Open microcredentials on AI, designed with recognition and curriculum integration in mind, for use in HE, VET & LLL

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In Germany, 90 % know the term AI. Only 29 % of them are confident in explaining AI.[1]

By 2026, Germany will lack 780,000 people with tech skills.[2]

[1] Pfaff-Rüdiger, S. Herrmann, S., Cousseran, L. & Brüggen, N. (2022). Kompass: Künstliche Intelligenz und Kompetenz 2022. Wissen und Handeln im Kontext von KI. (JFF – Institut für Medienpädagogik in Forschung und Praxis (ed.)). München: kopaed. (Deutschlandweite Repräsentativbefragung, N = 1.602)

[2] Stifterverband für die Deutsche Wissenschaft e. V. (2021). Tech-Spezialisten gesucht! Bedarf an Personal mit technologischen Kompetenzen wächst. Diskussionspapier 4. Essen: Stifterverband für die Deutsche Wissenschaft e.V. / McKinsey & Company.
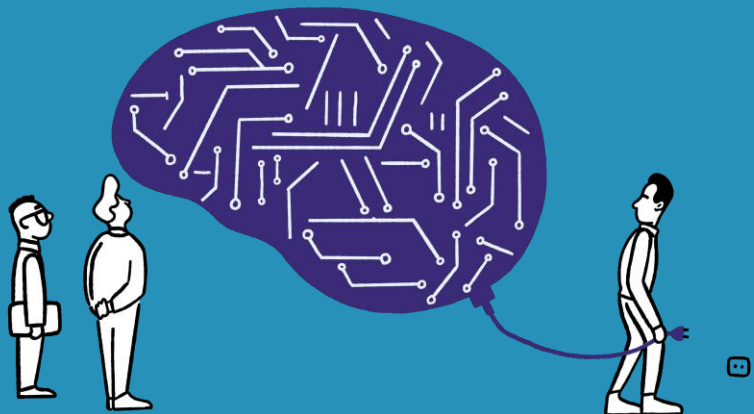
Our vision:

An AI-competent society.

Why the AI Campus?

Context

➢ Germany is struggling with a severe **shortage of skilled workers** and is in danger of losing its global competitiveness.

➢ Everyone in society needs to **better understand** possibilities and limitations of **AI**

➢ Thus, the AI Campus is part of the **AI Strategy** and the **Digital Strategy** of the German Federal Government
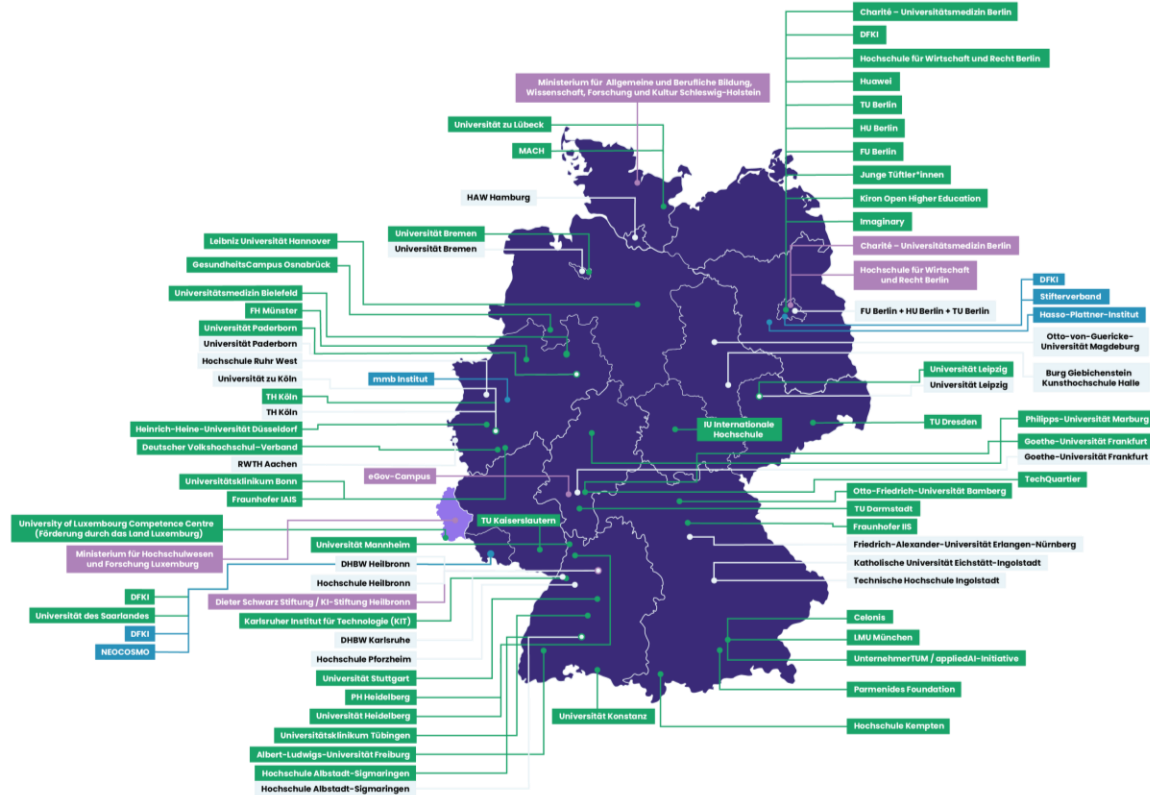
Duration

➢ **R&D project**: October 2019 to December 2024

➢ **Independent initiative** from 2025 onwards

Goals

➢ **Educate 100.000 people** on Artificial Intelligence & Data Literacy by 2025

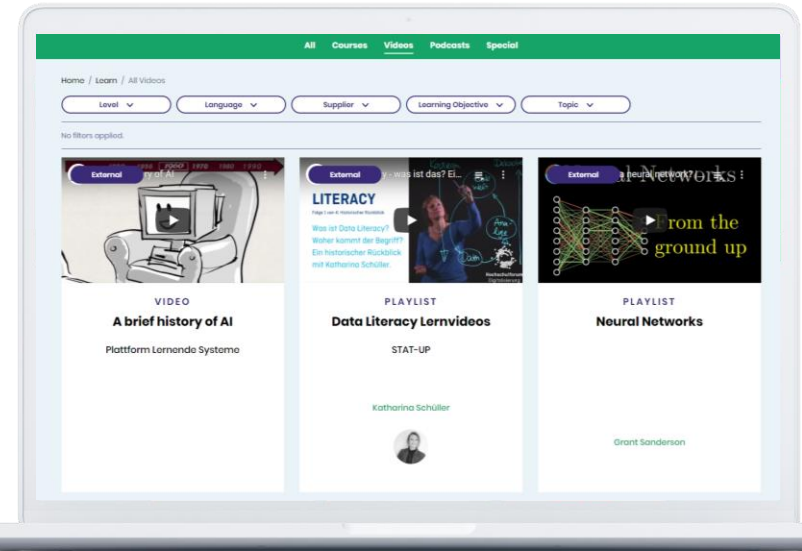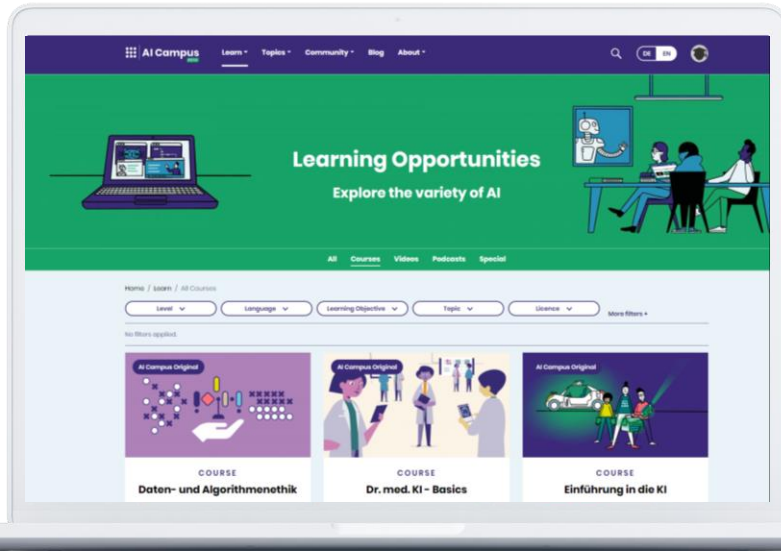➢ **Support** more than **100 HEIs** in Europe with AI learning by 2030

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and Research

AI Campus Network

AI Campus: A digital learning platform on AI

Who are the target groups?
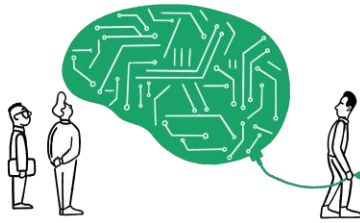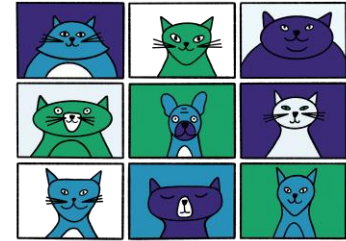

Students

Professionals

Lifelong Learners
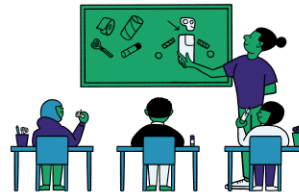
Which skills and subject domains are in focus?

Data Literacy

AI Basics

Machine Learning

Medicine

Education

Industry

What do learners need?
Digital formats depend on their learning objectives
(& not everything needs to be assessed & certified)

Objectives

Digital formats

Information & Knowledge

Micro formats (podcasts, videos, blog posts, publications, …)
Online courses / MOOCs (mainly informative or basic knowledge)
Online events / livestreams

} **Communication & Public Relations**

Skills

Micro learning formats (simulations, learning videos, programming exercises, …)
Online courses / MOOCs
Blended learning formats (courses, trainings, workshops, …)

Learning opportunities

Qualifications & Certificates

Digital badges
Micro credentials & micro degrees
Online and blended study programmes

Where do we stand?
Some facts and figures:

>50 Partners

for the development of learning opportunities

>23.000 Profiles

on the AI Campus

>30.000 Downloads & Streams

of AI Campus podcasts
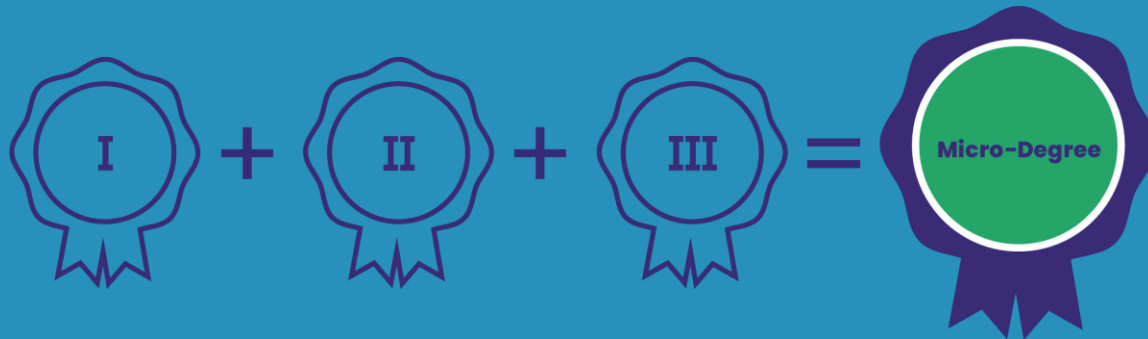
>500.000 Individual Visitors

on the AI Campus website

>2 Millionen Views

on YouTube and Vimeo

March 2023

Micro-Credentials & Micro-Degrees

Context in Germany

Germany: Increasing discussion on Micro-Credentials and/or Micro-Degrees as a flexible and innovative form of qualification

- *"Higher education institutions are recommended to examine the potential of micro-credentials and badges for their higher education teaching." (HRK, 2020)*

- *Federal government wants to "examine" the introduction of micro-degrees within the framework of continuing academic education (SPD et al., 2021)*

  ➤ Connecting the „AI skills" context with the „Micro-Credentials" context

  ➤ "AI Campus 2.0" as a laboratory for experimentation and implementation

Micro-Credentials & Micro-Degrees on the AI Campus

- Orientation towards the German Rectors' Conference (2020), UNESCO (Oliver, 2021) and the European Commission (2020)

- **Micro-Degrees** = A set or **aggregation of shorter learning units with stackable content** (AI Campus courses that are certified with a Micro-Credential).

- **Micro-Credentials** = Certified digital learning unit with 4 key requirements

| Demonstration of Learning Outcome (Knowledge / Skill) | Transparent Assessment | Stand-alone Value | Quality Assurance |

Records of Achievement

- An **AI Campus record of achievement is** awarded to those who have achieved at **least 60 percent of the** total number of **points in the** sum of all **assessed tasks of** an online course on the learning platform („Basic Setting").

- **Higher Education Collaboration** (University of Bonn)
  - 2 ECTS (Online Course + Onsite Exam) Studium Generale (free electives) in medicine

- **Further Education Collaboration** (State Medical Chamber of Baden-Württemberg)
  - 12 Credits in Continuing Medical Education (Online Course + Online Exam)

in Q Search

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Mike Bernd
Head of Content at AI Campus

Licenses & certifications

Daten- und Algorithmenethik
AI Campus – The Learning Platform for Artificial Intelligence
Issued Nov 2022
Credential ID KI-Campus

Show credential ↗

Dr. med. KI - Clinics
AI Campus – The Learning Platform for Artificial Intelligence
Issued Jun 2022
Credential ID KI-Campus

Show credential ↗

Dr. med. KI - Basics
AI Campus – The Learning Platform for Artificial Intelligence
Issued Jan 2022
Credential ID KI-Campus

Show credential ↗

AI Campus BETA

Learn ⌄   Topics ⌄   Community ⌄   Blog   About ⌄   🔍   Administration ⌄

Certificate Verification
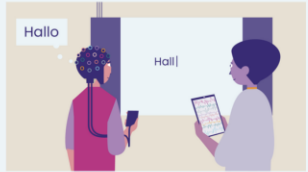
✓ The certificate for the verification code *xiros-nimuc-bulep-nikeh-kifal* is valid.

KI-Campus verifies that the candidate completed the course Dr. med. KI - Clinics and passed the necessary exercises and exams to earn a course certificate.

Gain a **Record of Achievement** by earning at least **60%** of the maximum number of points from all graded assignments.

Find out more in the certificate guidelines.

User Info
Issued for: **Mike Bernd**

Certificate Info
Certificate type: Record of Achievement
Issued at: 2022-06-30
Result: 117.1 of 120.0 points (97.6%)

Open Badge

KI-Campus
Dr. med. KI - Clinics
www.ki-campus.org

Course Info

Hallo
Hall|

Dr. med. KI - Clinics
Offered by: Charité – Universitätsmedizin Berlin
Course dates: since Nov 10, 2021

Micro-Degrees on the AI Campus
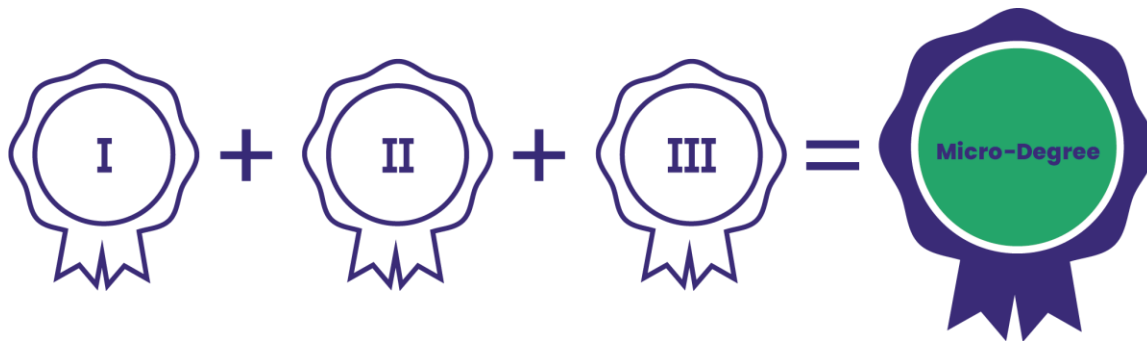
| At least 3 courses with stackable content (specialisation) | Workload 90-150 hours for entire MD | Certificate of Achievement (MC) per course | Fulfilment of the 4 criteria for MC | Currently optional award of ECTS credits |

(Flasdick et al. 2021)

Example 1: AI_VET

Micro-Credentials
(approx. 25-50 hours each)

Micro-Degree
(approx. 150 hours)

European Digital Credentials for Learning (EDC)

Key Learnings from Practice

1) Focus on the knowledge & skills gap:
AI as a topic helps with the acceptance and recognition
of micro-credentials in higher and in further education.

2) Keep it simple:
Don't overthink the basic quality standards and make it
understandable to non-experts (e.g. in industry).

3) Keep it flexible:
Different sectors have different needs. We cannot impose
all our academic standards on non-formal education.

4) Collaborate:
One of the great potentials of open and inclusive (digital) learning units certified
with micro-credentials is collaboration. Implement them in strong networks!

Common Microcredential Framework (CMF)

1) The CMF is a collaborative effort by leading European online education providers:

The CMF enables the creation of high-quality MOOCs (Massive Open Online Courses) across various European languages and offers academic credits based on the European Qualification Framework (EQF) and other recognized national qualification frameworks. It unifies qualification standards, promoting transparency and cross-border recognition of qualifications within Europe's higher education institutions.

2) To meet the requirements of the CMF, microcredentials must meet the following specifications

1. Has a **workload (or study time) of 4-6 ECTS (100-150 hours)**
2. Be levelled at **Levels 5-8 in the European Qualification Framework**
3. Provides a **summative assessment that awards academic credit**
4. Uses a **reliable method of ID verification**
5. Provides a **transcript** witht the learning outcomes, study hours required, EQF level, and number of credit points.

Challenges

Challenges

1) **Assessment:**
Recognition and portability of competences require transparent and secure assessment of learning outcomes. AI Campus is experimenting with several scenarios, such as
- on-site assessment
- online assessment with proctoring
- online assessment without ID verification
- issuing only certificates of participation, leaving the assessment to the recognizing institution

2) **Reviewing and updating Learning opportunities:**
The fast pace of development in the field requires courses, assessments and credentials to be regularly reviewed and updated.

3) **AI competence framework:**
To foster interdisciplinary collaboration and to develop a competence framework on AI, a research group is bringing together researchers with various backgrounds.
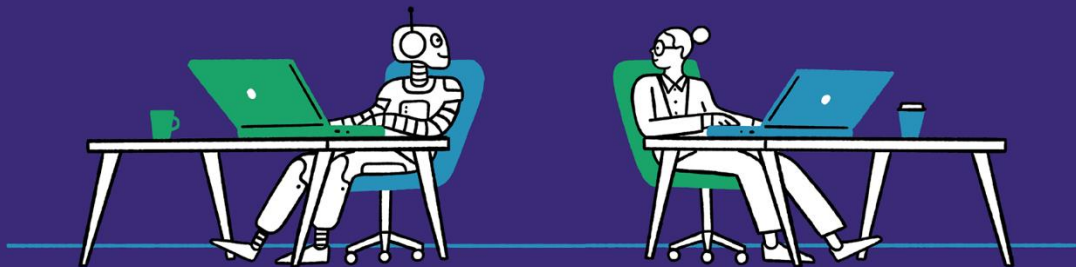
Funding

Partners "AI Campus 2.0"

Our mission: We strengthen AI skills through innovative, digital learning opportunities.

Let's work together!

Contact

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www.ai-campus.org

@KICampus #KICampus