## ODL Concept – Proven courses

To educate future Odesys professionals, a tailored educational concept called **Open Design Learning** (ODLc) has been developed. **ODLc** is an innovative, **constructivist** approach that integrates systems thinking with human-centered design learning. It connects personal learning with real-world challenges, fostering a collaborative, reflective dialogue.

Drawing on the principles of key educators such as Ackoff, Robinson, Schön, and Steiner, ODLc promotes integrative learning. The educator's role is to unlock students' free will, guiding them through a three-cycle model that incorporates technical, social, and purposeful aspects. This framework empowers students to move beyond predefined problems, encouraging innovation and independent thinking. They 'learn to learn by unlearning'.

The concept is built on the following key principles: (for more info see Chapter 9 out of Wolfert, A.R.M. (2023). *Open Design Systems*. IOS Press)

- 1. **ODL Self-chosen System of Interest** (SoI): Students apply knowledge to real-life contexts by selecting a personal area of interest, fostering, future-oriented designs through experiential learning with educators in a unique context.
- 2. **ODL Dialogue**: Mutual understanding and solution development arise through open-ended dialogue, encouraging creativity and vulnerability through active questioning and reflection.
- 3. **ODL Rhythm & Sessions**: The cyclical rhythm of weekly concept application, dialogue, and practical work, with masterclass sessions for collaborative reflection and problem-solving, fosters ongoing learning without formal evaluation.
- 4. **ODL Learning Goals**: Course objectives focus on engaging students with course concepts, applying them to real-life SoI, and generating new insights, leading to original responses and practical application.
- 5. **ODL Response**: A group deliverable based on a self-chosen SoI, demonstrating the transformation of course concepts into unique, collaborative designs, presented in an open format like a poster.
- 6. **ODL Commendation**: A grading rubric that deducts points from a base grade of 10 for missing or incomplete aspects, guiding both the SoI content and the student's learning process.
- 7. **ODL U-model**: A blended approach combining cognitive learning with hands-on experience, guiding students through co-creation, co-sensing, and co-reflection to achieve transformative, real-world problem-solving and reflective design.

ODLc has **proven effective** in fostering integrative learners who are capable of confronting complexity. **Over the past 10 years**, ODLc has been successfully integrated into various MSc curricula at TU Delft. The courses in the field of **Systems Design and Management**—*Engineering Systems Design, Engineering Asset Management, Engineering Project Management, and Management Information Systems*—along with the general course on *Research & Development Methodology*, have attracted a diverse range of MSc students (aged 21 and older), with participation varying between 25 and 350 students per course. We have trained MSc students from the master's programs **TIL, CME, ODE, CEG, and BK at TU Delft**.

Odesys and its constructivist educational approach ensure that your students or professionals are trained as 'lifelong problem solvers':

"Everyone has a designer within themselves; it is the art of Odesys & ODL to awaken this inner designer."

## Want to learn more?

Odesys has years of educational experience at TU Delft. For more information about our educational programs or guest lectures, contact Odesys or visit our websites at <a href="www.odesys.nl">www.odesys.nl</a> and/or <a href="www.open-design.school">www.open-design.school</a>.