



LERU DOCTORAL SUMMER SCHOOL 2025, 22-27 June

Updated programme to DOCT Steering Group members

September 30, 2024

Theme: *Artificial Intelligence across University Disciplines – Perspectives and Hands-on Experience*

The LERU Doctoral Summer School at UCPH aims at furnishing PhD students from a multitude of subjects with both theoretical perspectives on Artificial Intelligence and group-based hands-on experience in fields closely related to their own. The summer school will cover critical perspectives from technical AI experts, ethical and legal implications and pitfalls, and practical exercises.

The take-away from the summer school will be to dream big and use AI, but to cut hype away and use AI as a tool to improve research, and applications of research, for the good of humanity.

Draft programme

All morning sections feature a selection of renowned speakers.

All afternoon sections feature hands-on group work in AI and data science tools requiring a sharp mind, but no prior programming experience (e.g., in the Konstanz Information Miner or a similar tool). Group work will be facilitated by a professor and teaching assistants.

We aim for a course that corresponds to approximately 2.5 ECTS.

	Sunday (22 June)	Monday (23 June)	Tuesday (24 June)	Wednesday (25 June)	Thursday (26 June)	Friday (27 June)
Morning session		<p>Welcome by Dean/Vice Dean.</p> <p>AI - the view from Olympus (non-technical overview by top computer scientist)*</p> <p>Legal conundrums and political issues in AI – talk by professor in law, Henrik Palmer Olsen, and professor in political science, Rebecca Adler-Nissen.</p>	<p>Large language models and ChatGPT - how do they work, and what are the problems – talk by professor in computer science, Isabelle Augenstein.</p> <p>AI in the life sciences – the story of AlphaFold and other things (talk by professor in biology or bioinformatics).</p>	<p>AI in the human and social sciences (talk by humanities professor).</p> <p>AI and the news media (talk by professor in media studies).</p>	<p>Complexities and physical limitations of AI (talk by physics professor).</p> <p>Cognitive limitation of current AI implementations (talk by psychology professor or similar).</p>	<p>Work on presentations for group project (short 10-minute talks about problem are followed by 10-minute presentations of technical solutions and results. Facilitated/helped by professor(s) and TAs.</p>
Lunch						
Afternoon session	Arrival and check-in.	Group formation, introduction to data science tool. Choice of data set (a selection of data sets from different sciences and application areas will be presented).	Work on group project.	Work on group project.	Work on group project.	<p>Presentations to each other and to local Associate Dean and professors from the Faculty of Science.</p> <p>A toast and goodbye.</p>
Evening session	TBA (a max. of three social evening events, incl. dinner).	TBA	TBA	TBA	Dinner	

*All talks will be approx. 1.5 hour in total with 45 min. presentation, 45 min. discussion and question session.