



## Global Junior Challenge

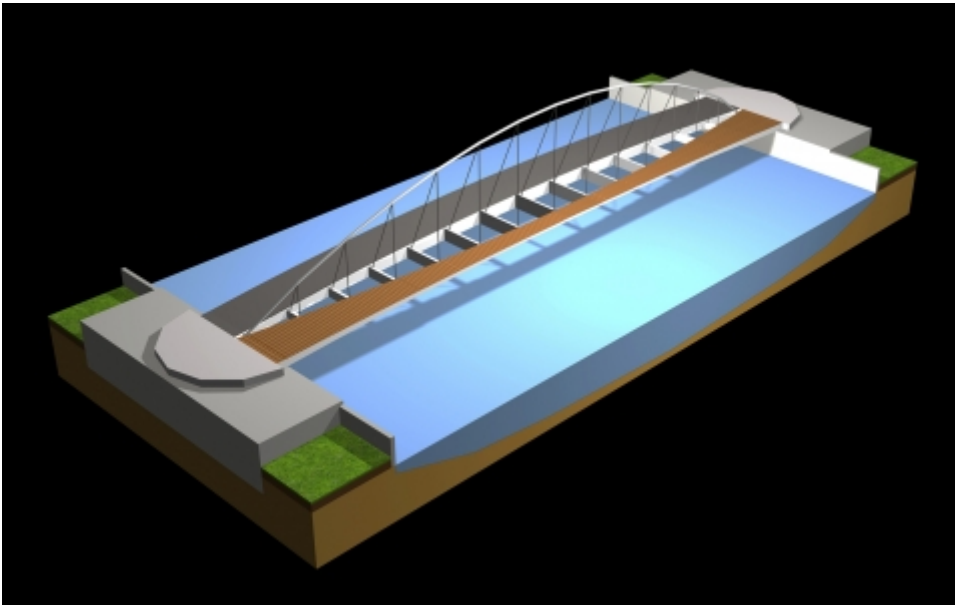
Projects to share the future

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Professor **Arianna Coviello** coordinates a project on the **Geometric and Static Analysis of a Bridge with Geogebra and Cad** <sup>[1]</sup> that will participate in the 8th edition of the **Global Junior Challenge** <sup>[2]</sup> in the "up to 18 years old" category.

The project activities, inspired by a bridge being constructed in **Alessandria**, are held in a year-two class at the Liceo Scientifico **Galileo Galilei** <sup>[3]</sup>. The interdisciplinary project involves core subjects such as mathematics, physics and technical drafting and reinterprets them to provide students with skills required by the labour market.

After having studied the Euclidean and static geometry of the bridge site and analysed the forces at play on an irregularly-shaped body, the students used software such as Geogebra and CAD, Photoshop and 3D Studio Max to reproduce the bridge structure in 2D and 3D. The project, in fact, was conceived to allow students to understand how technology can be an added value for the acquisition of knowledge, subject-specific competences and to improve learning.

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#### **Links**

[1] <http://www.gjc.it/it/progetti/analisi-geometrica-e-statica-di-un-ponte-con-geogebra-e-cad>

[2] <http://www.gjc.it/>

[3] <http://www.scientificogalilei.gov.it/>

[4] <https://www.gjc.it/en/javascript%3Ahistory.go%28-1%29>