



## Invest UPB Proof of Concept - Invest PoC -

### 1. Background

The Invest UPB Proof of Concept (Invest POC) programme provides funding for pre-commercialization and acceleration of research funded ideas and technologies/products emerging from UPB. The programme is implemented in UPB in the framework of DECIP<sup>1</sup> project. The purpose of the Invest PoC is to support research results from early-stage to proof their potential for commercialization in the market.

Early-stage results from research are perceived too risky to attract funding to develop a marketable product, forming a gap between early research and early-stage commercialization effort. The risk can be found in the outcome of the project itself (it is a technology or a method? does it work in an off-the-shelf environment or does it scale?) and in the market opportunity (who would buy it and why?). Therefore, UPB believes special funding is needed to close this gap.

The Invest PoC program aims to demonstrate the feasibility of selected proposals and to accelerate the process towards commercialization, as commercialization is a valuable way to increase research impact. Projects must demonstrate that their ideas have originality, protectable IP, registered at UPB and potential for significant economic impact.

Invest-PoC is implementing its objectives by offering support to Applicants, who can be PhD graduates, post-doc students, researchers and academic staff from UPB. Invest PoC, as a new service line, will offer financial and business support to existing research efforts to establish the proof of concept of an idea generated during previous R&D activities

The Invest PoC program represents **a stage** within *a process* that supports the advance from research - funded ideas to innovation commercialization. Innovations can be commercialized through licenses to a new spin-off or existing company, or through a venture funded start-up/spin-off, depending on the nature of the invention/idea, its potential markets, and the inventor's plans for future involvement in the commercialization. Innovations can also feed into ventures aimed at addressing social and environmental goals, including social entrepreneurs and voluntary and not-for-profit sectors.

This process creates a comprehensive support framework for UPB academic staff, PhD, students, researchers, through which will be provided funding, mainly private, global expertise networks, and the professional development necessary to bridge the technical and funding gap between lab discoveries and societal impact. But the key step before start actually prototyping and launching a product or an idea is the proof of concept, representing a test conducted for the purpose of validating that a research product or idea is feasible to take to the commercialization stage.

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<sup>1</sup> <https://crescdi.pub.ro/>



## 2. Description

**The primary aim of Invest PoC** is to test whether a research idea can be realized as a marketable, profitable product. Is there a need or gap in the market? Who's the potential customer base? Why would they buy the product? What is the demand scale? What would be a good revenue model? How one can create demand? Will it be ROI positive? The PoC provides answers to some of these questions and validates the idea *before* investing money, manpower, and time.

The **award of up to 10.000 EURO** is intended to steer the projects to the next stage closer to commercialization. For example, to develop an early prototype, Minimal Viable Product, more in-depth market understanding, business plan, customer understanding or the generation of additional data to support market validation of the idea. The focus of the funding scheme is to provide short-term grant to check the feasibility of early stage ideas, where there are some preliminary findings, but no clear route to the market. The programme has been designed to help UPB academic staff, PhD students, Postdoc, researchers prepare their knowledge and technology transfer for commercialization. **The programme is not intended to support research projects for which no preliminary findings have been generated.** It is designed to demonstrate the potential for economic impact of a new concept, technology, or invention and to highlight the need for and type of additional development support that would be required to take the technology closer to the market.

Every investor wants to know that they are backing a winner. However, new research is too risky for an investor to invest in. A PoC provides a better understanding of the market potential of a research product and is vital to attracting interest and funding from investors, senior managers, and other decision-makers.

## 3. Who can apply?

**Invest PoC is suitable for PhDs, Postdoc and researchers, and academics staff intending to validate the commercial potential of their research product and/or create spin-offs or start-ups.** Eligible candidates are applicants that:

- Have a research result like model, early prototype, method, experiment, knowledge;
- Have registered their results at UPB;
- Want funds for activities outside typical research funds, activities that confront the risk associated with early-stage technology commercialization.



#### 4. Type of projects that can be financed

A proof-of-concept project should include:

- A research idea, prototype, minimum viable product (MVP) which can be tested in functional or performance validation relevant to potential target users.
- Market assessment including customer discovery interviews, exploration of potential industry collaboration, gathering prototype feedback from experts/new customers/licensees.
- Business model generation and testing financial models that validates the commercial opportunity.
- Information gathering for applying to funding competitions that needs a business plan, to pitching competitions or technology accelerators.

The above examples are relevant to potential investors, managers, and other stakeholders to demonstrate the viability of these research products or ideas to gain approval and funding.

Go for Proof of Concept if:

- You need a pre-seed-stage funding;
- You need to check whether the technical aspects of the idea are in line with what the final user seeks;
- You need a pre-commercial validation of your research idea.

Regardless of niche or vertical, every potential research idea should follow these essential steps for a thorough PoC:

- Prove there's a need or a gap in the market;
- Present the right solution;
- Identifying potential customers and their pain points;
- Create a demo and test It with the target users;
- Create a roadmap to get your product to the market.

A PoC development contains a range of information and data learned during the testing process, including:

- Customer feedback;
- Competitor research;
- Business analysis;
- Projected financials;
- Go-to-market strategy;
- and much more.

Although similar to a pitch, a PoC is actually much more than that. It's not just trying to entice investors with marketing hype. Rather, it means to prove to all stakeholders that there is a need in the market and that the idea is positive Return on Investment (ROI).

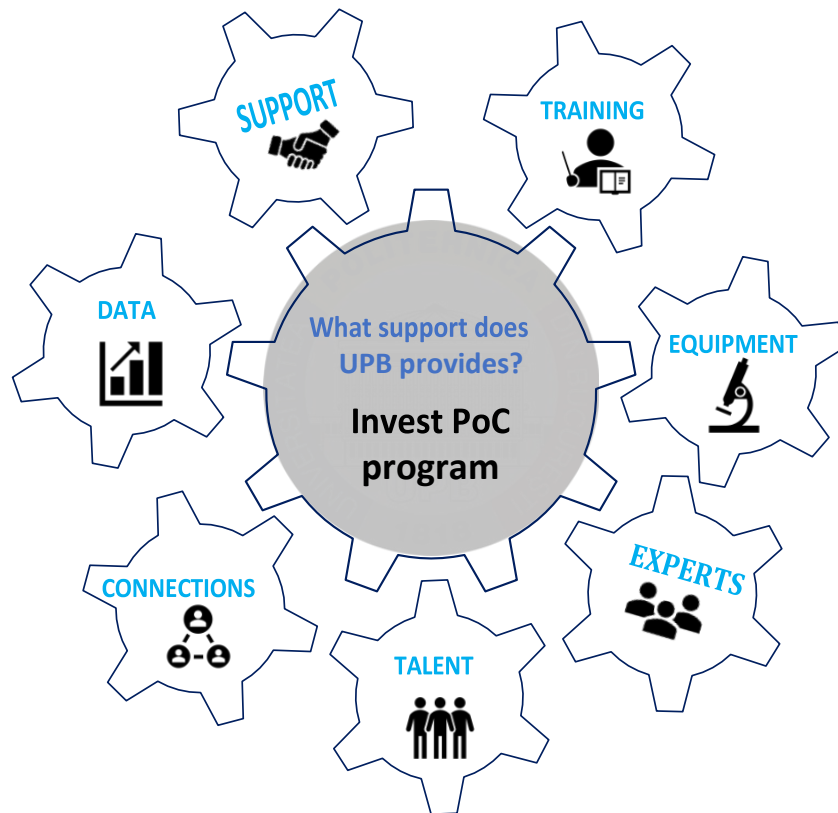


Figure 1 – Resources and services offered by Invest UPB-PoC Scheme.

## 5. What support does UPB provides?

### 5.1 Access to resources

The Invest PoC programme provides access to multiple internal resources to advance the development of UPB research results towards commercialization, such as access to equipment, spaces, and technical expertise.

Through Invest PoC, UPB provides time-limited funding to carry out your project. Invest PoC funds can be used for direct project-related expenses, including hiring staff, small equipment purchases, travel that directly supports the project, business and IPR services, participation to recognized startup/spinoff creation courses or conferences.

### 5.2 Hands-on guidance

Invest PoC program experts will assist participants in planning, operations, and troubleshooting during the project period. Furthermore, participants (the POC project members) will have the



support of other mentor/experts from partner stakeholders on issues related to intellectual property, industry collaborations, customer discovery, collaboration agreements, venture capital activity, pitch, and others.

### 5.3 Opportunities for professional development

The Invest PoC projects members will have access to entrepreneurship education resources at UPB to lay the path towards commercialization success. Learn about the innovation process by acquiring knowledge and skills that will be useful throughout their careers.

### 5.4 Mentoring by External Innovation Experts

The PoC projects members will have access to External Innovation Mentors with knowledge and experience in the early stage of research idea and technology commercialization to provide technical and entrepreneurial guidance and overall mentorship.

## 6. The PoC programme is developed in three stages

Both technical and commercial development activities are allowed during the PoC development project.

### STAGE 1 (Commercialization verification)

Designed to allow the applicants to fully explore the commercialization potential of their discovery whilst giving them the necessary training to fully exploit their customer engagement and determine future commercialization direction. The aim is the development of the Business Plan Canvas.

Even from Stage 1, projects are encouraged to build and consolidate the commercialization team. This will ideally consist from the beginning of an Academic Mentor and a Delivery Lead. The recruitment of a business/commercialization mentor is encouraged.

For clarification:

- The Academic Mentor is likely to be a senior Principal Investigator and will provide guidance and direction (technical and commercial) to the Delivery Lead.
- The Delivery Lead is likely to be an early career academic and will be the driving force behind the project's commercialization and technical activity. She should have sufficient capacity and desire to pursue commercialization to a conclusion.

**The main KPI for this stage is the development of the initial Business Model including the target customer and target market and to have a clear strategy on how to get the initial feedback from the target users (e.g. create mock-ups/modify product to be shown to customers and what are the questions to ask the users).**



## STAGE 2 (Commercialization consolidation/validation)

Projects would enter this stage after the completion of Stage 1. Stage 2 allows for technical development in parallel with the validation of business plan through user interviews. Technical development at this stage is defined as moving the research result/idea or technology so that it can be presented to the final user.

The projects members could participate in a Fundraising Bootcamp organized by UPB, where they will get hands-on experience in creating an investment strategy, updating and validating business planning, defining Unique Selling Proposition (USP), optimizing pitch content establishing and managing investor relations, optimizing term sheet and investment conditions.

Also, the project members can participate to courses organized by UPB on training skills for creation a spin-off, start-up, spin-out.

**The Main KPI for this stage is conducting at least 40 interviews (with the protocol defined in Stage 1) with target customers and at least 10 interviews with business/IPR experts or industry representatives. A pitch deck should be ready by the end of this phase. Another KPI will be to have a clear roadmap for stage 3, on what it is to be done (add new features to the product, improve business plan) after the interviews.**

## STAGE 3 (Commercialization acceleration)

### Technical support

In this stage the teams will finalize technical development of a product that can be demonstrated to customers or investors. All projects will provide a function/technical validation that is relevant for the target customer identified in previous stages (e.g., scalability, integration with other technologies, adding new features).

### Commercialization acceleration

Based on previous stages, in this phase the research product should achieve better investor readiness level and the team should be able to pitch it for pre-seed or angel investment. The teams will have to establishing and managing a network of investors, understanding, and optimizing term sheet and investment conditions.

The projects members will get ready for the board meetings by participating in Board Meeting Simulations sprints, where dedicated consultants and investors will pose real life questions and challenges

The IPR should be clearly defined in this stage.

**The main KPI for this stage is having an answer to the following questions: Does it work as expected by the end-users? Do we know who is going to buy it and why? What is the evidence that supports the answers to the above questions? Also, at least one meeting with an investor or VC should be completed and one with a company that can become a partner of the research product. A clear IPR strategy must be in place.**



## Overview of the PoC results

### *Technical development overview*

PoC supports the development of a Technical Demo and product Test/Validation to attract further investments and the development of intellectual property to take place in a way which:

- Extends protection of that property;
- Extends applicability of that property;
- Improves confidence in its anticipated commercialization;
- Underpins the validity of its claims;
- Demonstrates value.

The projected technical outputs must be aligned with the goal of obtaining follow-on funding or investment and to create a product that resolves a real problem of the identified end-users.

### *Commercial development output (overview)*

The potential commercialization outcomes will likely be one or more of the following:

- Establishment of a spin-off, start-up company;
- Having a clear license agreement for the technology and a potential license;
- Follow-on funding to continue the development of the technology;
- Collaboration with an industry partner to fund future technical development of the technology;
- Attract investors and pre-seed and seed funds – VCs;
- Confirmation of the economic benefits.

## 7. Eligible Costs

- **Directly incurred costs**, such as:
  - Personal costs: approx. 10% of the budget.
  - Materials: approx. 20% of the budget.
  - Business services and Commercialization Mentor: approx. 10% of the budget.
  - Equipment: approx. 30% of the budget.
  - Travel costs: approx. 20% of the budget.
- **Indirect costs 20%**

## 8. Method of Funding

Claims will be submitted at the beginning of each stage. Payment will be subject to satisfactory progress against milestones.

For Invest PoC, UPB will organize three calls (cohorts of projects will be selected in each phase).



### TIMETABLE first call

<b>5 September 2022</b>	Launching program in faculties, centers, at the level of UPB
<b>30 September 2022</b>	Application deadline
<b>4 October 2022</b>	Announcement of top 3 applications
<b>4-5 October 2022</b>	Submission of redress
<b>7 October 2022</b>	Announcement of top 3 applications – final result
<b>7-10 October 2022</b>	Grant signature
<b>10 October – 31 December 2022</b>	<b>Stage 1</b> 2K EUR: Business plan + Mentors + strategy to get to end-users
<b>1 January 2022 – 30 April 2023</b>	<b>Stage 2</b> 4K EUR: Validation + Roadmap + Mentors
<b>10 April – 21 April 2023</b>	Fundraising Bootcamp will be organized
<b>1 May – 31 July 2023</b>	<b>Stage 3</b> 4K EUR: Investor readiness, Pre-seed, Seed from VCs Develop Demo and Test it
<b>15 July – 31 July 2023</b>	Board meeting simulation and <b>individual mentoring sprints</b>

### TIMETABLE second call

<b>1 May 2023</b>	Launching program in faculties, centers, at the level of UPB
<b>26 May 2023</b>	Application deadline
<b>30 May 2023</b>	Announcement of top 3 applications
<b>30-31 May 2023</b>	Submission of redress
<b>2 June 2023</b>	Announcement of top 3 applications – final result
<b>2-5 June 2023</b>	Grant signature
<b>5-31 August 2023</b>	<b>Stage 1</b> 2K EUR: Business plan + Mentors + strategy to get to end-users
<b>1 September – 31 December 2023</b>	<b>Stage 2</b> 4K EUR: Validation + Roadmap + Mentors
<b>1-15 December 2023</b>	Fundraising Bootcamp will be organized
<b>1 January – 31 March 2024</b>	<b>Stage 3</b> 4K EUR: Investor readiness, Pre-seed, Seed from VCs Develop Demo and Test it
<b>15 – 31 March 2024</b>	Board meeting simulation and <b>individual mentoring sprints</b>





### TIMETABLE third call

<b>1 November 2023</b>	Launching program in faculties, centers, at the level of UPB
<b>29 November 2023</b>	Application deadline
<b>4 December 2023</b>	Announcement of top 3 applications
<b>4-5 December 2023</b>	Submission of redress
<b>7 December 2023</b>	Announcement of top 3 applications – final result
<b>7-8 December 2023</b>	Grant signature
<b>8 December 2023 – 29 February 2024</b>	<b>Stage 1</b> 2K EUR: Business plan + Mentors + strategy to get to end-users
<b>1 March – 30 June 2024</b>	<b>Stage 2</b> 4K EUR: Validation + Roadmap + Mentors
<b>10-21 June 2024</b>	Fundraising Bootcamp will be organized
<b>1 July – 30 September 2024</b>	<b>Stage 3</b> 4K EUR: Investor readiness, Pre-seed, Seed from VCs Develop Demo and Test it
<b>15-30 September 2024</b>	Board meeting simulation and <b>individual mentoring sprints</b>

## 9. Application Procedure and Selection Criteria

Applications will be reviewed by an Assessment Panel and scored on commercial potential and technical quality. The following basic eligibility requirements must be met;

- The application has been signed by the applicant.
- The idea has to be submitted to UPB for IP Disclosure in advance.
- The project is not curiosity or strategic driven (at least TRL 2/3). PoC is not an alternative source of research funding.
- State aid compliant.
- Progenitor projects demonstrate quality and relevance.
- Clarity of language.
- Adherence to page limits, and
- Satisfactory completion of a stage during a research project/activity.

Calls are competitive and therefore the number of projects supported at each call is dependent on the number that meet minimum quality standards and the available programme budget.

The Assessment Panel's decision will be final.



The Assessment Panel includes UPB technical experts, UPB entrepreneurial & Innovation experts, as well as external business experts.

## 10. Project Monitoring and Reporting

Each project supported under the programme will be overseen by a Project Management Panel comprising the Academic Mentor/Delivery Lead, a representative from DCIFE, and an appointed Business/Commercialisation Mentor. The remit of the Panel will be to review progress on the project, as well as monitor costs. These will be scheduled at a project initiation meeting.

Failure to provide the reports in the agreed time frame or in conjunction with the submitted claim, may result in grant claims being rejected.

## 11. Submission of Completed Applications

The submission of proposals is done through the EasyChair Platform.

## Glossary

Minimum Viable Product (MVP)	A concept from Lean Startup that stresses the impact of learning in new product development. Eric Ries, defined an MVP as that version of a new product which allows a team to collect the maximum amount of validated learning about customers with the least effort. This validated learning comes in the form of whether your customers will actually purchase your product.
Prototype	When project managers can demonstrate that the solution could be built and stakeholders agree and approve the proposal, they can proceed to making a prototype, or sample version, of the product. A prototype physically presents the basic functions of a product and how it will be developed.
Investor readiness.	If you're seeking to raise external funding from investors, the first step is to define the type of investors that are right for your business and situation. That will dictate the kind of approach you take
Unique Selling Proposition (USP)	<p>What distinguishes your product from similar products in the market?</p> <p>You probably had several things come to mind; maybe your product is integrated, easy to use and versatile enough that it has many possible applications across several industries.</p> <p>But providing a long-winded list of every feature and potential benefit of your product is a poor selling technique. Instead, consider forming a unique selling proposition or USP.</p> <p>A USP is a succinct statement of what your product or service does, how it solves for the customer's challenge and why it's better than other options in the market. By</p>



zeroing in on the one unique feature, benefit, or use of your product, you can focus your sales and marketing strategies for a more targeted approach.

**Fundraising  
Bootcamp**

The most comprehensive investor-readiness programme that prepares you to raise a funding round efficiently and from the VC funds you actually want.

**Individual  
mentoring sprints**

Mentoring is a relationship centered on personal or professional growth that aims to enhance one's skills and help gain experience in a certain area of life or work.

Team Sprints bring out the best in people through an engaging, personalized, and data-driven coaching program that guarantees sustained team cohesion and performance.

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## Invest UPB Proof of Concept

- Invest PoC –

### Application Form

#### PROJECT TITLE

Please provide a short disclosable descriptive title for the project

#### APPLICANT DETAILS

1. Name/Faculty/Department:

2. Academic Mentor

Name:

Position:

Email address:

3. Delivery Lead

Name:

Position:

Email address:

#### TECHNICAL DETAILS

This section examines the project objectives and how the project will deliver innovative applications to address a commercial problem. **Whilst demonstrating the full potential of the research result please use non-technical terms to describe how your solution is new or novel. Failure to do so may result in your application being rejected.**

## OFFICIAL-SENSITIVE-COMMERCIAL

The aim of a PoC project is to move the research result to a stage where it is investor ready and getting to this stage should be clearly articulated in this section.

### 4. Progenitor Projects (1/2 page)

Please list any previously funded project(s) that provides the basis for your current proposal; confirm and explain the current Technology Readiness Level (TRL) and the predicted TRL level when the PoC project completes.

### 5. PoC Project Summary (1/4 page)

Please provide a **disclosable** summary of the PoC project including a statement of the commercial opportunity for the product (research result) and the specific application of this project will focus on.

### 6. PoC Project Description and Competitive Advantage through Innovation (3 pages)

In this section you should specify what is the aim of the PoC project? What do you want to accomplish with this award?

For example, you want to:

- Define the target market (i.e. the ‘gap’, ‘need’ or ‘problem’ your product proposes to solve).
- Better understand your product competitive advantage.
- Measure the realistic size of this market.
- Identify the ‘gap’, ‘need’ or ‘problem’ your research idea proposes to solve.

Add commercialization objectives, including how the risk of commercialization can be reduced. There should be clear path to how one can increase the confidence in the product to be commercialized (e.g., user interview. testing and adding features that are demanded by the user, etc.).

Hence, during the project you may want to:

- Create the competitive landscape of your product.
- Determine the Likely time to market.
- What is the commercialization risk (including mitigation strategies).
- What are the industry trends.
- Prepare a detailed commercialisation plan and a product roadmap.
- Have a clear IPR plan.

**OFFICIAL-SENSITIVE-COMMERCIAL**

On the technical part you may want to add new features to you research product, as resulted from the users’ interviews.

Include a project plan. Add activities and milestones (with time frames) that you need to achieve the objectives and the indicators that are going to validate that the objectives are achieved.

**7. Research/Technology Area**

To assist us in assigning the right assessors, please tell us the technology or market area in which your project will be based. **Please select one area only.**

Life and Health Sciences	
Information and Communication Technologies	
Mechanics	
Space technologies	
Transportation and Smart Mobility	
Agritech, Food and Water	
Cleantech & Energy	

**8. IPR**

State any background patents relevant to the project (Give details: title, patent number). Indicate whether you or UPB owns these patents or whether you have the rights to use them in this project. Copies of any relevant current patent applications should be appended to your Proof-of-Concept application. You should also advise if there are any obstacles to patenting such patents owned by a third party that may inhibit commercialisation.

The technology, that wants to be commercialized, have to be disclosed to the UPB Tech Transfer office prior to the application for this award.

**9. Regulatory/Ethical Issues**

Give details of any regulatory/ethical issues to be addressed prior to commencing the project and post project as this could impact commercial appeal. Also indicate if you have obtained or will need approvals for use of animal or human tissues.

**PROJECT COSTS**

**OFFICIAL-SENSITIVE-COMMERCIAL**

All reasonable costs involved in the execution of the project are eligible for funding. Please provide totals for each sub-head and clear justifications of costs under each heading and how it represents value for money. The detail on projected spend shall be included in the accompanying spreadsheet.

**PROJECT MANAGEMENT**

**10. Details of Project Management**

Describe the project team and if there is any commercial experience please state it clearly .

**PREVIOUS FUNDING**

11. Have you applied, or will you be applying for other public funding for this or a similar project? You must also indicate if there are alternative funding options (such as Research Council follow on funds) and why they are not appropriate.

YES  NO

If 'Yes', please provide details.

**DECLARATION BY PRINCIPAL INVESTIGATOR AND UPB**

12. The formal arrangement for the funding of the project will be between principal investigator (from UPB) and the host UPB.

I declare that the information given in this application is correct.

I agree to abide by all the conditions of the Invest UPB Proof of Concept programme and accept that the Assessment Panel's decision is final.

Academic Mentor or Delivery Lead \_\_\_\_\_ Department/ Faculty \_\_\_\_\_

Signed: \_\_\_\_\_ Signed: \_\_\_\_\_

Date: \_\_\_\_\_ Date: \_\_\_\_\_

Name: \_\_\_\_\_ Name: \_\_\_\_\_  
(Capital Letters) (Capital Letters)

Position: \_\_\_\_\_ Position: \_\_\_\_\_

**DECLARATION BY DCIFE**

13. I declare that the DCIFE has reviewed this application; provided input where appropriate; is fully supportive of the proposal and will supply a representative to the project's commercialisation team.

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Signed:

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Name:  
(Capital Letters)

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Commercialisation Office:

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Position:

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Date:

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