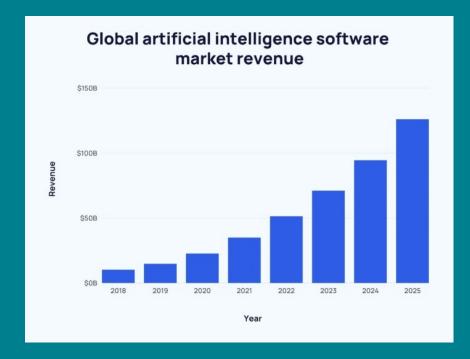


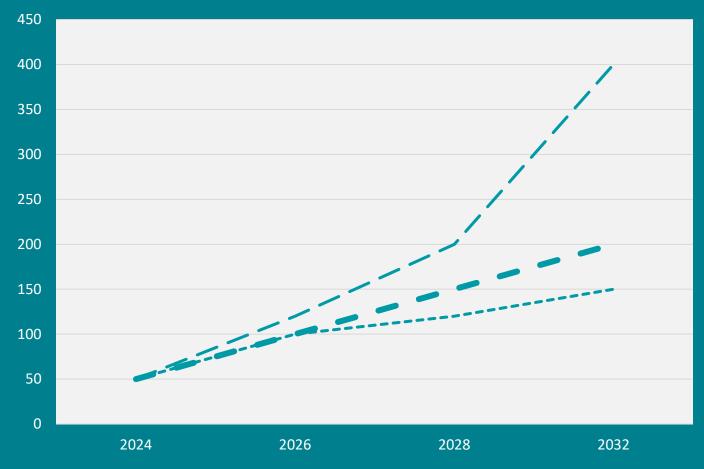
# **XAMK** Education and RDI Supporting the Data Center Ecosystem

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#### Workforce Needs in Kajaani Data Centers







# **XAMK**

# Current Education for Data Centers

#### **Bachelor of Business Administration in Data Center Education** (since 2010)

- 10-15 graduates/year
- Focus: server/workstation systems, networking, virtualization, containers, cybersecurity
- Hands-on experience in a real data center environment (including supercomputer access)

#### Bachelor of Engineering in ICT - From Data to AI (since 2019)

- 40-60 graduates/year
- Focus: data analytics, deep learning, data center services

### **Mechanical and Construction Engineering (since 1996)**

- 15-20 graduates/year
- Some graduates recruited into data centers
- Some relevant content in electrical and automation engineering

## **KAMK** DC 2030 Development Programme

A strategic initiative by KAMK to:

- Scale and enhance existing degree programs
- Create new courses and degrees
- Launch demand-driven RDI projects
- ➤ Develop facilities and labs

Based on cooperation with businesses, HEIs, the city of Kajaani, KAO, and other institutions.

	2025	2026	2027	2028	2029	2030	
BA in Data center	Development of Content		Study Programme available in English				
Continuous Education, Long Course	Development of Multidisciplinary 60 cr Study Module		Study Module available				
Engineering (BA)	An EU-funded project "Expertise Development of Study Module 15 cr – for Kainuu Data Centers" is Construction lechnology and Mechanical engineering		Module available in KAMK and national wide via Open University		New Study Programme in DC Engineering?		
From Data to AI, Engineering (BA)	Development of Content, New Study Modules		Study Module available				
MBA in Engineering	Development of New Course 5 cr		Course available		New MBA DC Study Programme?		
Educational Infrastructure	Continuous Development of DC lab		New Lab? Other New Facilities	Facilities Ready			
Research and Development	Excess heat development projects, AIKA- development projects		Deepening excess heat expertice, focus on energy issues				
Continuous Education, Short Courses	Microsoft Skills: Data Engineering, Data Analyst, Data Scientist						

## **KAMK** Expertise for Kainuu Data Centers

#### Institutions:

- Kajaani University of Applied Sciences (KAMK), WPs 1-4, 8, 9,
- Kainuu Vocational College (KAO), WPs 5-6, 8,9
- Kajaani Upper Secondary School, WP 7, 8,9

#### Activities - Work Packages (WP)

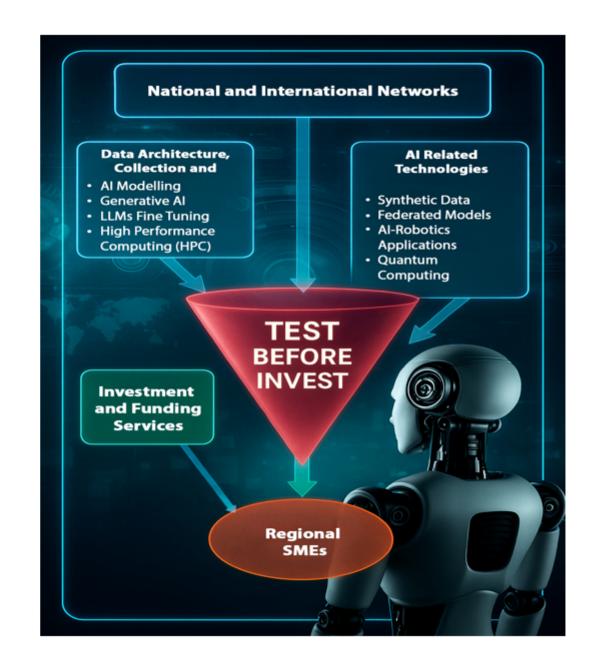
- WP1: Development of DC BBA; new modules, English learning materials, staff competence building.
- WP2: Multidisciplinary 15-credit module on data center infrastructure maintenance (energy, HVAC)
- WP3: New 5-credit course on energy efficiency management for Master's engineering students.
- WP4: 60-credit continuing education module for degree holders.
- WP5–7: Training modules and study paths for upper secondary and vocational students, focusing on technical skills and higher education readiness.
- WP8: Marketing and Communication
- WP9: Roadmap for future skills needs in the data center sector developed



### AIKA ecosystem

- The main goal of AIKA is to support the digital tranformation of SMEs with focus on AI implementation within the SMEs fuctions and products
- A central compnant of the AIKA is the Test Before Invest servcies to help the SMEs realising the benefits and possiblities of AI technologies
- Aika is a hub for attracting AI talents to the region, as well as supporting AI focus start ups via AIKA academy program

For more information please visit www.aikaecosystem.com



### **KAMK**

 The development of the data center ecosystem in Kajaani is remarkable, with education at its core. The region's RDI environmentssuch as LUMI, the upcoming AI Factory, and the data centers of XTX Market and Borealis-are complemented by rapidly advancing educational solutions.

• Let's build an ecosystem—and an ego system—for Kainuu that we can be proud of.