

# Digital Competences of Higher Education Students

Technische Hochschule Nürnberg Georg-Simon-Ohm



#### Motivation



- The educators of Technische Hochschule Nürnberg Georg-Simon-Ohm recognized that continuous (self-)education and digital competences are important factors for employment, personal development and participation in a digital society.
- This led Nuremberg Institute of Technology to initiate the development of a curriculum-integrated program for students to improve their digital competences by helping them evaluate their own competence levels and assist them in independently closing their competence gaps.

## Challenge



 To be able to improve the students' digital competences, Nuremberg Institute of Technology were looking for a self-assessment-tool, that enabled the students to evaluate their own competence levels and assisted them in closing their competence gaps.

## **Objectives**



- Help students to better understand current topics and trends from different fields of digital competences.
- 2. Support the lifelong learning skills of students in the digital age.
- 3. Promote self-reflection and assessment of competence levels.





## How MapUs supports the objectives

Objective 1: Help students to better understand current topics and trends from different fields of digital competences.

- Participants acquire knowledge of digital learning, data literacy, digital ethics, industry 4.0.
- Participants get familiar with and practice technologies and techniques, especially for obtaining, analyzing and
  evaluating information, security and protection of their own data, communication using digital media and creating
  digital content like websites, apps, infographics, etc.
- Participants acquire relevant key competences which are then trained further within the program, especially agile work management, critical thinking and teamwork.



#### Objective 2: Support the lifelong learning skills of students in the digital age.

 Participants identify their own knowledge gaps and areas of interest, try new digital tools and suitable online educational platforms and document their learning experience in online learning portfolios.

### **Objective 3:** Promote self-reflection and assessment of competence levels.

- Through a series of self-assessment statements, the students reflect upon and score their own everyday practice.
- Upon completion, the students are presented with personal competence profiles, which visually illustrate their strengths and weaknesses as well as include supplementary resources for upskilling.
- From there, the students can formulate a strategy on how best to develop their strengths in the future and how to independently close their competence gaps.



## The structure of the "DigKom Nuremberg-Tech" program

The DigKom Nuremberg-Tech program is structured as a modular concept. Students can choose a part of the
program according to their interest and individual needs or they can participate in the whole program and apply
for a Certificate for digital competence.



#### STEP 1

The students participate in interactive workshops and interdisciplinary lectures, which are integrated in module "General Studies" of the curriculum.

#### STEP 2

The participants use the digital self-assessment-tool to evaluate current competence levels an reflect upon these.

#### STEP 3

The students are presented with personal competence profiles, which visually illustrate their digital strengths and weaknesses as well as supplementary resources for upskilling.

#### STEP 4

Students start working with online educational learning platforms and formulate a strategy on how to improve on their weaknesses. The participants document their learning experience in online learning portfolios.



## The Effect of of incorporating MapUs in the "DigKom Nuremberg-Tech program"



Nuremberg Institute of Technology gained a digital self-assessment-tool, enabling studentsto understand their own digital strengths and weaknesses. The tool provided them with hands-on experience with new technologies, as well as theoretical knowledge of current competence demands.



By focusing on the individuals' competencies, the tool enabled the students to formulate the most efficient strategy to develop their own strengths in the future and thereby guide the students lifelong competence learning.

