

# D4.1 - Assessment report identifying suitable technologies from funded ATTRACT Phase-1 and ATTRACT Phase-2 projects for use in the Student Pilots

Name of the project:

**ATTRACT**

Grant Agreement contract number:

**GA- 101004462**

Date:

**26/10/2022**



# Introduction

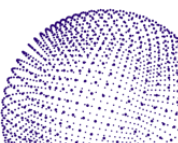
ATTRACT Academy is an integral part of ATTRACT phase 2, under which interdisciplinary student teams develop concepts and prototypes to explore and expand on the societal impact potential of the technologies developed under ATTRACT. These student projects are run in various universities utilising Passion-Based Learning courses and Design Thinking methodologies, and various world-class innovation platforms support them. A total of 10 Student Programs (Programs or SPs) have been selected for funding in ATTRACT Phase 2. Each Program is run by a consortium of 2–4 universities or institutions, each utilising one or more of their master's level courses to run the required activities.

This report describes the matching process of ATTRACT-funded R&D&I Projects with ATTRACT Academy Student Programs. The report details the pairing considerations, examines the process and concludes with the matching outcomes. The technologies (R&D&I Projects) were paired with the Student Programs to support and aid them in reaching their pedagogical goals by considering the various practicalities of different courses and the multiple themes the courses are built around. The primary considerations for the R&D&I projects focused on the projects' workload and them getting sufficient exposure to different kinds of Student Programs.

## Preliminary considerations

### Infopacks

To achieve the objectives of the ATTRACT Academy and manage the expectations of the collaboration process between the SPs and R&D&Is, separate Infopacks (Annexe 1 and 2) were drafted for both parties. The information was shared with the Programs and Project Coordinators as they disseminated the packs to their respective consortia and student contact persons. The Infopacks displayed the structure of ATTRACT Academy, collaboration process, inputs required, deliverables, timelines and critical contact points of collaboration.





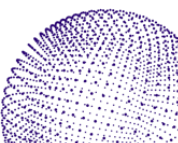
## Virtual Meetings

It was incremental for the Facilitation team to understand what the teachers of the different Program courses expected from R&D&I collaboration to manage and further direct those expectations to meet the objectives of the Academy. Thus, before starting the matching process, the Facilitator had virtual meetings with all the Student Programs and their consortia members to understand their course structures, needs, and methods. For example, the Facilitator needed to know if the courses were organised by distinguishing a sustainability challenge first or did students usually seek the problem through the possible usages of provided technologies. It was also concluded that the students should have basic knowledge of the technologies they were paired with before the R&D&I collaboration and mentoring started. This need was addressed through the creation of Technology Cards discussed below.

In addition, the Facilitation team had Zoom meetings with the funded R&D&I Projects to understand their innovation and explain what was expected from them during the cooperation. Hence, the representatives were familiarised with the Academy and student collaboration – including exploration of what the latter entails. To help the technology representatives better understand the possibilities of student projects, they were introduced to some exemplary student projects from ATTRACT phase 1 "Young Innovators and Entrepreneurs" pilot. The Facilitator also used this opportunity to ensure that the previously sent Infopack was interpreted correctly.

## Technology Cards

To compile easily approachable information on the R&D&I Projects, The Facilitation team asked them to complete a questionnaire about their technology. The collected data was then used to create Technology Cards – concise information packages explaining the technology through rhetoric that renders the tech accessible and understandable for master-level students from different disciplinary backgrounds. In addition to the technical and functional information, Technology Cards also contain information regarding the Project





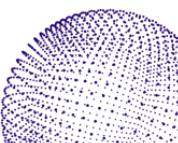
representatives, such as the contact details for the student contact person. Annexe 3 is an example of a technology card given to the Student Programs.

## Matching process

### Basic principles and practicalities

In the first Facilitation team meeting regarding the pairing of R&D&Is and Student Programs, the basic principles of how the R&D&I Projects should be allocated between different Programs were decided. Firstly, the team created a table chart to ensure that R&D&I Projects would not be overwhelmed by similarly running, possibly intensive collaboration courses and that Student Programs would have varying technologies to partner with throughout the different ATTRACT Rounds. The chart was meant for practicality, as there are 18 ATTRACT-funded R&D&I Projects and 10 Student Programs. Further, the SPs run in 3 separate Rounds based on varying academic calendars, with multiple student projects within each Program requiring several collaborating technologies, which exceeds the total of the R&D&I Projects. All these variables needed to be managed systematically and coherently from the start. Additionally, ATTRACT phase1 projects were considered for the SPs that did not require intensive collaboration with the R&D&I Projects.

Secondly, it was decided that the Facilitator should familiarise themselves with the technologies to understand what possibilities they harboured for student cooperation and to identify suitable matches between the SPs and technologies. In the virtual meetings with the Student Programs, their needs and possible course specialities were placed so the Facilitator could ideally cater to them in the matching process. These meetings helped the Facilitator understand the SPs' need for specific themes in the paired technologies and how many different technologies each Program would need. While these discussions were proceeding, the Facilitator drafted Technology Cards from the R&D&I Projects' answers to the mentioned questionnaire to distribute to the relevant Student Programs and their teachers and students before the courses started.





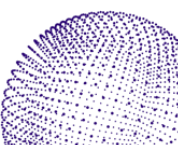
## Preparatory matching

After the Facilitator had met with the SP and R&D&I representatives, a preliminary matching was drafted. Critical criteria for the matching were how many technologies the Student Programs required throughout the Rounds and how many technologies the Facilitation team could confidently allocate without straining the R&D&I Projects excessively. Given the complex criteria needed for the suitable pairings between the SPs and R&D&Is, the matching task was not simple. The different Student Programs required 95 technologies for all the ATTRACT Academy Rounds. To fulfil this requirement equally, each R&D&I Project should collaborate with at least 5,3 Student Programs throughout the Rounds. However, such a straightforward matching was impossible as the funding modalities and specific requirements of the R&D&I Projects and SPs needed to be considered. Hence, Modality A R&D&I Projects were allocated with two Modality B (in-depth) and two Modality A (lighter) Student Programs. Differently, Modality B R&D&I Projects with the more considerable funding were matched with three to four Modality A and three to four modality B Student Programs.

In addition, some Student Programs already wanted to start technology collaborations on the optional Round 0. To render this collaboration possible, the Academy Facilitation team reached out to the R&D&I Projects that were enthusiastic about working with the students by using some of their research before the beginning of ATTRACT phase 2 or research completed in phase 1. Collaborating with SPs in Round 0 was not mandatory for the R&D&I Projects. For the R&D&I projects volunteering to collaborate in Round 0, this workload was considered when distributing their technology to the future Rounds.

## Final criteria and pairing

After this preparatory matching, the matches were moved around to evade intense overlapping of courses among the R&D&Is to even out their individual workload throughout the different Academy Rounds. In this phase, the Facilitator benefited from the knowledge acquired through the virtual meetings of the Student Programs' courses, structures, and practicalities. For example, it was incremental to know the course schedules to identify





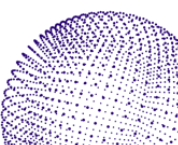
periods of intensity in possible R&D&I collaboration and, thus, manage the distribution of such cooperation concentrations among the R&D&Is moderately.

The last changes were made to the technology distribution to support the thematic wishes of the SPs. For example, SP4 – Challenge Based Innovation for AI, requested to be paired with R&D&I projects that mentioned that their technologies have implications in the domain of artificial intelligence. These changes had to be made keeping in mind also the workload and schedule of the R&D&I projects, meaning that the Modality A Project could be swapped only with another Modality A, which would not be assigned to many other SPs at that time.

Lastly, after the technology distribution was finalised, each R&D&I project received an individualised timeline which illustrated which SPs they would collaborate with throughout the Rounds 1 and 2 of ATTRACT Phase 2. Annexe 4 shows an example of the timeline that each R&D&I Project received. Finally, the timelines were delivered to the R&D&I Projects and Technology Cards for each Student Program after the Kick-Off event.

## Conclusions

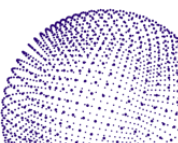
The matching process was successful, and its outcomes met the set objectives. For the R&D&Is, the individual workload was evenly distributed throughout the Rounds, and collaborations were allocated according to their Modalities. Further, the Student Programs were provided with the number of technologies they initially and realistically requested, aligning their thematic requests. The essential principles for the matching were to ensure that Student Programs would get the needed number of technologies without overbearing the technology Projects with student collaboration. The final matching of the Student Programs with the ATTRACT technologies can be found in Annexe 5.

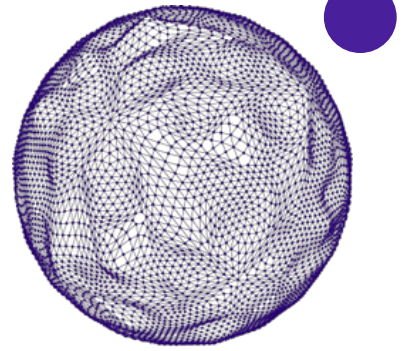




# Annexe 1

## Infopack for Student Program Consortia





# Infopack for Student Program Consortia

Name of the project:

**ATTRACT**

Grant Agreement contract number:

**GA- 101004462**

Date:

**15/03/2022**





# Welcome!

Congratulations on winning the call for one of the Student Programs of ATTRACT phase 2 and welcome to the ATTRACT Academy (Academy for short). This infopack is designed to help understand the structure of the Academy, to familiarise you with the responsibilities of the Student Program Coordinator, have an understanding of how submissions and deliverables are handled, and get an overview of the plan for the Academy events.

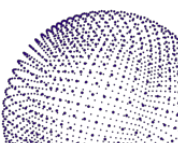
## ATTRACT Project

ATTRACT is a pioneering initiative bringing together Europe's fundamental research and industrial communities to lead the next generation of detection and imaging technologies.

In 2018, the European Commission (EC)'s Horizon 2020 Programme funded ATTRACT phase 1, which aimed at identifying breakthrough technologies from fundamental research. Phase 1 supported 170 breakthrough Research, Development and Innovation (R&D&I) Projects that produced technology concepts in the domain of detection and imaging technologies across Europe.

During phase 1, as a part of the 'Young Innovators and Entrepreneurs Pilot', over 100 Masters level students in cross-disciplinary student teams used design thinking methodologies to develop breakthrough innovations to solve societal challenges inspired by the technologies being developed in the ATTRACT initiative. The student projects from phase 1 can be viewed on the [ATTRACT phase 1 project showroom](#).

One of the activities in ATTRACT phase 2 is the upscaling of the 'Young Innovator and Entrepreneurs' pilot from ATTRACT phase 1. Using the three existing pilot locations at Aalto, ESADE and CERN from ATTRACT phase 1 as starting locations, phase 2 will increase the number of universities and students involved in applying ATTRACT technologies to benefit society. The inclusion of student activities in ATTRACT phase 2 is also designed to create a new generation of researchers who perceive co-innovation between academia, research infrastructures, and commercial organisations as a natural way of working. The student activities are intended to foster a stronger entrepreneurial culture across Europe that uses the concepts and resulting technologies created for research purposes as the starting point for developing products and services for our citizens.





In phase 2, all the student activities fall under the umbrella of ATTRACT Academy

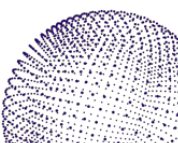
## Structure of ATTRACT Academy

ATTRACT Academy is a part of the ATTRACT phase 2 under which 10 Student Program Proposals are funded. Each Student Program is run by a consortium of 2-4 universities/institutions, which each utilise one or more of their courses to run the required activities. One university in each consortium is the Student Program Coordinator (Coordinator for short) and is the main contact for Student Program.

To ensure knowhow transfer from ATTRACT phase 1, each Student Program is run in liaison with one of the three institutions (and their respective innovation platforms), which were part of ATTRACT phase 1 'Young Innovators and Entrepreneurs Pilot': Aalto University / Aalto Design Factory, ESADE / Fusion Point, or CERN / IdeaSquare.

Each Student Program carries out a minimum of 10 Student Projects over the course of ATTRACT phase 2. The courses are run according to the regular course schedules of the universities in two rounds: Round 1 during academic year 2022-2023 and Round 2 during academic year 2023-2024. In addition, Round 0 is conducted in Spring 2022 with a select courses and available R&D&I Projects. The Student Projects are done by students in interdisciplinary teams, with the pedagogical support from the course staff, while working on a design brief based on an ATTRACT R&D&I Project.

Finally, each Student Program is either Modality A or Modality B. Modality A programs are made of smaller (5-9 ECTS) courses with the goal to produce a service concept, tangible solution demonstration, or prototype. Modality B programs are larger (10+ECTS) courses with the goal to do a more extensive design process resulting in a Proof-of-Concept prototype.



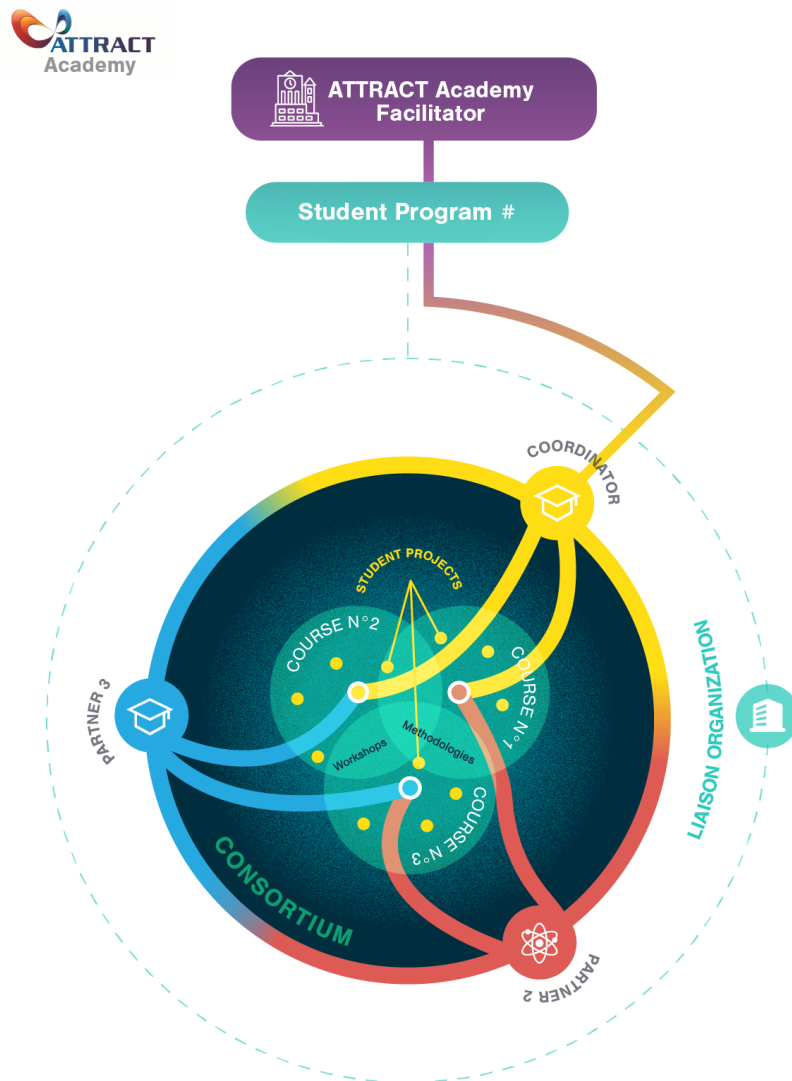
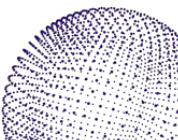


Figure 1 Structure of ATTRACT Academy

## ATTRACT Academy Facilitator

The ATTRACT Academy Facilitator (Facilitator for short) oversees the activities and is the touch point for all the Student Program Coordinators. The ATTRACT Academy Facilitator is Aalto University. You can contact them at [attract-academy@aalto.fi](mailto:attract-academy@aalto.fi).



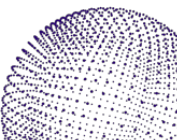


## Responsibilities of the Student Program Coordinator

As the Coordinator of the Student Program consortium you be responsible for the following:

- Being the primary contact for all communications pertaining to their Student Program.
- Facilitate communication between ATTRACT R&D&I Projects and the course staff.
- Submitting the student information document to the Facilitator at the start of each course in the Student Program (Template and encryption instructions shared with the Coordinator in drive)\*.
- Submitting the deliverables to the Facilitator at the end of each course in the Student Program (The details of the deliverables and formats shared with the Coordinator in drive).
- Keeping track of the finances, budget, and reporting them. Please refer to the section 'Finances' in this document for detailed information regarding this.
- Communicating dates of events and workshops within the Student Program to the Facilitator at the earliest.
- Deliver the feedback from the students at the end of each round of the different courses within their Student Program to the Facilitator (Feedback form shared in common drive).
- Ensure selection and participation of students from within the Student Program for the common events for example, ATTRACT Academy Gala.
- Ensure handover of the student projects within the Program to their respective R&D&I Projects.

\* To protect the student information, the file will be encrypted. The detailed encryption process is included in the deliverables document.





<i>Before the course(s)</i>	<i>During the course(s)</i>	<i>End of the course(s) and after</i>
<ul style="list-style-type: none"><li><input type="checkbox"/> Go through the materials shared by the Facilitator on the drive, check if encryption password works</li><li><input type="checkbox"/> Participate in the onboarding/trainers workshops</li><li><input type="checkbox"/> Get in touch with the dedicated Technology Projects based on the Technology Cards received from the Facilitator.</li><li><input type="checkbox"/> Inform the Facilitator about dates for common workshop/activities for the course(s) within the consortium.</li><li><input type="checkbox"/> Inform the Facilitator about finance officer in their organisation</li></ul>	<ul style="list-style-type: none"><li><input type="checkbox"/> Deliver Student Information Document to the Facilitator once the students participating in the course(s) are confirmed.</li></ul>	<ul style="list-style-type: none"><li><input type="checkbox"/> Outcomes and deliverables of the student projects from the course(s)</li><li><input type="checkbox"/> Ensure the sharing of the student feedback form with the students</li><li><input type="checkbox"/> Expenditure report</li><li><input type="checkbox"/> Participation of selected students to common attract academy events</li></ul>

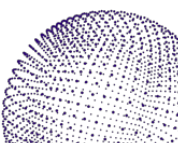
Figure 2 Checklist for Coordinators

## Where to find information and how to submit deliverables

The Facilitator will share a cloud-based drive with you for uploading all the deliverables. The drive will contain the templates and documents containing relevant information for you, for example what deliverables are needed based on the modality of the Student Program and their formats. You should notify the Facilitator if you would like someone else in addition to you to have access to the drive as well.

## Finances

The obligations and responsibilities that you have acquired are stipulated in the Third Party Project Agreement (TPPA) that you have signed. The text here is not substituting it and intended to be for additional informational purposes. The ATTRACT initiative receives its funding through the EC's Horizon 2020 grant (Grant number 101004462). For reporting and audit purposes, you are required to collect all physical receipts for expenses. A report of expenses must be submitted along with the other deliverables at the end of each round to the Facilitator. The Student Program consortium is responsible for complying with European Commission guidelines for making eligible expenses and will be liable in case of an audit. The funding will be received by the Coordinator of the consortium in lump sum after the signing of the Third Party Project Agreement. The consortium is responsible for ensuring that the entire amount of the received funding is utilised within the duration of the ATTRACT phase 2 on related activities. It is not possible to carry forward the funding or utilise it for other projects and activities. Any questions regarding the finances can be addressed to the





ATTRACT Project Administration Office at [attract-pao@cern.ch](mailto:attract-pao@cern.ch). You are asked to forward the Facilitator the contact information of your financial officer within your organisation who will be handling matters related to the Student Program.

## Communication with R&D&I Projects

The Facilitator will connect you with the R&D&I Projects that will be utilised in the course(s) in your Student Program. Once you have been connected with them, you can formulate briefs with them and discuss their involvement in the course. Each of the R&D&I Projects have a Contact Person responsible for communicating with the Student Programs. The frequency of interaction between the student teams and the Contact Person of the R&D&I Projects depends on the modality of the Student Program.

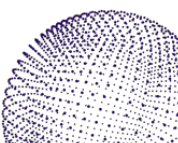
- One off or few times in total with student teams from Modality A programs
- Regular occurrence (up to weekly) with the student teams from Modality B programs.

It is important to note that the ATTRACT R&D&I Projects cannot be asked to share any details about their technologies that they are not willing to share at that point. ATTRACT follows an [Open Science to Open Innovation principle](#) and most of the deliverables of the Student Programs will be disseminated publicly. Do not engage in a non-disclosure agreement or similar with the ATTRACT R&D&I Projects that the students will work with. Please, when you interact with the R&D&I Projects, make sure that they understand this point and share with you information that is not intended to be protected and could go into the public domain.

## ATTRACT Academy Common Events

The ATTRACT phase 2 begins with a common Kick Off event.

The Facilitator will arrange yearly Trainer's Workshops. These workshops will be an event for all the Student Programs to sync activities, share best practices and update each other about the challenges and achievements of their Student Programs. It is important to note that the ATTRACT Student Program budget cannot be used for covering the cost of travel, accommodation etc. for you, the teaching staff or other representatives of the Student Programs attending the Trainer's Workshop. During the Trainer's Workshops we will also discuss the possibilities of further academic work such as publishing in the CERN Ideasquare journal of Experimental Innovation (CIJ).





In addition, to the Trainer's Workshop, after Round 1 and 2 of the Student Programs, the ATTRACT Academy Gala, will be organised for showcasing selected student projects from all the different Student Programs to showcase their work. The ATTRACT Student Program budget is to be used to cover the cost of the student travels and accommodation to the common events.

The tentative dates for these common events are:

- ATTRACT phase 2 Kick-Off – May 31<sup>st</sup> 2022
- 1<sup>st</sup> Trainers Workshop – 17<sup>th</sup> June 2022, Hybrid format from Barcelona and Online
- 2<sup>nd</sup> Trainers Workshop and 1<sup>st</sup> ATTRACT Academy Gala - 15-16 June 2023
- 2<sup>nd</sup> ATTRACT Academy Gala (Pre AFC) - 12-14 June 2024
- ATTRACT Final Conference - 20 - 23 January 2025

Please note that these dates are tentative and will be confirmed closer to the event. The common events are designed to be face to face events. Depending on the Coronavirus situation, the events may take place virtually or in a hybrid format. The details will be shared in advance.

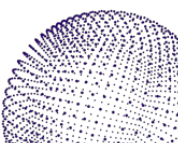
## Visits by ATTRACT Academy Facilitator

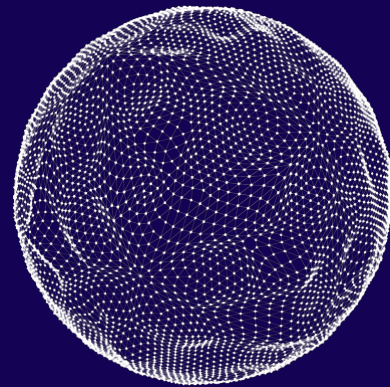
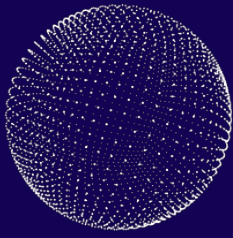
For project monitoring purposes, the Facilitator would be visiting while the Student Programs are running. A preferred time for these visits is when the common activities within the Student Program are taking place. You are requested to let the Facilitator know at the earliest about these events so that the Facilitator can plan for their visit.

## Channels for Communication

All official communication will be handled via email. The email address of the ATTRACT Academy Facilitator is [attract-academy@aalto.fi](mailto:attract-academy@aalto.fi). All the deliverables and files are shared through the cloud based shared drive.

In addition to this, there is a common ATTRACT Academy Slack workspace. This will be a community space for all the Student Programs. You can freely invite the course staff, teachers, and also students from your Student Program to the Slack workspace if you wish.





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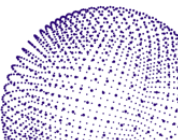
This project has received funding from the European Union's Horizon 2020 research and innovative programme under grant agreement No. 101004462





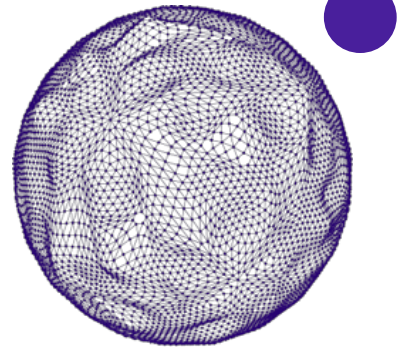
## Annexe 2

Infopack for R&D&I Projects for Collaboration with Student Program Consortia





Developing breakthrough technologies  
for science and society



# Infopack for R&D&I Projects for Collaboration with Student Program Consortia

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Date:

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## ATTRACT Academy

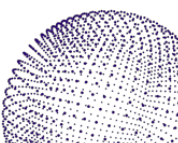
ATTRACT Academy (Academy, for short) is an integral part of the ATTRACT phase 2, under which student teams develop concepts and prototypes to explore and expand on the societal impact potential of the technologies you are developing. These student projects are run in various universities utilising [Passion Based Learning](#) courses, [Design Thinking](#) methodologies, interdisciplinary student teams, and supported by various world class innovation platforms. The Academy courses are run in two main rounds for Academic years 2022-2023 and 2023-2024. In addition, Round 0 is conducted in Spring 2022 with a select courses and available R&D&I Projects. **Note that the ATTRACT Academy Students are separate from any MSc or PhD students that you are working with as a part of your R&D&I project.**

Through the work done by students you gain a broader perspective in the potential societal impact of your technology. The exploration conducted by the students can feed new ideas and directions for potential opportunities for you. The students produce prototypes, concepts, or design services which demonstrate their ideas. This work can be utilised by you to demonstrate the importance of the new technologies and function as an important example for future funding applications.

The outcomes of the student projects depend upon the Modality of the Student Program that they are being done in. The Modality A includes courses with a lesser workload, a shorter duration, and a smaller budget, while Modality B is more extensive in those aspects. In Modality A the core deliverable is a tangible product solution or prototype with an accompanying report about the work done by the team. In Modality B the core deliverable is a full Proof-of-Concept Prototype (PoC) or demonstration of the product solution, accompanied by an extensive documentation on the work conducted by the team. In both Modalities the students also produce pictures, posters and short videos to support communication about the project. You can see the [ATTRACT phase 1 Project Showroom](#) for examples of previous projects.

## Structure of ATTRACT Academy

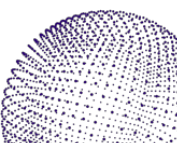
ATTRACT Academy is a part of the ATTRACT phase 2, under which 10 Student Program Proposals were funded in a parallel open call like the R&D&I projects. Each Student Program is run by a consortium of 2-4 universities/institutions which each utilise one or





more of their courses to run the required activities. One university in each consortium is the Student Program Coordinator and is the main contact for Student Program.

Furthermore, to ensure knowhow transfer from ATTRACT phase 1, each Student Program is run in liaison with one of the three institutions (and their respective innovation platforms), which were part of ATTRACT phase 1 'Young Innovators and Entrepreneurs Pilot': Aalto University / Aalto Design Factory, ESADE / Fusion Point, or CERN / IdeaSquare.



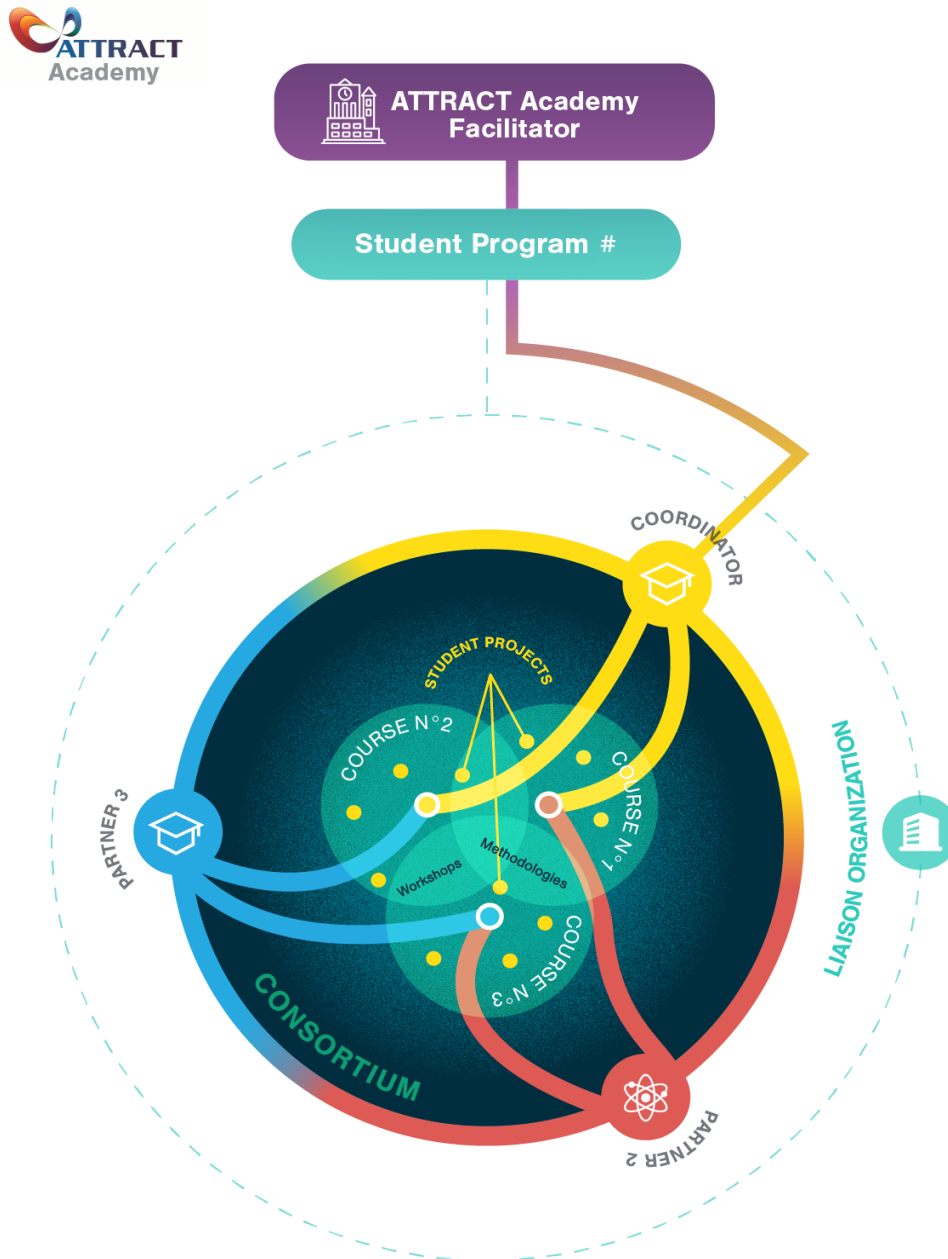
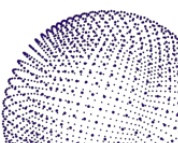


Figure 1 Structure of ATTRACT Academy

Each Student Program delivers a minimum of 10 Student Projects over the course of ATTRACT phase 2. Each Student Project is run by an interdisciplinary team of students, with the pedagogical support from the courses, while working on a design brief based on a R&D&I Project. The Academy provides the students a budget to cover prototyping and travel expenses for the students under ATTRACT Academy.





The courses are run according to the regular course schedules of the universities in two rounds: Round 1 during academic year 2022-2023 and Round 2 during academic year 2023-2024. Once you are connected with course staff of a specific course, please confirm with them the key dates of the course.

## Collaboration with ATTRACT Academy

As it was mentioned in the Guide for Applicants, *'The ATTRACT Consortium will facilitate Design Thinking projects with interdisciplinary teams of MSc level students with the goal of generating ideas for social innovation inspired by the technologies developed in the funded projects . As well, the ATTRACT Consortium will facilitate the implementation of a socioeconomic study of the ATTRACT initiative.'*

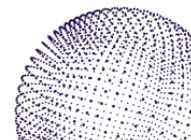
*Groups of participants in both modalities are required to nominate a knowledgeable person responsible for liaising with the student teams and their tutors in the event of selection for funding as well as for the scholars undertaking the socioeconomic study.'*

Aalto University functions as the ATTRACT Academy Facilitator (Facilitator, for short), and initiates the connections between you and the Student Program Coordinators, and collects the required materials. You can contact the Facilitator at [attract-academy@aalto.fi](mailto:attract-academy@aalto.fi).

The Academy student teams will be mentored by the teaching staff of different Student Program consortia, and your active involvement is crucial in:

- 1) ensuring that the outcomes are well connected to the research you are doing
- 2) connecting the students with relevant information and people within your consortium to enable them to create meaningful solutions for your project
- 3) ensuring meaningful knowledge transfer back to your project

All the activities under Academy follow the Open Science to Open Innovation principle, meaning that any information provided to the students and any results generated by their projects are shared publicly. Please make sure that your project only shares materials and information with the students that you would be willing to share publicly. All the deliverables that the student teams generate are public and no NDAs shall be done with the teams, or the universities.





**The costs of the ATTRACT Academy student projects, the work done by the universities supervising them, and the coordination of the Academy are all funded separately through ATTRACT and thus no monetary cost is incurred your R&D&I project for the design thinking student projects.**

## Your Role as R&D&I Project Contact Person for ATTRACT Academy

Your role as active participants in ATTRACT Academy is critical for the success for both the students' learning experiences as well as for the outcomes of your projects. To ensure fluent collaboration, you need to name an individual as your R&D&I Project Contact Person for ATTRACT Academy (Contact Person, for short).

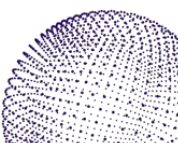
The main requirements for the Contact Person are that they have an open and welcoming attitude towards the student teams, have the capability to communicate the technology and the activities of the consortium in layman's terms, and have sufficient time resources to collaborate with the Academy student teams.

The contact person is responsible for the following:

- Communication between your project consortium and the ATTRACT Academy Facilitator
- Communication between your project consortium and the assigned university/course staff
- Communication between your project consortium and the Academy student teams
- Facilitating contact between the Academy student teams and other experts and stakeholders within your consortium

## Key Contact Points with ATTRACT Academy

Within the ATTRACT Academy, you will have different interactions with different stakeholders of the Academy, such as the Facilitator, the Student Program Coordinators and teaching staff, and Academy Students.





All official communication with the Facilitator will be done over email or in meetings. For smoother communication, please do keep the Facilitator ([attract-academy@aalto.fi](mailto:attract-academy@aalto.fi)) in CC of your communication with the universities.

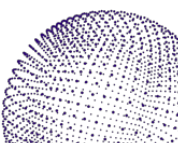
The Facilitator will also be sending you a Tech Card -form for collecting information about the technology you are developing and feedback on your collaboration at the end of each round of collaboration.

At the end of each round there will be an event for the students to showcase their work done with you (Academy Gala) and Trainer's Workshops for sharing best practices between different Student Programs. Your input in these events is extremely valuable and your involvement will be discussed closer to the event. In case the interaction with any of the stakeholders of the ATTRACT Academy requires you or someone from your project consortium to travel, the travelling budget of your R&D&I project is the one to be used for covering your travelling expense.

Below are the dates for some of the events that require the involvement of you or the Student Program Contact Person from your consortium. Please note that the dates and formats for the events are tentative and will be confirmed closer to the event.

**With ATTRACT Academy Facilitator:**

- Info session as a part of ATTRACT Kick-off event [Mandatory]
  - Primary session to get information about the Academy from the perspective of a R&D&I Project
  - 31<sup>st</sup> May 2022, Virtual
- Trainer's Workshop [Mandatory]
  - 17<sup>th</sup> June 2022, Hybrid, Barcelona and Online
  - 15<sup>th</sup> – 16<sup>th</sup> June 2023
- ATTRACT Academy Gala [Mandatory]
  - 15<sup>th</sup> – 16<sup>th</sup> June 2023
  - 12<sup>th</sup> – 14<sup>th</sup> June 2024





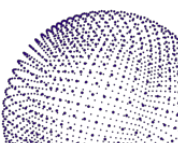


**With course staff (minimum, more might be requested by course staff):**

- Pre-course call with course staff [Mandatory]
  - Purpose of the call is to form the student project briefs and agree on forms of collaboration
  - Few months to few weeks prior to the launch of the specific course
- Grading [Case Dependent]
  - Courses might ask R&D&I Project to give the students a grade for their work

**With student teams (examples, exact procedure to be agreed with course staff):**

- Information session [Mandatory, as needed by course]
  - Meet the student teams, share information on technology and brief, share information on previous Academy Student Projects, agree on forms of collaboration and channels of communication with the student team
  - Note that all of the courses run under an open innovation principle, meaning that everything shared with the students will be considered public information. Only share information and materials with the students that you are comfortable sharing publicly.
- Update calls with student team [Case Dependent]
  - Frequency depends on Modality of the Student Program and course structure
    - Regular occurrence (up to weekly) with the student teams from Modality B programs
    - One off or few times in total with student teams from Modality A programs
  - Chance for students to share progress and get feedback on their progress and direction





- Chance to discuss what kind of contact with other parts of the consortium and external stakeholders the students might benefit from interacting with
- Hand-over [Mandatory]
  - Call, meeting, workshop, etc.
  - Agreed upon way of ensuring final knowledge transfer between the student team and the R&D&I Project Consortium
  - Participation, if required, in any end of course presentations and events

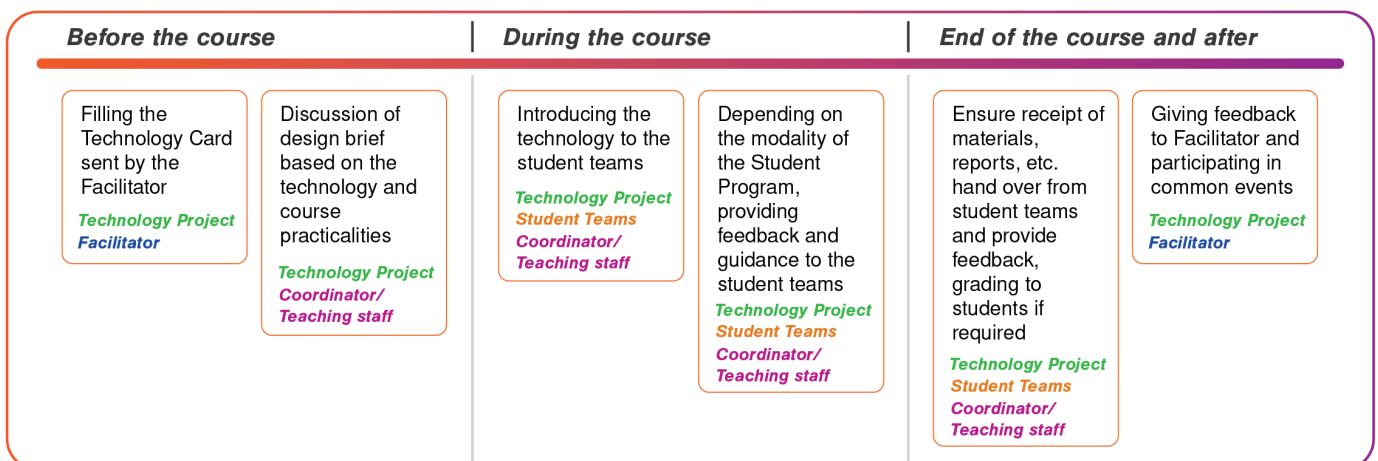
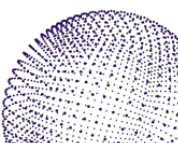
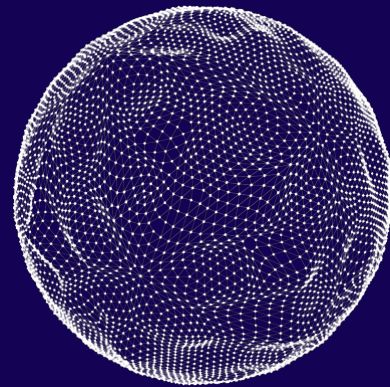
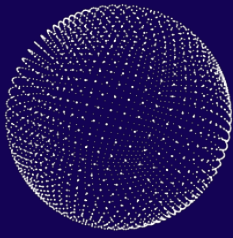


Figure 2 Key contact points in ATTRACT Academy

Hope that this document clarifies the main tasks and interactions that you will pursue with ATTRACT Academy. In case of any further questions, please do not hesitate to contact the Facilitator at [attract-academy@aalto.fi](mailto:attract-academy@aalto.fi)





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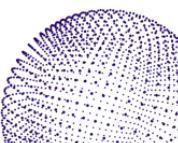


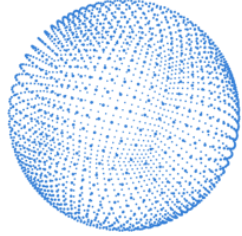
This project has received funding from the European Union's Horizon 2020 research and innovative programme under grant agreement No. 101004462



## Annexe 3

### Example of Technology Card

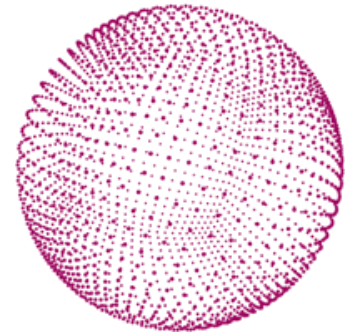
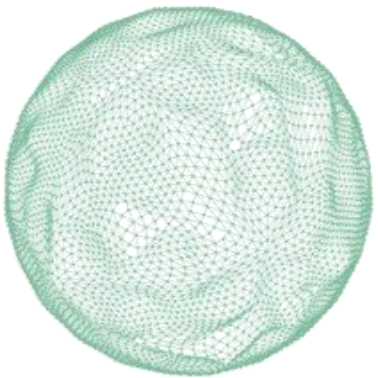
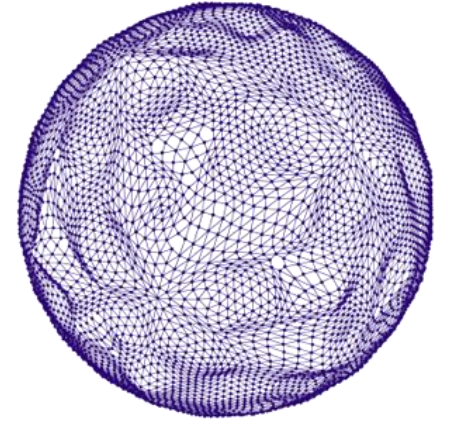


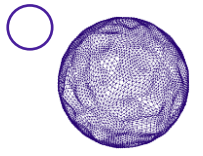
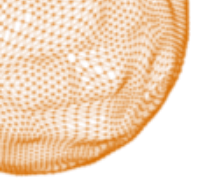


# Technology card:

## H3D VISIONnAIR

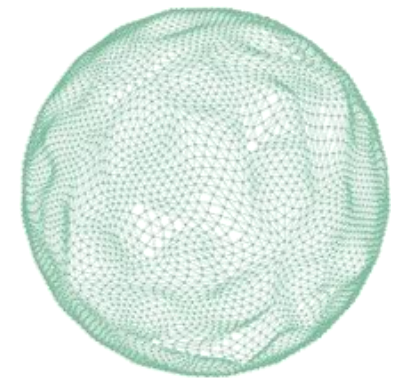
Augmented reality (AR) headgear to help surgeons to attain reliable high-resolution visual discrimination of anatomical structures in real-time.

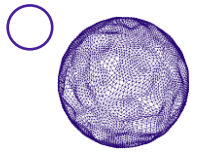
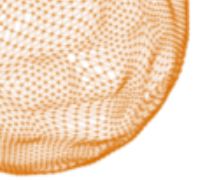




# What does it do?

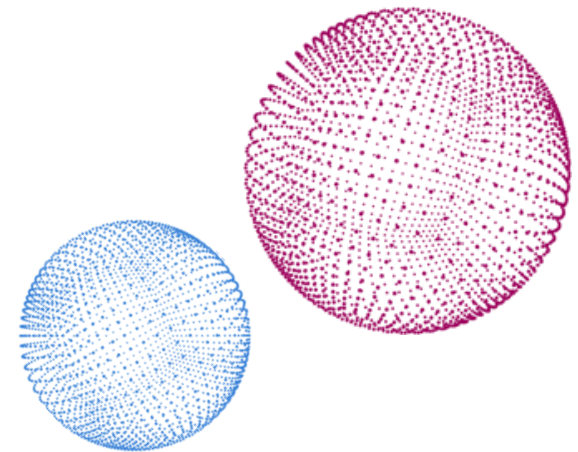
The headset offers surgeons high-tech intraoperative imaging in real-time to see beyond normal eyesight and discriminate critical anatomical structures (nerves, arteries) to perform safe surgery.

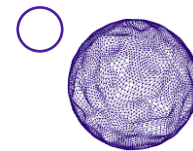
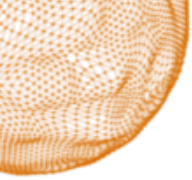




# How does it work?

The technology is based on an offline AI algorithm that has been trained to discriminate critical anatomic structures from spectral information. This algorithm is embedded in the head-mounted 3D display system for real-time visualisation.



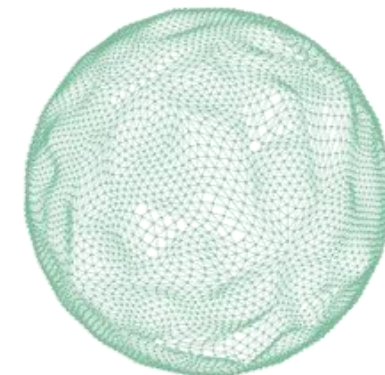


## Unique characteristics

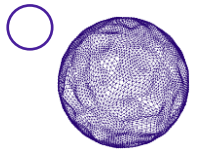
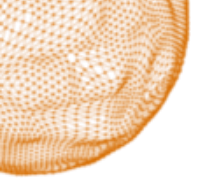
- Contactless 2D spectral dataset of human nerve and adipose tissues.
- Off-line classification of nerve and adipose tissue.
- Integrated hardware for real-time processing.
- Demonstrator.

## Domains of impact?

- Medical imaging
- Forensic science
- Agriculture
- Defence

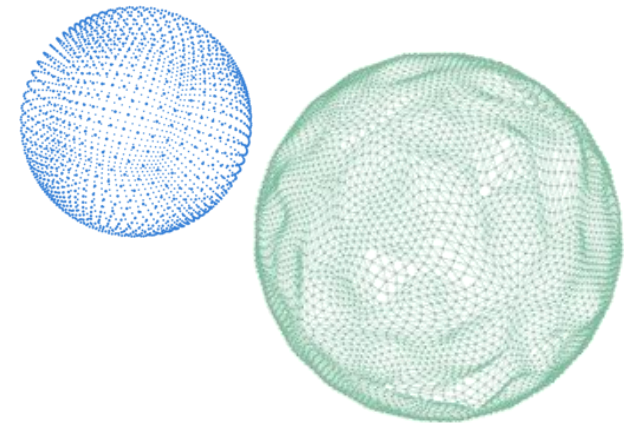


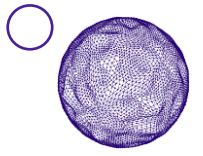




# Potential societal issues that your technology can address.

- Safe surgery. The imagining can prevent unnecessary tissue damage during all surgeries performed as an open procedure.





## Student contact person and other possible info

- Gabrielle Tuijthof  
[g.j.m.tuijthof@utwente.nl](mailto:g.j.m.tuijthof@utwente.nl)
- Primary location(s) of:
  - Student contact: Enschede (Netherlands)
  - Research: Maastricht and Amsterdam (Netherlands)
- ATTRACT showroom phase 1:

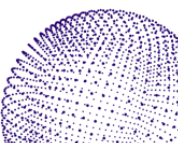
<https://phase1.attract-eu.com/showroom/project/h3d-visionair-head-worn-3d-visualation-of-the-invisible-for-surgical-intra-operative-augmented-reality/>





## Annexe 4

Example of Timeline given to R&D&I Projects showing collaboration with Student Programs



# H3D-VISIOAIR

Timeline of collaboration with different Student Programs

	Round 1												Round 2														
	Aug '22	Sep '22	Oct '22	Nov '22	Dec '22	Jan '23	Feb '23	Mar '23	Apr '23	May '23	Jun '23	Jul '23	Aug '23	Sep '23	Oct '23	Nov '23	Dec '23	Jan '24	Feb '24	Mar '24	Apr '24	May '24	Jun '24	Jul '24			
SP1		Mod B – In-depth																									
SP3														Mod A – Light													
SP5														Mod B – In-depth													

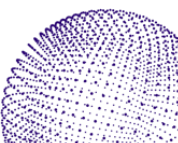
## Information about Student Programs

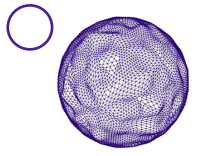
Student Program #	Acronym	Modality	Coordinator	Contact
SP1	BASE	Mod B – In-depth	Jali Närhi	jali.narhi@hamk.fi
SP3	SPT	Mod A – Light	Tua Björklund	tua.bjorklund@aalto.fi
SP5	CBI-FP	Mod B – In-depth	Sonia Navarro	sonia.navarro@esade.edu



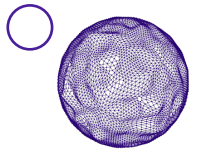
## Annexe 5

### Table of paring of ATTRACT technologies with different Student Programs

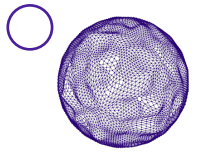




R&D&I Project	Round 0 Student Programs (January 2022 – July 2022)	
<b>Random Power</b>		
<b>ULTRARAM</b>		
<b>Sniffirdrone</b>	SP6 - TeSI	
<b>Pipe4.0</b>	SP7 - ACISS	
<b>AHead</b>	SP1 - BASE	
<b>h-cube</b>		
<b>VISIR2</b>	SP6 - TeSI	
<b>MICROQUAD</b>	SP7 - ACISS	
<b>HYGER</b>		
<b>IALL</b>	SP2 - SGI	
<b>MEGAMORPH</b>		
<b>Glass2mass</b>	SP7 - ACISS	
<b>META-Hilight</b>	SP2 - SGI	
<b>Unicorn DX</b>	SP1 - BASE	SP7 - ACISS
<b>POSICS-2</b>		
<b>H3D-VISIOAIR</b>	SP7 - ACISS	SP11 - FTSF
<b>HIPMED</b>	SP7 - ACISS	
<b>HYLIGHT</b>	SP6 - TeSI	

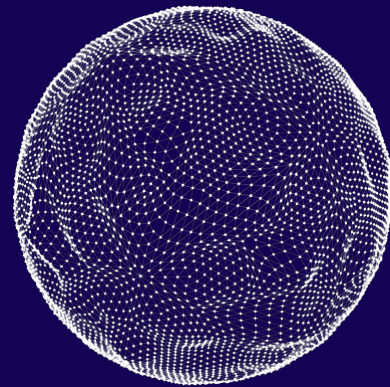
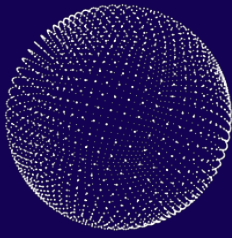


R&D&I Project	Round 1 Student Programs (August 2022 – July 2023, Ongoing)		
<b>Random Power</b>	SP4-CBI4AI	SP9-CBI.ATTRACT	
<b>ULTRARAM</b>	SP6 - TeSI	SP7-ACISS	
<b>Sniffirdrone</b>	SP1 - BASE	SP9 - CBI.ATTRACT	
<b>Pipe4.0</b>	SP2 - SGI	SP8 - CBI-A3	SP9 - CBI.ATTRACT
<b>AHead</b>	SP7 - ACISS	SP8 - CBI-A3	
<b>h-cube</b>	SP1 - BASE	SP8 - CBI-A3	
<b>VISIR2</b>	SP5 - CBI-FP	SP7 - ACISS	
<b>MICROQUAD</b>	SP5 - CBI-FP	SP9 - CBI.ATTRACT	
<b>HYGER</b>	SP4 - CBI4AI	SP8 - CBI-A3	
<b>IALL</b>	SP2 - SGI	SP3 - SPOT	
<b>MEGAMORPH</b>	SP4 - CBI4AI	SP7 - ACISS	SP11 - FTSF
<b>Glass2mass</b>	SP1 - BASE	SP6 - TeSI	
<b>META-Hilight</b>	SP3 - SPOT	SP2 - SGI	
<b>Unicorn DX</b>	SP1 - BASE	SP2 - SGI	SP3 - SPOT
<b>POSICS-2</b>	SP5 - CBI-FP	SP6 - TeSI	
<b>H3D-VISIOAIR</b>	SP1 - BASE		
<b>HIPMED</b>	SP5 - CBI-FP	SP8 - CBI-A3	
<b>HYLIGHT</b>	SP7 - ACISS	SP9 - CBI.ATTRACT	



R&D&I Project	Round 2 Student Programs (August 2023 – July 2024)		
<b>Random Power</b>	SP1-BASE	SP7-ACISS	SP8-CBIA3
<b>ULTRARAM</b>	SP1-BASE	SP4 - CBI4AI	
<b>Sniffirdrone</b>	SP3 - SPOT	SP5 - CBI-FP	SP7 - ACISS
<b>Pipe4.0</b>	SP2 - SGI	SP5 - CBI-FP	
<b>AHead</b>	SP6 - TeSI	SP9 - CBI.ATTRACT	SP11 - FTSF
<b>h-cube</b>	SP4 - CBI4AI	SP7 - ACISS	SP9 - CBI.ATTRACT
<b>VISIR2</b>	SP3 - SPOT	SP8 - CBI-A3	
<b>MICROQUAD</b>	SP2 - SGI	SP7 - ACISS	SP8 - CBI-A3
<b>HYGER</b>	SP1 - BASE	SP6 - TeSI	
<b>IALL</b>	SP4 - CBI4AI	SP5 - CBI-FP	
<b>MEGAMORPH</b>	SP1 - BASE	SP3 - SPOT	
<b>Glass2mass</b>	SP9 - CBI.ATTRACT		
<b>META-Hilight</b>	SP6 - TeSI	SP8 - CBI-A3	
<b>Unicorn DX</b>	SP2 - SGI		
<b>POSICS-2</b>	SP2 - SGI	SP9 - CBI.ATTRACT	
<b>H3D-VISIOAIR</b>	SP3 - SPOT	SP5 - CBI-FP	
<b>HIPMED</b>	SP7 - ACISS	SP9 - CBI.ATTRACT	
<b>HYLIGHT</b>	SP1 - BASE	SP8 - CBI-A3	





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