## LCT at Charles University - within the Computer Science - Language Technologies and Computational Linguistics General rules - new accreditation from 2024/25: Each student has to pass all obligatory courses (for most of them, alternatives from a partner university might be recognized - BASED on previous 27 obligatory

Each student has to pass all obligatory courses (for most of them, alternatives from a partner university might be recognized - BASED on previous Each student must collect at least 42 credits for elective courses, with the additional two constraints:

- at lest 24 credits from core elective courses
- at least 6 credits from supplementary elective courses

Each student can register any number of courses (credits are counted as "free" credits).

algorith ms and languag digital applicat e data LRs ions science

42 elective courses

21 free choice

30 thesis

120

|         | Course name                                     | ECTS | note          | term | pre-requis | core     | DLR | NLA | LDS |
|---------|---|------|---------------|------|------------|----------|-----|-----|-----|
| NTIN066 | Data Structures I                               | 6    | obligatory    | S    |            |          |     |     | 6   |
| NTIN090 | Introduction to Complexity and Computability    | 4    | obligatory    | w    |            |          |     |     | 4   |
| NPFL063 | Introduction to General Linguistics             | 4    | obligatory    | w    |            | 4        |     |     |     |
| NPFL067 | Statistical Methods in Natural Language Process | 5    | obligatory    | w    |            | 2        |     | 3   |     |
| NPFL138 | Deep Learning                                   | 8    | obligatory    | S    |            | 3        |     |     | 5   |
|         | Diploma Thesis I                                | 6    | obligatory    | both |            |          |     |     |     |
|         | Diploma Thesis II                               | 9    | obligatory    | both | Diploma Tl | hesis I  |     |     |     |
|         | Diploma Thesis III                              | 15   | obligatory    | both | Diploma Tl | hesis II |     |     |     |
| NPFL006 | Introduction to Formal Linguistics              | 3    | core elective | w    |            | 3        |     |     |     |
| NPFL038 | Fundamentals of Speech Recognition and Gener    | 5    | core elective | w    |            |          | 2   | 3   |     |
| NPFL068 | Statistical Methods in Natural Language Process | 5    | core elective | S    |            |          |     | 3   | 2   |
| NPFL070 | Language Data Resources                         | 4    | core elective | w    |            | 2        | 2   |     |     |
| NPFL075 | Dependency Grammars and Treebanks               | 3    | core elective | S    |            |          | 2   | 1   |     |
| NPFL079 | Algorithms in Speech Recognition                | 5    | core elective | S    |            |          |     | 5   |     |
| NPFL083 | Linguistic Theory and Grammar Formalisms        | 5    | core elective | S    |            | 2        | 3   |     |     |
| NPFL087 | Statistical Machine Translation                 | 5    | core elective | S    |            |          |     |     | 5   |
| NPFL093 | NLP Applications                                | 4    | core elective | S    |            |          |     | 4   |     |
| NPFL094 | Morphological and Syntactic Analysis            | 3    | core elective | w    |            | 3        |     |     |     |
| NPFL099 | Statistical Dialogue Systems                    | 4    | core elective | w    |            |          |     | 2   | 2   |
| NPFL103 | Information Retrieval                           | 5    | core elective | w    | ]          |          |     | 3   | 2   |
| NPFL128 | Language technologies in practice               | 4    | core elective | S    | ]          | 4        |     |     |     |

|         | Course name                                    | ECTS | note                   | term | pre-requis             | core | DLR | NLA | LDS |
|---------|--|------|------------------------|------|------------------------|------|-----|-----|-----|
| NPFL082 | Information Structure of Sentences and Discour | 2    | supplementary elective | S    | ] [                    |      | 2   |     |     |
| NPFL095 | Modern Methods in Computational Linguistics    | 3    | supplementary elective | W    | ] [                    |      |     |     | 3   |
| NPFL097 | Unsupervised Machine Learning in NLP           | 3    | supplementary elective | W    | ] [                    |      |     |     | 3   |
| NPFL100 | Variability of Languages in Time and Space     | 2    | supplementary elective | W    | ] [                    |      | 2   |     |     |
| NPFL139 | Deep Reinforcement Learning                    | 8    | supplementary elective | W    | ] [                    | 2    |     |     | 6   |
| NPFL140 | Large Language Models                          | 3    | supplementary elective | S    | ] [                    |      |     |     | 3   |
| NPGR036 | Computer Vision                                | 5    | supplementary elective | S    | ] [                    |      |     | 5   |     |
| NAIL025 | Evolutionary Algorithms I                      | 5    | supplementary elective | W    | ] [                    |      |     |     | 5   |
| NAIL069 | Artificial Inteligence I                       | 4    | supplementary elective | w    | ] [                    | 4    |     |     |     |
| NAIL070 | Artificial Inteligence II                      | 3    | supplementary elective | S    | ] [                    |      |     | 1   | 2   |
| NAIL104 | Probabilistic Graphical Models                 | 3    | supplementary elective | W    | ] [                    |      |     | 3   |     |
| NAIL131 | Ethics of AI+                                  | 2    | supplementary elective | both | ] [                    |      |     |     |     |
| NPGR069 | Company Project                                | 6    | supplementary elective | both | track depends on topic |      |     |     |     |
| NPGR070 | Research Project                               | 9    | supplementary elective | both | track depends on topic |      |     |     |     |
| NPGR071 | Software Project                               | 12   | supplementary elective | both | track depends on topic |      |     |     |     |

## Recommended free courses (not counted as elective):

| NPFL012 | Introduction to Computer Linguistics         | 3 | Bc course | w |
|---------|--|---|-----------|---|
| NPFL101 | PFL101 Competing in Machine Translation      |   | Bc course | w |
| NPFL123 | 'FL123 Dialogue Systems                      |   | Bc course | S |
| NPFL124 | Natural Language Processing                  | 4 | Bc course | S |
| NPFL125 | Introduction to Language Technologies        | 3 | Bc course | w |
| NPFL129 | Introduction to Machine Learning with Python | 5 | Bc course | w |
| NPFL141 | Linguistics                                  | 2 |           | S |
| NJAZ097 | Czech for Beginners I                        | 3 |           | w |
| NJAZ098 | Czech for Beginners II                       | 3 |           | S |

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|   | 3 |   |  |

http://ufal.mff.cuni.cz/lct/modules

Very detailed and updated.

TOTAL

44

21

41 48

Contact person

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