

# PROTO CHALLENGE



*To know more about this initiative, please*  
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The **PROTO Challenge** is an open innovation contest implemented by Hub Innovazione Trentino (Trento, Italy) aiming at supporting SMEs in adopting Additive Manufacturing and topology optimization technologies. Companies apply for the PROTO Challenge through a public call notice and five products or components are selected based on specific challenges (for example maintaining the stiffness of a component while lightening its weight).

The PROTO Challenge lasts about 11 weeks, and it engages teams of students coming from Engineering Departments who are mentored by Additive Manufacturing professionals or researchers. Each team focuses on a specific product/challenge and the activities are carried out using a specific software. Due to the activities that are carried out, it is feasible both in a remote and in an in-presence setting. The company linked to the winning team gains the opportunity to prototype the optimized component in a local advanced manufacturing and prototyping facility (ProM Facility, Trentino Sviluppo).

Lessons learned and hints for implementation:

- when selecting companies, make sure to appropriately handle expectations, both in terms of results, as well as in terms of possibility of being selected as a beneficiary (a competitive process is used to select applicants on both sides: solvers as well as beneficiary companies);
- if using specific softwares, accessibility is the key: verify that all solvers are able to use them beforehand;
- providing support to teams of solvers during the two months of problem-solving operation is key: make sure each team is mentored by an engineering professional experienced with DFAM and topology optimization;
- some companies are fully committed; some others are not: let them freely organize with the teams and make them feel that you are there with weekly emails or calls.

