

Call for the Training Plan in Artificial Intelligence and Big Data for Cardiovascular health: **CardiotrAIning**

Annex I: Training Plan

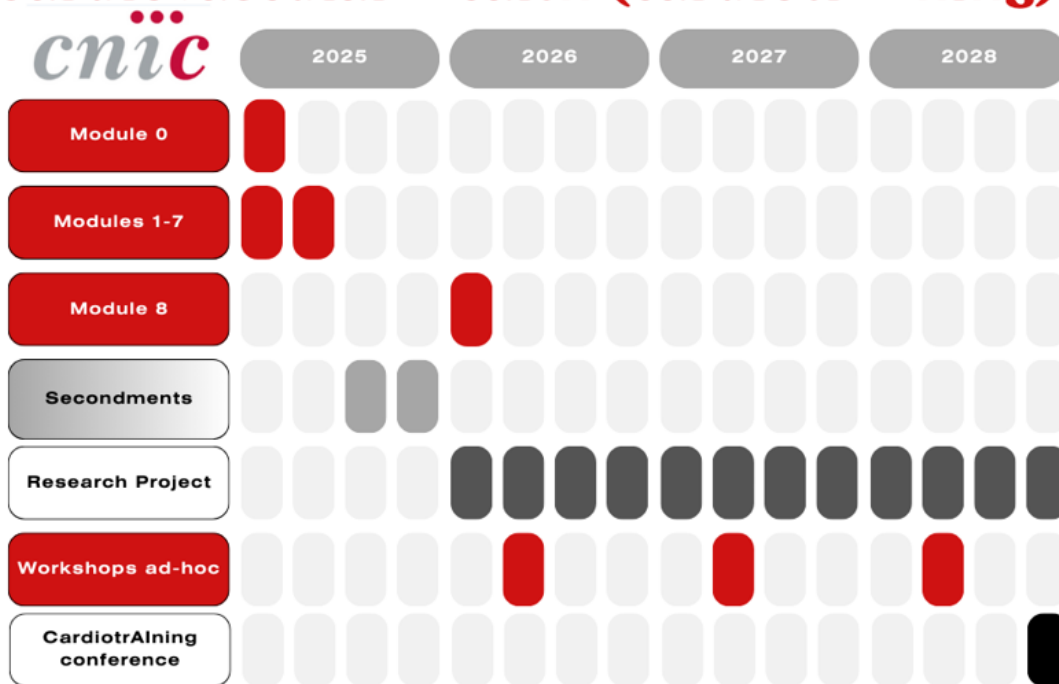
This call is included in the framework of the TALENT ATTRACTION AND RETENTION PROGRAMS. Talent attraction and retention programs are one of the actions at the investment area 4, Digital Professionals, which is within component 19 of the National Digital Capabilities Plan, encompassed within Generation D, and framed within the Recovery, Transformation and Resilience Plan. The project is part of the Artificial Intelligence Strategy approved on May 14, 2024 by the Council of Ministers, in which one of the fundamental axes is training in Artificial Intelligence. Red.es, an entity attached to the Ministry for Digital Transformation and Public Function through the Secretary of State and Artificial Intelligence has allocated 120 million euros for scholarships and training contracts in Artificial Intelligence that aim to ensure the training and digital inclusion of citizens and workers.

All **cardiotrAIning** participants will have access to the training plan in AI and Big Data for cardiovascular health with theoretical and practical content equivalent to 240 ECTS. The plan includes:

1. Theoretical training courses taught by prestigious professionals, and structured in 8 modules:
 - Block 0: Fundamentals of cardiovascular research
 - Block 1: AI and Big Biomedical Data
 - Block 2: General Data Science concepts
 - Block 3: Main algorithms in AI
 - Block 4: Main concepts in Big Data
 - Block 5: Introduction to image analysis through AI
 - Block 6: Introduction to big molecular data (omics)
 - Block 7: Natural Language Processing basics (NLP)
 - Block 8: Ethical and legal aspects of the use of data in health
2. Secondments in different CNIC labs and other national and international collaborating entities.
3. Development of a research project in the areas described in [Annex II](#).
4. Priority access to annual workshops in which students will share their progress and doubts with relevant scientists in their research areas.
5. Participation in program and centre seminars organized weekly at CNIC.
6. End of project conference to share the results of each participant's research.

The following chart shows the schedule of the training plan:

Training Plan in AI and Big Data for Cardiovascular Health (cardiotrAining)



“The funding for these actions/grants and contracts comes from the European Union's Recovery and Resilience Mechanism-Next Generation, within the framework of the General Call from the public entity Red.es to participate in the talent attraction and retention programs within Investment 4 of Component 19 of the Recovery, Transformation and Resilience Plan.”