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New International Master's Degree Programmes at the University of Regensburg

The three new English-taught M.Sc. programmes – "Computer Science", "Data Science, and "Human-Centred Artificial Intelligence" – are designed to equip students with the skills needed for future-oriented topics in an international academic environment, ranging from data-driven analytical methods to human-centred AI design.

Starting in the winter semester 2025/26, the Faculty of Informatics and Data Science (FIDS) at the University of Regensburg will launch its new international full-time and part-time Master's degree programmes in Computer Science, Data Science, and Human-Centred Artificial Intelligence. Applications for these programmes are open until June 1. Prospective students are invited to learn more and ask questions about the new programmes at an information session, taking place both on-site and online, on April 29.

The new consecutive Master's programme in Computer Science allows students to deepen their knowledge in core areas of computer science while choosing a specialisation in one of the following fields: "Core Computer Science", "Bioinformatics", "Human-Centred Compu-ting", or "Information Systems". "Our programme combines in-depth computer science education with a strong connection to current research," explains Professor Meike Klettke, Professor of Data Engineering and Dean of Research at FIDS. "The areas of specialization align with the faculty's research foci. Students will have the opportunity to work on real research projects during their studies and experience innovation firsthand." The programme also offers students extensive freedom to shape their individual academic profile: "Computer science has evolved into a highly diverse field. Students can expect a broad and comprehensive range of courses covering both foundational and applied topics," Professor Klettke adds proudly.

Launching simultaneously with the Computer Science programme is the international M.Sc. in Data Science. Graduates in this field are in high demand due to their ability to integrate methods from mathematics, statistics, and computer science to support data-driven decision-making across industries such as business, healthcare, and finance."Data Science is inherently interdisciplinary because data always comes with context. To truly extract value from large datasets, technical data science expertise must be paired with domain-specific knowledge," says Professor Florian Erhard, Dean of Studies at FIDS and lead developer of the programme.

In addition to advanced courses in machine learning and statistics, students will choose a specialisation in one of the following: "Computational Life Sciences", "Human-Centred Data Science", "Information Systems", or "Machine Learning and Statistics". Like the Computer Science programme, the Data Science programme is designed for students with a relevant academic background. "Because of its interdisciplinary nature, we welcome motivated applicants from fields such as mathematics, biology, psychology, or economics, provided they have the necessary prior knowledge in data science," Professor Erhard adds.

Both the Data Science and Computer Science programmes can be started in either the winter or summer semester.

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The new international Master's programme in Human-Centred Artificial Intelligence (HCAI) marks a strong commitment by the faculty to the ethically responsible development of AI. The programme combines advanced AI concepts with a human-centred approach. "In an increasingly AI-driven world, it is essential that the development and application of artificial intelligence align with human values and societal needs," says Professor Udo Kruschwitz, Professor of Information Science and Internationalization Officer at the faculty. "Our students will be equipped to tackle both the technical and ethical challenges of AI development while keeping users in mind." Applications of such technologies include search engines, chatbots, and systems for automatically detecting fake news or hate speech using natural language processing. The programme integrates competencies from computer science, data science, human-computer interaction, and psychology. Graduates will be highly sought after in all sectors where AI is applied, especially in the development of human-machine interfaces. Potential employers range from companies designing entertainment features for smart homes or the automotive industry to public institutions and businesses optimizing information systems.

Flexible Study Options for Working Professionals

"All three new international Master's programmes are available in both full-time and part-time formats," emphasizes Professor Christian Wolff, Dean of FIDS. "Our Master's students are in high demand across nearly all sectors. They no longer have to choose between starting their career after a Bachelor's degree or continuing their studies – they can do both." To enable the flexible combination of work and study, students can switch between full-time and part-time enrolment up to two times.

A Globally Oriented and Attractive Academic Environment

In addition to excellent career prospects, Professor Wolff highlights the international and dynamic academic environment of the new Master's programmes. Established in 2022, the young faculty offers its students a highly supporting learning atmosphere – made possible in large part by 15 new professorships permanently funded by Bavaria's Hightech Agenda. "There have already been many reasons for prospective students to come to FIDS in Regensburg," he says. "These include the high level of student support, research-based teaching, strong cooperation between academia and industry, a thriving AI-driven business ecosystem offering exciting part-time jobs for students, the historic old town with its scenic beer gardens and a vibrant cultural scene."

The international orientation of the three new programmes is another major advantage and reflects the aspirations of the faculty's academic community. "It strengthens international research collaboration, enhances the faculty's appeal to top international researchers, and aligns with the university's mission as a diverse and globally engaged institution," Wolff explains. "From my years of experience in academia, I know how much our students benefit from international exchanges, global academic networks, and the experience of working in international teams – it's a huge boost for their careers, both at home and abroad."

contact for scientific information:

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URL for press release: https://uni-regensburg.zoom-x.de/j/62442210653 / Information session for prospective students on the new M.Sc. programmes "Computer Science", "Data Science, and "Human-Centred Artificial Intelligence" at the University of Regensburg: Tuesday, April 29, 2025, at 4:15 p.m. Lecture Hall H401, Bajuwarenstraße 4, 93053 Regensburg URL for press release: http://www.go.ur.de/FIDS Combining research and teaching in Computer Science, Data Science, and Artificial Intelligence at UR

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Students attend a seminar at the University of Regensburg. Julia Dragan University of Regensburg