HERO

Human-centred and Ethical Robotics for Health and Wellbeing

Blended Intensive Programme (BIP)

DIBRIS, University of Genoa, Italy

Date: June 22-26, 2026 (Virtual)
/ June 29-July 03, 2026 (Physical)

HERO - Human-centred and Ethical Robotics for Health and Wellbeing

Beneficiary Module BIP code: TBD

Summary of Information:

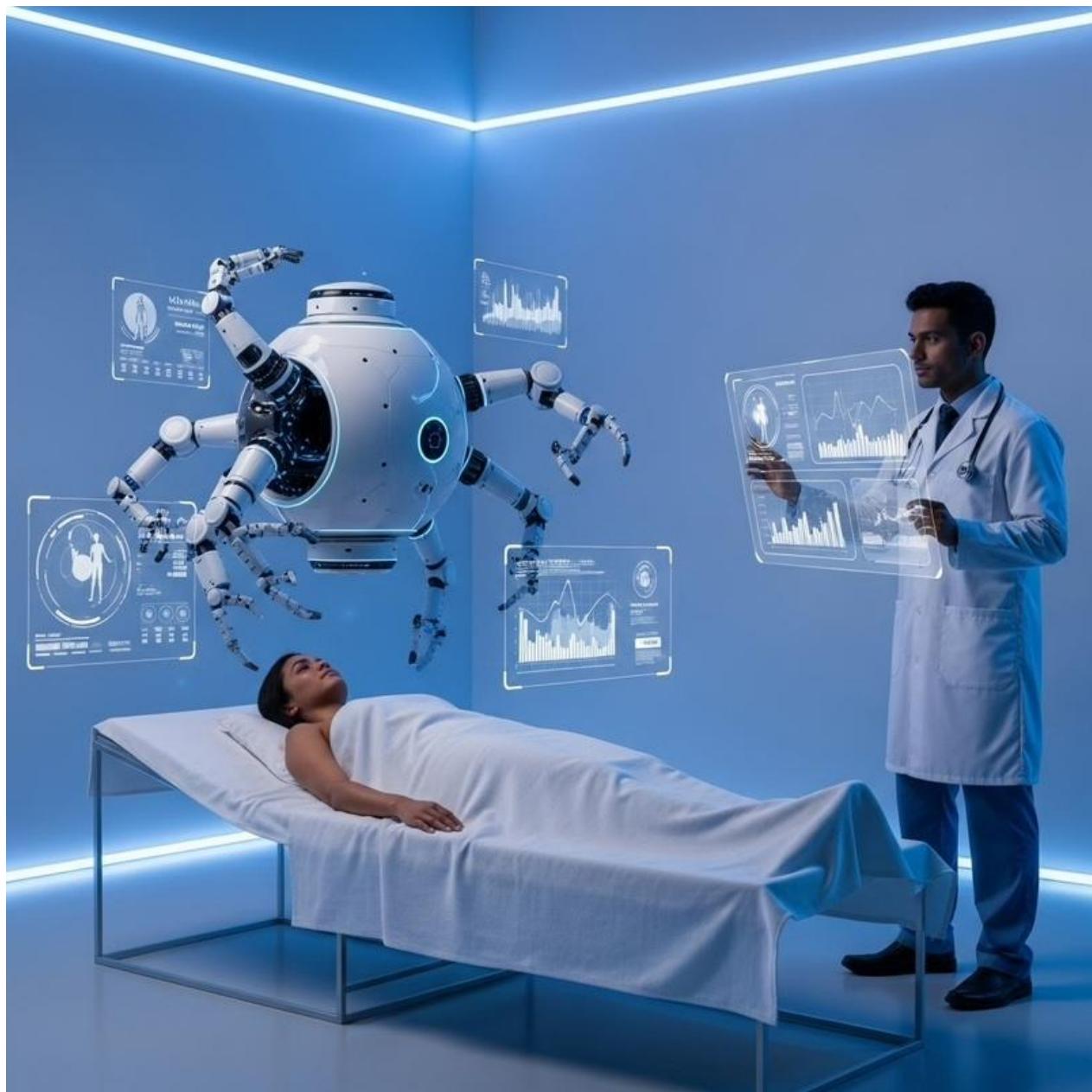|	
In which city is the BIP located?	Genoa, IT
Name of the hosting university?	University of Genoa (UniGe)
Name of the coordinating university?	UniGe
Ulysseus BIP topics?	❑ Entrepreneurship; ❑ Topics related to the Ulysseus Innovation Hubs, ❑ Transversal/Interdisciplinary topics aligned with the Ulysseus Mission
ISCED code, according to the list in annex 1 (for a BIP for students):	0610 0710 0788
Amount of ECTS (minimum 3 ECTS for a BIP for students):	3
Expected participants (students, staff or the two ones) and the expected study level for students:	15 Master's degree students
- Maximum number of desired Erasmus BIP participants (granted or zero granted) and precise if non BIP participants, can be added - And if possible, precise, how many slots per university:	Max 20 participants [Max 5 per Ulysseus alliance university} Non-BIP participants may be added.
Start/End dates of the virtual component:	22.06 – 26.06.26

Start/End dates of the physical component:	29.06 – 03.07.26
(Expected) Workload (detail for physical component and the virtual one if possible):	75 hours (35 virtual + 40 physical)
Language and level required:	English (C1)
Available funding:	*Consult your home university regarding available funding options*
Hosting university's registration deadline to receiving (the participant list) or (the signed Erasmus mobilty agreement):	30.04.26
Application Details:	Please contact your Ulysseus Local Mobility Officers in this table below. Feel free to reach out to them with any questions. They will manage the selection process internally.

Contact details of Ulysseus Local Mobility Officers:	
University of Seville:	**mobilityulysseus@us.es**
Université Côte d'Azur:	**mobility-ulysseus@univ-cotedazur.fr**
University of Genoa:	**mobility.ulysseus@info.unige.it**
Technical University of Kosice:	**natalia.vaskova@tuke.sk**
MCI The Entrepreneurial School®:	**mobilityofficer.ulysseus@mci.edu**
Haaga-Helia University of Applied Sciences:	**mobilityulysseus@haaga-helia.fi**
University of Münster:	**mobilityulysseus@uni-muenster.de**
University of Montenegro:	**ulysseusmobility@ucg.ac.me**

General Course Information:

- Course Description:
  This course is aimed at anyone interested in the application of human-centred and ethical robotics in health and wellbeing, with particular attention to ageing, artificial intelligence, and technology transfer. It is organised by the Innovation Hub in Robotics

(IHR) at the University of Genoa, in collaboration with the Departments of Engineering (DIBRIS) and Health Sciences (DISALL)..

- Ulysseus Priority topics:
    - Entrepreneurship;
    - Related to the Ulysseus Innovation Hubs;
    - Transversal/Interdisciplinary topics aligned with the Ulysseus Mission

- Target group:
    - Students

- Level (for students):
    - Master

- Field of study and ISCED code(s) for a BIP for students using the ISCED code list in annex:
    - 0610
    - 0710
    - 0788

- Course dates:

Physical component: **22/ 06/ 26** to **26/ 06/ 26**

Virtual component: **29/ 06/ 26** to **03/ 07/ 26**

- Registration dates are open from **15/ 01/ 26** to **30/ 04/ 26**

    Please be aware that your home university may set a different application deadline depending on their internal selection process (around 2-3 months).

Course Content:

- Course Outline:

    The course aims to foster a transdisciplinary approach on robotics, exploring how to support health and wellbeing through human-centred design, ethical principles, and responsible innovation. Adopting the perspectives of multiple stakeholders, the different stages of research and innovations will be illustrated

by the means of concrete case studies from molecular sciences, clinical research, public health and industrial partnerships, emphasising the process of responsible transfer to clinical care.

Participants will work both individually and in small interdisciplinary groups created in collaboration with the BIP 'AWAKE' organized by DISALL, encouraging collaboration among students with diverse academic backgrounds. Active participation in discussions and collaborative activities is an essential component of the course.

Group activities will focus on the analysis of real-world case studies and the co-design of conceptual solutions addressing specific challenges in health and ageing. Participants will present their innovative proposals in a final pitch session at the end of the course as part of the final assignment required to obtain course credits, which consists of a short project or concept proposal and presentation.

- Course content:

   This course provides an interdisciplinary overview of human-centred and ethical robotics for health and wellbeing, integrating perspectives from robotics engineering, neuroscience, biomechanics, artificial intelligence, rehabilitation, and clinical practice.

   It addresses the design and evaluation of assistive, wearable, and rehabilitative robotic systems, exploring sensorimotor control, physical human–robot interaction, and AI-driven adaptation, while also examining laboratory cutting-edge techniques in ageing research and clinical care. Emphasis is placed on user-centred evaluation methodologies and on pathways for technology transfer, bridging research innovation with real-world clinical and healthcare deployment through close collaboration between academia, healthcare professionals, and patient organisations.

- Learning Outcomes:

   By the end of this course, students will:

- Demonstrate advanced knowledge of human-centred robotics applied to health, healthcare, and ageing contexts.
- Understand the technological foundations of assistive, wearable, and rehabilitative robotic systems, including the role of artificial intelligence.
- Understand entrepreneurship, innovation processes, and technology transfer pathways relevant to robotics and AI solutions in healthcare.

Upon completing this course, students will be prepared to:

- Critically evaluate robotic and AI-based solutions for health and wellbeing in relation to user needs, clinical relevance, and innovation potential.
- Design, present, and justify a conceptual robotic or AI-based solution addressing a specific health or ageing challenge.
- Contribute effectively to interdisciplinary teams and engage with innovation and technology transfer processes supporting the translation of research outcomes into real-world healthcare applications.

Physical Mobility:

- The physical mobility part will be running from **29/06/26 to 03/07/26** in Genoa, Italy.
- The activity will be hold at UniGe, between DIBRIS and DISALL departments.
  - The seminar focuses on fostering transdisciplinary collaboration and a practical, human-centred approach to robotics for health and wellbeing, closely connected with the local ecosystem and involving activities that co-design conceptual solutions, with a strong emphasis on entrepreneurship and technology transfer.

	Morning	Afternoon
Day 1	9:00 – 11:20 **Introduction** 11:30 – 13:00 **Lecture & Workshop**	14:00 – 16:30 **Workgroup**
Day 2	9:30 – 11:20 **Lecture held by IH A&W** 11:30 – 13:00 **Lab visit & Workshop**	14:00 – 16:30 **Workgroup**
Day 3	9:30 – 11:20 **Lecture held by IHR** 11:30 – 13:00 **Lab visit & Workshop**	14:00 – 16:30 **Workgroup**

Day 4	9:30 – 13:00 **Lecture and Workshop held by DISALL dpt**	14:00 – 16:30 **Workgroup**
Day 5	9:30 – 11:20 **Entrepreneurship lecture** 11:30 – 13:00 **WG Presentations**	**Thank you & Farewell**

Virtual Component/Part:

- Practical Details Regarding the Virtual Component:
- The virtual component will be running from **22/06/26 to 26/06/26**.
- Students will work remotely, with sessions conducted synchronously to allow real-time interaction, on the foundational aspect of matters, focusing on background research, theoretical issues and design.
- Final programme **TBC**.

.

Requirements:

- Language and level requirement: English (C1). The participation to the Ulysseus language courses is strongly encouraged – see also the [Ulysseus Language Policy](#)
- Expected participants: Master's degree students in Robotics, Engineering, or related disciplines, with advanced skills in machine learning and programming, and experience with wearable devices
- Equipment: personal laptop

Application Process:

After completing your BIP template, please send it to your Local Mobility Officer to check it.

- CV, including personal contact details.
- A short bio accompanied by an outline of personal interests in the discipline, as well as potential ideas to explore and develop within the workgroup.
- Deadline for application: April, 30th, 2026.
- Maximum number of BIP participants: 20 students

Professor(s): TBC

Contact(s):

Prof. Fulvio Mastrogiovanni fulvio.mastrogiovanni@unige.it (Scientific Coordinator)

Dr.Clio Flego clio.flego@unige.it (Innovation Hub Manager)

Annex 1: ISCED CODES

Broad field	Narrow field	Detailed field
00 **Generic programmes and qualifications**	000 Generic programmes and qualifications not further defined	0000 Generic programmes and qualifications not further defined
	001 Basic programmes and qualifications	0011 Basic programmes and qualifications
	002 Literacy and numeracy	0021 Literacy and numeracy
	003 Personal skills and development	0031 Personal skills and development
	009 Generic programmes and qualifications not elsewhere classified	0099 Generic programmes and qualifications not elsewhere classified
01 **Education**	011 Education	0110 Education not further defined 0111 Education science 0112 Training for pre-school teachers 0113 Teacher training without subject specialisation 0114 Teacher training with subject specialisation 0119 Education not elsewhere classified
	018 Inter-disciplinary programmes and qualifications involving education	0188 Inter-disciplinary programmes and qualifications involving education
02 **Arts and humanities**	020 Arts and humanities not further defined	0200 Arts and humanities not further defined
	021 Arts	0210 Arts not further defined 0211 Audio-visual techniques and media production 0212 Fashion, interior and industrial design 0213 Fine arts 0214 Handicrafts 0215 Music and performing arts 0219 Arts not elsewhere classified
	022 Humanities (except languages)	0220 Humanities (except languages) not further defined 0221 Religion and theology 0222 History and archaeology 0223 Philosophy and ethics 0229 Humanities (except languages) not elsewhere classified
	023 Languages	0230 Languages not further defined 0231 Language acquisition 0232 Literature and linguistics 0239 Languages not elsewhere classified
	028 Inter-disciplinary programmes and qualifications involving arts and humanities	0288 Inter-disciplinaryprogrammes and qualifications involving arts and humanities
	029 Arts and humanities not elsewhere classified	0299 Arts and humanities not elsewhere classified

Broad field	Narrow field	Detailed field
03 Social sciences, journalism and information	030 Social sciences, journalism and information not further defined	0300 Social sciences, journalism and information not further defined
	031 Social and behavioural sciences	0310 Social and behavioural studies not further defined 0311 Economics 0312 Political sciences and civics 0313 Psychology 0314 Sociology and cultural studies 0319 Social and behavioural sciences not elsewhere classified
	032 Journalism and information	0320 Journalism and reporting not further defined 0321 Journalism and reporting 0322 Library, information and archival studies 0329 Journalism and reporting not elsewhere classified
	038 Inter-disciplinary programmes and qualifications involving social sciences, journalism and information	0388 Inter-disciplinary programmes and qualifications involving social sciences, journalism and information
	039 Social sciences, journalism and information not elsewhere classified	0399 Social sciences, journalism and information not elsewhere classified
04 Business, administration and law	040 Business, administration and law not further defined	0400 Business, administration and law not further defined
	041 Business and administration	0410 Business and administration not further defined 0411 Accounting and taxation 0412 Finance, banking and insurance 0413 Management and administration 0414 Marketing and advertising 0415 Secretarial and office work 0416 Wholesale and retail sales 0417 Work skills 0419 Business and administration not elsewhere classified
	042 Law	0421 Law
	048 Inter-disciplinary programmes and qualifications involving business, administration and law	0488 Inter-disciplinary programmes and qualifications involving business, administration and law
	049 Business, administration and law not elsewhere classified	0499 Business, administration and law not elsewhere classified

Broad field	Narrow field	Detailed field
05 Natural sciences, mathematics and statistics	050 Natural sciences, mathematics and statistics not further defined	0500 Natural sciences, mathematics and statistics not further defined
	051 Biological and related sciences	0510 Biology and related sciences not further defined 0511 Biology 0512 Biochemistry 0519 Biology and related sciences not elsewhere classified
	052 Environment	0520 Environment not further defined 0521 Environmental sciences 0522 Natural environments and wildlife 0529 Environment not elsewhere classified
	053 Physical sciences	0530 Physical sciences not further defined 0531 Chemistry 0532 Earth sciences 0533 Physics 0539 Physical sciences not elsewhere classified
	054 Mathematics and statistics	0540 Mathematics and statistics not further defined 0541 Mathematics 0542 Statistics 0549 Mathematics and statistics not elsewhere classified
	058 Inter-disciplinary programmes and qualifications involving natural sciences, mathematics and statistics	0588 Inter-disciplinary programmes and qualifications involving natural sciences, mathematics and statistics
	059 Natural sciences, mathematics and statistics not elsewhere classified	0599 Natural sciences, mathematics and statistics not elsewhere classified
06 Information and Communication Technologies	061 Information and Communication Technologies (ICTs)	0610 Information and Communication Technologies (ICTs) not further defined 0611 Computer use 0612 Database and network design and administration 0613 Software and applications development and analysis 0619 Information and Communication Technologies (ICTs) not elsewhere classified
	068 Inter-disciplinary programmes and qualifications involving Information and Communication Technologies (ICTs)	0688 Inter-disciplinary programmes and qualifications involving Information and Communication Technologies (ICTs)

Broad field	Narrow field	Detailed field
07 Engineering, manufacturing and construction	070 Engineering, manufacturing and construction not further defined	0700 Engineering, manufacturing and construction not further defined
	071 Engineering and engineering trades	0710 Engineering and engineering trades not further defined 0711 Chemical engineering and processes 0712 Environmental protection technology 0713 Electricity and energy 0714 Electronics and automation 0715 Mechanics and metal trades 0716 Motor vehicles, ships and aircraft 0719 Engineering and engineering trades not elsewhere classified
	072 Manufacturing and processing	0720 Manufacturing and processing not further defined 0721 Food processing 0722 Materials (glass, paper, plastic and wood) 0723 Textiles (clothes, footwear and leather) 0724 Mining and extraction 0729 Manufacturing and processing not elsewhere classified
	073 Architecture and construction	0731 Architecture and construction not further defined 0731 Architecture and town planning 0732 Building and civil engineering 0739 Architecture and construction not elsewhere classified
	078 Inter-disciplinary programmes and qualifications involving engineering, manufacturing and construction	0788 Inter-disciplinary programmes and qualifications involving engineering, manufacturing and construction
	079 Engineering, manufacturing and construction not elsewhere classified	0799 Engineering, manufacturing and construction not elsewhere classified
08 Agriculture, forestry, fisheries and veterinary	080 Agriculture, forestry, fisheries and veterinary not further defined	0800 Agriculture, forestry, fisheries and veterinary not further defined
	081 Agriculture	0810 Agriculture not further defined 0811 Crop and livestock production 0812 Horticulture 0819 Agriculture not elsewhere classified
	082 Forestry	0821 Forestry
	083 Fisheries	0831 Fisheries
	084 Veterinary	0841 Veterinary
	088 Inter-disciplinary programmes and qualifications involving agriculture, forestry, fisheries and veterinary	0888 Inter-disciplinary programmes and qualifications involving agriculture, forestry, fisheries and veterinary
	089 Agriculture, forestry, fisheries and veterinary not elsewhere classified	0899 Agriculture, forestry, fisheries and veterinary not elsewhere classified

Broad field	Narrow field	Detailed field
09 Health and welfare	090 Health and welfare not further defined	0900 Health and welfare not further defined
	091 Health	0910 Health not further defined 0911 Dental studies 0912 Medicine 0913 Nursing and midwifery 0914 Medical diagnostic and treatment technology 0915 Therapy and rehabilitation 0916 Pharmacy 0917 Traditional and complementary medicine and therapy 0919 Health not elsewhere classified
	092 Welfare	0910 Welfare not further defined 0921 Care of elderly and of disabled adults 0922 Child care and youth services 0923 Social work and counselling 0929 Welfare not elsewhere classified
	098 Inter-disciplinary programmes and qualifications involving health and welfare	0988 Inter-disciplinary programmes and qualifications involving health and welfare
	099 Health and welfare not elsewhere classified	0999 Health and welfare not elsewhere classified
10 Services	100 Services not further defined	1000 Services not further defined
	101 Personal services	1010 Personal services not further defined 1011 Domestic services 1012 Hair and beauty services 1013 Hotel, restaurants and catering 1014 Sports 1015 Travel, tourism and leisure 1019 Personal services not elsewhere classified
	102 Hygiene and occupational health services	1020 Hygiene and occupational health services not further defined 1021 Community sanitation 1022 Occupational health and safety 1029 Hygiene and occupational health services not elsewhere classified
	103 Security services	1030 Security services not further defined 1031 Military and defence 1032 Protection of persons and property 1039 Security services not elsewhere classified
	104 Transport services	1041 Transport services
	108 Inter-disciplinary programmes and qualifications involving services	1088 Inter-disciplinary programmes and qualifications involving services
	109 Services not elsewhere classified	1099 Services not elsewhere classified
99 Field unknown	999 Field unknown	9999 Field unknown