

## DIGITAL AREA COURSE CATALOGUE

**Location: SALERNO – CAVA DE' TIRRENI**



### Summary

1. *3D Modeling and Printing for Educational Restoration.....page 3*
2. *3D Modeling and Printing for STEM.....p.4*
3. *3D Printing as a Cross-Curricular Teaching Tool.....p.5*
4. *Artificial Intelligence for Teaching: Experimenting and Teaching AI in the Classroom.....page 7*
5. *Arduino for Interactive Teaching.....page 8*

## General info and prices

**Target:**Secondary school teachers from European countries participating in mobility programmesErasmus+

**Number of participants:**min. 6 – max. 12 per group

**Duration:**

- 20 hours of classroom and laboratory training
- 4 hours of cultural visit (accompaniment only. No guided tour)

**Cost per participant:**€450

- Included: training, materials, transportation for the visit
- Excluded: any entrance tickets to museums or archaeological sites or sites of interest and anything not included falls under the "included" heading

**Course calendar**

<b>1. 3D Modeling and Printing for Educational Restoration</b>	<b>September 29, 2025 November 10, 2025 January 26, 2026</b>	
<b>2. 3D Modeling and Printing for STEM</b>	<b>October 6, 2025 November 17, 2025 December 15, 2025</b>	
<b>3D Printing as a Cross-Curricular Teaching Tool</b>	<b>September 29, 2025 November 10, 2025 January 26, 2026</b>	
<b>Artificial Intelligence for Education: Experimenting and Teaching AI in the Classroom</b>	<b>October 27, 2025 November 10, 2025 December 1, 2025 January 19, 2025</b>	
<b>Arduino for Interactive Teaching</b>	<b>November 3, 2025</b>	

**IF YOU NEED OTHER DATES CONTACT OUR STAFF AT [info.euroinnova@gmail.com](mailto:info.euroinnova@gmail.com)**

**Place:**CAD, Center for Digital Crafts,Viale Crispi, 14 Cava de' Tirreni 84013 Salerno, Italy

---

## **1. 3D Modeling and Printing for Educational Restoration**

### **Who is this course for?**

Are you a teacher of art, history, technology or digital subjects in secondary school and are you looking for a job?

An Erasmus experience that combines innovation, creativity, and cultural heritage? This course will guide you step-by-step through the use of 3D technologies to reinterpret the past and bring it into the classroom in an engaging way.

### **What you will learn:**

During 20 hours of hands-on training, you'll explore digital scanning, modeling, and 3D printing techniques applied to the simulation of historical artifact restoration. You'll learn how to use accessible tools (including open-source) to design interdisciplinary teaching modules that you can replicate with your students.

### **Training contents**

- Introduction to 3D scanning made easy
- Digital modeling of damaged fragments and creative reconstruction
- 3D printing: from design to physical realization
- Creative and narrative approaches to restoration: reinterpreting heritage with students

### **What you can do after the course**

- Offer simulated restoration workshops in class
- Integrate art history, digital technologies and storytelling
- Use 3D modeling to develop critical thinking, manual dexterity and digital skills

### **Tangible outputs**

- A 3D printed object created from a damaged artifact
- A ready-to-use teaching sheet to replicate the activity in the classroom

- A complete lesson plan with objectives and evaluation criteria

### **The Experience: training and beauty**

In addition to the practical part, the course includes an exclusive guided visit (4h) to a museum or site

archaeological site in the area (e.g. MANN Museum, Paestum, etc.).

You will be able to explore first-hand strategies for restoring and enhancing heritage, with a look at the digitization techniques used in museums and restoration projects.

### **Why participate**

Acquire innovative skills that can be used at school

Experience immersive laboratory training

Live an Erasmus experience in a unique cultural context

Bring home ideas, materials, projects and tools to use immediately with your students.

### **Where**

Cava de' Tirreni (SA) – at the gateway to the Amalfi Coast, amidst culture, craftsmanship, and innovation.

### **Included in the course**

- 20 hours of lessons + 4 hours of guided tour
- Training kit and waiver
- Teaching materials for classroom use

## **2. 3D Modeling and Printing for STEM**

### **Who is this course for?**

Are you a math, physics, science, or technology teacher looking to introduce innovative methods to STEM teaching? This course will guide you in using digital tools to transform abstract concepts into tangible and engaging experiences through 3D modeling and printing that can be replicated in the classroom.

### **What you will learn**

During 20 hours of hands-on training, you'll explore the use of 3D printing to enhance scientific learning. You'll design and build prototypes that help students understand structures, systems, and physical phenomena, making teaching more interactive and effective.

### **Training contents**

- 3D modeling of mathematical shapes and scientific objects (molecules, structures, solids)
- 3D printing for educational experiments: levers, gears, pendulums, molecular models
- Simulation of STEM activities to bring into the classroom

#### **What you can do after the course**

- Use 3D printing to make scientific concepts visual and concrete
- Design practical workshops integrated into the school curriculum
- Foster the development of computational thinking and design skills in your students

#### **Tangible outputs**

- Creation of printed STEM prototypes (e.g. geometric model, gear, molecule)
- Teaching resource kit and references to European curricula
- Traces of activities replicated in the classroom with students

#### **The Experience: training and inspiration**

The course includes a guided tour (4 hours) of a laboratory or technical institute that uses 3D printing for scientific and technological prototyping. This is an opportunity to discover real-world cases and compare existing best practices.

#### **Why participate**

Acquire applicable digital and pedagogical skills

Bring STEM innovation into your classroom with simple tools

Learn how to make science learning more experiential

Live a stimulating Erasmus experience in a dynamic cultural context

#### **Where**

Cava de' Tirreni (SA) – at the gateway to the Amalfi Coast, between innovation and beauty

Included in the course

- 20 hours of training + 4 hours of guided tour
- Handouts and digital materials
- Operational toolkit for STEM teaching

### **3. 3D Printing as a Cross-Curricular Teaching Tool**

#### **Who is this course for?**

Are you a teacher interested in educational innovation and are looking for tools to design activities?

Engaging interdisciplinary courses? This course will allow you to explore 3D printing as a creative language and a cross-disciplinary educational tool, applicable across all disciplines.

### **What you will learn**

During 20 hours of intensive training, you'll learn how to use 3D printing to design school activities that integrate technology, art, science, and civics. You'll also discover how to introduce sustainability and the circular economy.

### **Training contents**

- Overview of FDM 3D printing technologies
- File preparation: slicing, print settings, optimization
- Design of small interdisciplinary objects
- Introduction to sustainability in 3D printing (PLA, recycling, reuse)

### **What you can do after the course**

- Start a mini-fabrication lab in your school
- Work with students on concrete and cross-curricular projects
- Promote creativity, digital skills and active citizenship

### **Tangible outputs**

- PLA printed product created during the course
- Guidelines for setting up a school laboratory
- Interdisciplinary project sheet that can be replicated in the classroom

### **The Experience: between school and innovation**

The guided tour (4 hours) will take you to a vocational training center or educational hub that integrates 3D printing and innovative methodologies. A chance to see firsthand how digital teaching takes shape.

### **Why participate**

Learn how to make 3D printing interdisciplinary

Experiment with replicable activities for different school curricula

Experience creative, immersive and hands-on training

Get in touch with good European educational practices

### **Where**

Cava de' Tirreni (SA) – a stone's throw from the Amalfi Coast

### **Included in the course**

- 20 hours of lessons + 4 hours of guided tour
- Handouts and teaching sheets
- Technical material and support for replicability

## **4. Artificial Intelligence for Education: Experimenting and Teaching AI in the Classroom**

### **Who is this course for?**

Are you a teacher curious to understand how artificial intelligence can enhance teaching or become a learning tool for your students? This course introduces you to the practical use of AI in the classroom, with ready-to-use activities.

### **What you will learn**

During 20 hours of hands-on training, you will explore accessible AI tools for creating content personalized learning, automate learning tasks, and develop creative coding projects. The course is designed to be integrated into secondary school curricula.

### **Training contents**

- What is AI and how does it work (basic concepts, datasets, models)
- AI tools for school: quizzes, automatic summary, personalized feedback
- Simple AI projects to implement in the classroom (e.g. classifiers, chatbots)
- Ethics and critical thinking in the use of AI in schools

### **What you can do after the course**

- Teaching AI as an interdisciplinary topic
- Use AI tools to optimize your teaching
- Promote a critical and aware digital culture among students

### **Tangible outputs**

- A mini AI project completed during the course (e.g. image classifier)
- AI and Computational Thinking Lesson Model
- Digital resources ready for use in the classroom (guides, links, tutorials)

### **L'Experience: technology and culture**

The course includes a 4-hour visit to a research center, company, or startup that uses AI in education or the creative field. You'll have the opportunity to interact with experts and see real-world use cases of AI applied to learning.

### **Why participate**

Find out how AI can support your classroom work

Bring innovation and critical thinking into your programs

Experiment with useful, simple and replicable digital tools

Experience an Erasmus focused on the future of teaching

### **Where**

Cava de' Tirreni (SA) – a place of innovation between history and landscape

### **Included in the course**

- 20 hours of lessons + 4 hours of guided tour
- Operational handouts and digital materials
- AI Toolkit for Teaching

## **5. Arduino for Interactive Teaching**

### **Who is this course for?**

Are you a teacher interested in active learning and want to introduce coding, electronics, and creativity projects into your classroom? This course will provide you with the skills to use Arduino in a simple and engaging way, even with students with no technical background.

### **What you will learn**

During 20 hours of hands-on training, you'll learn to build small, working projects with Arduino, which you can replicate with your students. The course combines programming, prototyping, and innovative teaching methodologies.

### **Training contents**

- Introduction to the Arduino ecosystem and its educational applications
- Basic electronics: sensors, actuators, connections
- Programming in Arduino IDE
- Project implementation: weather station, traffic light, alarm, thermometer
- Designing replicable lessons: guidance and evaluation

### **What you can do after the course**

- Teach coding in a tangible way through prototyping
- Integrate Arduino into interdisciplinary courses (art, science, physics, technology)
- Create STEM laboratories even in school contexts with few resources



## **Tangible outputs**

- Two working prototypes built during the course
- Ready-to-use teaching sheet with students
- Access to an open source resource kit (code, guides, tutorials)

## **The Experience: between making and community**

The guided tour (4 hours) will take place in a Fab Lab or an innovative school that uses Arduino for educational projects. It will be an opportunity to discover real-world examples, interact with maker educators, and share best practices.

## **Why participate**

Learn to design interactive activities with Arduino

Experience hands-on teaching applicable in all schools

Live a dynamic and creative Erasmus experience

Bring concrete tools into the classroom to stimulate student interest

## **Where**

Cava de' Tirreni (SA) – a crossroads of creativity, innovation, and culture

Included in the course

- 20 hours of lessons + 4 hours of guided tour
- Technical materials and handouts
- Digital toolkit for school use