

Master and PhD Program Computational Neuroscience

Recommended Courses and Programs, Summer Term 2018

The following courses are recommended to **senior master students** of Computational Neuroscience (at least in their 3rd semester) and **PhD students**. We recommend that master students in the 1st and 2nd semesters focus on the internal BCCN courses and choose courses for Individual Studies upon consultation with the mentor.

In general, recognition of courses for “Individual Studies” or “Courses on Advanced Topics” must be discussed beforehand with the mentor, the examination board or the teaching coordinator.

This list as well as a list of relevant summer schools and conferences is available at:

https://www.bccn-berlin.de/Graduate+Programs/7_Web+Links/

For further recommendations see:

<http://www.neuroscience-berlin.de/education/class/>

For questions and feedback: graduateprograms@bccn-berlin.de

As not all offered courses of Berlin universities are online yet, this is a preliminary version of the list.

All courses highlighted in yellow are courses which were offered in SoSe 2016, without confirmation that they will be offered in the coming winter term again.

TITLE	CONTACT	LINK and INFO
TU Berlin		
Neuronale Netze (seminar, in German)	Reinhold Orglmeister, reinhold.orglmeister@tu-berlin.de	TU Berlin_Neuronale-Netze
Aktuelle Fragen des Konnektionismus (colloquium, in English)	Klaus Obermayer, klaus.obermayer@mailbox.tu-berlin.de	TU Berlin_Konnektionismus
Wahrscheinlichkeitstheorie III (lecture+ tutorial, in English)	Michael Scheutzow michael.scheutzow@math.tu-berlin.de	TU Berlin_Wahrscheinlichkeitstheorie
Maschinelles Lernen/Machine Learning - Integrated Lecture Machine Learning II (lecture + tutorial, in English) - Kognitive Algorithmen/ Cognitive Algorithms(lecture, language TBA) - Cognitive Algorithms (seminar, in English) - Deep Neural Networks (in English) - Python Programming for Machine Learning (programming course, in English) - Lab Course Machine Learning and Data Analysis (in English, course is full at the moment – 26.03.2018) - Machine Learning in the Sciences (seminar, in English) - Machine Learning and Data Management	Klaus Robert Müller, klaus-robert.mueller@tu-berlin.de	TU Berlin_Machine-Learning

TITLE	CONTACT	LINK and INFO
(seminar, language TBA) - Hot Topics in Machine Learning (seminar, in English)		
Project: Brain-Computer Interfacing (project, in English)	Benjamin Blankertz, benjamin.blankertz@tu-berlin.de	TU Berlin_Brain-Computer-Interfacing
From Neurons to Data (in English)	Benjamin Blankertz, benjamin.blankertz@tu-berlin.de Daniel Miklody miklody@tu-berlin.de	TU Berlin - From Neurons to Data
Automatic Image Analysis (lecture + tutorial, in English)	Olaf Hellwich, olaf.hellwich@tu-berlin.de Ronny Hänsch r.haensch@tu-berlin.de	TU Berlin Automatic Image Analysis
Microwave and Radar Remote Sensing (lecture + tutorial, in English)	Andreas Reigber, andreas.reigber@dlr.de	TU Berlin_Microwave-Radar-Remote-Sensing
Künstliche Intelligenz in RoboCup	Sahin Albayrak, sahin.albayrak@tu-berlin.de	TU Berlin Künstliche Intelligenz RoboCup
Computational Biology (seminar, in English)	Oliver Brock oliver.brock@tu-berlin.de	TU Berlin Computational Biology
Robotics (colloquium, in German)	Oliver Brock oliver.brock@tu-berlin.de	TU Berlin Robotics
Applications of Robotics and Autonomous Systems	Orhan Can Görür goeruer@tu-berlin.de Sahin Albayrak sahin.albayrak@tu-berlin.de	TU Berlin - Applications of Robotics and Autonomous Systems
Monte Carlo Methods in Artificial Intelligence and Machine Learning (lecture + tutorial, in English)	Manfred Opper, manfred.opper@tu-berlin.de	TU Berlin Monte Carlo Methods
Neuro-Usability (project course, in English)	Jan-Niklas Voigt-Antons, jan-niklas.antons@tu-berlin.de	TU Berlin_Neuro-Usability
Usability Engineering (lecture + tutorial, in German)	Sebastian Möller, moeller@tu-berlin.de	TU Berlin Usability-Engineering
Quality and Usability (seminar, in German)	Sebastian Möller, moeller@tu-berlin.de	TU Berlin Quality-Usability-1
Studienprojekt Quality & Usability (project, in German)	Sebastian Möller, moeller@tu-berlin.de	TU Berlin Quality-Usability-2
Multimodal Interaction (lecture + tutorial, in English)	Sebastian Möller, moeller@tu-berlin.de	TU Berlin Multimodal-Interaction
Quanten-Information – Elementare Einführung	Chariton Dreismann chariton.dreismann@tu-berlin.de	TU Berlin_Quanteninformation

TITLE	CONTACT	LINK and INFO
	berlin.de	
Nichtlineare Dynamik und Strukturbildung (in German and English)	Harald Engel harald.engel@tu-berlin.de	TU Berlin_Nichtlineare-Dynamik-Strukturbildung
Nichtlineare Dynamik und Kontrolle (lecture + tutorial, in German/ English)	Eckehard Schöll eckehard.schoell@tu-berlin.de	TU Berlin_Nonlinear-Dynamics-Control
Nonlinear Dynamics – Dynamics and control of complex networks (seminar, in English)	Eckehard Schöll eckehard.schoell@tu-berlin.de	TU Berlin Nichtlineare Dynamik
Kolloquium des Sfb 910 "Control of Self-Organizing Nonlinear Systems" (in English)	Roland Aust roland.aust@tu-berlin.de	TU Berlin_SFB-910-Nonlinear-Systems
Nichtlineare Dynamik und deren Anwendungen. Eine Einführung (lecture, in German)	Serhiy Yanchuk, yanchuk@tu-berlin.de	TU Berlin Nichtlineare Dynamik und deren Anwendungen
Dynamische Systeme in der Neurowissenschaft (lecture, in German)	Serhiy Yanchuk, yanchuk@tu-berlin.de	TU Berlin Dynamische Systeme Neurowissenschaft
Applied dynamical systems (research seminar, in English)	Serhiy Yanchuk, yanchuk@tu-berlin.de	TU Berlin Applied dynamical systems
Neuronale Grundlagen von Kognition und Handeln (lecture + seminar, in German)	Evelyn Jungnickel, evelyn.jungnickel@tu-berlin.de	TU Berlin_Kognition-Handeln
HU Berlin		
Computational Neuroscience: Oberseminar (in English)	Richard Kempster r.kempster@biologie.hu-berlin.de	HU Berlin_OS-Computational-Neuroscience
Electrical field potentials (seminar, in English)	Robert Martin graduateprograms@bccn-berlin.de	HU Berlin Electrical Field Potentials
Neural Noise and Neural Signal-Spontaneous Activity and Information Transmission in Models of Single Nerve Cells (lecture + tutorial, in English)	Benjamin Lindner benjamin.lindner@bccn-berlin.de	HU Berlin_Neural-Noise
Physikalische Kinetik (lecture + tutorial, in German)	Igor Sokolov igor.sokolov@physik.hu-berlin.de	HU Berlin_Physikalische-Kinetik
Irreversible Prozesse und Selbstorganisation (seminar, in German)	Benjamin Lindner benjamin.lindner@bccn-berlin.de Igor Sokolov igor.sokolov@physik.hu-berlin.de	HU Berlin Irreversible Prozesse und Selbstorganisation
Seminar zur Nichtlinearen Dynamik und Statistischen	Benjamin Lindner benjamin.lindner@bccn-berlin.de	HU Berlin Nichtlineare Dynamik

TITLE	CONTACT	LINK and INFO
Physik (seminar, in German)	berlin.de	
Seminar zu Neurophysik (seminar, in German)	Benjamin Lindner benjamin.lindner@bccn-berlin.de	HU Berlin Seminar zur Neurophysik
Statistische Physik (lecture, in German)	Benjamin Lindner benjamin.lindner@bccn-berlin.de	HU Berlin Statistische Physik
Biologische Physik (lecture + tutorial, in German)	Martin Falcke martin.falcke@mdc-berlin.de	HU Berlin Biologische Physik
Bioakustik der Insekten (lecture + Oberseminar, in German)	Bernhard Ronacher bernhard.ronacher@rz.hu-berlin.de	HU Berlin Bioakustik-Insekten
Kommunikationsverhalten: Signale und Signalerkennung (practical, in German)	Bernhard Ronacher bernhard.ronacher@rz.hu-berlin.de	HU Berlin Kommunikationsverhalten: Signale und Signalerkennung
Einführung in die Verhaltensbiologie (German)	Bernhard Ronacher bernhard.ronacher@rz.hu-berlin.de	HU Berlin Verhaltensbiologie-Einführung
Kolloquium Sinnesbiologie und Verhaltensphysiologie (colloquium, in German)	Bernhard Ronacher bernhard.ronacher@rz.hu-berlin.de	HU Berlin Kolloquium Sinnesbiologie Verhaltensphysiologie
Cognitive Neurobiology (lecture + seminar + practical, in English)	York Winter, york.winter@charite-berlin.de	HU Berlin Cognitive Neurobiology
Cognitive Neurobiology: Current topics (Oberseminar, in English)	York Winter, york.winter@charite-berlin.de	HU Berlin Cognitive Neurobiology Current topics
Mathematische Modelle in der Molekularbiologie (lecture, in German)	Nils Bluethgen, nils.bluethgen@charite.de	HU Berlin Mathematische Modelle Molekularbiologie
Analyse hochdimensionaler Daten (lecture and tutorial, in German)	Nils Bluethgen, nils.bluethgen@charite.de	HU Berlin Analyse hochdimensionaler Daten
Komplexe Systeme in der Biologie (lecture, seminar and practical, in German)	Dirk Brockmann, dirk.brockmann@hu-berlin.de	HU Berlin Komplexe Systeme Biologie
Grundlagen der Bioinformatik (lecture + tutorial, in German)	Ulf Leser, leser@informatik.hu-berlin.de	HU Berlin Bioinformatik-Grundlagen
Bioinformatik für Biophysiker (lecture + tutorial, in German)	Ulf Leser, leser@informatik.hu-berlin.de	HU Berlin Bioinformatik für Biophysiker
Systembiologie (lecture + seminar, in German)	Edda Klipp, edda.klipp@rz.hu-berlin.de	HU Berlin Systembiologie

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	berlin.de	
Biostatistik (lecture, in German)	Hans-Peter Herzel h.herzel@cms.hu-berlin.de	HU Berlin_Biostatistik
Neurokognitive Psychologie (colloquium, in German)	Anna Kuhlen anna.kuhlen@hu-berlin.de	HU Berlin Neurokognitive Psychologie
Spezialgebiete der Bildverarbeitung (lecture, tutorial and practical, in German)	Beate Meffert, meffert@informatik.hu-berlin.de	HU Berlin Spezialgebiete-Bildverarbeitung
Kognitive Robotik (lecture, in German)	Verena Hafner, hafner@informatik.hu-berlin.de	HU Berlin Kognitive Robotik
Can robots develop a sense of agency? (Q-team, in English)	Guido Schillaci, guido.schillaci@informatik.hu-berlin.de	HU Berlin Robots Sense of Agency
Multivariate Statistical Analysis II (lecture, in English)	Zdenek Hlavka, hlavka@wiwi.hu-berlin.de	HU Berlin Multivariate-Statistical-Analysis
Datenanalyse (lecture and tutorial, in German)	Sigbert Klinke, sigbert@wiwi.hu-berlin.de	HU Berlin Datenanalyse
FU Berlin		
Entwicklungsneurobiologie (seminar, in German/English)	Fritz-Günther Rathjen, rathjen@mdc-berlin.de	FU Berlin Entwicklungsneuropsychologie
From Anatomy to Behaviour (block course, in English and German)	Hans-Joachim Pflüger, pflueger@neurobiologie.fu-berlin.de	FU Berlin From Anatomy to Behaviour
Aktuelle Probleme in der Entwicklungsneurobiologie (German)	FU/MDC Berlin, Fritz-Günter Rathjen rathjen@mdc-berlin.de	MDC Berlin Entwicklungsneurobiologie
Molekulare Neurogenetik (lecture + seminar + practical, in German)	Stephan Sigrist, stephan.sigrist@fu-berlin.de	FU Berlin Molekulare Neurogenetik
Verhaltensbiologie (seminar + practical, in German)	Constance Scharff, constance.scharff@fu-berlin.de	FU Berlin Verhaltensbiologie
Einführung in Tierschutzethik und -recht (German)	Christa Thöne-Reineke Thoene-reineke.christa@fu-berlin.de	FU Berlin Tierschutzethik-Recht
Applied Machine Learning (practical seminar, in English)	Annalisa Marsico, annalisa.marsico@fu-berlin.de	FU Berlin Applied Machine Learning
Metabolische Netzwerke (lecture + tutorial, in German and English)	Alexander Bockmayr, alexander.bockmayr@fu-berlin.de	FU Berlin Metabolic Networks

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Netzwerkanalyse (lecture + tutorial + seminar, in German)	Tim Conrad, conrad@mi.fu-berlin.de	FU Berlin Netzwerkanalyse
Rechnergestützte Systembiologie (seminar, in German)	Heike Siebert, siebert@mi.fu-berlin.de	FU Berlin Rechnergestützte-Systembiologie
Journal Club Computational Biology (Colloquium, in German and English)	Knut Reinert, knut.reinert@fu-berlin.de	FU Berlin Journal-Club
Physiologie (lecture + tutorial + seminar, in German)	Jörg Aschenbach, joerg.aschenbach@fu-berlin.de	FU Berlin Physiologie
Courses offered by other schools and graduate programs in Berlin		
Master Program Molecular Medicine Molecular Mechanisms of Disease; Maintenance and Integrity of the Endocrine System; Development and Genetics; Functional Genomics; Infection and Pathogens; Therapeutic Research and Development	Charité; project coordinator - naomi.weizenbaum@charite.de	Molecular Medicine Master-Program Please contact the contact person for information about currently offered courses
Berlin School of Mind and Brain	Program coordinator – mb-education@hu-berlin.de	Mind and Brain Master-Program Mind and Brain Doctoral-Program Note: The courses are generally not open to the public. Please write to the contact person to apply for a course.
Berlin Mathematical School	TU, HU, FU, Uni Potsdam office@math-berlin.de	Berlin Mathematical School Master-Program
Master Program Medical Neurosciences	Charité Benedikt Salmen benedikt.salmen@charite.de Lutz Steiner lutz.steiner@charite.de	Medical Neurosciences Master-Program Please contact the contact person for information about currently offered courses
Master Program SCAN (Social, Cognitive, Affective Neuroscience)	studium-psy@fu-berlin.de Dr. Jana Lüdtko, jana.luedtke@fu-berlin.de	SCAN Master-Program SCAN Master-Program-Brochure Please contact the contact person for information about currently offered courses.