



Wicked problems – new 2026

Does the student have the ability to tackle wicked problems? Do we practise challenge-driven education (CDE) across all components of the learning portfolio?

Three-stage rocket in ethics (ABE/KTH)

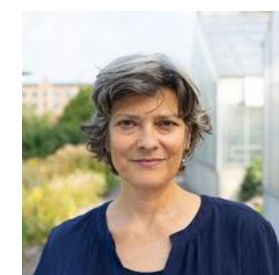
The project develops a three-step model integrating ethics throughout the programme (years 1–3) to strengthen students' ability to address sustainability challenges. It focuses on critical thinking, values and problem-solving to prepare students to drive sustainable development.



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Collaborative urban planning: teaching for wicked problems

The project involves the further development of a design methodology for interdisciplinary knowledge production in urban planning, strengthening dialogue between disciplines and civil society, and promoting innovative pedagogical teaching formats documented in a handbook report.



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Wicked water – teaching wicked problems in water resource management

The project develops three simple teaching modules on complex water management problems. The modules are based on research of stakeholder mapping, game theory and MCDA/AI tools and will be tested in AL2511 (autumn 2026). The result will be open educational materials scalable to EECS, ITM and CBH.



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Wicked problems in sustainable development for chemistry education

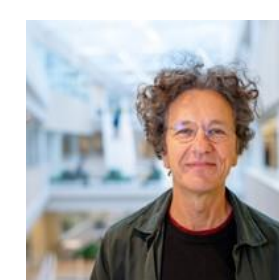
The project develops chemistry education by integrating wicked problems in sustainable development, where scientific, technical, social and ethical dimensions interact. It aims to strengthen students' ability to handle complex problems without clear-cut solutions.



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Managing wicked problems in clinical environments

The project develops a mandatory placement (VFU) within the Master of Science in Engineering programme in Medical Engineering. It aims to strengthen students' ability to understand and handle complex clinical problems and increase societal relevance and real-world grounding.



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Project-based courses

The project develops workshops for project courses to address complex problems, use experimental environments effectively and ensure equal participation. The goal is that all 3- and 5-year programmes, and many Master's programmes, include at least one redesigned project course.



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Teaching discrimination as a wicked problem

The project examines how discrimination as a wicked problem is addressed in ITM education and how students can be prepared for working life. Through interviews and mapping, it develops proposals for educational initiatives to strengthen social sustainability and learning at KTH.



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Sociotechnical systems understanding for dealing with Wicked Problems

The project involves mapping best practices and developing teaching methods that contribute to the students' abilities to address wicked problems by broadening the question from "design thinking" to "systems thinking" and to a sociotechnical systems understanding.



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Following new projects 2026 have separate posters:

- **Sustainability Lighthouse**
- **The industries complex sustainability and trade-offs challenges in society**

