

CBI ATTRACT 2023-2024 Programme presentation

CBI.ATTRACT is an interdisciplinary student programme aiming at prototyping societal innovations inspired by the breakthrough detection and imaging technologies developed under the ATTRACT initiative, addressing societal challenges in the spirit of open innovation to create solutions that contribute to the United Nations Sustainable Development Goals.

It is an international Open Innovation program aimed at generating new ideas and takes place within IdeaSquare, CERN Geneva's open innovation laboratory. The University of Bologna, The University of Modena and Reggio Emilia, The University of Ferrara and Almacube are partnering to run together with the CBI.ATTRACT Student Program: the three universities engage their students, professors and researchers, facilities, and networks; Unibo acts as the coordinator; Almacube is responsible for the methodological approach and supporting the Student Teams with its coaches.

This program is funded under H2020 ATTRACT Phase 2 Student Program Open Call - GA 101004462 - SP-9 B, which allows all the 30 participant students to benefit from a Travel Expense Grant, of 1410,00€.

Programme Aim and brief description

The aim of CBI.ATTRACT is to develop the students' entrepreneurial mindset as future innovation players while ensuring the valorization of existing innovative technologies and applying them to resolve societal needs.

In 16 weeks, 5 inter-university teams of multidisciplinary students investigate breakthrough technologies to exploit their potential and develop relevant solutions to solve society, human, and ecosystem needs.

The program methodology is a hybrid model based on the human-centered approach of Design Thinking and Tech-Driven Innovation processes to nurture the students' ability to identify and evaluate technology opportunities with societal impact on a global and local level.

Students will connect with researchers, either with those who developed the imaging technology and with other experts, to acquire a technical understanding of the technology; with users and professionals from different fields to understand the technology's potential impact in different contexts; finally, they will develop various ideas in an iterative process and will verify with users which applications have more potential. Teams are supported by local coaches, valorizing knowledge from Attract researchers and Ideasquare professionals during scheduled design sprints.

Learning goals and methodology

The course aims to shape the students' entrepreneurial mindset, especially regarding technology-driven entrepreneurship. The course's objective is to help students to develop: the ability to identify and evaluate technology opportunities with a societal impact; the ability to empathize with their users, their ecosystem, and their needs; the ability to ideate, evaluate and improve solutions that address the identified needs, with global and local relevance; the ability to organize and implement entrepreneurial actions.

On the one hand, the program aims to shape the students' entrepreneurial mindset; on the other hand, it is also essential that students' outcome represents a radical and relevant innovation. In order to achieve this goal, the process involves ideation tools to boost ideation capabilities and stimulate students' divergent thinking, to allow the teams the ideation and evaluation of not-ordinary ideas as possible solutions.

ATTRACT.CBI is a project-based course based on design thinking principles, such as human-centredness, tackling ill-formulated challenges, building knowledge through making and through iteration, and learning collectively instead of individually. The Design Thinking process has been hybridized with tech-driven innovation tools to enable



the students to gain a deep understanding of their users' needs and exploit the technology's potential of Attract projects through a "tech ability-societal need" match.

The process is articulated in three phases:

- Discover: Tech understanding and opportunity identification

This first phase is aimed at deeply understanding the assigned technology to be exploited, defining the technology abilities, assuming various potential applications in different fields, running a first validation with users and experts, verifying the early feasibility of the most promising fields with the Attract Project Partner, in order to narrow down the opportunities.

- Design: Critical Prototypes

This phase is aimed at developing a few concept solutions based on the chosen opportunities, at developing multiple prototypes and testing them with relevant users to verify the expected experience, at testing and overcoming the most critical feasibility issues along with the Attract Project Partner.

- Develop: Proof of concept

This last phase is aimed at developing the Proof of Concept, a functional prototype of the solution, at designing the solution details and its validation with relevant stakeholders, and at planning the implementation strategy.

Activities

The ATTRACT.CBI programme will take place mainly at the University of Bologna, Almalabor and Almacube premises and entails 3 mobility periods:

- a week-long mobility (Collision Week) to IdeaSquare CERN, Geneva;
- a mobility to the site of the ATTRACT Technology Partner (different according to the assigned technology);
- a mobility to one of the European ATTRACT Partners for the final event.

The dates of the mobility periods may vary according to the Partners availability.

For the 16 weeks of the course, students are involved once a week in a 4 hours LGM, the weekly plenary session where all the Students' Teams gather together and the Teaching Team holds a lecture on the week's activities. Throughout the week the team dedicates 1½ day to teamwork and individual activities, and has approximately 2 hours dedicated to Project Review with its coach.

During the Collision Week at Ideasquare CERN and during the visit at the ATTRACT Technology Partner site, students are involved for a full-time commitment to the course.

The programme experience comprises a set of training modules that altogether serve to help students gain collateral and supplementary skills.

The total time commitment for the CBI programme is around 375 hours, of which around 150 hours in meetings face to face (80 LGM and Presentations and 70 Mobility weeks) spread out over 16 weeks.

Programme schedule

The beginning date of the Programme is the 14th of February, 2024 and it ends by the end of June 2024. Below is the complete schedule of activities. Unless specified otherwise, the activities are taking place at Almalabor, via Ugo Foscolo 7, Bologna.









| SETUP | 14/02/24 | Remote, 9am-1pm | Safety Training Course (mandatory) |
|----------|-------------|--|--|
| | 20/02/24 | 9am-6pm | Preliminary Meeting |
| | 21/02/24 | 9am-6pm | Programme Kick-Off + LGM |
| DISCOVER | 28/02/24 | 9am-1pm | LGM |
| | | Remote, 2 hours Exact day and time TBD according to the Project Partner's agenda | First meet up with the Attract Project Partner |
| | 06/03/24 | 9am-1pm | LGM |
| | 11-15/03/24 | Geneva, Full time | COLLISION WEEK AT IDEASQUARE CERN |
| | 20/03/24 | 9am-1pm | LGM |
| | 22/03/24 | 3-6pm | l Milestone rehearsal |
| | 27/03/24 | 9am-5pm | I MILESTONE + LGM |
| DESIGN | 03/04/24 | 9am-1pm | LGM |
| | 10/04/24 | 9am-1pm | LGM |
| | week | Project Partner's site (different according to the assigned technology), 2 days, full-time. Exact dates TBD according to the Project Partner's agenda | 2 days visit at the Project Partner's site/research Lab |
| | 24/04/24 | 9am-1pm | LGM |
| | 30/04/24 | 9am-1pm | LGM |
| | 22/03/24 | 3-6pm | II Milestone rehearsal |
| | 08/05/24 | 9am-5pm | II MILESTONE + LGM |
| DEVELOP | 15/05/24 | 9am-1pm | LGM |
| | 22/05/24 | 9am-1pm | LGM |
| | 29/05/24 | 9am-1pm | LGM |
| | 05/06/24 | 9am-1pm | LGM |
| | 10/06/24 | 3-6pm | Final presentation rehearsal |
| | 12-14/06/24 | Grenoble, Full time | ATTRACT Gala Presentation |
| | 19/06/24 | 9am-6pm | III MILESTONE + Final reflection |
| | 25/06/24 | By and no later than 6pm | Submission of final deliveries for review |
| | 28/06/24 | By and no later than 6pm | Final deliveries submission deadline |

If it's necessary, some of the dates may change and the participants will be informed as soon as possible. Further details will be notified via email to the participants. Find more information about the programme at <u>https://attract-eu.com/projects/cbi-attract/</u>