Report thematic sessions bachelor's and master's programme Computing Science, University of Groningen

30 September 2025

As part of the reaccreditation visit for the bachelor's programme Computing Science and the master's programme Computing Science at the University of Groningen, two thematic sessions were organized to stimulate reflection and dialogue on the programme's future. The sessions aimed to explore challenges and opportunities, with a forward-looking focus on how to enhance the programme's relevance and resilience. The sessions addressed two topics: the impact of generative AI on education, and the opportunity to grow in a time of budget cuts.

Theme 1: impact of GenAI on education

The first thematic session focused on the question "What can and should be GenAI-able?" and invited discussion on how to responsibly integrate generative AI into teaching, learning, and assessment. The programme team presented current developments at three levels: the university (where a Faculty of Science and Engineering 'AI Literacy Vision Document' advocates a critical embrace of AI), the Board of Examiners (which interprets rather than prescribes institutional guidelines), and the programme level (where course coordinators decide whether to adopt or restrict AI use within graded components). The session explored how to balance innovation with integrity, how to design programme-wide policies, and whether current developments are progressing too fast or too slowly.

Panel members raised questions about data protection, the practical implications of using local models such as Mistral, and the potential confusion for students when AI-use policies differ across courses. The discussion broadened to fundamental questions about the nature of learning outcomes and academic writing in the age of AI: if written reports are replaced by other formats, what skills should programmes continue to emphasize? The panel encouraged the department to rethink learning outcomes in light of AI, considering not only technical but also ethical and societal dimensions. Students' ability to critically and responsibly use AI tools, rather than avoid them, should become an explicit goal. The panel commended the programme's balanced top-down and bottom-up approach and its awareness of broader educational change, while encouraging a clearer articulation of how AI literacy will be embedded across the curriculum.

Theme 2: growth in efficiency

The second session addressed the challenge of sustaining growth and quality in an increasingly resource-constrained environment. The programme presented its Digital Lab initiative (established in 2022) as a key driver of innovation, comprising three integrated platforms: Themis for automated assessment with iterative feedback; Repository Management for efficient handling of student code submissions; and Virtual Labs providing scalable computational resources, including GPU and cloud environments. Plans for expanding lab infrastructure (e.g. an HPC lab) and strengthening university-industry collaboration through UnICo (100+ partners, 250+ projects) were also discussed.

The panel praised these initiatives as forward-looking examples of digital transformation, improving both learning quality and scalability. It noted the importance of ensuring sustainable access to hardware resources (GPUs, FPGAs, cloud capacity) and to ensure sufficient funding to sustain these efforts. It also urged the programme to anticipate practical constraints such as cooling and space limitations. On the topic of collaboration, the panel encouraged exploring more structured models to maintain industry partnerships

efficiently as student numbers rise. It suggested appointing a dedicated business developer to support relationship management, freeing academic staff from the administrative burden. Overall, the panel found the programme's efficiency-driven innovations impressive and well-aligned with its ambitions for growth, while emphasizing the need to match these technological advances with adequate staffing and infrastructure to safeguard educational quality.