

# Future Classroom Lab course Science, Technology, Engineering and Mathematics in primary school classrooms

25-29 June 2018, Future Classroom Lab, Brussels

## Description

The "Science, Technology, Engineering and Mathematics in primary school classrooms" course provides primary teachers, with no particular STEM background, with resources and ideas that will help them bring effective and quality teaching of STEM disciplines at primary level, while developing and applying innovative teaching approaches to increase young students' knowledge, skills and interest in STEM. The course includes hands-on workshops (e.g. coding) and active exploring of online resources such as virtual labs and research centers or space related activities, among other ingenious tools. Primary teachers have the opportunity to exchange knowledge while being introduced to different creative teaching approaches and practices, to be used both in STEM and in cross-curricula capacity, in the classroom. The course is co-organized by Scientix, the community for Science education in Europe.

## Learning objectives

In this course the participants will:

- Learn how to create inspiring, lesson plans
- Understand the concept of interdisciplinarity learning and how to apply it
- Learn about coding and how they can use it in their classroom
- Get familiar with STEM resources (space, online laboratories etc.) and learn how to use them in their lessons

## Pre-activities

To be communicated closer to the course



## Programme

Day 1 – Monday 25 June	
<b>9:00-9:30</b>	Arrival and registration
<b>9:30-10:30</b>	Course introduction <ul style="list-style-type: none"> <li>• Practicalities</li> <li>• Course agenda</li> <li>• Introduction to Scientix</li> <li>• Ice-breaking activity</li> </ul>
<b>10:30-12:00</b>	Future Classroom Lab tour: Exploring the lab Introduction to group work: Creating your own STEM inspired lesson plan/activity
<b>12:00-13:00</b>	Lunch
<b>13:00-14:30</b>	STEM experiments for the primary classroom
<b>14:30-15:00</b>	Coffee break
<b>15:00-16:30</b>	Workshop: Interdisciplinary learning <ul style="list-style-type: none"> <li>• What is interdisciplinary learning?</li> <li>• What is interdisciplinary project-based learning?</li> <li>• Interdisciplinary project based ideas (activity)</li> </ul>
<b>16:30</b>	End of the day at the lab
	<i>Social/cultural activity: Interactive city walk</i>
<b>19:30</b>	Working dinner: "Primary interdisciplinary teaching with the use of STEM"

Day 2– Tuesday 26 June	
<b>9:00-10:30</b>	Teaching with Space <ul style="list-style-type: none"> <li>• Space awareness resources</li> <li>• Remote telescopes</li> <li>• ESA Kids</li> </ul>
<b>10:30-12:00</b>	Time for Mathematics! : <ul style="list-style-type: none"> <li>• Making Mathematical connections in the early years</li> <li>• Geogebra</li> </ul>
<b>12:00-13:00</b>	Lunch
<b>13:00-14:30</b>	Digital tools to use in the primary classroom <ul style="list-style-type: none"> <li>• Video making (CamStudio, iMovie, Windows movie maker)</li> <li>• Online collaboration tools (eTwinning)</li> </ul>
<b>14:30-15:00</b>	Coffee break
<b>15:00-16:30</b>	Making and Tinkering in STEM
<b>16:30</b>	End of the day at the lab
	<i>Free afternoon</i>



This course has received funding from the European Union's H2020 research and innovation programme – project Scientix 3 (Grant agreement N. 730009), coordinated by European Schoolnet (EUN). The content of the course is the sole responsibility of the organiser and it does not represent the opinion of the European Commission (EC), and the EC is not responsible for any use that might be made of information contained.

### Day 3 – Wednesday 27 June

<b>9:00-10:30</b>	Inquiry learning and use of online laboratories
<b>10:30-12:00</b>	Fairy tales based STEM teaching ideas
<b>12:00-13:00</b>	Lunch
<b>13:00-14:30</b>	Scientix: the community of science education in Europe
<b>14:30-15:00</b>	Coffee break
<b>15:00-16:30</b>	Introducing STEM careers in the primary classroom
<b>16:30</b>	End of the day at the lab
<b>19:30</b>	<i>Social/cultural activity</i>

### Day 4 – Thursday 28 June

<b>9:00-10:30</b>	Coding in Primary (part I)
<b>10:30-12:00</b>	Coding in Primary (part II)
<b>12:00-13:00</b>	Lunch
<b>13:00-14:30</b>	Teaching in primary using STEM Good practices from Greece
<b>14:30-15:00</b>	Coffee break
<b>15:00-16:30</b>	Group work: Working on STEM primary lesson plans/ activity/ idea
<b>16:30</b>	End of the day at the lab
<b>19:30</b>	Farewell dinner

### Day 5 – Friday 29 June

<b>9:00-12:00</b> (incl. coffee break)	Group work: Working on STEM primary lesson plans/activity/idea
<b>12:00-13:00</b>	Lunch
<b>13:00-15:00</b>	Presenting the lesson plans/activity/idea Conclusions and impressions of the week Certificates
<b>15:00</b>	End of the course



## Participants

To be added

## Cultural & social programme

The course participants are invited to take part in some organised cultural & social activities.  
*To be confirmed later.*

Brussels offers also many other options to spend time:

- What to visit/see: [http://visitbrussels.be/bitc/BE\\_en/do-see/to-see/](http://visitbrussels.be/bitc/BE_en/do-see/to-see/)
- Parks and gardens: <http://www.brussels.be/artdet.cfm/5443>
- Free exhibition on the city of Brussels:  
<http://experiencebrussels.biponline.be/en/exhibition>
- Free museums/exhibitions: <http://www.brusselmuseums.be/en/faq.php?id=5>
- Discover Belgium beers: <http://belgium.beertourism.com/belgian-beers>
- Discover Belgium chocolate: <http://www.visitbelgium.com/?page=chocolate-lovers>

## Accommodation

**The participants whose hotel is organised by EUN, the name and address will be communicated in due course.**

**The participants who take care of their own accommodation arrangements** can find many options at [www.booking.com](http://www.booking.com) or [www.airbnb.com/s/Brussels--Belgium](http://www.airbnb.com/s/Brussels--Belgium). The following hotels are some of the options close to the course venue:

- Adagio Access Bruxelles Europe; [www.booking.com/hotel/be/adagio-access-bruxelles-europe.en-gb.html](http://www.booking.com/hotel/be/adagio-access-bruxelles-europe.en-gb.html)
- Hotel Motel One: [www.booking.com/hotel/be/motel-one-brussels.en-gb.html](http://www.booking.com/hotel/be/motel-one-brussels.en-gb.html)
- Hotel Chambord: [www.booking.com/hotel/be/chambord.en-gb.html](http://www.booking.com/hotel/be/chambord.en-gb.html)
- Chelton Hotel: [www.booking.com/hotel/be/chelton.en-gb.html](http://www.booking.com/hotel/be/chelton.en-gb.html)
- Hotel Le Berger: [www.booking.com/hotel/be/le-berger.en-gb.html](http://www.booking.com/hotel/be/le-berger.en-gb.html)
- Silken Berlaymont Brussels: [www.booking.com/hotel/be/silkenberlaymont.en-gb.html](http://www.booking.com/hotel/be/silkenberlaymont.en-gb.html)
- Thon Hotel EU: [www.booking.com/hotel/be/thon-eu.en-gb.html](http://www.booking.com/hotel/be/thon-eu.en-gb.html)

If you would like to stay in the Brussels city centre, it is only 10 min away by metro from the course venue (by foot 20-30 min). It is advised to avoid immediate vicinity of the two train stations Gare du Nord and Gare du Midi, which some visitors may find less comfortable.

**Hotel rates:** The hotel prices can vary a lot in Brussels, so it is good to book in advance. You can find examples of rates and compare them at [www.booking.com](http://www.booking.com). The participants' comfort requirements are different which reflect their selection of accommodation. As a general tip, some hotels can have tempting "non-refundable" rates but we recommend selecting the "refundable" rate even if it may be a little bit more expensive.

If you have any questions, e.g. regarding the hotel location, public transport connections to the course venue or similar, please contact: [elina.jokisalo@eun.org](mailto:elina.jokisalo@eun.org).



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## How to arrive to Brussels

Brussels has two airports: Brussels National airport (Zaventem), about 30 min to the city centre, and Brussels South airport (Charleroi), about 60 min to the city centre. You can arrive conveniently to Brussels also by train from London (Eurostar), Paris, Amsterdam and Cologne (Thalys).

### From the Brussels airport (Zaventem) to the city:

- BY TRAIN to the city centre: The train takes you to the main train stations in the Brussels city area: Gare du Nord, Gare Centrale, and Gare du Midi. The ticket costs 8.5€. The trains go every 15-20 min and leave from the level -1 of the airport terminal: [www.brusselsairport.be/en/passngr/to\\_from\\_brussels\\_airport/train/](http://www.brusselsairport.be/en/passngr/to_from_brussels_airport/train/)
- BY BUS to Schuman-Luxembourg: From the level 0 of the airport, the buses 12 and 21:
  - **Number 12** (Monday to Friday until 20h) OR
  - **Number 21** (weekends all day and weekdays after 20h)
  - Both buses take you to **Diamant, Schuman and Luxembourg**.
  - The ticket costs 4.5€ from the automat and 6€ from the driver.
  - You find the bus schedules here: <http://www.stib.be/horaires-dienstregeling.html?l=en>
- BY BUS to Gare du Nord: Take the bus "De Lijn" N° 471 (level 0 of the airport). The bus takes you to the train station Gare du Nord / Brussel-Noord. Timetables: [www.delijn.be/en/lijnen/lijn/3/471/1/471\\_Zaventem - Brussel?vertaling=true#2](http://www.delijn.be/en/lijnen/lijn/3/471/1/471_Zaventem_-_Brussel?vertaling=true#2)

### From the Charleroi airport to the centre:

- Take the Brussels City Shuttle bus which takes you to the Brussels Gare du Midi (main train station). A return ticket costs 28 euros (and a one-way ticket normally 14 euros).
- For the bus schedule, see here: [www.charleroi-airport.com/en/passengers/acces-and-parking/brussels-city-shuttle/index.html](http://www.charleroi-airport.com/en/passengers/acces-and-parking/brussels-city-shuttle/index.html)
- At Gare du Midi you can continue your journey by using different metro lines, buses or pre-metro. See the metro map here: [www.brussels.be/dwnld/57065131/Plan%5FM%5F10%2D2015.pdf](http://www.brussels.be/dwnld/57065131/Plan%5FM%5F10%2D2015.pdf)
- Alternative for the shuttle bus: a private taxi shuttle that takes you directly to the hotel (price about 21€). You need to book this service in advance and directly here: Liedts Riflesso Italiano [riflessoitaliano@outlook.com](mailto:riflessoitaliano@outlook.com) // <http://www.riflesso-italiano.be/312681630>



## Course venue and how to arrive

The courses will be organised in Brussels, at European Schoolnet's Future Classroom Lab.

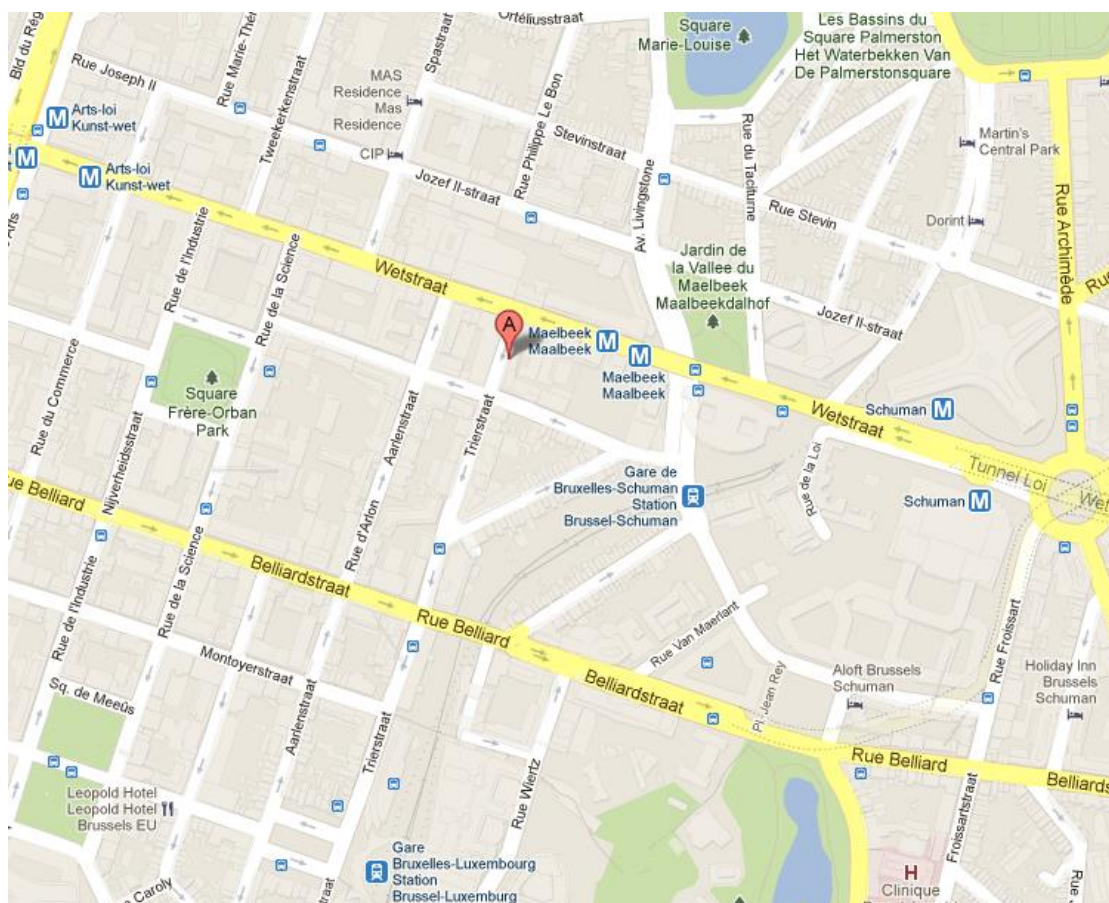
**Address:** European Schoolnet, Rue de Trèves 61 – 3<sup>rd</sup> floor, 1040 Brussels (see the map below)  
[www.europeanschoolnet.org/](http://www.europeanschoolnet.org/)

**Future Classroom Lab** - The Future Classroom Lab is a fully equipped, reconfigurable, teaching and learning space developed by European Schoolnet, its 30 supporting Ministries of Education and leading educational technology providers. Future Classroom Lab helps to visualise how conventional classrooms and other learning spaces can be reorganised to support changing styles of teaching and learning. Read more: <http://fcl.eun.org>

### How to best reach the EUN office and Future Classroom Lab

The office is close to the following places:

- Schuman (buses, metro lines 5 & 1, train, airport bus): 10 min walk
- Luxembourg (buses, train, airport bus): 10 min walk
- Arts-Loi (metro lines 1, 2, 5, 6): 10 min walk
- Maelbeek metro station (lines 1 and 5): take the exit "Rue de la Loi", 2 min walk
- Thon EU hotel: 1 min walk (across the street)



***Be aware of pick-pockets whenever you are in public places, especially when using public transports.***



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## Insurance

Participants are responsible for their own safety and belongings. The registration fee does not cover insurance for the participants. We recommend that participants take out insurance in their home country to cover pre-journey cancellation for personal reasons and necessary insurance to cover accidents, medical expenses and loss of personal belongings during the visit. EU citizens can obtain a free European Health Insurance Card (EHIC).

## Cancellation policy

If the participant cancels his or her participation up to 6 weeks before the course begins, there are no cancellation fees. If the participation is cancelled between 6 weeks and 2 weeks before the course starts, 50% of the course fee will be charged. If they cancel any later, there will not be any refund. Substitutions are possible right up to the start of the course.

## About European Schoolnet

European Schoolnet is the network of 34 European Ministries of Education, based in Brussels. As a not-for-profit organisation, we aim to bring innovation in teaching and learning to our key stakeholders: Ministries of Education, schools, teachers, researchers, and industry partners. [www.eun.org](http://www.eun.org)

### Contact

For any questions related to the course, please contact Elina Jokisalo, [elina.jokisalo@eun.org](mailto:elina.jokisalo@eun.org)

EUN reserves the right to change the programme or any parts of it.



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