

Master Programme in Innovation and Technological Entrepreneurship

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Value Proposition

Integrated training in the innovation process and in technology, promoting the creation of new technology-based businesses. Our students go through a rigorous hands-on training that covers the entire venture creation process.

Short description

In a group setting, the exposure to different thinking styles and people promotes what is called creative abrasion, which, if properly managed, can greatly enhance the innovation potential. This is the philosophy behind MIETE, which was conceived to promote innovation and entrepreneurship with multidisciplinary teams. With this in mind, MIETE aims at adapting itself to the profiles of candidates from different

areas including, amongst others, Management, Engineering, Biotechnology, Sciences and Design. Throughout the programme, the teams develop key integrated competencies on innovation, entrepreneurship and technology that will ultimately enable the students to create and develop new technology-based businesses.

People who should follow this programme: anyone with a strong will to creating new businesses.

People attending MIETE are usually middle managers from the private sector, faculty staff and researchers or recent graduate students wishing to major on innovation and entrepreneurship. Students applying to MIETE should have completed their 1st cycle – cf. Bolonha.

U.PORTO Course Plan for 2007/09*

2nd Cycle - Bolonha

1st Year		2nd Year	
1st Semester	2nd Semester	1st Semester	2nd Semester
Technology, Optional I ECTS 6,00	Technology, Optional III ECTS 6,00	Technology, Optional IV ECTS 6,00	
Technology, Optional II ECTS 6,00			
Product and Services Development Management ECTS 3,00	Innovation Management ECTS 6,00	Project / Period of training / Dissertation ECTS 14,00	Project / Period of training / Dissertation ECTS 28,00
Creativity ECTS 5,00	Organizational Behaviour and Leadership ECTS 6,00		
Entrepreneurship ECTS 5,00	Project for Opportunity identification and Evaluation ECTS 6,00	Business Construction Project ECTS 5,00	Business Implementation Project ECTS 2,00
Marketing Management ECTS 5,00	Business Creation and Development ECTS 6,00	Business Construction ECTS 5,00	

(*) Approved by the University Senate in October 2006, now waits for approval by the DGES.

Acquired Competencies

By the end of each course the student should be able to:

Technology, Optional

Technology (optional subjects): Students will have acquired the competencies developed in selected technological subjects offered by the University of Porto at the of 2nd Cycle level.

Product Design

Product and Services Development Management: 1) To organize and define development process of a product/service in the company; 2) Be able to define a structured plan for product or service development; 3) Be able to use a set of methods and tools for a systematic approach to the introduction of new innovative products and understand the role of the multiple functional areas of the company in its development and commercial launching; 4) Integrate the development of new products in the enterprise strategy.

Innovation Management

Creativity: 1) Identify abilities and Behaviours that enable the development of innovative proposals; 2) Understand the mechanisms and identify the different moments of the creative process; 3) To make a conscious and flexible use of a systematic heuristic tools: techniques for problem exploration, methods for idea generation and evaluation techniques 4) Participate actively in a creative group.

Introduction to Entrepreneurship: 1) To be able to understand the impact of entrepreneurship in the economic and social development; 2) To understand the basic entrepreneurship issues, main concepts and recognise the entrepreneurship process; 3) Will have developed competencies related to the entrepreneurship process, this involving a set of relevant topics to the creation of new ventures, and to the innovation and new business creation by existing enterprises; 4) Will have acquired the ability to realize the analysis and discussion of entrepreneurship processes.

Innovation Management: Analyse the creation and innovation processes and its implications for the enterprise/venture management, and explore the processes through which innovation can be fostered within the organisations.

Project/ Training Period / Dissertation: 42 ECTS for the realisation of a scientific Dissertation, for a project of for a training period in a company. The developed work should be original, specially prepared and documented in a final report aimed at fulfilling its objectives.

Marketing

Marketing Management: Integrate the development of new products and services and its launching in the market with the enterprise marketing strategy (marketing plan –AMP and EMP).

Market Studies

↓ Project for Opportunity identification and Evaluation: 1) Identify technologies with a potential for a market economic valorisation; 2) Realise the innovation creative process to generate business opportunities from existing knowledge; 3) Realise the technology valorisation process; 4) Conduct the feasibility study for a technology commercialisation; 5) Define valorisation strategies.

Management

Business Creation and Development: 1) Develop a strategic plan adjusted to the reality of a new technology-based enterprise; 2) Have an holistic and integrated view of the enterprise involving all its resources and stakeholders; 3) Know how to finance a technology-based enterprise.

Business Construction: Prepare a business plan comprising the opportunity diagnostic; implementation strategy and investment project feasibility study.

↓ Business Construction Project: 1) Create a complete, concise and well supported business plan; 2) Know about the procedures and legal issues associated with the enterprise creation as well as the enterprise obligations in its relation with the state; 3) Know how to present a technology-based enterprise project to a venture capital fund, a business angel or to a financing institution.

↓ Business Implementation Project: 1) Realise the planning of the new technology-based product or service; 2) Select the management team for the new venture; 3) identify what is the most adequate strategy to finance the investment project.

→ Business Development, Construction and Implementation Sequence: based on a “learning-by-doing” approach, along these three disciplines students are faced with a real technology / idea/ opportunity to launch a new technology venture. To this end, they will apply and further practice the competencies acquired in all other disciplines in the development, construction and implementation of new real technology-based businesses.

Acquired Competencies (continued)

Management

Organisational Behaviour and Leadership: 1) Identify the most common work organisation forms, the different structure types and the main elements that assemble and mould the organisational culture; define the most meaningful behaviour factors that enable/block the leadership success in the entrepreneurship context; 2) Apply techniques that promote change, use leadership strategies, negotiation techniques and supervise collaborators performance, by using practical instruments that can assist in the guiding of both individual and collective actions to the achievement of organisational objectives. 3) Have an insight of the changes needed to promote a new attitude towards innovation, the development of a leadership profile and to increase the entrepreneurship ability. Be aware that team performance is key to the leader performance whose role should ensure the regular and consistent training of his team(s) members as well as and increased effectiveness of the organisational behaviour.

Cultural Project

Training and New Business Construction

This 2nd Cycle promotes and innovative combination of training in technology (any topic from the University of Porto), Creativity, Development of New Products and Services and management, promoting, whenever appropriate, the valorisation of technologies through the construction of commercialisation strategies and their implementation through licensing or through the creation of new businesses. In this context, where innovation is approached as a conscious and consistent effort for identifying new opportunities, MIETE aims at bridging the gap between the technology discovery – conducted at Faculties, Research Institutes, Research Unites and Enterprises – and the commercialisation of innovative technology-based products and services, both through the constructions of new businesses or through the transfer of technology to existing companies.

MIETE as Pivot in the Technology Transfer Process

The model with which MIETE started in Sep/04 relied heavily on the interaction of MIETE teams and R&D groups at the University of Porto. In Sep/06 the new MIETE students faced an increment in training in the usage of creative processes and techniques to support the early ideation phases. In parallel, the course started the establishment of bridges to the enterprises. This connection is crucial for the role that MIETE aims at playing in the Portuguese society. The picture below illustrates the current MIETE operations model where MIETE multidisciplinary teams play an interface role in Training, Technology Transfer, R&D and established enterprises.

By promoting this close relationship with R&D groups and Enterprises, MIETE wishes to explicitly position itself as a Pivot in the innovation process, technology transfer and new venture creation.



