# FutureData4EU

## Training Future Big Data Experts for Europe

# The FD4EU Training Programme

# Agenda

- Presentation of the training programme
- Minimum requirements and mandatory activities
- Awarding and recognition of Doctoral Credits
- Calendar of the training programme

# Today we explain in more details what's inside the scheme below

| FutureData4EU Training Programme | | | | |
|---|---|---|---|---|
| **Training Activities** | | | **Network-wide training program** | **Secondments** |
| Scientific/technical skills | | Transferable skills (LIST) | | |
| CORE Skills *(courses and activities already included in the doctoral courses)* | ADVANCED skills *(courses and activities to be defined for each Thematic area)* | Cross-discipline skills for PhD students | Cyclic network wide events organized by FutureData4EU in collaboration with ART-ER and other APs | 2 mandatory secondments in academic and non-academic institution. |
| | | | | Not more than 12 months |

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# Training Programme

The programme is structured to provide FD4EU fellows with a balanced combination of topical trainings, network-wide events, project-related activities, for a minimum total of 13 doctoral credits.

| | |
|---|---|
| **Topical Training** | **+** |
| **Network–Wide Events** | **+** |
| **Project Activities** | **+** |
| **Transferable Skills Courses** | **+** |

DIRECT LINK: https://site.unibo.it/futuredata4eu/en/training-programme1

# FutureData4EU: Training Programme

## Training Activities

| Scientific/technical skills | | Transferable skills ([LIST](#)) |
|---|---|---|
| **CORE Skills**<br>(courses and activities <u>already included</u> in the doctoral courses)<br><br>→ Phd courses<br>→ integrated training opportunity with all PhDs Students (e.g. [Summer and Winter Schools at the University of Bologna — University of Bologna](#)) | **ADVANCED skills**<br>*(courses and activities <u>to be defined</u> for each Thematic area)*<br><br>→ Big Data Life Cycle of Big Data Analytics and Management topics<br>→ ….. | Exemples:<br>-IPR, patents, exploitation of results, entrepreneurship<br>-Proposal preparation, scientific writing, project management, task coordination<br>-Ethics, RRI, Open Science, Gender Issues, Diversity awareness<br>-Communications and outreach skills, Languages<br><br><br>→ [Transversal Skills Program for PhD Studenst (UNIBO)](#) |

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# FutureData4EU: Training Programme

| Network-wide training program | Cyclic network wide events organized by FutureData4EU in collaboration with ARTER and other APs, will focus on joint activities designed to complement those offered locally. |
|---|---|
| Thematic workshop on Big Data | Workshops about the state-of-the-art of the interdisciplinary science & technologies that FutureData4EU needs |
| Summer school on public engagement and dissemination | To train DCs in tools to engage the wider community (from professionals to general public), including social media contents, videoclips, open-day events, interviews and articles and make them active player in FutureData4EU dissemination. |
| Research symposium with industry & business incubator | Training & practice in research innovation and entrepreneurship skills with tutorials/seminars on IPR management & knowledge transfer; trainings on open innovation and industrial research, team working and public speaking. |
| Joint international conference | PhD conference will be organized by the DCs with the support of supervisory team to present their outcomes and invite relevant speakers from outside, with a session focus on post-doctoral opportunities. |

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# FutureData4EU: Training Programme

## Secondments

two mandatory secondments:
→ 6-8 months in a European Academic Partner or extra-EU University (interdisciplinary approach)
→ 4-6 months in non-academic institution (inter-sectorial experience)

The overall two secondments will not cover more than 12 months.

→ Candidate have to guided in that choice through their Secondment Plan at the beginning of their PhD course with the support of **Supervisors**.

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# Topical Trainings



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# Topical Training #1: Big Data + Breakout

**Date**: 6 February 2026, 10 AM + 11 March 2026
**Coordinated by**: Prof. Stefano Lodi + Thematic Area Chairs
**Total Hours**: 6 + 3
**Doctoral Credits**: 1 + 0.5
**Assessment Method**: Certified participation and active discussion in class

**Description**: An introduction to Big Data processing, from a methodological and computer system perspective, encompassing data collection, visualization and efficient analysis, with a focus on predictive workflows and natural language tasks for humanities and industrial applications. The classes are organized around presentations, followed by sessions of questions and answers.

# Topical Training #2: AI For Science and Science For AI + Breakout

**Date**: 15 July 2026 + 2 September 2026
**Coordinated by**: Prof. Daniele Bonacorsi + Thematic Area Chairs
**Total Hours**: 6 + 3
**Doctoral Credits**: 1 + 0.5
**Assessment Method**: Certified participation and active discussion in class

# Topical Training #3: Humanistic AI + Breakout

**Date**: 16 December 2026 + December 2026 TBD
**Coordinated by**: Prof. Stefano Lodi (TBC) + Thematic Area Chairs
**Total Hours**: 6 + 3
**Doctoral Credits**: 1 + 0.5
**Assessment Method**: Certified participation and active discussion in class

# Topical Training #4: E-Infrastructures, Digital Twins, Explainability and Reproducibility in Modern Research + Breakout

**Date**: January 2027 + February 2027
**Coordinated by**: Prof. Luigi Rovati / Prof. Michela Longo + Thematic Area Chairs
**Total Hours**: 6 + 3
**Doctoral Credits**: 1 + 0.5
**Assessment Method**: Certified participation and active discussion in class

# Topical Training #5: Evolution in Programming Techniques + Breakout

**Date**: July 2027 + September 2027
**Coordinated by**: Prof. Renato Vacondio + Thematic Area Chairs
**Total Hours**: 6 + 3
**Doctoral Credits**: 1 + 0.5
**Assessment Method**: Certified participation and active discussion in class

# Topical Training #6: Green and Sustainable Computing + Breakout

**Date**: November 2027 + December 2027
**Coordinated by**: Prof. Andrea Bartolini / Prof. Paolo Ajmone + Thematic Area Chairs
**Total Hours**: 6 + 3
**Doctoral Credits**: 1 + 0.5
**Assessment Method**: Certified participation and active discussion in class

# Topical Training #7: Responsible Data Handling, Dual-Use and Research Integrity + Breakout

**Date**: January 2028 + February 2028
**Coordinated by**: Prof. Roberta Rizzo + Thematic Area Chairs
**Total Hours**: 6 + 3
**Doctoral Credits**: 1 + 0.5
**Assessment Method**: Certified participation and active discussion in class

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# Network-Wide Events

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|---|---|---|---|---|
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| CORE Skills *(courses and activities already included in the doctoral courses)* | ADVANCED skills *(courses and activities to be defined for each Thematic area)* | Cross-discipline skills for PhD students | Cyclic network wide events organized by FutureData4EU in collaboration with ART-ER and other APs | 2 mandatory secondments in academic and non-academic institution.<br><br>Not more than 12 months |

# Thematic Workshop on Big Data

**Dates**: 3 Days - TBD April, May, June 2026
**Location**: TBD
**Coordinated by**: TBD
**Total Hours**: 18
**Doctoral Credits**: 3
**Assessment Method**: TBD

# Summer school on public engagement and dissemination

**Dates**: TBD September 2026
**Location**: TBD
**Coordinated by**: TBD
**Total Hours**: 12
**Doctoral Credits**: 2
**Assessment Method**: TBD

**Description**: 2-day summer school, organized in collaboration with ART-ER, is planned to train DCs in tools to engage the wider community (from professionals to general public), including social media contents, videoclips, open-day events, interviews and articles and make them active player in FutureData4EU dissemination.

Training on the values of research in and outside the academia and about the social impact of R&I will be included.

# Research symposium with industry & business incubator

**Dates**: TBD April 2027
**Location**: TBD
**Coordinated by**: TBD
**Total Hours**: 6
**Doctoral Credits**: 1
**Assessment Method**: TBD

**Description**: 2-day workshop, organized with the support of ART-ER, will provide the training & practice in research innovation and entrepreneurship skills with tutorials/seminars on IPR management & knowledge transfer. External speakers from the venture capital investment and specialists in business incubation will be invited.

Trainings on open innovation and industrial research, team working and public speaking (pitch) will be included.

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# Joint International Conference

**Dates**: TBD 2028
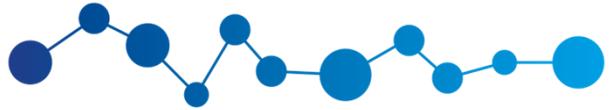**Location**: TBD
**Coordinated by**: TBD
**Total Hours**: 6
**Doctoral Credits**: 1
**Assessment Method**: TBD

3-day PhD conference will be organized by the DCs with the support of supervisory team to present their up-to-date outcomes and invite relevant speakers from outside. By organizing this event, DCs will gain crucial research/project management skills through event organization/communication.

A session lead by ART-ER will be focused on post-doctoral opportunities in the Emilia-Romagna Region and beyond.

# Doctoral Credits

# Doctoral Credits (DC) Awarding and Recognition

The **awarding** of DCs is conditional upon the fellows' active participation in the training activities organized by the project, including <u>certified attendance</u> and <u>active participation</u> in class discussions.

To obtain DC **recognition**, after attending the training activity, the fellows **must download** the certificate of attendance template on the FutureData4EU website, fill it, and submit it to the COFUND team for signature ([cofund@unibo.it](mailto:cofund@unibo.it)); the COFUND Team will verify the fellow's active participation in the specific activity before returning the signed document.

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# Credit Summary
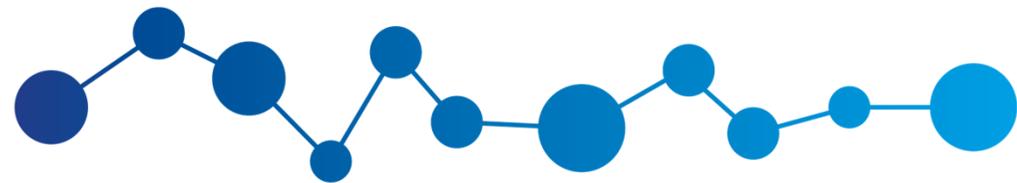
**Minimum total credits required:** 13 CD

**Topical trainings:** at least 6 CD (compulsory minimum)

**Network-wide events:** 7 CD (all compulsory)

**Project activities:** compulsory, but not credit-bearing individually

**Transferable skills courses:** not compulsory, but highly recommended

# Thank you!