**Template ICAB 2025**

**How to make calculus not boring?**

This workshop focuses on applying Problem-Based Learning (PBL) principles—constructive, contextual, collaborative, and self-directed learning (CCCS)—to create meaningful calculus assessments. Participants will begin by examining examples of authentic assessments, such as designing beer glass shapes using integrals or analyzing motion with derivatives, developed for an engineering calculus course. These examples illustrate how CCCS principles align assessments with learning outcomes and real-world challenges. Attendees will then collaborate in small groups to evaluate or redesign one of their own assessments, with support from facilitators. The session concludes with a plenary discussion to share insights and strategies. Participants will leave with concrete ideas and a framework for implementing CCCS principles in their STEM courses to enhance student engagement and learning.

**Speaker**

Martijn Boussé is an Assistant Professor at the Department of Advanced Computing Sciences, Faculty of Science and Engineering, Maastricht University. With a background in mathematical engineering, he specializes in teaching courses like calculus, linear algebra, and numerical methods. This workshop stems from his work on an EDLAB education grant, where he collaborated with students to design innovative, real-world assessments that integrate Problem-Based Learning principles into STEM education.

Workshops will be scheduled in 60 minute timeslots

Workshop language = English