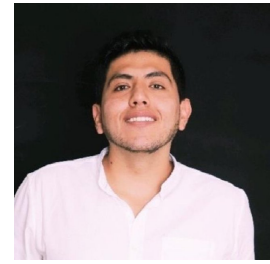


Juan Esteban Heredia Mena  
The Maersk Mc-Kinney Moller Institute  
SDU Software Engineering  
**Email:** jehm@mmmi.sdu.dk  
**Phone:** +4565507606



## Teaching and supervision

### Introduction to Embodied Artificial Intelligence

Mena, J. E. H.  
01/09/2023 → 31/12/2024

### Modeling of Cyber Physical Systems

Mena, J. E. H.  
01/02/2021 → 31/05/2025

## Teaching Philosophy

Teaching is a dynamic and evolving process that involves multiple stages to effectively convey knowledge and ensure students can apply their learning in real-world scenarios. Recognizing that each student has a unique learning process influenced by their background, personality, and preferences, I embrace a flexible and adaptive teaching methodology. My approach prioritizes active learning, constructivism, and experiential learning, allowing students to engage deeply with the subject matter and develop both technical and critical thinking skills.

As an educator in an engineering program, my teaching philosophy aligns with the core competencies required for future engineers. Engineering education must bridge theoretical knowledge with practical application, fostering problem-solving abilities, innovation, and collaboration. My courses are designed to integrate theory with hands-on experiences, ensuring students gain the skills necessary to navigate complex engineering challenges.

My teaching methodology is built upon active learning strategies that engage students beyond passive reception of information. To achieve this, I incorporate:

- Project-Based Learning (PBL): Providing students with real-world problems to solve, reinforcing theoretical concepts through application.
- Collaborative Active Learning: Encouraging peer discussions, teamwork, and interdisciplinary approaches to problem-solving.
- Experiential Learning: Utilizing laboratory work, case studies, and hands-on activities to contextualize engineering principles.
- Constructivist Approaches: Allowing students to build their own understanding through guided exploration and reflection.

In my role as a university teacher, I view myself as a mentor rather than a supervisor. My aim is to guide and support students in developing their capabilities, fostering an environment where they can take ownership of their learning. I encourage curiosity, critical inquiry, and creativity, empowering students to explore and apply their knowledge with confidence.

I expect students to be active participants in their learning journey, engaging critically with course materials, contributing to discussions, and taking initiative in problem-solving activities. Engineering education is not solely about acquiring knowledge but about learning how to think, adapt, and apply concepts in dynamic situations. I encourage students to take risks, embrace failure as part of the learning process, and continuously seek improvement.

The University of Southern Denmark emphasizes high-quality education, innovation, and student-centered learning. My teaching philosophy aligns with this perspective by fostering an interactive and application-driven learning environment. I strive to contribute to the university's educational mission by continuously refining my teaching methods and participating in pedagogical research and development.

As an early-career academic, I am committed to continuous growth and adaptation in my teaching practices. I actively seek feedback from students and colleagues to refine my methods, participate in professional development workshops, and contribute to educational research. My goal is to foster an inclusive, engaging, and innovative learning environment that equips students with the knowledge and skills necessary for their future careers in engineering and beyond.

By maintaining a reflective and student-centered approach, I aim to enhance the learning experience and contribute to the advancement of engineering education