

Course: OPENING MINDS TO STEM CAREERS FOR TEACHERS

Justification

The “Opening minds to STEM careers” MOOC for teachers is meant to train and empower primary and secondary teachers in successfully introducing and attracting young people to choose STEM (Science, Technology, Engineering and Math) careers from an early age, as well as to learn about private and public initiatives on STEM education. This course is offered due to the collaboration between the Consejería de educación of Castilla Leon and European Schoolnet.

Participants need to have at least an intermediate level in English, as the course will be held in that language.

Objectives

- 1.- To Understand the importance of integrating STEM Career orientation in their curriculum and lessons.
- 2.- To be equipped with the knowledge and tools needed to introduce STEM careers to their students, inspire and guide them in their STEM career choices.
- 3.- To learn how to introduce STEM career materials in the classroom
- 4.- To become familiarized with a series of STEM applied to real life careers.

Contents

- 1.- STEM careers orientation
- 2.- Currently relevant STEM industries and what is the spectrum of jobs available in each of them.
- 3.- Learn practical steps to introduce STEM career activities in the classroom;
- 4.- Learn how to integrate STEM professionals in school activities

Competences

Didactic competence
Communicative competence
ICT Competence

Target group

Primary, Secondary and Vocational School teachers.

Selection criteria

- 1.- In-service teachers interested in STEM working in schools supported by public funds of the Community of Castilla y León
- 2.- In case the number of inscriptions is superior to the places available, there will be a draw which will take place the 21st of March at CFP Idiomas.

Methodology and evaluation

This MOOC will run for 9 weeks, with a total of 8 modules.

The course will be developed through the European Schoolnet platform. You will receive concrete information about how to sign in for the course in the European Schoolnet webpage once you have been admitted.

Assessment strategies : Quizzes, peer reviews and self-reviews.

Application

The dates to apply for the course start from February 24th until March 20th.

Schedule of the course

The course will be developed from the 3rd of April to the 4th of May 2017.

Certification

Participants will get a certification of 30 hours, 3 credits, by CFP IDIOMAS if they complete the activities proposed and the tasks are evaluated positively.

Places

100

Organisation

CENTRO DE FORMACIÓN DEL PROFESORADO EN IDIOMAS DE CASTILLA Y LEÓN

Teacher trainer responsible of the activity

Laura Riesco Canduela

Information about each module of the course

Module 1: STEM careers in schools and in the job market

1. Understand the relevance of STEM studies for students and society;
2. Understand the importance of STEM career in the job market;
3. Understand the importance of integrating STEM career guidance in lessons, curriculum and what are the benefits for their students;

Module 2: STEM Careers pathways

1. Understand which are the currently relevant STEM industries and what is the spectrum of jobs available in each of them;
2. Explore and learn about different career pathways available to reach those careers;

Module 3: STEM Careers pathways (2)

1. Become familiarized with a set of STEM hard skills on demand;

Information about each module of the course

2. Become familiarized with soft/transversal skills needed across all sectors/industries.
3. Explore various tools for matching skills with career pathways.

Module 4: Career induction activities and materials and guidelines

1. Understand and learn what are the types of STEM careers activities available at school level and how they can use them in the classroom;
2. Learn practical steps to introduce STEM career activities in the classroom;
3. Become familiarized with various experiences of STEM career activities implemented across several countries;

Module 5: Gender stereotypes in STEM education

1. Understand the principles behind the STEM gender gap;
2. Learn what are some of the most common gender stereotypes in STEM education and how they can overcome them;
3. Learn strategies to further address gender equity in the classroom, and how to encourage girls into STEM careers;

Module 6: Prepare your students for STEM careers: How to balance the roles of teachers, mentors, parents and role models

1. Understand the concept of mentorship and how they can integrate it in their schools (with focus on their own role as career counsellors);
2. Learn how to integrate STEM professionals in school activities;
3. Learn how to work together with career counsellors for optimum performance;
4. Understand and learn how to manage the role of parents in career awareness;

Module 7: Benefits of external school to work programs

1. Learn about types of school-to-work programs available and where to find them;
2. Learn how to guide their students towards these programs;

Module 8: Career orientation events on STEM education

1. Become aware of the main benefits of organizing a STEM careers events in schools;
2. Learn tips and steps to organize their own STEM careers event;
3. Explore case studies of various STEM careers events