Join Radboud Summer School 2018!

Introduction to Cognitive Neuroscience

change perspective

Radboud University
How do you perceive and act? How do you speak and listen? How do you remember? What goes wrong when you would suffer from aphasia, Alzheimer's, or Parkinson's disease?

Answers to these questions are to be looked for in your brain; the most complex and intricate organ in the universe. During the past few decades, several different scientific disciplines, including psychology, neurology, physics, biology, and genetics have joined forces in trying to understand the neural basis of perceiving, acting, speaking, listening, remembering and other cognitive processes, from molecule to behaviour. This research enterprise, called cognitive neuroscience, seeks to understand the biological underpinnings of cognition and behaviour in terms of explanatory principles ranging from small-scale levels, including molecules and neurons, to larger-scale levels, including brain networks.

In Nijmegen, at the Donders Institute for Brain, Cognition, and Behaviour (DI), over 700 researchers use cutting-edge techniques, such as electrophysiology, brain imaging, and genetic methods, to unravel cognition and behaviour as well as its breakdown due to, for example, strokes or neurodegenerative diseases. Research in cognitive neuroscience in Nijmegen is at the scientific forefront and the DI is one of the world-leading institutes in this research area.

This summer school course aims to provide a thorough introduction to this exciting research field in general and to actual research at the DI in particular. Lecturers in the summer school are investigators at the DI and/or lecturers in the corresponding research master’s programme of the Donders Graduate School for Cognitive Neuroscience. Following a general orientation, you will receive introductions to four specific topics that correspond to the major research themes of the DI: Language & Communication; Perception, Action & Control; Plasticity & Memory; Brain Networks & Neuronal Communication. In addition, you will be provided with demonstrations at the research labs of the DI and gaining hands-on experience with the basics of cognitive scientific empirical research.

After completing this course, you should have gained a basic understanding of cognition and behaviour in terms of elementary operating principles of the brain, be able to relate
operating principles at smaller and larger scales in the brain, and to apply the operating principles to the breakdown of cognition and behaviour in neurodegenerative diseases.

For whom is this course designed
Second- or third year Bachelor students in cognitive, behavioural, (bio-)medical, language, or natural sciences; Master/PhD students outside the domain of cognitive neuroscience, but with an interest in the domain are also welcome to apply.

Entry level
Advanced Bachelor’s

After this course you are able to
• Analyse cognition and behaviour in term of basic operating principles of the brain
• Relate explanatory principles at small-scale brain levels, including molecules and neurons, to larger-scale levels, including brain networks
• Explain cognitive and behavioural disorders, for example aphasia, In terms of the operating principles of the brain
• Set-up a basic behavioural experiment

Course leader
Dr. A. Koning, Programme Coordinator MSc Cognitive Neuroscience, Donders Centre for Cognition, Radboud University

Admission documents
CV and Transcript of records
Want to be part of the RSS experience?

**Number of EC**
2 ECTS credits

**Dates**
Monday 13 August – Friday 17 August 2018

**Course fee**
€500

**Discounts**
- 10% discount for early bird applicants. The early bird deadline is 1 April 2018.
- 15% discount for students and PhD candidates from partner universities.

**More than just a course!**
Radboud Summer School also has an elaborate social programme to choose from.

**Have a look at what participants have said about their experience!**

**Deadline application**
1 June 2018

**Contact**
T. +31-248187706
E: Radboudsummerschool@ru.nl
F: RadboudSummerSchool

**You can find more details about the courses on our website**

Register now!

www.ru.nl/radboudsummerschool, August 5-17 2018