seminar     |             | 3  | 0+2+0 | Zp    | 2 | LS |
| KRP/NNRS  | Design of Control Systems  |             | 5  | 2+2+0 | Zp,Zk | 2 | LS |

Anglický jazyk je v souladu s akreditací předmětem povinným. Student splní během studia 1 předmět z bloku Anglický jazyk odborný.

### Elective courses 2nd year - type A (B)

Volba min.: 2 př.

| Abbreviation | Course name            | Meaning     | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|------------------------|-------------|-------------------|-----------------------|--------------|-------------------|
| KRP/NPRER    | Predictive Control     | Profilující | 4                 | 2+2+0                 | Zp,Zk        | 2 ZS              |
| KRP/NSTVI    | Machine Vision         | Profilující | 4                 | 2+2+0                 | Zp,Zk        | 2 ZS              |
| KE/NNSBE     | Reliability and Safety |             | 4                 | 2+2+0                 | Zp,Zk        | 2 LS              |

Student splní v každém semestru min. 1 předmět z uvedené nabídky.

### Optional courses 2nd year (C)

| Abbreviation | Course name                             | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|---------|-------------------|-----------------------|--------------|-------------------|
| KE/ZNSSE     | Signals and Systems                     |         | 2                 | 1+1+0                 | Zp,Zk        |                   |
| KE/INAPE     | Personal Data and Copyright Protection  |         | 2                 | 2+0+0                 | Zp           | ZS                |
| KE/INPVE     | Parallel Computing with MATLAB          |         | 3                 | 1+2+0                 | Zp,Zk        | ZS                |
| KE/INSSE     | Signals and Systems                     |         | 5                 | 3+2+0                 | Zp,Zk        | ZS                |
| KIT/BZPO     | Basics of Business                      |         | 3*                | 0+2+0                 | Zp           | ZS                |
| KIT/INMRF    | Marketing Management                    |         | 3                 | 1+1+0                 | Zp,Zk        | ZS                |
| KIT/NNEPD    | Electronic Document Preparation         |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KMF/IZMF     | Basics of Modern Physics                |         | 2                 | 2+0+0                 | Zp           | ZS                |
| KRP/ZNU11    | Introduction to Artific. Intelligence 1 |         | 5*                | 2+3+0                 | Zp,Zk        | ZS                |
| FEI/INAK2    | English conversation for follow-ups     |         | 2                 | 0+2+0                 | Zp           | LS                |
| KE/BBEZZP    | Work Safety                             |         | 3                 | 1+0+0                 | Zp           | LS                |
| KIT/INPPD    | PR and Presentation Skills              |         | 3                 | 1+1+0                 | Zp,Zk        | LS                |
| KIT/NNPI     | Business Informatics                    |         | 5                 | 2+2+0                 | Zp,Zk        | LS                |
| KMF/INAM     | Applied Mathematics                     |         | 5                 | 2+2+0                 | Zp,Zk        | LS                |
| KRP/IDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |
| KRP/ZDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |

Student si vybírá volitelné předměty k doplnění kreditového minima 60 kreditů za rok. Student má možnost si zapsat tělesnou výchovu dle nabídky Katedry tělovýchovy a sportu.

### Předměty státní závěrečné zkoušky povinné (A)

Number of courses: 2 credits: 0

| Abbreviation | Course name             | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|-------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KRP/NTERS    | Control Theory          |         | 0                 | 0+0+0                 | Szv          | LS                |
| KRP/NUIS     | Artificial Intelligence |         | 0                 | 0+0+0                 | Szv          | LS                |

Předmět Teorie řízení zahrnuje vybraná témata z předmětů Spojité řízení + Diskrétní řízení. Předmět Umělá inteligence zahrnuje vybraná témata z předmětů Základy umělé inteligence 1+ 2.

### Předměty státní závěrečné zkoušky povinně volitelné (B)

Volba min.: 1 př.

| Abbreviation | Course name                | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KRP/NALOS    | Algorithms of Optimization |         | 0                 | 0+0+0                 | Szv          | LS                |
| KRP/NHWPS    | HW Tools for Control       |         | 0                 | 0+0+0                 | Szv          | LS                |
| KRP/NPRSS    | Industrial Networks        |         | 0                 | 0+0+0                 | Szv          | LS                |
| KRP/NSWPS    | SW Tools for Control       |         | 0                 | 0+0+0                 | Szv          | LS                |
| KRP/NZSIS    | Signal Processing          |         | 0                 | 0+0+0                 | Szv          | LS                |

Student si vybere jeden z uvedených předmětů. Předmět Algoritmy optimalizace zahrnuje vybraná témata z předmětu Algoritmy optimalizace. Předmět HW prostředky řízení zahrnuje vybraná témata z předmětů Mechatronika + Průmyslové řídicí systémy + Průmyslové roboty. Předmět Průmyslové sítě zahrnuje vybraná témata z předmětů Úvod do průmyslových sítí + Spolehlivost a bezpečnost + Základy kybernetické bezpečnosti. Předmět SW prostředky řízení zahrnuje vybraná témata z předmětů Identifikace a

modelování dynamických systémů + Softwarové prostředky pro řízení + Prediktivní řízení. Předmět Zpracování signálů zahrnuje vybraná témata z předmětů Číslíkové zpracování signálů + Strojové vidění.

### Anglický jazyk odborný pro obory elektro a IT (B)

Volba min.: 1 př.

| Abbreviation | Course name                          | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/IPAIU     | English for IT - B1+                 |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIV     | English for Electro/IT Careers - B2  |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIW     | English for Electr.Engineering - B2+ |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIX     | English for Electro/IT Careers - C1  |         | 2                 | 0+2+0                 | Zk           |                   |

Student během navazujícího magisterského studia splní alespoň 1 předmět tohoto bloku.

### Anglický jazyk - volitelný (C)

| Abbreviation | Course name                          | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/IPAIV     | English for Electro/IT Careers - B2  |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIW     | English for Electr.Engineering - B2+ |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIX     | English for Electro/IT Careers - C1  |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUF     | English - B1+                        |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUT     | English - B1                         |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUX     | English - C1                         |         | 2                 | 0+2+0                 | Zk           |                   |

### Ruský jazyk - volitelný (C)

| Abbreviation | Course name   | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPRUA     | Russian - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPRUB     | Russian - A1+ |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPRUC     | Russian - A2  |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPRUD     | Russian - A2+ |         | 2                 | 0+2+0                 | Zk           |                   |

### Německý jazyk - volitelný (C)

| Abbreviation | Course name  | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPNUA     | German - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUB     | German - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUC     | German - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUD     | German - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUT     | German - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUU     | German - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |

### Francouzský jazyk - volitelný (C)

| Abbreviation | Course name  | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPFUP     | French - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUQ     | French - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUR     | French - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUS     | French - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUT     | French - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUU     | French - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |

### Španělský jazyk - volitelný (C)

| Abbreviation | Course name   | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPSUP     | Spanish - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUQ     | Spanish - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUR     | Spanish - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUS     | Spanish - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |

|          |               |    |       |    |
|----------|---------------|----|-------|----|
| JC/UPSUT | Spanish - B1  | 2* | 0+2+0 | Zk |
| JC/UPSUU | Spanish - B1+ | 2  | 0+2+0 | Zk |

### P.E. Optional - WS (C)

| Abbreviation | Course name                      | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KTS/AER1     | Aerobic 1                        |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/ATP1     | Athletics ZS                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BAD1     | Badminton 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BAS1     | Basketball 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BCH1     | Beach Volleyball 1               |         | 1                 | 0+10+0                | Zp           | ZS                |
| KTS/FLO1     | Floorball 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/FOT1     | Football 1                       |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/HOK1     | Ice hockey 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/INC1     | Indoorcycling 1                  |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/KCV1     | Conditional training 1           |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/LEZ1     | Climbing 1                       |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/PLA1     | Swimming 1                       |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/POS1     | Strengthening 1                  |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/PWJ1     | Poweryoga 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SEB1     | Self defence and combat sports 1 |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SPV1     | Sports for all 1                 |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SQU1     | Squash 1                         |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/STOL1    | Table tennis ZS                  |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/TEN1     | Tennis 1                         |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/VES1     | Rowing 1                         |         | 1                 | 0+12+0                | Zp           | ZS                |
| KTS/VOL1     | Volleyball 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/ZZS1     | Healthy lifestyle ZS             |         | 1                 | 0+2+0                 | Zp           | ZS                |

Student si volí pouze jeden předmět z nabídky.

### P.E. Optional - SS (C)

| Abbreviation | Course name                      | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KTS/AER2     | Aerobic 2                        |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/ATP2     | Athletics LS                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BAD2     | Badminton 2                      |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BAS2     | Basketball 2                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BCH2     | Beach Volleyball 2               |         | 1                 | 0+10+0                | Zp           | LS                |
| KTS/FLO2     | Floorball 2                      |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/FOT2     | Football 2                       |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/HOK2     | Ice hockey 2                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/INC2     | Indoorcycling 2                  |         | 1                 | 0+1+0                 | Zp           | LS                |
| KTS/KCV2     | Conditional training 2           |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/LEZ2     | Climbing 2                       |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/PLA2     | Swimming 2                       |         | 1                 | 0+1+0                 | Zp           | LS                |
| KTS/POS2     | Strengthening 2                  |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/PWJ2     | Poweryoga 2                      |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/SEB2     | Self defence and combat sports 2 |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/SPV2     | Sports for all 2                 |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/SQU2     | Squash 2                         |         | 1                 | 0+1+0                 | Zp           | LS                |
| KTS/STOL2    | Table tennis LS                  |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/TEN2     | Tennis 2                         |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/VES2     | Rowing 2                         |         | 1                 | 0+12+0                | Zp           | LS                |
| KTS/VOL2     | Volleyball 2                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/ZZS2     | Healthy lifestyle LS             |         | 1                 | 0+2+0                 | Zp           | LS                |

Student si volí pouze jeden předmět z nabídky.

**Compulsory courses 1st year (A)****Number of courses: 9 credits: 41**

| Abbreviation | Course name                              | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|---------|-------------------|-----------------------|--------------|-------------------|
| KE/INAOE     | Electronics Circuits Analysis and Design |         | 5                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KE/INAPE     | Personal Data and Copyright Protection   |         | 2                 | 2+0+0                 | Zp           | 1 ZS              |
| KE/INSSE     | Signals and Systems                      |         | 5                 | 3+2+0                 | Zp,Zk        | 1 ZS              |
| KMF/INTPE    | Theory of Probability and Mat. Statistic |         | 4                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KRP/INRSE    | Control systems theory                   |         | 5                 | 2+0+2                 | Zp,Zk        | 1 ZS              |
| KE/INDME     | Theory of Communication                  |         | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KE/INPAE     | Advanced Analogue Circuits               |         | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KE/INZSE     | Digital Signal Processing                |         | 5                 | 2+3+0                 | Zp,Zk        | 1 LS              |
| KMF/INMAE    | Matrix Algebra                           |         | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |

Anglický jazyk je předmětem povinným. Student splní během studia 1 předmět z bloku Anglický jazyk odborný dle úrovně vstupního testu.

**Elective courses 1st year (B)****Volba min.: 4 př.**

| Abbreviation | Course name                              | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|---------|-------------------|-----------------------|--------------|-------------------|
| KE/INLOE     | Design with Programmable Logic Devices   |         | 4                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KE/INMSE     | Transmission&Processing of spec. Signals |         | 4                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KE/INRKE     | Radio-Communication Systems Technology   |         | 4                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KRP/INPSE    | Industrial control systems               |         | 5                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KRP/INUI1    | Introduction to Artificial Intelligence  |         | 5*                | 2+3+0                 | Zk           | 1 ZS              |
| KE/INUPE     | Radio Positioning Systems                |         | 4                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KE/INVZE     | Programming of Embedded Devices          |         | 4                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KE/INZOE     | Image Processing                         |         | 4                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KRP/INPRE    | Advanced Control Systems                 |         | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KRP/INUI2    | Introduction to Artificial Intelligence  |         | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |

Student si vybere nejméně dva z uvedených předmětů v každém semestru.

**Optional courses 1st year (C)**

| Abbreviation | Course name                          | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| FEI/INAKO    | English conversation for follow-ups  |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KE/INPVE     | Parallel Computing with MATLAB       |         | 3                 | 1+2+0                 | Zp,Zk        | ZS                |
| KIT/BZPO     | Basics of Business                   |         | 3*                | 0+2+0                 | Zp           | ZS                |
| KIT/INMRF    | Marketing Management                 |         | 3                 | 1+1+0                 | Zp,Zk        | ZS                |
| KIT/NNEPD    | Electronic Document Preparation      |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KMF/IZMF     | Basics of Modern Physics             |         | 2                 | 2+0+0                 | Zp           | ZS                |
| FEI/INAK2    | English conversation for follow-ups  |         | 2                 | 0+2+0                 | Zp           | LS                |
| KE/IBPVE     | General Rules for Safety in El. Eng. |         | 2*                | 2+0+0                 | Zp           | LS                |
| KIT/INPPD    | PR and Presentation Skills           |         | 3                 | 1+1+0                 | Zp,Zk        | LS                |
| KMF/INAM     | Applied Mathematics                  |         | 5                 | 2+2+0                 | Zp,Zk        | LS                |
| KMF/IZMF2    | Basics of Modern Physics 2           |         | 2                 | 2+0+0                 | Zp           | LS                |
| KRP/IDIFO    | Digital Photography                  |         | 2                 | 2+0+0                 | Zp           | LS                |

Student si dále vybere volitelné předměty s takovým rozsahem, aby získal minimálně 60 kreditů za ročník.

**Compulsory courses 2nd year (A)****Number of courses: 8 credits: 46**

| Abbreviation | Course name                                | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|---------|-------------------|-----------------------|--------------|-------------------|
| KE/INRPE     | Annual Project                             |         | 4                 | 0+1+0                 | Zp           | 2 ZS              |
| KE/INSDE     | Signal processing in digital communication |         | 6                 | 2+2+0                 | Zp,Zk        | 2 ZS              |
| KRP/INSZD    | Chemometrics I                             |         | 5                 | 2+2+0                 | Zp,Zk        | 2 ZS              |
| KST/INSIE    | Modelling and simulation                   |         | 5                 | 2+2+0                 | Zp,Zk        | 2 ZS              |
| KE/INDPE     | Thesis                                     |         | 15                | 0+1+0                 | Zp           | 2 LS              |
| KE/INDSE     | Thesis Tutorial                            |         | 2                 | 0+2+0                 | Zp           | 2 LS              |
| KE/INEKE     | Electrom. Compatibility of Electr. Systems |         | 4                 | 2+1+0                 | Zp,Zk        | 2 LS              |
| KE/INSBE     | Electronic Systems Dependability and Saf   |         | 5                 | 2+2+0                 | Zp,Zk        | 2 LS              |

Anglický jazyk je předmětem povinným. Student splní během studia 1 předmět z bloku Anglický jazyk odborný dle úrovně vstupního testu.

**Elective courses 2nd year (B)****Volba min.: 2 př.**

| Abbreviation | Course name                  | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KE/INASE     | Acoustic Signal Processing   |         | 4                 | 2+2+0                 | Zp,Zk        | 2 ZS              |
| KE/INMKE     | Mobile Communication Systems |         | 4                 | 2+2+0                 | Zp,Zk        | 2 ZS              |
| KE/INSPE     | Digital Signal Processors    |         | 4*                | 2+2+0                 | Zp,Zk        | 2 ZS              |
| KRP/INMOE    | Methods of Optimization      |         | 5                 | 2+2+0                 | Zp,Zk        | 2 ZS              |

Student si zapíše dva z uvedených předmětů v zimním semestru.

**Optional courses 2nd year (C)**

| Abbreviation | Course name                               | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|---------|-------------------|-----------------------|--------------|-------------------|
| KOANCH/C886  | Semiconductors                            |         | 4                 | 2+0+0                 | Zk           | 2 LS              |
| FEI/INAKO    | English conversation for follow-ups       |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KE/INPVE     | Parallel Computing with MATLAB            |         | 3                 | 1+2+0                 | Zp,Zk        | ZS                |
| KE/ZNSSE     | Signals and Systems                       |         | 2                 | 1+1+0                 | Zp,Zk        | ZS                |
| KIT/BZPO     | Basics of Business                        |         | 3*                | 0+2+0                 | Zp           | ZS                |
| KIT/INMRF    | Marketing Management                      |         | 3                 | 1+1+0                 | Zp,Zk        | ZS                |
| KIT/NNEPD    | Electronic Document Preparation           |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KMF/IZMF     | Basics of Modern Physics                  |         | 2                 | 2+0+0                 | Zp           | ZS                |
| KRP/ZNU11    | Introduction to Artificial Intelligence 1 |         | 5*                | 2+3+0                 | Zp,Zk        | ZS                |
| FEI/INAK2    | English conversation for follow-ups       |         | 2                 | 0+2+0                 | Zp           | LS                |
| KE/IBPVE     | General Rules for Safety in El. Eng.      |         | 2*                | 2+0+0                 | Zp           | LS                |
| KIT/INPPD    | PR and Presentation Skills                |         | 3                 | 1+1+0                 | Zp,Zk        | LS                |
| KMF/INAM     | Applied Mathematics                       |         | 5                 | 2+2+0                 | Zp,Zk        | LS                |
| KMF/IZMF2    | Basics of Modern Physics 2                |         | 2                 | 2+0+0                 | Zp           | LS                |
| KRP/IDIFO    | Digital Photography                       |         | 2                 | 2+0+0                 | Zp           | LS                |

Student si dále vybere volitelné předměty s takovým rozsahem, aby získal minimálně 60 kreditů za ročník.

**Anglický jazyk odborný pro obory elektro a IT (B)****Volba min.: 1 př.**

| Abbreviation | Course name                           | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/IPAIU     | English for IT - B1+                  |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIV     | English for Electro/IT Careers - B2   |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIW     | English for Electr. Engineering - B2+ |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIX     | English for Electro/IT Careers - C1   |         | 2                 | 0+2+0                 | Zk           |                   |

Student během navazujícího magisterského studia splní alespoň 1 předmět tohoto bloku.

**Anglický jazyk - volitelný (C)**

| Abbreviation | Course name                          | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/IPAIV     | English for Electro/IT Careers - B2  |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIW     | English for Electr.Engineering - B2+ |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIX     | English for Electro/IT Careers - C1  |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUF     | English - B1+                        |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUT     | English - B1                         |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUX     | English - C1                         |         | 2                 | 0+2+0                 | Zk           |                   |

**Ruský jazyk - volitelný (C)**

| Abbreviation | Course name   | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPRUA     | Russian - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPRUB     | Russian - A1+ |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPRUC     | Russian - A2  |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPRUD     | Russian - A2+ |         | 2                 | 0+2+0                 | Zk           |                   |

**Německý jazyk - volitelný (C)**

| Abbreviation | Course name  | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPNUA     | German - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUB     | German - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUC     | German - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUD     | German - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUT     | German - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUU     | German - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |

**Francouzský jazyk - volitelný (C)**

| Abbreviation | Course name  | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPFUP     | French - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUQ     | French - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUR     | French - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUS     | French - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUT     | French - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUU     | French - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |

**Španělský jazyk - volitelný (C)**

| Abbreviation | Course name   | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPSUP     | Spanish - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUQ     | Spanish - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUR     | Spanish - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUS     | Spanish - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUT     | Spanish - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUU     | Spanish - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |

**P.E. Optional - WS (C)**

| Abbreviation | Course name        | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KTS/AER1     | Aerobic 1          |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/ATP1     | Athletics ZS       |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BAD1     | Badminton 1        |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BAS1     | Basketball 1       |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BCH1     | Beach Volleyball 1 |         | 1                 | 0+10+0                | Zp           | ZS                |
| KTS/FLO1     | Floorball 1        |         | 1                 | 0+2+0                 | Zp           | ZS                |

|           |                                  |   |        |    |    |
|-----------|----------------------------------|---|--------|----|----|
| KTS/FOT1  | Football 1                       | 1 | 0+2+0  | Zp | ZS |
| KTS/HOK1  | Ice hockey 1                     | 1 | 0+2+0  | Zp | ZS |
| KTS/INC1  | Indoorcycling 1                  | 1 | 0+1+0  | Zp | ZS |
| KTS/KCV1  | Conditional training 1           | 1 | 0+2+0  | Zp | ZS |
| KTS/LEZ1  | Climbing 1                       | 1 | 0+2+0  | Zp | ZS |
| KTS/PLA1  | Swimming 1                       | 1 | 0+1+0  | Zp | ZS |
| KTS/POS1  | Strengthening 1                  | 1 | 0+2+0  | Zp | ZS |
| KTS/PWJ1  | Poweryoga 1                      | 1 | 0+2+0  | Zp | ZS |
| KTS/SEB1  | Self defence and combat sports 1 | 1 | 0+2+0  | Zp | ZS |
| KTS/SPV1  | Sports for all 1                 | 1 | 0+2+0  | Zp | ZS |
| KTS/SQU1  | Squash 1                         | 1 | 0+1+0  | Zp | ZS |
| KTS/STOL1 | Table tennis ZS                  | 1 | 0+2+0  | Zp | ZS |
| KTS/TEN1  | Tennis 1                         | 1 | 0+2+0  | Zp | ZS |
| KTS/VES1  | Rowing 1                         | 1 | 0+12+0 | Zp | ZS |
| KTS/VOL1  | Volleyball 1                     | 1 | 0+2+0  | Zp | ZS |
| KTS/ZZS1  | Healthy lifestyle ZS             | 1 | 0+2+0  | Zp | ZS |

Student si volí pouze jeden předmět z nabídky.

### P.E. Optional - SS (C)

| Abbreviation | Course name                      | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KTS/AER2     | Aerobic 2                        |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/ATP2     | Athletics LS                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BAD2     | Badminton 2                      |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BAS2     | Basketball 2                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BCH2     | Beach Volleyball 2               |         | 1                 | 0+10+0                | Zp           | LS                |
| KTS/FLO2     | Floorball 2                      |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/FOT2     | Football 2                       |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/HOK2     | Ice hockey 2                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/INC2     | Indoorcycling 2                  |         | 1                 | 0+1+0                 | Zp           | LS                |
| KTS/KCV2     | Conditional training 2           |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/LEZ2     | Climbing 2                       |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/PLA2     | Swimming 2                       |         | 1                 | 0+1+0                 | Zp           | LS                |
| KTS/POS2     | Strengthening 2                  |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/PWJ2     | Poweryoga 2                      |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/SEB2     | Self defence and combat sports 2 |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/SPV2     | Sports for all 2                 |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/SQU2     | Squash 2                         |         | 1                 | 0+1+0                 | Zp           | LS                |
| KTS/STOL2    | Table tennis LS                  |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/TEN2     | Tennis 2                         |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/VES2     | Rowing 2                         |         | 1                 | 0+12+0                | Zp           | LS                |
| KTS/VOL2     | Volleyball 2                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/ZZS2     | Healthy lifestyle LS             |         | 1                 | 0+2+0                 | Zp           | LS                |

Student si volí pouze jeden předmět z nabídky.

### Předměty státní závěrečné zkoušky povinné (A)

Number of courses: 2 credits: 0

| Abbreviation | Course name                              | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|---------|-------------------|-----------------------|--------------|-------------------|
| KE/INESE     | Electronics and Communication Technology |         | 0                 | 0+0+0                 | Szv          | LS                |
| KE/INSZE     | Electronic Systems and Signal Processing |         | 0                 | 0+0+0                 | Szv          | LS                |

Předmět Elektronika a sdělovací technika zahrnuje látku z předmětů INAOE, INPAE, INSSE a INDME. Předmět Elektronické systémy a zpracování signálu zahrnuje látku předmětů INRSE, INSBE, INZSE a INSIE.

### Předměty státní závěrečné zkoušky povinně volitelné (B)

Volba min.: 0 cr.

| Abbreviation | Course name        | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KE/INDTE     | Digital Technology |         | 0                 | 0+0+0                 | Szv          | LS                |



|          |                                   |   |       |     |    |
|----------|-----------------------------------|---|-------|-----|----|
| KE/INREE | Radioelectronic Systems           | 0 | 0+0+0 | Szv | LS |
| KE/INRTE | Control Technologies              | 0 | 0+0+0 | Szv | LS |
| KE/INZMS | Video and Audio Signal Processing | 0 | 0+0+0 | Szv | LS |

Student si vybere jeden předmět z uvedené nabídky. Předmět Digitální technika zahrnuje látku předmětů INLOE, INVZE a INSPE. Předmět Řídicí technologie zahrnuje látku předmětů INPSE, INPRE a INMOE. Předmět Radioelektronické systémy zahrnuje látku předmětů INRKE, INUPE a INMKE. Předmět Zpracování multimediálních signálů zahrnuje látku předmětů INMSE, INZOE a INASE.

### Compulsory courses 1st year (A)

Number of courses: **9** credits: **41**

| Abbreviation | Course name                              | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|---------|-------------------|-----------------------|--------------|-------------------|
| KE/INAOE     | Electronics Circuits Analysis and Design |         | 5                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KE/INAPE     | Personal Data and Copyright Protection   |         | 2                 | 2+0+0                 | Zp           | 1 ZS              |
| KE/INSSE     | Signals and Systems                      |         | 5                 | 3+2+0                 | Zp,Zk        | 1 ZS              |
| KMF/INTPE    | Theory of Probability and Mat. Statistic |         | 4                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KRP/INRSE    | Control systems theory                   |         | 5                 | 2+0+2                 | Zp,Zk        | 1 ZS              |
| KE/INDME     | Theory of Communication                  |         | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KE/INPAE     | Advanced Analogue Circuits               |         | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KE/INZSE     | Digital Signal Processing                |         | 5                 | 2+3+0                 | Zp,Zk        | 1 LS              |
| KMF/INMAE    | Matrix Algebra                           |         | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |

Anglický jazyk je předmětem povinným. Student splní během studia 1 předmět z bloku Anglický jazyk odborný dle úrovně vstupního testu.

### Elective courses 1st year (B)

Volba min.: **4 př.**

| Abbreviation | Course name                              | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|---------|-------------------|-----------------------|--------------|-------------------|
| KE/INLOE     | Design with Programmable Logic Devices   |         | 4                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KE/INMSE     | Transmission&Processing of spec. Signals |         | 4                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KE/INRKE     | Radio-Communication Systems Technology   |         | 4                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KRP/INPSE    | Industrial control systems               |         | 5                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KRP/INUI1    | Introduction to Artificial Intelligence  |         | 5*                | 2+3+0                 | Zk           | 1 ZS              |
| KE/INUPE     | Radio Positioning Systems                |         | 4                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KE/INVZE     | Programming of Embedded Devices          |         | 4                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KE/INZOE     | Image Processing                         |         | 4                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KRP/INPRE    | Advanced Control Systems                 |         | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KRP/INUI2    | Introduction to Artificial Intelligence  |         | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |

Student si vybere nejméně dva z uvedených předmětů v každém semestru.

### Optional courses 1st year (C)

| Abbreviation | Course name                          | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| FEI/INAKO    | English conversation for follow-ups  |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KE/INPVE     | Parallel Computing with MATLAB       |         | 3                 | 1+2+0                 | Zp,Zk        | ZS                |
| KIT/BZPO     | Basics of Business                   |         | 3*                | 0+2+0                 | Zp           | ZS                |
| KIT/INMRF    | Marketing Management                 |         | 3                 | 1+1+0                 | Zp,Zk        | ZS                |
| KIT/INNEPD   | Electronic Document Preparation      |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KMF/IZMF     | Basics of Modern Physics             |         | 2                 | 2+0+0                 | Zp           | ZS                |
| FEI/INAK2    | English conversation for follow-ups  |         | 2                 | 0+2+0                 | Zp           | LS                |
| KE/IBPVE     | General Rules for Safety in El. Eng. |         | 2*                | 2+0+0                 | Zp           | LS                |
| KIT/INPPD    | PR and Presentation Skills           |         | 3                 | 1+1+0                 | Zp,Zk        | LS                |
| KMF/INAM     | Applied Mathematics                  |         | 5                 | 2+2+0                 | Zp,Zk        | LS                |
| KMF/IZMF2    | Basics of Modern Physics 2           |         | 2                 | 2+0+0                 | Zp           | LS                |
| KRP/IDIFO    | Digital Photography                  |         | 2                 | 2+0+0                 | Zp           | LS                |

Student si dále vybere volitelné předměty s takovým rozsahem, aby získal minimálně 60 kreditů za ročník.

### Compulsory courses 2nd year (A)

Number of courses: **8** credits: **46**

| Abbreviation | Course name                                | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|---------|-------------------|-----------------------|--------------|-------------------|
| KE/INRPE     | Annual Project                             |         | 4                 | 0+1+0                 | Zp           | 2 ZS              |
| KE/INSDE     | Signal processing in digital communication |         | 6                 | 2+2+0                 | Zp,Zk        | 2 ZS              |
| KRP/INSZD    | Chemometrics I                             |         | 5                 | 2+2+0                 | Zp,Zk        | 2 ZS              |

|           |  |    |       |       |   |    |
|-----------|--|----|-------|-------|---|----|
| KST/INSIE | Modelling and simulation                 | 5  | 2+2+0 | Zp,Zk | 2 | ZS |
| KE/INDPE  | Thesis                                   | 15 | 0+1+0 | Zp    | 2 | LS |
| KE/INDSE  | Thesis Tutorial                          | 2  | 0+2+0 | Zp    | 2 | LS |
| KE/INEKE  | Electrom.Compatibility of Electr.Systems | 4  | 2+1+0 | Zp,Zk | 2 | LS |
| KE/INSBE  | Electronic Systems Dependability and Saf | 5  | 2+2+0 | Zp,Zk | 2 | LS |

Anglický jazyk je předmětem povinným. Student splní během studia 1 předmět z bloku Anglický jazyk odborný dle úrovně vstupního testu.

### Elective courses 2nd year (B)

Volba min.: 2 př.

| Abbreviation | Course name                  | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KE/INASE     | Acoustic Signal Processing   |         | 4                 | 2+2+0                 | Zp,Zk        | 2 ZS              |
| KE/INMKE     | Mobile Communication Systems |         | 4                 | 2+2+0                 | Zp,Zk        | 2 ZS              |
| KE/INSPE     | Digital Signal Processors    |         | 4*                | 2+2+0                 | Zp,Zk        | 2 ZS              |
| KRP/INMOE    | Methods of Optimization      |         | 5                 | 2+2+0                 | Zp,Zk        | 2 ZS              |

Student si запиše dva z uvedených předmětů v zimním semestru.

### Optional courses 2nd year (C)

| Abbreviation | Course name                             | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|---------|-------------------|-----------------------|--------------|-------------------|
| KOANCH/C886  | Semiconductors                          |         | 4                 | 2+0+0                 | Zk           | 2 LS              |
| FEI/INAKO    | English conversation for follow-ups     |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KE/INPVE     | Parallel Computing with MATLAB          |         | 3                 | 1+2+0                 | Zp,Zk        | ZS                |
| KE/ZNSSE     | Signals and Systems                     |         | 2                 | 1+1+0                 | Zp,Zk        | ZS                |
| KIT/BZPO     | Basics of Business                      |         | 3*                | 0+2+0                 | Zp           | ZS                |
| KIT/INMRF    | Marketing Management                    |         | 3                 | 1+1+0                 | Zp,Zk        | ZS                |
| KIT/INNEPD   | Electronic Document Preparation         |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KMF/IZMF     | Basics of Modern Physics                |         | 2                 | 2+0+0                 | Zp           | ZS                |
| KRP/ZNU11    | Introduction to Artific. Intelligence 1 |         | 5*                | 2+3+0                 | Zp,Zk        | ZS                |
| FEI/INAK2    | English conversation for follow-ups     |         | 2                 | 0+2+0                 | Zp           | LS                |
| KE/IBPVE     | General Rules for Safety in El. Eng.    |         | 2*                | 2+0+0                 | Zp           | LS                |
| KIT/INPPD    | PR and Presentation Skills              |         | 3                 | 1+1+0                 | Zp,Zk        | LS                |
| KMF/INAM     | Applied Mathematics                     |         | 5                 | 2+2+0                 | Zp,Zk        | LS                |
| KMF/IZMF2    | Basics of Modern Physics 2              |         | 2                 | 2+0+0                 | Zp           | LS                |
| KRP/IDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |

Student si dále vybere volitelné předměty s takovým rozsahem, aby získal minimálně 60 kreditů za ročník.

### Anglický jazyk odborný pro obory elektro a IT (B)

Volba min.: 1 př.

| Abbreviation | Course name                          | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/IPAIU     | English for IT - B1+                 |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIV     | English for Electro/IT Careers - B2  |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIW     | English for Electr.Engineering - B2+ |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIX     | English for Electro/IT Careers - C1  |         | 2                 | 0+2+0                 | Zk           |                   |

Student během navazujícího magisterského studia splní alespoň 1 předmět tohoto bloku.

### Anglický jazyk - volitelný (C)

| Abbreviation | Course name                          | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/IPAIV     | English for Electro/IT Careers - B2  |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIW     | English for Electr.Engineering - B2+ |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIX     | English for Electro/IT Careers - C1  |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUF     | English - B1+                        |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUT     | English - B1                         |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUX     | English - C1                         |         | 2                 | 0+2+0                 | Zk           |                   |

**Ruský jazyk - volitelný (C)**

| Abbreviation | Course name   | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPRUA     | Russian - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPRUB     | Russian - A1+ |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPRUC     | Russian - A2  |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPRUD     | Russian - A2+ |         | 2                 | 0+2+0                 | Zk           |                   |

**Německý jazyk - volitelný (C)**

| Abbreviation | Course name  | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPNUA     | German - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUB     | German - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUC     | German - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUD     | German - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUT     | German - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUU     | German - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |

**Francouzský jazyk - volitelný (C)**

| Abbreviation | Course name  | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPFUP     | French - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUQ     | French - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUR     | French - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUS     | French - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUT     | French - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUU     | French - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |

**Španělský jazyk - volitelný (C)**

| Abbreviation | Course name   | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPSUP     | Spanish - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUQ     | Spanish - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUR     | Spanish - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUS     | Spanish - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUT     | Spanish - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUU     | Spanish - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |

**P.E. Optional - WS (C)**

| Abbreviation | Course name                      | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KTS/AER1     | Aerobic 1                        |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/ATP1     | Athletics ZS                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BAD1     | Badminton 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BAS1     | Basketball 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BCH1     | Beach Volleyball 1               |         | 1                 | 0+10+0                | Zp           | ZS                |
| KTS/FLO1     | Floorball 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/FOT1     | Football 1                       |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/HOK1     | Ice hockey 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/INC1     | Indoorcycling 1                  |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/KCV1     | Conditional training 1           |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/LEZ1     | Climbing 1                       |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/PLA1     | Swimming 1                       |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/POS1     | Strengthening 1                  |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/PWJ1     | Poweryoga 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SEB1     | Self defence and combat sports 1 |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SPV1     | Sports for all 1                 |         | 1                 | 0+2+0                 | Zp           | ZS                |

|           |                      |   |        |    |    |
|-----------|----------------------|---|--------|----|----|
| KTS/SQU1  | Squash 1             | 1 | 0+1+0  | Zp | ZS |
| KTS/STOL1 | Table tennis ZS      | 1 | 0+2+0  | Zp | ZS |
| KTS/TEN1  | Tennis 1             | 1 | 0+2+0  | Zp | ZS |
| KTS/VES1  | Rowing 1             | 1 | 0+12+0 | Zp | ZS |
| KTS/VOL1  | Volleyball 1         | 1 | 0+2+0  | Zp | ZS |
| KTS/ZZS1  | Healthy lifestyle ZS | 1 | 0+2+0  | Zp | ZS |

Student si volí pouze jeden předmět z nabídky.

### P.E. Optional - SS (C)

| Abbreviation | Course name                      | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KTS/AER2     | Aerobic 2                        |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/ATP2     | Athletics LS                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BAD2     | Badminton 2                      |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BAS2     | Basketball 2                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BCH2     | Beach Volleyball 2               |         | 1                 | 0+10+0                | Zp           | LS                |
| KTS/FLO2     | Floorball 2                      |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/FOT2     | Football 2                       |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/HOK2     | Ice hockey 2                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/INC2     | Indoorcycling 2                  |         | 1                 | 0+1+0                 | Zp           | LS                |
| KTS/KCV2     | Conditional training 2           |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/LEZ2     | Climbing 2                       |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/PLA2     | Swimming 2                       |         | 1                 | 0+1+0                 | Zp           | LS                |
| KTS/POS2     | Strengthening 2                  |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/PWJ2     | Poweryoga 2                      |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/SEB2     | Self defence and combat sports 2 |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/SPV2     | Sports for all 2                 |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/SQU2     | Squash 2                         |         | 1                 | 0+1+0                 | Zp           | LS                |
| KTS/STOL2    | Table tennis LS                  |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/TEN2     | Tennis 2                         |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/VES2     | Rowing 2                         |         | 1                 | 0+12+0                | Zp           | LS                |
| KTS/VOL2     | Volleyball 2                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/ZZS2     | Healthy lifestyle LS             |         | 1                 | 0+2+0                 | Zp           | LS                |

Student si volí pouze jeden předmět z nabídky.

### Předměty státní závěrečné zkoušky povinné (A)

Number of courses: 2 credits: 0

| Abbreviation | Course name                              | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|---------|-------------------|-----------------------|--------------|-------------------|
| KE/INESE     | Electronics and Communication Technology |         | 0                 | 0+0+0                 | Szv          | LS                |
| KE/INSZE     | Electronic Systems and Signal Processing |         | 0                 | 0+0+0                 | Szv          | LS                |

Předmět Elektronika a sdělovací technika zahrnuje látku z předmětů INAOE, INPAE, INSSE a INDME. Předmět Elektronické systémy a zpracování signálu zahrnuje látku předmětů INRSE, INSBE, INZSE a INSIE.

### Předměty státní závěrečné zkoušky povinně volitelné (B)

Volba min.: 0 cr.

| Abbreviation | Course name                       | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|-----------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KE/INDTE     | Digital Technology                |         | 0                 | 0+0+0                 | Szv          | LS                |
| KE/INREE     | Radioelectronic Systems           |         | 0                 | 0+0+0                 | Szv          | LS                |
| KE/INRTE     | Control Technologies              |         | 0                 | 0+0+0                 | Szv          | LS                |
| KE/INZMS     | Video and Audio Signal Processing |         | 0                 | 0+0+0                 | Szv          | LS                |

Student si vybere jeden předmět z uvedené nabídky. Předmět Digitální technika zahrnuje látku předmětů INLOE, INVZE a INSPE.

Předmět Řídicí technologie zahrnuje látku předmětů INPSE, INPRE a INMOE. Předmět Radioelektronické systémy zahrnuje látku předmětů INRKE, INUPE a INMKE. Předmět Zpracování multimediálních signálů zahrnuje látku předmětů INMSE, INZOE a INASE.

### Compulsory courses 1st year (A)

Number of courses: **8** credits: **41**

| Abbreviation | Course name                              | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|---------|-------------------|-----------------------|--------------|-------------------|
| KMF/INVKM    | Selected mathematical lectures           |         | 5                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KRP/INAR1    | Theory of Automatic Control              |         | 6                 | 2+3+0                 | Zp,Zk        | 1 ZS              |
| KRP/INSZD    | Chemometrics I                           |         | 5                 | 2+2+0                 | Zp,Zk        | 1 ZS              |
| KRP/INZM     | Fundamentals of Mechatronics             |         | 5                 | 1+1+2                 | Zp,Zk        | 1 ZS              |
| KRP/INAR2    | Theory of Automatic Control              |         | 6                 | 2+3+0                 | Zp,Zk        | 1 LS              |
| KRP/INLC1    | Laboratory exercises                     |         | 4                 | 0+0+4                 | Zp,Zk        | 1 LS              |
| KRP/INMDS    | Identification and Modeling of Dynamic S |         | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |
| KRP/INPR     | Industrial Robots                        |         | 5                 | 2+2+0                 | Zp,Zk        | 1 LS              |

Anglický jazyk je předmětem povinným. Student splní během studia 1 předmět z bloku Anglický jazyk odborný dle úrovně vstupního testu.

### Elective courses 1st year (B)

Volba min.: **2 př.**

| Abbreviation | Course name                              | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|---------|-------------------|-----------------------|--------------|-------------------|
| KE/INAPE     | Personal Data and Copyright Protection   |         | 2                 | 2+0+0                 | Zp           | ZS                |
| KE/INSSE     | Signals and Systems                      |         | 5                 | 3+2+0                 | Zp,Zk        | ZS                |
| KIT/INMRF    | Marketing Management                     |         | 3                 | 1+1+0                 | Zp,Zk        | ZS                |
| KIT/INPI     | Business Informatics                     |         | 5                 | 2+2+0                 | Zp,Zk        | ZS                |
| KRP/INUI1    | Introduction to Artificial Intelligence  |         | 5*                | 2+3+0                 | Zk           | ZS                |
| KE/INSBE     | Electronic Systems Dependability and Saf |         | 5                 | 2+2+0                 | Zp,Zk        | LS                |
| KE/INZOE     | Image Processing                         |         | 4                 | 2+2+0                 | Zp,Zk        | LS                |
| KE/INZSE     | Digital Signal Processing                |         | 5                 | 2+3+0                 | Zp,Zk        | LS                |
| KRP/INSAD    | Statistical analysis of multivariate dat |         | 4                 | 2+2+0                 | Zp,Zk        | LS                |
| KRP/INSPR    | Software Tools for Control               |         | 5                 | 2+2+0                 | Zp,Zk        | LS                |
| KRP/INUI2    | Introduction to Artificial Intelligence  |         | 5                 | 2+2+0                 | Zp,Zk        | LS                |

Student si v každém semestru vybere alespoň jeden z uvedených předmětů.

### Optional courses 1st year (C)

| Abbreviation | Course name                         | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|-------------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| FEI/INAKO    | English conversation for follow-ups |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KMF/IZMF     | Basics of Modern Physics            |         | 2                 | 2+0+0                 | Zp           | ZS                |
| FEI/INAK2    | English conversation for follow-ups |         | 2                 | 0+2+0                 | Zp           | LS                |
| KIT/INEPD    | Electronic Document Preparation     |         | 2                 | 0+2+0                 | Zp           | LS                |
| KIT/INPPD    | PR and Presentation Skills          |         | 3                 | 1+1+0                 | Zp,Zk        | LS                |
| KMF/INAM     | Applied Mathematics                 |         | 5                 | 2+2+0                 | Zp,Zk        | LS                |
| KMF/IZMF2    | Basics of Modern Physics 2          |         | 2                 | 2+0+0                 | Zp           | LS                |
| KRP/IDIFO    | Digital Photography                 |         | 2                 | 2+0+0                 | Zp           | LS                |

Student si vybere volitelné předměty s takovým rozsahem, aby získal minimálně 60 kreditů za ročník. Student má dále možnost si zapsat tělesnou výchovu dle nabídky Katedry tělovýchovy a sportu.

### Compulsory courses 2nd year (A)

Number of courses: **7** credits: **42**

| Abbreviation | Course name                 | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|-----------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KRP/INAR3    | Theory of Automatic Control |         | 6                 | 2+3+0                 | Zp,Zk        | 2 ZS              |
| KRP/INLC2    | Laboratory exercises        |         | 4                 | 0+0+4                 | Zp,Zk        | 2 ZS              |
| KRP/INPSE    | Industrial control systems  |         | 5                 | 2+2+0                 | Zp,Zk        | 2 ZS              |
| KRP/INSEP    | Term Project                |         | 5                 | 0+4+0                 | Zk           | 2 ZS              |
| KRP/INDP     | Diploma Thesis              |         | 15                | 0+1+0                 | Zp           | 2 LS              |
| KRP/INDS     | Diploma Thesis Seminar      |         | 2                 | 0+2+0                 | Zp           | 2 LS              |

KRP/INRS Design of Control Systems 5 2+0+2 Zp,Zk 2 LS

Anglický jazyk je předmětem povinným. Student splní během studia 1 předmět z bloku Anglický jazyk odborný dle úrovně vstupního testu.

### Elective courses 2nd year (B)

Volba min.: 2 př.

| Abbreviation | Course name                              | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|---------|-------------------|-----------------------|--------------|-------------------|
| KE/INAPE     | Personal Data and Copyright Protection   |         | 2                 | 2+0+0                 | Zp           | ZS                |
| KE/INSSE     | Signals and Systems                      |         | 5                 | 3+2+0                 | Zp,Zk        | ZS                |
| KIT/INMRF    | Marketing Management                     |         | 3                 | 1+1+0                 | Zp,Zk        | ZS                |
| KIT/INPI     | Business Informatics                     |         | 5                 | 2+2+0                 | Zp,Zk        | ZS                |
| KRP/INMO     | Methods of Optimization and Optimal Cont |         | 5                 | 2+2+0                 | Zp,Zk        | ZS                |
| KRP/INUI1    | Introduction to Artificial Intelligence  |         | 5*                | 2+3+0                 | Zk           | ZS                |
| KE/INSBE     | Electronic Systems Dependability and Saf |         | 5                 | 2+2+0                 | Zp,Zk        | LS                |
| KE/INZOE     | Image Processing                         |         | 4                 | 2+2+0                 | Zp,Zk        | LS                |
| KE/INZSE     | Digital Signal Processing                |         | 5                 | 2+3+0                 | Zp,Zk        | LS                |
| KRP/INSAD    | Statistical analysis of multivariate dat |         | 4                 | 2+2+0                 | Zp,Zk        | LS                |
| KRP/INSPR    | Software Tools for Control               |         | 5                 | 2+2+0                 | Zp,Zk        | LS                |
| KRP/INUI2    | Introduction to Artificial Intelligence  |         | 5                 | 2+2+0                 | Zp,Zk        | LS                |

Student si vybere v každém semestru alespoň jeden z uvedených předmětů.

### Optional courses 2nd year (C)

| Abbreviation | Course name                             | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---|---------|-------------------|-----------------------|--------------|-------------------|
| FEI/INAKO    | English conversation for follow-ups     |         | 2                 | 0+2+0                 | Zp           | ZS                |
| KE/ZNSSE     | Signals and Systems                     |         | 2                 | 1+1+0                 | Zp,Zk        | ZS                |
| KMF/IZMF     | Basics of Modern Physics                |         | 2                 | 2+0+0                 | Zp           | ZS                |
| KRP/ZNUI1    | Introduction to Artific. Intelligence 1 |         | 5*                | 2+3+0                 | Zp,Zk        | ZS                |
| FEI/INAK2    | English conversation for follow-ups     |         | 2                 | 0+2+0                 | Zp           | LS                |
| KIT/INEPD    | Electronic Document Preparation         |         | 2                 | 0+2+0                 | Zp           | LS                |
| KIT/INPPD    | PR and Presentation Skills              |         | 3                 | 1+1+0                 | Zp,Zk        | LS                |
| KMF/INAM     | Applied Mathematics                     |         | 5                 | 2+2+0                 | Zp,Zk        | LS                |
| KMF/IZMF2    | Basics of Modern Physics 2              |         | 2                 | 2+0+0                 | Zp           | LS                |
| KRP/IDIFO    | Digital Photography                     |         | 2                 | 2+0+0                 | Zp           | LS                |

Student si vybere volitelné předměty s takovým rozsahem, aby získal minimálně 60 kreditů za ročník. Student má dále možnost si zapsat tělesnou výchovu dle nabídky Katedry tělovýchovy a sportu.

### Anglický jazyk odborný pro obory elektro a IT (B)

Volba min.: 1 př.

| Abbreviation | Course name                          | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/IPAIU     | English for IT - B1+                 |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIV     | English for Electro/IT Careers - B2  |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIW     | English for Electr.Engineering - B2+ |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIX     | English for Electro/IT Careers - C1  |         | 2                 | 0+2+0                 | Zk           |                   |

Student během navazujícího magisterského studia splní alespoň 1 předmět tohoto bloku.

### Anglický jazyk - volitelný (C)

| Abbreviation | Course name                          | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/IPAIV     | English for Electro/IT Careers - B2  |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIW     | English for Electr.Engineering - B2+ |         | 2                 | 0+2+0                 | Zp           |                   |
| JC/IPAIX     | English for Electro/IT Careers - C1  |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUF     | English - B1+                        |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUT     | English - B1                         |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPAUX     | English - C1                         |         | 2                 | 0+2+0                 | Zk           |                   |

**Ruský jazyk - volitelný (C)**

| Abbreviation | Course name   | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPRUA     | Russian - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPRUB     | Russian - A1+ |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPRUC     | Russian - A2  |         | 2                 | 0+2+0                 | Zk           |                   |
| JC/UPRUD     | Russian - A2+ |         | 2                 | 0+2+0                 | Zk           |                   |

**Německý jazyk - volitelný (C)**

| Abbreviation | Course name  | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPNUA     | German - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUB     | German - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUC     | German - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUD     | German - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUT     | German - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPNUU     | German - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |

**Francouzský jazyk - volitelný (C)**

| Abbreviation | Course name  | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPFUP     | French - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUQ     | French - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUR     | French - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUS     | French - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUT     | French - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPFUU     | French - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |

**Španělský jazyk - volitelný (C)**

| Abbreviation | Course name   | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|---------------|---------|-------------------|-----------------------|--------------|-------------------|
| JC/UPSUP     | Spanish - A1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUQ     | Spanish - A1+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUR     | Spanish - A2  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUS     | Spanish - A2+ |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUT     | Spanish - B1  |         | 2*                | 0+2+0                 | Zk           |                   |
| JC/UPSUU     | Spanish - B1+ |         | 2                 | 0+2+0                 | Zk           |                   |

**P.E. Optional - WS (C)**

| Abbreviation | Course name                      | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KTS/AER1     | Aerobic 1                        |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/ATP1     | Athletics ZS                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BAD1     | Badminton 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BAS1     | Basketball 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/BCH1     | Beach Volleyball 1               |         | 1                 | 0+10+0                | Zp           | ZS                |
| KTS/FLO1     | Floorball 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/FOT1     | Football 1                       |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/HOK1     | Ice hockey 1                     |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/INC1     | Indoorcycling 1                  |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/KCV1     | Conditional training 1           |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/LEZ1     | Climbing 1                       |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/PLA1     | Swimming 1                       |         | 1                 | 0+1+0                 | Zp           | ZS                |
| KTS/POS1     | Strengthening 1                  |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/PWJ1     | Poweryoga 1                      |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SEB1     | Self defence and combat sports 1 |         | 1                 | 0+2+0                 | Zp           | ZS                |
| KTS/SPV1     | Sports for all 1                 |         | 1                 | 0+2+0                 | Zp           | ZS                |



|           |                      |   |        |    |    |
|-----------|----------------------|---|--------|----|----|
| KTS/SQU1  | Squash 1             | 1 | 0+1+0  | Zp | ZS |
| KTS/STOL1 | Table tennis ZS      | 1 | 0+2+0  | Zp | ZS |
| KTS/TEN1  | Tennis 1             | 1 | 0+2+0  | Zp | ZS |
| KTS/VES1  | Rowing 1             | 1 | 0+12+0 | Zp | ZS |
| KTS/VOL1  | Volleyball 1         | 1 | 0+2+0  | Zp | ZS |
| KTS/ZZS1  | Healthy lifestyle ZS | 1 | 0+2+0  | Zp | ZS |

Student si volí pouze jeden předmět z nabídky.

### P.E. Optional - SS (C)

| Abbreviation | Course name                      | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|----------------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KTS/AER2     | Aerobic 2                        |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/ATP2     | Athletics LS                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BAD2     | Badminton 2                      |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BAS2     | Basketball 2                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/BCH2     | Beach Volleyball 2               |         | 1                 | 0+10+0                | Zp           | LS                |
| KTS/FLO2     | Floorball 2                      |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/FOT2     | Football 2                       |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/HOK2     | Ice hockey 2                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/INC2     | Indoorcycling 2                  |         | 1                 | 0+1+0                 | Zp           | LS                |
| KTS/KCV2     | Conditional training 2           |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/LEZ2     | Climbing 2                       |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/PLA2     | Swimming 2                       |         | 1                 | 0+1+0                 | Zp           | LS                |
| KTS/POS2     | Strengthening 2                  |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/PWJ2     | Poweryoga 2                      |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/SEB2     | Self defence and combat sports 2 |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/SPV2     | Sports for all 2                 |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/SQU2     | Squash 2                         |         | 1                 | 0+1+0                 | Zp           | LS                |
| KTS/STOL2    | Table tennis LS                  |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/TEN2     | Tennis 2                         |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/VES2     | Rowing 2                         |         | 1                 | 0+12+0                | Zp           | LS                |
| KTS/VOL2     | Volleyball 2                     |         | 1                 | 0+2+0                 | Zp           | LS                |
| KTS/ZZS2     | Healthy lifestyle LS             |         | 1                 | 0+2+0                 | Zp           | LS                |

Student si volí pouze jeden předmět z nabídky.

### Předměty státní závěrečné zkoušky povinné (A)

Number of courses: 1 credits: 0

| Abbreviation | Course name                 | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|-----------------------------|---------|-------------------|-----------------------|--------------|-------------------|
| KRP/INARZ    | Theory of Automatic Control |         | 0                 | 0+0+0                 | Szv          | LS                |

Předmět Teorie automatického řízení zahrnuje látku z předmětů INAR1, INAR2 a INAR3

### Předměty státní závěrečné zkoušky povinně volitelné (B)

Volba min.: 0 cr.

| Abbreviation | Course name                              | Meaning | Number of credits | Course extent L+T+Sem | Finalization | Recomm. Year Sem. |
|--------------|--|---------|-------------------|-----------------------|--------------|-------------------|
| KRP/INMDZ    | Identification and Modeling of Dynamic   |         | 0                 | 0+0+0                 | Szv          | LS                |
| KRP/INMOZ    | Methods of Optimization and Optimal Cont |         | 0                 | 0+0+0                 | Szv          | LS                |
| KRP/INPRZ    | Industrial Robots                        |         | 0                 | 0+0+0                 | Szv          | LS                |
| KRP/INPSZ    | Industrial control systems               |         | 0                 | 0+0+0                 | Szv          | LS                |
| KRP/INRSZ    | Design of Control Systems                |         | 0                 | 0+0+0                 | Szv          | LS                |
| KRP/INUIZ    | Introduction to Artificial Intelligence  |         | 0                 | 0+0+0                 | Szv          | LS                |
| KRP/INZMZ    | Fundamentals of Mechatronics             |         | 0                 | 0+0+0                 | Szv          | LS                |

Student si vybere dva z uvedených předmětů. Předmět Základy umělé inteligence zahrnuje látku předmětů INUI1 a INUI2

Annotations: