



## Developing Curricula for Artificial Intelligence and Robotics

**Discover DeCAIR Project** 



618535-EPP-1-2020-1-JO-EPPKA2-CBHE-JP

# **Project Goal**

Developing Curricula for Artificial Intelligence and Robotics (DeCAIR)

A three-year project (15.1.2021 – 14.1.2024)

Co-funded by the Erasmus+ Capacity Building for Higher Education Programme

> Coordinator: The University of Jordan (UJ), Jordan

DeCAIR aims to establish new programs and improve existing programs in the areas of Artificial Intelligence and Robotics (AIR):

- New MSc program in Artificial Intelligence and Robotics at the University of Jordan
- New BSc program in Intelligent Systems Engineering at Tafila Technical University
- AIR courses of current BSc and MSc programs at the partner Jordanian & Lebanese universities

With the help of leading European partners, DeCAIR will give the partner universities opportunities to improve capacities in AIR and learn and adopt best practices to offer AIR courses and programs. This will lead to graduating students able to meet the rising labour market demands - for experts who can use AIR technologies to develop products and solve various problems facing modern societies.

# **Partnership Map**

## **DeCAIR Consortium**

The DeCAIR project is implemented by a consortium of 10 partners from 6 Countries

All partners are HEIs except CreThiDev which is an NGO.



## Jordan

The University of Jordan (UJ) Jordan University of Science and Technology (JUST) Tafila Technical University (TTU)

## Lebanon

Lebanese University (LU) Beirut Arab University (BAU)

## Italy

University of Pisa (UNIPI) University of Genoa (UNIGE)

## Spain

University of Granada (UGR)

## Germany

University of Stuttgart (UST)

## Greece

Creative Thinking Development (CreThiDev)

# **DeCAIR Specific Objectives**



**SO1: Qualifying experts** in the fields of AIR who can conduct research and solve problems by utilizing the technologies of AIR through the establishment of new master's and bachelor programs.



**SO2: Building and improving the teaching capacity** in AIR at the partner universities of the Partner Countries.



SO3: Improving the AIR capabilities of graduates from existing bachelor and master's programs in computer, mechatronics, electrical, and mechanical engineering in the areas of AIR.



SO4: Improving the practical skills of university graduates in the areas of AIR by establishing and developing modern AIR laboratories.



**SO5: Building networks** of highly qualified professionals in the areas of AIR among South Mediterranean and European countries.



SO6: Improving collaboration with the local, regional and European industry and community for applying AIR technologies in solving industry and community problems.



SO7: Disseminating and implementing modern teaching methods such as flipped learning and project-based learning in the developed master programme.



45 new/updated courses to be Developed/ Accredited/ Implemented/ Delivered

**19** training courses for building capacities in AIR

**50** academic staff from JO and LB to be trained

**25** students from JO and LB to be trained

# Main Outcomes

Several deliverables & events will be implemented during the lifetime of the project

### Reports

- Surveying and identifying the needs for AIR in Jordan and Lebanon
- New developed syllabi and content of the courses in the new programs

- Syllabi and content for added/modified courses in existing master programs
- Syllabi and content for added/modified courses in existing bachelor programs
- Main needs of industry, commerce and society, as well as the available expertise in AI and robotics

## Manuals

- Good practices on the application of modern teaching methods
- Good practices for the MSc program and a source for generating research ideas that identifies a clear set of steps and guidelines for approaching, communicating, and suggesting solutions to stakeholders

## Training Workshops / Events

19 training workshops as well as plenty of events and awareness workshops in Jordan and Lebanon will be organised during the lifetime of the project.

# **Added Value**

## **HE Sector**

- Improve the excellence/ competitiveness/ attractiveness of the higher education institutions.
- Innovative character of the planned results.

## Society

- Engage Partner Countries HEIs in new means of cooperation with employers and other stakeholders.
- Planning measures to contribute to improving lifelong learning approaches in the Partner Country HEIs.



### ENGINEERS

in Jordan and Lebanon who have graduated from related specializations and are looking for a graduate program that gives them experiences and skills needed to advance their careers, solve industry and national problems more efficiently, and/or create start-ups. The related specializations include computer, mechatronics, mechanical, and electrical engineering.

### FACULTY MEMBERS & TECHNICIANS

in Jordan and Lebanon from the related specializations need to improve their capacities to give AIR courses and engage in practical research to solve local and global problems.

#### STUDENTS

in existing related specializations need to gain better experiences and skills. They need modern courses that improve their opportunities to find jobs or start new businesses. They need courses that give them practical skills in rising areas such as Al, machine learning, data science, robotics, autonomous vehicles, and self-driving cars.

# TARGET GROUPS

## Join the DeCAIR communication @DeCAIR channels

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DeCAIR

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#### Disclaimer

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