Pathway 1

History of Science, Digital Heritage and Museum Communication

Host Centre

Urbino e la Prospettiva – L'umanesimo scientifico da Piero e Leonardo alla rivoluzione galileiana

The centre studies Renaissance scientific humanism, with particular attention to Urbino and the relationships between mathematics, art, architecture and technology.

Training Activities

Under the supervision of members of the centre, the trainee may receive practical training in:

- digitising selected early printed books and historical documents;
- using AI-assisted tools to transcribe historical texts and manually check the results;
- preparing content for exhibitions, educational activities and guided visits on Renaissance science;
- developing a small digital, exhibition or museum communication project.

Activities involving exhibitions, museums or guided visits will depend on the projects and institutional collaborations available during the traineeship.

Practical and Professional Skills

By the end of the traineeship, the trainee will have developed practical experience in:

- digitising and systematically organising historical texts and documents;
- using OCR and AI-assisted transcription tools and checking the accuracy of their outputs;
- preparing clear exhibition, educational and museum-communication materials;
- communicating topics in Renaissance science to students and non-specialist audiences.

Practical Project

The trainee will complete a small supervised project, such as:

- a digitised and corrected historical text;
- a set of materials for an exhibition;
- an educational resource on Renaissance science;
- a script or set of materials for a guided visit.

More information:

https://urbinoelaprospettiva.uniurb.it/

Pathway 2

Foundations of Physics, Educational Design and Scientific Communication

Host Centre

CIRFIS – Inter-University Research Centre for Philosophy and Foundations of Physics

CIRFIS promotes research and education concerning the conceptual, epistemological and philosophical foundations of physics.

Its activities include the International Summer School in Philosophy and Foundations of Physics, seminars and educational initiatives on topics such as quantum mechanics, relativity, cosmology, black holes and quantum gravity.

Training Activities

Under the supervision of members of the centre, the trainee may receive practical training in:

- designing a short educational activity on a selected topic in the foundations of physics;
- transforming specialised scientific and philosophical content into clear teaching or communication materials;
- using AI-assisted tools to develop scientific communication materials and critically checking their accuracy;
- designing a small educational or communication project for a seminar, workshop or scientific school.

When relevant activities are scheduled, the trainee may observe and take part in the design of seminars, workshops or the International Summer School.

Practical and Professional Skills

By the end of the traineeship, the trainee will have developed practical experience in:

- designing short educational activities with clearly defined audiences and learning objectives;
- preparing accessible teaching and communication materials from specialised scientific content; u
- sing AI tools for scientific communication and checking AI-generated materials for conceptual errors;
- designing the structure and content of a seminar, workshop or session for a scientific school.

Practical Project

The trainee will complete a small supervised project, such as:

- a short educational module;
- a workshop or scientific-school session plan;
- a set of introductory teaching materials;
- an AI-assisted scientific communication resource that has been checked and revised.

More information:

https://cirfis.uniurb.it/

Supervision and Individual Training Plan

Each trainee will be assigned an academic supervisor.

Before the traineeship begins, the supervisor and the trainee will agree on an individual training plan specifying:

- the activities to be carried out;
- the tools and methods to be learned;
- the practical skills to be acquired;
- the final project to be completed.

Trainees may also attend relevant seminars, lectures or university classes when these are available and compatible with their training plan.

At the end of the traineeship, the trainee will submit a brief report describing the activities completed, the project produced and the skills acquired.

Requirements

Applicants should:

- be enrolled at a university participating in the Erasmus+ Programme;
- have an academic background relevant to the selected pathway;
- have a good working knowledge of English or Italian;
- have basic competence in the use of digital tools;
- be willing to carry out supervised practical activities and revise their work in response to feedback.

For Pathway 1, knowledge of Italian, Latin or ancient Greek may be useful when working with historical texts and museum materials.

For Pathway 2, previous knowledge of physics, philosophy of science or philosophy of physics is recommended.

Previous experience with OCR, AI tools, digital humanities, educational design or scientific communication is welcome but not required.

How to Apply

Applicants should send to Prof. Vincenzo Fano:

- a curriculum vitae;
- a brief motivation letter;
- an indication of their preferred pathway;
- their proposed dates and duration;

- information about their field and level of study;
- the number of working hours required by their home university;
- a brief description of the Erasmus+ requirements of their home institution.

The motivation letter should briefly explain which practical skills the applicant would like to acquire.

Applications will be evaluated on the basis of the applicant’s background, motivation, proposed period of mobility and the availability of appropriate activities and supervision.

Acceptance is subject to the possibility of offering a feasible and properly supervised individual training plan.