

Digitalisation of degree programmes: “The students can prepare us for the future”



The world is riding a wave of digitalisation, and the universities must keep up. The teaching staff play an important role when it comes to producing graduates who match an increasingly digitalised labour market. But the students themselves also partly hold the key to achieving this, find postdocs employed to strengthen the digital competences of professors at UCPH.

The Dead Sea Scrolls are analysed digitally. Research is conducted into self-tracking on social media. Researchers have tools for structuring and sharing giant data volumes across disciplines, for example via the [Harvard Dataverse](#) repository. The list of digitalisation at UCPH is long, and – with variation across disciplines – UCPH has come a very long way with digital solutions that strengthen our research. But what is the status when it comes to the digitalisation of our degree programmes and preparing our graduates for a digitalised labour market? And what opportunities does teaching staff have for keeping up with the latest currents, discussing and trying out new methods and relevant digital tools? What are your options?

Artificial intelligence shaped by students and teaching staff

The two postdocs Mark William Johnson and Danielle Hagood have been employed to strengthen the core digital competences of teachers across UCPH. They are studying what works and how UCPH’s digitalisation can be scaled across disciplines.

Together with a small group of students and teaching staff, Mark William Johnson has developed the [meta curriculum](#) AI toolkit, which is an example of machine learning. The toolkit has been designed to demonstrate to chemistry students the potential of AI and the types of tools they will encounter when entering the labour market. Mark William Johnson believes in listening to the students, and he sees them as an important resource.

David Just Højgaard Jensen, who is doing a BSc in Nanoscience, is one of the students who have participated in developing the toolkit. He emphasises Mark's open and playful approach to teaching as crucial to the desire and ability to learn. So, the type of instruction has in itself been fruitful.

"We've had a good dialogue, and as students we've been able to say openly what we think. Our opinions have been listened to. The result of the elective is an AI toolkit that everyone can use and which demonstrates to us students how much we actually need to know about machine learning to be able fully to use the methods and tools," says David Just Højgaard Jensen. At the Faculty of Law, Mark William Johnson is also involving students in the digitalisation work. He has developed a tool that enables the students to evaluate their own performance during exams. An important part of the philosophy is to create useful tools for both students and staff, while showing the students how the tools are made and integrated in the everyday lives of teaching staff.

One of Mark William Johnson's main principles is that researchers and teachers must see what the students see:

"The students can prepare us for the future. And this applies in all disciplines – from chemistry to anthropology," he says. He also invites lecturers and students to contact him if they want to know more or discuss the opportunities and challenges of using artificial intelligence in the teaching – everyone is welcome to write to him at mj@ind.ku.dk

For inspiration, you can also attend the webinar [AI in teaching – dream, dystopia or fundamental condition?](#) held on 27 April from 15.00 to 16.15. The webinar presents three angles on artificial intelligence from an educational perspective, and invites the participants to go home and discuss with their colleagues how we can equip students for their meeting with artificial intelligence in the future.

How does digitalisation affect academic standards and teaching?

The challenges associated with the rapid digitalisation of degree programmes is also being addressed in-depth on the developing Teknosofikum technology programme targeted at teachers in higher education. Here the participants are introduced to digital solutions and tools, and importantly, they meet each other across disciplines. Sebastian Schwemer, who is Associate Professor at the Faculty of Law and is involved from UCPH in Teknosofikum, has clearly seen the value to the participants of sharing their experiences. For example, lecturers from ITU have been able to share their views on the use of algorithms in teaching with lecturers from the Faculty of Law. For how do we each understand and use digital tools, and how does digitalisation actually affect the lecturers professionally? According to Sebastian Schwemer and Jeppe Kilberg Møller, who is the head of Teknosofikum, this is an important debate.

As a lecturer at UCPH, you can participate in [Teknosofikum's autumn course](#); in addition to taking part in fruitful discussions, you will be given wide insight into trends, educational theory and practice, GDPR and new trends in TechEd.

[Read more about Teknosofikum](#)

Need for digital data processing etiquette

Professor Nicole Schmitt is a cardiology researcher, Teacher of the Year 2020 at UCPH and National Teacher of the Year in 2021, and sits on UCPH's steering committee for interdisciplinary digitalisation initiatives (The 2023 strategy programme: Common goals at UCPH for the digitalisation of programmes). She is already listening to the students, but she also sees a need to talk about digitisation at several other levels:

“I see a general need for students to learn about etiquette when it comes to the use of sources and ways of handling digital data. Even though they are digital natives, many find it difficult to distinguish between relevant data sharing platforms – for example between a professional platform like Absalon or a commercial platform like Facebook”.

Precisely to increase the dialogue with students and create greater variation in the teaching, Nicole Schmitt recommends that all lecturers kick-start their course development with [ABC Learning Design](#) – , a method originally developed by University College London and facilitated by UCPH’s learning units. This is a research-based method for developing future-oriented courses that uses digital learning technologies where relevant. In addition, the students are involved in course design, which is a fantastic resource for creating engaging and professional learning experiences.

[Find out how you can develop your course with ABC Learning Design](#)

Keep up with the digitalisation of degree programmes at UCPH

- [Learn more about how UCPH works strategically with digitalisation.](#)
- [Find your local representative on the Strategy 2023 programme Common goals at the UCPH for the digitalisation of programmes – and keep an eye on the work of the faculty’s digitalisation task force.](#)
- If you know of students who take a particular interest in the digitalisation of degree programmes, please send a message to US Digital: signe.flyvbjerg@adm.ku.dk