learningtogether
siner advanced skills institute

ERASMUS+ STRUCTURED COURSE | SCHOOL APPROVAL SUMMARY

Computational Thinking and Programming (Python) in Math Classes

A concise, shareable overview for teachers, school leaders and Erasmus+ mobility coordinators.

Course code	LTTPMC31	**Language**	English
Destination	Porto, Portugal	**Subject level**	Basic to Intermediate Computational Thinking & Python
Format	On-site · 6-day programme	**Audience**	Mathematics teachers, STEM educators & VET staff

Educational purpose

Develop computational thinking and use beginner-friendly Python to explore mathematical problems, data, probability, patterns and classroom STEM activities.

Learning objectives & outcomes

- Computational Thinking in Mathematics
- Python Programming Fundamentals
- Data, Lists & Functions
- Programming-Based Classroom Activity Design
- Algorithm Design & Problem Representation
- Control Flow & Repetition
- Mathematical Modelling & Visualisation
- European Peer Exchange & Institutional Transfer

Learning activities and methodologies

Programme format: **6-days (30h)**. Participants learn through unplugged computational-thinking tasks, guided Python coding, mathematical inquiry and project-based activity design. Debugging, experimentation, peer support and reflection help them connect programming concepts with mathematical reasoning and prepare classroom applications.

Documentation, materials and practical arrangements

Certificate of Attendance: issued for participants meeting the 80% minimum attendance requirement. **Learning Agreement** and **Europass Mobility support** are provided where agreed and relevant; if you need support for additional documents contact our team. Participants have access to a dedicated folder with digital course materials, resources and evidences. **Materials to bring: Laptop.**

Locations, fees and booking

Course location: Porto. **Fees per participant:** 6-day: €580. Current edition dates, confirmation status, fee and inclusions must be verified before making non-refundable travel commitments. Pre-enrolment is non-binding and is not a booking confirmation.

Course details · **Live course calendar** · **Mobility documents**

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