

## 1. Context

The QUARMEN Master's program wishes to offer second-year students a training which objective is to raise awareness on the issues, difficulties, interests and methods of creating scientific startups, particularly in the quantum science and technology field.

## 2. Teaching method

- acquire reflexes and knowledge on the protection of innovation
- realize that business creation is accessible
- become aware of the areas of knowledge and skills to develop
- Identify the classic steps and possible supports

To serve these objectives, and based on our experience in this area, we have designed the program below with emphasis on:

- an approach based on concrete aspects rather than too many concepts
- interactions within the group and with the speaker and the entrepreneurs who will come to testify, to work on representations on the subject (often erroneous), awareness-raising, and role-playing.

The aim here is not to provide participants with thick manuals which could be perceived as contributions disconnected from their reality, but to encourage them to broaden their vision of the subject and to perceive differently an activity that is often poorly understood and generates apprehensions.

## 3. Program

The objective is to put participants in the situation of the entrepreneur to modify their perceptions and help them:

- to project oneself into a possible future as a business creator (perceiving that this is really possible)
- to understand the classic stages of creating and developing a business,
- to more precisely identify knowledge, know-how (skills) and interpersonal skills (self-management – fear, stress, doubt, etc. – and relationships with third parties – prospects, investors, suppliers, etc.)
- to understand the necessary attention to be paid to the uses of technology and customer needs (expressed or not) to allow a company to develop
- to know the different means of protecting intellectual property, with their limits

The acquisition of academic knowledge is not the objective of this session, which is more focused on the operational implementation of a creative project.

We will rely on an inducto-deductive approach, which should be quite close to the approach of young researchers. Much room is left for interaction in the group and with the facilitator and the entrepreneurs who will come and testify.

## **THURSDAY 11 January:**

### ***Morning:***

- ice-breaking
- interactive perspective on what a business is (perceived ideas, blind spots... and reality)
- the key dimensions in business creation, whatever the sector of activity
- review of 25 years of experience: the classic pitfalls that lead to the premature termination of projects/companies
- suggested approach to maximize the chances of success

### ***Afternoon:***

- testimony from an early stage business creator
- debrief and links with morning learning
- techno push vs market pull / notion of need and value creation / Product Market Fit
- workshop presentation of participants' projects (for those who have one, with participation of others)

## **Monday 15 January:**

### ***Morning:***

- concept of areas of application / intensity of need / creation of value for the customer
- the market: segmentation, dynamics, quantification, competitive positioning, persona / use cases
- concept of go-to-market
- Intellectual Property: patents, know-how and licensing – the key players in the ecosystem

### ***Afternoon:***

- testimony from a business creator in an advanced phase
- debrief and links with morning learning
- improvement of project presentations

## **Tuesday 16 January:**

### ***Morning:***

- build your financial projections, and links with the market penetration strategy
- financing strategies
- testimony from an investment fund: its criteria for investing in a scientific start-up (or a presentation video if the fund speaker is not available)

### ***Afternoon:***

- importance of the founding team, classic pitfalls, best practices
- debrief and links with the learning of the week
- some ideas for those who want to go further

**The above program is given for information purposes only. The order of the themes and their depth may be different to adapt to the availability of certain specialized speakers and to the questions and pace of the participants**