Project Title

Capacity Building in Robotics & Autonomous Systems in India

Project Acronym

IRAS-HUB

PROJECT COORDINATION

Institution:	**Indraprastha Institute of Information Technology Delhi (IIIT-D)**
Address:	**Okhla Industrial Estate, Phase III, Near Govind Puri Metro Station, New Delhi-110020, India**
Contact:	**IRAS-HUB administration** **admin-irashub@iiitd.ac.in**

PROJECT INFORMATION

Number and call:	**101083029-2022**
Key action:	**ERASMUS-EDU-2022-CBHE-STRAND-2**
Start-date:	**March 1st 2023**
End-date:	**February 28th 2026**
Granting authority:	**European Education and Culture Executive Agency (EACEA)**
EC contribution:	**€ 797 785.00**

ADDITIONAL PROJECT INFORMATION at local level if UniGe is not coordinating Institution

Department / Unit:	**DIBRIS**
Local coordinator:	**Prof. Fulvio Mastrogiovanni**
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OTHER INFORMATION

Partnership:	1. Indraprastha Institute of Information Technology, Delhi, India 2. International Institute of Information Technology, Hyderabad, India. 3. Indian Institute of Information Technology, Allahabad, India. 4. Universita' degli Studi di Genova, Italy. 5. Warsaw University of Technology (Politechnika Warszawska), Poland. 6. Universitat Rovira I Virgili, Spain. 7. Creative Thinking Development, Greece. 8. Guru Gobind Singh Indraprastha University, India. 9. Addverb Technologies, India. 10. Polytechneio Kritis, Greece.
Project summary:	Robotics can offer numerous opportunities to a wide range of market domains in a developing country like India, such as manufacturing, agriculture, transport and logistics, space exploration, etc. However, the use of robotics in India has been mainly challenged by the high cost of adoption, lack of accessibility, and the lack of skilled talent in robotics technology. The current project, IRAS-HUB, addresses the lack of skilled talent in robotics technology in India by the establishment of three hubs in robotics and autonomous systems (RAS). Project IRAS-HUB will achieve the following results: 1. 3 RAS hubs set up at and equipped with prototyping equipment and robotics software in three different Indian HEIs, namely IIIT-Delhi, IIIT-Hyderabad, and IIIT-Allahabad. 2. 22 faculties from Indian HEIs (6 from each IIIT-Delhi, IIIT-Hyderabad, and IIIT-Allahabad and 4 from GGSIPU) will be trained in RAS by reputable researchers and experts from four EU HEIs, namely UNIGE, Italy, WUT, Poland, URV, Spain and TUC, Greece.

	3. 4 existing courses in robotics at Indian HEIs will be modernized and 4 additional courses in robotics will be developed for senior UG and PG students. 4. 1 standardized training program will be developed for continued learning of working professionals in RAS. 5. 3 industry-driven pilot projects in RAS will be developed in India, one in each Indian HEI. 6. 6. 220 senior UG and PG students (60 from each IIIT-Delhi, IIIT-Hyderabad, and IIIT-Allahabad and 40 from GGSIPU) will be taught through the developed and modernized semester-long courses. 7. 7. 60 working professionals in RAS from other Indian HEIs and robotics industries will be formally trained in RAS through the developed training program. 8. 1 collaboration platform set up aiming at favoring collaboration between three RAS hubs. Project IRAS-HUB envisions to achieve the following impact: 1. Development of highly knowledgeable and skilled human resources in RAS in India. 2. Promotion of the knowledge generation in robotics technology through basic and applied research. 3. Development of robotics technology for problem-solving in diverse sectors of India such as agriculture, transportation, etc. 4. Promotion of competencies, capacity building, and training to nurture innovation and start-ups among young and aspiring entrepreneurs in robotics, 5. Internationalization and modernization of Indian HEIs by connecting Indian HEI's with global efforts in robotics education.