

Multi-annual strategy 2025-2029 of the faculty EEMCS of the University of Twente - *strategy process and short concept vision – mission – strategy statement*

Preface of developing multi-annual strategy of EEMCS

The Faculty of Electrical Engineering, Mathematics and Computer Science (EEMCS) of the University of Twente is preparing a new multi-annual strategic plan for 2025-2029.

The execution of this process is as follows:

1. 22 March 2023: Brainstorm with a wide representation of the scientific and support staff
2. June-July 2023: consultation of internal stakeholders (disciplines DAMUT, CS, EE; Chamber of Professors; FC-OW; Faculty Council; Design lab; research institutes DSI, Techmed, MESA+; Rector; S&P)
3. 20 September 2023: consultation of external stakeholders
4. August-September 2023: writing of first concept
5. October – November 2023: re-consultation of internal stakeholders on concept strategy plan

This process is to result in a final multi-annual strategy plan of EEMCS, approved by the Faculty Board by spring 2024.

This documents specifies a concise concept vision, mission and strategy statement to adequately inform our external stakeholders in preparation for the external stakeholder consultation meeting of 20 September 2023.

1. Introduction

We live in a complex and rapidly changing world with essential challenges in fighting climate change, ensuring people's health and wellbeing in the face of changing demographics, and securing safe communication of information under conditions that are increasingly complex.

We are the Faculty of Electrical Engineering, Mathematics and Computer Science (EEMCS) of the University of Twente in the Netherlands. Our expertise is in solving real-life problems in a generic manner as well as in actual life by applying our disciplinary tool sets for analysis and design of the dynamic interaction between systems involving the digital, physical and human worlds.

2. Vision

Our technological expertise in Electrical Engineering, Applied Mathematics and Computer Science is essential for improving people's lives in a resilient and sustainable society.

3. Mission

We contribute to a resilient and sustainable society by:

- *Realizing a responsible digital transition*, through key contributions in energy-efficient computing and responsible AI, resilient innovations in heterogeneous integrated circuits and semiconductor hardware and development of secure and safe information and communication systems.
- *Supporting people's health and well being*, through e-health solutions, medical imaging, robotics, logistics and data science for health as well as technology for well-being and sports.
- *Fighting climate change* and supporting the *sustainable energy transition* by creating sustainable energy systems and negative emission technologies

4. Strategy

Our approach is characterized by:

- *Research Excellence* at an International Level from theory to demonstrable implementation.
- *Societal impact* through interdisciplinary and challenge driven collaboration in close relationships with industry and societal partners.
- Leading *academic education* that delivers excellent experts in Electrical Engineering, Mathematics and Computer science who contribute to solving grand societal challenges in multidisciplinary teams, while deepening their disciplinary knowledge.
- *Life Long Learning* activities in close collaboration with industry and societal partners.
- *Sustainable academic work practices, fostering talent and personal development in a safe environment that welcomes diversity, equity and inclusion.*
- *Contributions at a regional and national level, while being part of European and world-wide networks.*
- *Our unique choices based on our specific strengths and the needs around us.*