

# UAS (Drone) University Collaboration Network, UCNDrone

Project partners:

**University of Oulu**

**University of Helsinki**

**University of Turku**

**Centria University of Applied Sciences**

**Metropolia University of Applied Sciences**

**Savonia University of Applied Sciences**

**South-Eastern Finland University of Applied Sciences**

**Tampere University of Applied Sciences**

**Turku University of Applied Sciences**

**Oulu University of Applied Sciences**

*...and other Finnish universities to join the network*

The primary objective is to create a new **nationally comprehensive university network** focusing on the **education and RDI activities** related to **Unmanned Aircraft System (UAS)** technologies and applications. The members of the network have their own strengths, on the basis of which they will identify **national and international** development targets to **develop education and research**. In terms of education, this means **identifying the competences** needed by **businesses** and **developing education** according to the needs. In research, **strengthening the collaboration** with **networks and stakeholders** will create the conditions for **joint projects** and more **effective research** in **Finland** and the **European Union**.

Funded by **Ministry of Education, Science and Culture**

Total budget is **823 116 EUR**

Duration is two years, **2021-2023**

# Miehittämättömien ilma-alusjärjestelmien (UAS/Drone) yliopistojen ja ammattikorkeakoulujen yhteistyöverkosto, UCNDrone

Projektiikumppanit:

**Oulun yliopisto**

**Helsingin yliopisto**

**Turun yliopisto**

**Centria-ammattikorkeakoulu Oy**

**Kaakkois-Suomen ammattikorkeakoulu Oy**

**Metropolia Ammattikorkeakoulu**

**Savonia-ammattikorkeakoulu**

**Tampereen ammattikorkeakoulu**

**Turun ammattikorkeakoulu**

**Oulun ammattikorkeakoulu Oy**

*... ja muut suomalaiset yliopistot ja*

*ammattikorkeakoulut liittymään verkostoon*

Avustuksella luodaan kymmenen korkeakoulun verkostomainen toimintamalli, jolla vahvistetaan miehittämättömiin ilmaalusjärjestelmin liittyvää koulutusta ja tutkimusta ja vastataan yhteiskunnan ja työelämän muutoksiin elinkeinoelämää kuunnellen. Verkostossa kehitettävät ratkaisut ja koulutus liittyvät keskeisesti nouseviin teknologioihin, yhteiskunnan muutokseen ja vihreään teknologiaan. Korkeakoulu osallistuvat hankkeeseen omien strategisten painopisteidensä mukaisesti ja aidon monialaisesti.

Rahoittaa: **Opetus- ja kulttuuriministeriö**

Kokonaisbudjetti: **823 116 EUR**

Kesto on kaksi vuotta: **2021-2023**

# Objectives

- The primary objective is to create a new nationally comprehensive network focusing on the training and research of technologies related to unmanned aerial vehicle systems. The network develops technology in the field, creating a basis for specialised training and innovation activities for the needs of companies and society. Utilisation targets include logistics, monitoring and rescue services. The members of the network have their own strengths, on the basis of which it is possible to identify national and international development targets and to put education and research in the field at the forefront. In terms of education, this means identifying the competence needs of companies and developing teaching according to needs, taking into account students' ability to create new business. In research, strengthening the network's stakeholder activities creates the conditions for joint projects and more effective research in Finland and the EU. The network's operations are established by developing joint projects and co-studies.

# In Figures

- A total of approximately 30 people from the project partners' own organisations will participate directly in the project. In addition, the aim of the project is to reach approximately 3,000 professionals in Finland and internationally through networks and social media available to project actors. The Allied ICT Finland network alone consists of 3,000 professionals from 1,500 companies. Over the next two years, the aim is to launch 50 new courses and projects on the content development of courses (totalling 3,000 students) as well as several research projects that employs total of approximately 150 teachers and researchers. The combined number of students and potential applicants of participating universities is over 100,000, and the dissemination of the project reaches most of these.

# Goals

- Understanding Finnish know-how in drone technologies and its relationship to the forefront of technology internationally, both from the perspective of education and research networked with industry.
- Versatile and high-quality training provision (unmanned aerial vehicles and ancillary technologies), taking into account flexible and continuous learning and collaborative studies.
- R&D activities for both individual universities in the network and partnerships formed from the network-based on the values.
- Cooperation in workshop activities, for example.
- An internationally significant and competitive, collaborative network capable of providing training both nationally and internationally.
- Established research cooperation in the international arena (e.g. EU framework and innovation programme searches).
- A website for sharing trainings, research results achieved, and information about events in the field, such as seminars and podcasts organised by the network

# WP1 Network Operational Model

- Lead: Metropolia
  - A list of competences will be collected from actors both inside and outside the network, and on this basis the strengths, cooperation model and development needs of the universities participating in the network will be identified.
- Network Operating Model shared with other universities
  - Network of UAS Clubs

# WP2 Education

- Lead: UTU
- This work package focuses on identifying genuine business life and students' educational needs. Actions will then be developed that will raise the level and quality of education.

➤ National Survey on UAS  
Education Needs

# WP3 Research

- Lead: OY
- The network creates a comprehensive understanding of the RDI needs that the field has both nationally and internationally. The network also identifies the bottlenecks that prevent research from switching to applications at this time. Research themes are presented and research results published in regular workshops and industry conferences.

➤ National Survey on UAS Research Needs



# WP4 Stakeholder Communication

- Lead: Centria
  - The network connects with national and international, business-oriented networks and develops cooperation with companies in the field. Other important stakeholders are the public sector and decision-makers (e.g. in the aviation sector). The communication plan (e.g. social media) and the recovery plan are a key part of the work package.
- Identifying stakeholder circles and key stakeholders
  - Communication and Dissemination activities

# WP5 Consolidation of activities

- Lead: Xamk
  - This work package establishes a comprehensive network that is internationally competitive on the themes of the topic.
  - The network cooperates in a multidiscipline manner alongside the stakeholders identified in WP4 and the partnerships established from them. The results of the project will be shared by platforms, trainings, etc. at least 5 years after the end of the project.
- What is the future of UAS domain in Finland?
  - Round table discussion with key stakeholders
  - Developing the common understanding and vision
  - Finnish UAS Portal
  - Data Storage

# WP6 Management

- Leads:
- Oulu University of Applied Sciences (Overall coordination, network of Universities of Applied Sciences)
- University of Oulu (network of the Classical Universities)
- This work package establishes administrative tools and processes so that the project can be carried out on schedule and on budget in such a way that it achieves its objectives.

➤ Usual activities

# Contact Information

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