TECH FORWARD

A programme to identify areas of application for technologies developed within the Universities of Bologna, Ferrara, Modena and Reggio Emilia, and Parma.

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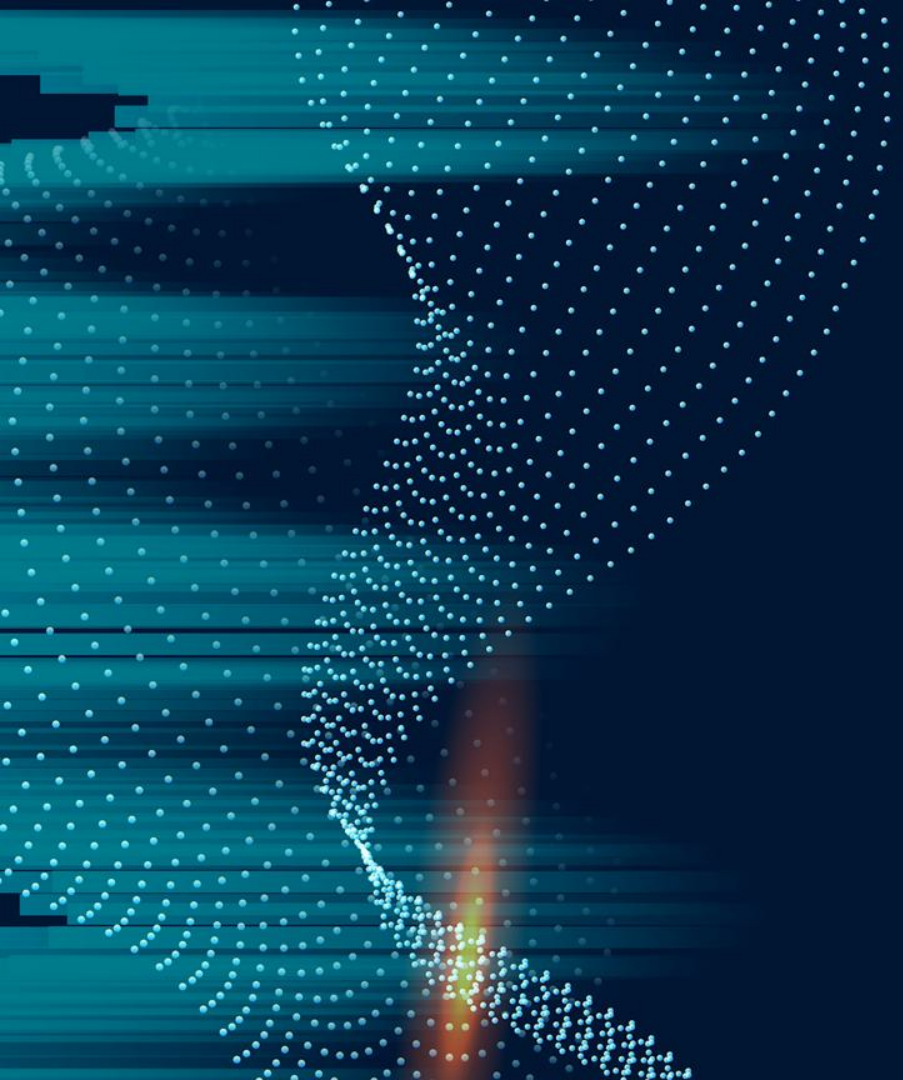
TECH FORWARD

The objective of Tech Forward (TF) is to **develop the entrepreneurial mindset of students and researchers,** while ensuring the enhancement of **innovative technologies** developed by research groups at the University and research centres, and their application to meet the needs of society.

Over 16 weeks, up to six multidisciplinary teams will study innovative technologies to exploit their potential and develop solutions relevant to market needs.

The programme's methodology is a hybrid model based on the human-centred approach of **design thinking and tech-driven innovation processes.**





6

TECHNOLOGIES

30

MASTER’S DEGREE STUDENTS

16

PROJECT WEEKS

THE ACTORS



MULTIDISCIPLINARY STUDENTS

The six multidisciplinary, cross-university teams (of five students) investigate, test and design new market applications for the assigned technology.



TECH PARTNER

The research groups that developed the technology support the team of students who will be working on it during the course.

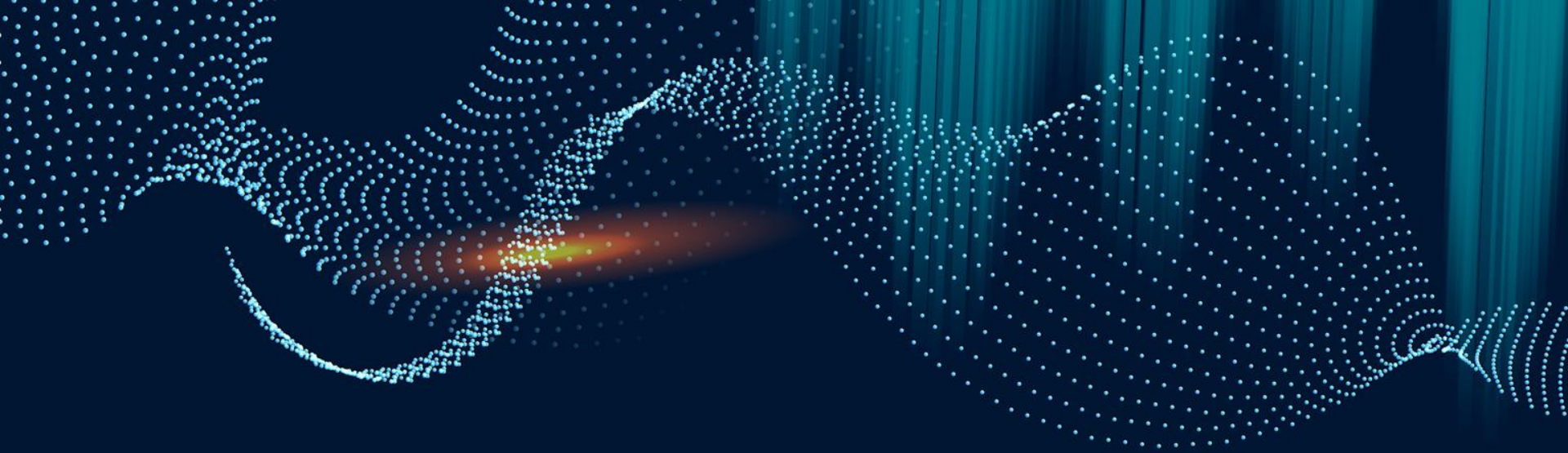


TEACHING TEAM

An methodological coordinator and coaches from Oper.space, who are experts in the methodology, support the adoption of the process and facilitate interactions

GOALS OF THE PROGRAMME

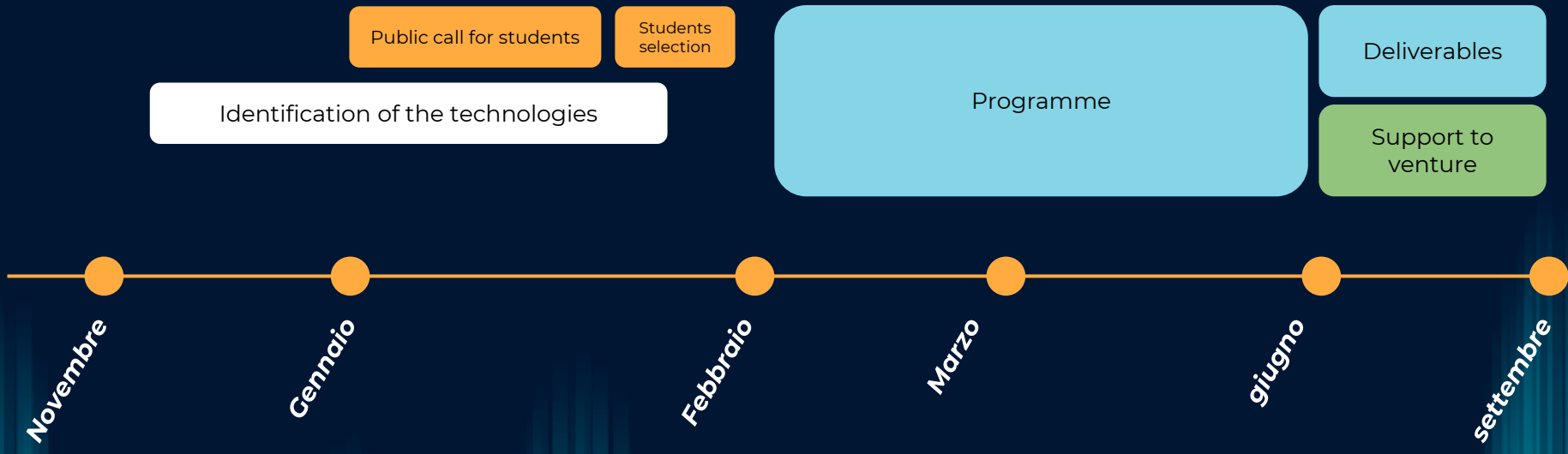
- Leveraging proprietary technologies
- Involving students in university start-up initiatives
- Potential increase in the number of spin-offs
- Integration of research team skills with technical, business, design and humanistic perspectives
- Exploration and validation of potential markets
- Greater awareness in investment choices
- Greater attraction of capital
- Enhancement of the cross-disciplinary skills of students and researchers



01 OVERVIEW

Programme schedule

TIMELINE


Public call for students
Students selection
Identification of the technologies
Programme
Deliverables
Support to venture
Novembre
Gennaio
Febbraio
Marzo
giugno
settembre

1. STUDENTS SELECTION

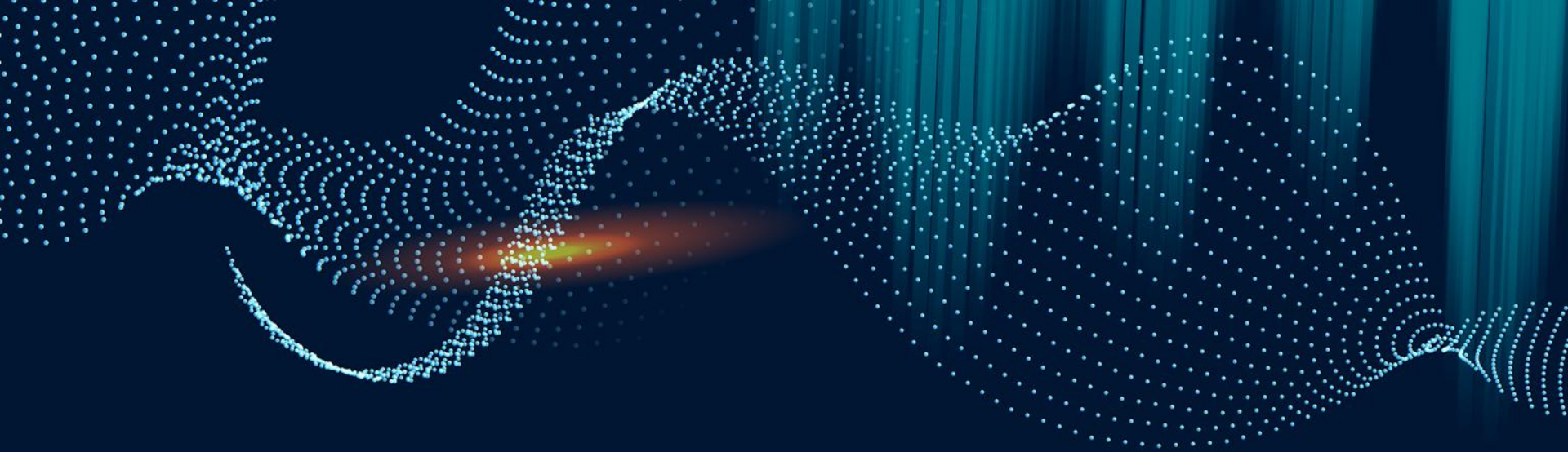
Admission to the programme is subject to passing a two-stage selection process (evaluation of CV and self-presentation video + group test).

Applications and selection are managed by the University of Bologna and the Oper.space team.

All candidates must meet the following admission requirements:

- Be currently enrolled in a master's degree programme at the University of Bologna, Ferrara, Modena and Reggio Emilia, or Parma.
- Demonstrate knowledge of English, the official language of the programme.

The programme will issue a certificate of participation that may be recognised at the discretion of the degree programme, and if permitted by the home university, it may be recognised in the Diploma Supplement.



02 METHODOLOGY

Tech to Market process

TECH TO MARKET

The process unfolds in 3 phases:



Discover
5 weeks

TECH UNDERSTANDING

Design
6 weeks

CRITICAL PROTOTYPES

Develop
5 weeks

PROOF OF CONCEPT

Discover the results of another past Tech-to-market program, CBI.ATTRACT, in its 2022-2023 edition.

TECH TO MARKET

DISCOVER Understanding the technology and identifying opportunities. This first phase aims to gain a thorough understanding of the assigned technology, defining its capabilities, hypothesising various potential applications in different fields, and verifying the initial feasibility of the most promising applications with the project's tech partner and experts in the field of application.

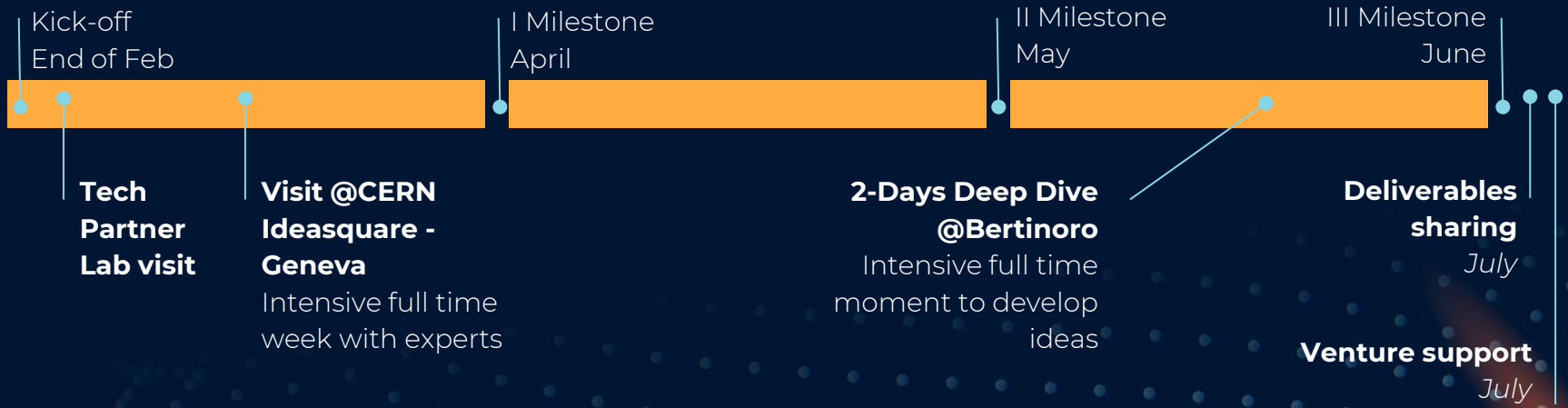
DESIGN Developing and testing ideas. This phase aims to validate conceptual solutions with users and experts in the application markets, developing multiple prototypes and testing them with interested users to verify the value of their application and the expected experience, testing and overcoming the most critical feasibility issues together with the tech partner.

DEVELOP Prototyping of the solution. This final phase is aimed at developing the Proof of Concept, a functional prototype of the solution, designing the details of the solution and validating it with stakeholders. This phase also includes planning the implementation strategy, including considerations of economic sustainability.



TECH FORWARD

Key activities and mobilities





COLLABORATION WITH THE TECH PARTNER

PROTOTYPING



COMMITMENT REQUIRED DROM STUDENTS

It is approximately 375 hours in total, of which 150 hours are in plenary sessions.

WEEKLY



Plenary session
4 hours/week

Involves all student teams, with the aim of teaching them the process and experimenting with the most suitable tools for the stage they are at.

Teamwork
Approximately 12 hours per week

Each team of students is dedicated to advancing the activities, with group and individual sessions as needed.

Project Review
1-2 hours/week

Each team of students meets with their dedicated coach to review project progress and discuss how to tailor activities to their specific case.

AT VARIABLE INTERVALS

Alignment with the Tech Partner
On request – approximately 1 hour every 2 weeks

Presentations
Milestones and rehearsals

Deep Dive in Bertinoro
Full-time commitment for 3 days

Deep Dive at CERN Ideasquare
Full-time commitment for 5 days

Visit(s) to the partner's LAB
To be defined in agreement with the tech partner

GRAZIE!

For Questions

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