

1. Introduction

The "Boats4schools" final race will take place on 22nd January at the "Campus Studentesco della Provincia di Treviso" (Student Campus of the Treviso Province) in the Veneto region, Italy.

The students, organized in teams, will have to build a small boat (miniature) following the Technical Regulations drawn up by the international Organizers in Italy, Portugal and Spain.

During the Boats4schools challenge, the students will gain first-hand experience of several technologies such as 3D design (Tinkercad, Blender), Additive Manufacturing, Cloud Manufacturing, Computer Aided Engineering (CAE), Computer Aided Design (CAD) tools, High performance computing (HPC), Maths, Physics, Innovative thinking, creativity and many other skills.

2. Objectives

- to increase young people's interest in future STEAM career paths and promote enthusiasm for these career options..
- to offer young students the opportunity of direct experience of STEAM practical contents and skills in a playful and educational approach.
- to involve teachers and experts from the world of work to guide young students in pursuing STEAM careers by highlighting opportunities available in the job market.
- to address the problem of the low numbers of young people(especially women) choosing STEAM studies such as mathematics, engineering, and other applied sciences through more innovative teaching methodologies.

3. Date and venue

The "Boats4schools" final race will take place on 22nd January 2020 in a fully-equipped area at "Campus Studentesco della Provincia di Treviso" (Student Campus of the Treviso Province) in the Veneto region, Italy

4. Sections

The teams, made up of a maximum of 5 students aged 12 to 18, from the Planck School or other Italian or European schools, will design and build a "miniature boat".

The following aspects will be evaluated:

- boat design,
- the manufacturing process,
- the race speed,
- project presentation made by the team to the jury in English.

4.1 Categories

Boats using advanced robotic techniques (such as trying to develop basic navigation controls using a Micro Arduino microcontroller with a remote control, or any other device).controlli di navigazione di base con un telecomando o qualsiasi altro dispositivo).

4.2 Sections

- A. Students aged 13 to 15 (last year of lower secondary school, and the first two years of upper secondary school). (*Rules 8.3 and 8.4 of the "Technical Regulations" are not mandatory for this Section*).
- B. Students aged 16 to 19 (final three years of uppersecondary school).
- C. Students aged 13 to 19 (last year of lower secondary school and uppersecondary school)

5. Presentation of the projects

Registration for the "BOATS4SCHOOLS" final race has to be made online at the following address:

http://www.itisplanck.it/index.php?option=com_content&task=view&id=5477&Itemid=817 where you will find the information and data necessary for registration. If you have any questions, please contact tecnico@itisplanck.it

The registration period will open on September 02, 2019 and end on September 26, 2019.

5.1 Selection Criteria

The maximum number of eligible teams is 10, to be selected according to order of registration.

5.2 Training support

Training actions have been identified to integrate the skills of teams of participants not exceeding 10-12 students:

- CAD Module: 20 HOURS
- 20-hour English module divided into two groups of participants.
- Electronics and Remote control Module: 20 hours ELETTRONICA .
- Artistic design and model-making Module 6 + 6 hours.

Each team will have a Tutor at disposal.

6. Jury and awards

La The jury of the "Boats4schools" final will consist of STEM teachers, English teachers, communicators, etc.

6.1 Awards

- Section A: Diploma and € 200.00
- Section B: Diploma and € 250.00
- Section C: Diploma and € 300.00

7. Acceptance of Rules

Participation implies full acceptance of the rules.

The organizer of the "BOATS4SCHOOLS" Final Race reserves the right to postpone, suspend or modify the event.