

## Foreword

### Learning through projects – Preparing for a future we do not yet know

The world is changing rapidly, bringing with it challenges that we and future generations will face. But how do we prepare our students today to solve the problems of tomorrow, problems that we cannot yet foresee? This calls for an education that is grounded in the latest research concerning higher education, and that goes beyond the mere transmission of specialised knowledge. Our students must learn to develop viable solutions for complex problems both within and across disciplines. For this, they need a broad set of competencies that enable them to integrate various perspectives, navigate uncertainty, and collaborate successfully.

An effective way to strengthen these skills is through project-based education that is at the heart of our *Vision for Teaching at ETH Zurich*. This educational approach immerses students in relevant, practice-oriented contexts where they apply their expertise, critically examine their knowledge, and collaboratively develop new ideas. In both subject-specific and interdisciplinary courses, students quickly realise that simple answers are rare – yet asking the right questions is often the first step towards meaningful solutions.

### Commitment to excellent teaching

Project-oriented, competency-based, and individualised learning is challenging – not only for students but also for lecturers. It demands a high level of commitment, motivation, and the ability to adapt their role flexibly to students' needs. Alongside deep subject-matter expertise, strong didactic competencies and supportive supervision are essential to guiding students on their individual learning paths and promoting critical engagement with what they have learned. Moreover, students themselves often take on an active role in teaching, for example, by coaching student teams or moderating specific teaching sequences.

In this issue of the *ETH Learning and Teaching Journal*, lecturers share insights into the courses they have designed, implemented, and continuously refined with great passion and dedication. Their experiences show how project-based education is embedded at ETH Zurich, as an integral part of a world-class university education that not only empowers students but also strengthens ETH Zurich as a leading institution in higher education.

### A shared commitment to learning

I hope this edition of the journal inspires you – the teaching community at ETH Zurich and other research-intensive universities. I am inviting you to discover new perspectives and explore ways to develop your own approaches to project- and practice-oriented teaching. Let's shape the future of learning together – at ETH Zurich and beyond.

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