

## Degree Programme Table:

### Natural Language Processing (PhD with Integrated Study) - Full-time 4 Years

#### Year 1

Notes: During the first three years of this programme students must complete 180 credits worth of courses, 150 of which have to be at level 11 or higher.

#### Compulsory courses

Doing research in NLP [level 11, 20 credits] new courses  
Group project in advanced NLP [level 11, 20 credits]  
Individual project in advanced NLP [level 11, 40 credits]

#### Course options

Group A: Select between 20 and 60 credits in this group

##### *Foundational courses in NLP:*

Accelerated natural language processing

Machine learning and pattern recognition

Machine learning practical

Computer programming for speech and language processing offered by PPLS

Speech processing

Introduction to phonology and phonetics

Introduction to morphology

Introduction to syntax

Group B: Select between 10 and 60 credits in this group

##### *Specialist courses in NLP:*

Natural language understanding, generation, and machine translation

Probabilistic modelling and reasoning

Neural information processing

Human-computer interaction

The human factor: working with users

Automatic speech recognition

Speech synthesis

Simulating language

Sentence comprehension

Discourse comprehension

Language production

Speech production and perception

Group C: Select between 0 and 20 points in this group

Level 9 to 11 courses in Schedules A to Q, T and W

#### Year 2

Notes: During the first three years of this programme students must complete 180 credits worth of courses, 150 of which have to be at level 11 or higher.

### **Compulsory courses**

Controversies in the data society [level 11, 20 credits]

offered by SSPS

### **Course options**

Group A: Select between 0 and 20 credits in this group

#### *Foundational courses in NLP:*

Accelerated natural language processing  
Machine learning and pattern recognition  
Machine learning practical  
Computer programming for speech and language processing  
Speech processing  
Introduction to phonology and phonetics  
Introduction to morphology  
Introduction to syntax

Group B: Select between 0 and 60 credits in this group

#### *Specialist courses in NLP:*

Natural language understanding, generation, and machine translation  
Probabilistic modelling and reasoning  
Neural computation  
Neural information processing  
Human-computer interaction  
The human factor: working with users  
Automatic speech recognition  
Speech synthesis  
Simulating language  
Sentence comprehension  
Discourse comprehension  
Language production  
Speech production and perception

Group C: Select between 0 and 20 points in this group

Level 9 to 11 courses in Schedules A to Q, T and W

### **Year 3**

Notes: During the first three years of this programme students must complete 180 credits worth of courses, 150 of which have to be at level 11 or higher.

### **No compulsory courses**

### **Course options**

Group B: Select between 0 and 40 credits in this group

*Specialist courses in NLP:*

Natural language understanding, generation, and machine translation

Probabilistic modelling and reasoning

Neural computation

Neural information processing

Human-computer interaction

The human factor: working with users

Automatic speech recognition

Speech synthesis

Simulating language

Sentence comprehension

Discourse comprehension

Language production

Speech production and perception

Group C: Select between 0 and 20 points in this group

Level 9 to 11 courses in Schedules A to Q, T and W

**Year 4**

Notes: By year 4 students must have achieved 180 credits as detailed in years 1-3 of the DPT. There are no taught elements in year 4.