

# EUT+

# MEMORANDUM OF AGREEMENT FOR THE CREATION OF EUT+ BACHELOR IN ENGINEERING AND MASTER IN ENGINEERING PROGRAMMES, BY EVOLUTION AND CONVERGENCE OF EXISTING PARTNER PROGRAMMES

**ENGLISH VERSION** 

















BETWEEN the following other partners:

**University of Technology of Troyes** (France), whose headquarters are located 12 rue Marie Curie - 10000 Troyes, France, represented by its Director, Mr Pierre KOCH,

**Hochschule Darmstadt, University of Applied Sciences of Darmstadt** (Germany), whose headquarters are located at Haardtring 100, 64295 Darmstadt, represented by its President, Mr Ralph STENGLER,

**Rīgas Tehniskā universitāte, Riga Technical University** (Latvia) with its seat at Kaļķu iela 1, Rīga, 1658, represented by its Rector Leonīds RIBICKIS,

**Technological University Dublin**, whose registered office is at North Circular Road 191 Park House Grangegorman, Dublin D07 EWV4, represented by its President David FITZPATRICK,

**Технически университет София Technical University of Sofia** (Bulgaria) with seat at Kliment Ohridsky Bd 8, Sofia 1000, represented by its Rector Ivan KRALOV,

Τεχνολογικό Πανεπιστήμιο Κύπρου, Cyprus University of Technology (Cyprus) with its seat at Archbishop Kyprianos 31 Savings Cooperative Bank Building 3rd Floor, Lemesos 3036, represented by its Rector Panayiotis ZAPHIRIS,

Universidad Politécnica de Cartagena, Technical University of Cartagena (Spain), with registered office at Plaza del Cronista Isidoro Valverde, Edificio la Milagrosa, Cartagena 30202, represented by its Rector Beatriz MIGUEL HERNÁNDEZ,

**Universitatea Tehnică din Cluj-Napoca, Technical University of Cluj-Napoca** (Romania) with seat at Str Memorandumului 28, Cluj-Napoca 400114, represented by its Rector Vasile TOPA.

Hereinafter referred to as "the partners".

Where a provision applies indiscriminately to the "Coordinator" and the "Partners", in the context of this Agreement, they shall be collectively referred to as the "Partners".

The initiative or project "European University of Technology" is also referred to by its acronym "EUt+".

All the active partners for the development of the project are also called "the Alliance". FIRST OF ALL, THE FOLLOWING IS SET OUT:

Having regard to the second call for Erasmus+ "European Universities" projects,

Having regard to the application file for this call for projects and its annexes, which the partners submitted on 26 February 2020,

Having regard to Grant Agreement N°101004088 (Annex 2) signed by the partners and the European Commission on 16 October 2020,



















In the event of a conflict between the terms of this agreement and the Grant Agreement, the terms of the Grant Agreement shall prevail.

HAVING STATED THIS, IT IS AGREED AND DETERMINED AS FOLLOWS:

















#### 1. EUt+ engineering programmes.

The partners of the EUt+ Alliance have defined a trajectory of convergence towards common training programmes across Europe to build European degrees in engineering at the Bachelor and the Master levels. They are called *EUt+ engineering programmes*.

#### 2. General frame

EUt+ engineering programmes are based on standards defined in the European Standards and Guidelines and the ENAEE. They are aligned with the EUt+ application in response to the second call for "European Universities", and in particular, the description of T3.1 and T3.2.

- 3. EUt+ engineering programmes are defined by:
  - 3.1. A common objective composed of:
    - 3.1.1. the principles and functioning of the targeted curricula and what is a degree:
      - · A learning environment (supportive, challenging and visionary)
      - Where the student follows a supervised process to validate:
        - A (minimal) path of discovery, thematic and geographic
        - Final learning outcomes
        - General competencies based on a self-evaluation process of situated learning
    - 3.1.2. The common general competencies given in appendix 1 and 2 below for all EUt+ Bachelors in Engineering and EUt+ Masters in Engineering.
    - 3.1.3. The final learning outcomes that are specific to each Bachelor and Master.
    - 3.1.4. the framework clarifying these concepts will be detailed in the *reference* guide.
  - 3.2. a cluster of pre-existing national curricula, which converges progressively towards a common objective and involves at least three EUt+ partner institutions.

    They are given in appendix 1 and 2.
  - 3.3. Large mobility of students and staff to create cohesion and accelerate the formal and informal exchange of information necessary to ensure a smooth and gradual convergence.

Ultimately, mobility will be compulsory in these EUt+ degrees. At Bachelor level, at least one semester will have been completed with a partner, according to generally predefined schemes. At the Master's level, at least one semester will have been spent with a partner, according to an offer and a free mobility between the partners.

















## 3.4. A convergence trajectory:

Each cluster must propose a first version of a mobility map that recognizes all ECTS in partners' universities and module selections as part of their own curricula by the end of 2021. In particular, a pool of modules will be created which are accessible to all students and whose ECTS are automatically recognized. This common pool will be regularly enlarged. The ECTS obtained are then automatically validated by the graduating partner, only a check prior to the final choice of modules is carried out so as to avoid validating the same course twice.

#### 4. National and European Framework

#### 4.1. National framework

In accordance with the call for European Universities, the partners identify the obstacles in the path towards what would be a European diploma and negotiate, when necessary, the adaptations, derogations and adjustments needed to progress.

#### 4.2. Targeted accreditation

These aim at a common accreditation at the European level. The partners are progressively taking the necessary steps to make the accreditation progress towards a European agency or acting as such.

#### 5. Fees

University fees, if any, are paid to the first enrollment partner during the course. Additional costs related to local life are paid according to local rules to the host partner.

## 6. Networking students

The incoming and outgoing EUt+ students will be integrated in a EUt+ community to build up a EUt+ spirit creating the support and feedback for the next mobilities.

#### 7. Follow-up of activities

By March 2022, the tasks 3.1 and 3.2 liaison act form a committee to ensure a close followup of the project to improve EUt+ experience and enable convergence.

The EUt+ universities agree to review for improving competencies in 2023 based on first experiences and feedbacks.

In the coming years, the final learning outcomes can be discussed and adjusted annually.



















## Appendices:

## 1. Implementation

# 1.1. First wave of clusters

To enforce the implementation of the EUt+ curricula, the eight universities of EUT+ agree on the following operational schedule:

The first three clusters are, for Bachelor and Master, focused on:

- Telecommunications and Networks,
- Civil engineering,
- Mechanical engineering

# 1.2. Agenda

They will establish the list of final learning outcomes that will be the core skills of the EUt+ students for November 2021.

The evaluation of final learning outcomes will be harmonized between partners, based on capability to mobilize competencies by 2024 by cluster. The curricula for incoming and outgoing EUT+ students will open for the fall/winter semester 2022.

The EUt+ universities agree to acknowledge the EUt+ students by a specific recognition that aims to develop an European degree in the future.

Each partner institution will guarantee mutual recognition and full ECTS accreditation.

Advertising to attract students will begin with spring semester in each university cluster.

## 1.3. Accelerated process for some students

From the beginning of the project while it is still in convergence, a small group of students can experiment the programme in an almost finalized form. They are closely monitored by the academic team and can return to a standard curriculum at any time. Their experience allows EUt+ to better anticipate the convergence process.

















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Memorandum of agreement for the creation of eut+ Bachelor in engineering and Master in engineering programmes 24.09.2021











APPENDIX 1

# Competency framework of the European University of technology Bachelors in Engineering

Europe envisions a technology which is both human-centric and society-driven, respectful of individual freedoms and careful about environment.

At EUT+, we believe in a technological education that raises technology-minded citizens and the society to build a powerful Europe.

The eight partners constituting the European University of Technology agree on the following general competency framework for their Bachelor in Engineering graduates:

Identifying, analyzing, formulating and solving technical or sociotechnical problems by relying on basic science, technical knowledge, practical skills, with critical awareness of the wider multidisciplinary context of engineering.

Proposing the design and the implementation of sustainable and reliable technical solutions; adapting original and resilient systems, integrating all technical constraints; managing a process or a system with rigor and know-how. Considering the local impact of a system, while being aware of global challenges. Knowing how to be accompanied when necessary for the integration of societal, human, environmental, normative and economic constraints over the entire life cycle.

Organizing a technical team or a small structure in an international and multilingual context. Receiving and transmitting information with the various trades required to carry out the tasks. Interacting with a large variety of profiles, supporting the integrity of the work and empowering social and ethical responsibilities, such as integrity, diversity, and inclusion.

Appling a quality and/or validation process at any level; verifing information; reporting reliably and clearly, contributing to a continuous improvement process, estimating performance and margins for improvement and progress.

Working in changing environments or under new constraints, assessing and completing training and self-training needs; self-training in one's field and related fields, integrating new practices after training.

















APPENDIX 2

# Competency framework of the European University of technology Masters in Engineering

Europe envisions a technology which is both human-centric and society-driven, respectful of individual freedoms and careful about environment.

At EUT+, we believe in a technological education that raises technology-minded citizens and the society to build a powerful Europe.

The eight partners constituting the European University of Technology agree on the following general competency framework for their Masters of Engineering graduates:

Identifying, analyzing, formulating and solving complex technical or sociotechnical problems even in a new situation by relying on advanced science, in-depth knowledge and solid practical skills, with critical awareness of the wider multidisciplinary context of engineering.

Conceptualizing and designing original, resilient, sustainable, and reliable solutions or systems, integrating all technical, societal, human, environmental, normative and economic constraints over the entire life cycle.

Effectively functioning in a team as a member and managing a team in an international, transdisciplinary, and multilingual context, empowering social and ethical responsibilities, such as integrity, diversity, and inclusion.

Piloting a process or system reliably and efficiently; deciding, planning and organizing with a holistic vision; anticipating and preventing direct or indirect local impacts of a system on its territory, while being aware of the global challenges.

Evaluating performance, margins for improvement and progress. Implementing the most appropriate and relevant methods for quality control, validation and advancement.

Exchanging, receiving, and transmitting information and ideas to different levels of qualifications as well as to the civil society; assessing information and making judgements; evaluating and completing training; committed to lifelong learning.

Leading or supporting innovation processes from the implementation of the proposals, based on the state of the art to the mobilization of skills, tools and methods; proposing solutions based on avant-garde visions; contributing to research and development, while evolving in an uncertain and constrained technical and technological environment.









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Other appendices

Reference guide Version 1













