Deusto
Deusto International Research School

Title of the course

- ● **230505 Research career in Engineering**

Organizing center/area leading the course

Deusto International Research School (DIRS) – PhD program in Engineering for the Information Society and Sustainable Development

Training category

AF7. Methodology and research techniques

Professor/Coordinator of the training course

Coordinator: Pablo Garaizar Sagarminaga

Lecturers: Aitor Goti Elordi, Rocío García Carrión

Priority group

3rd year PhD students, but it can be taken by 2nd year students too ...

Competences

SPECIFIC COMPETENCE SC1. Identify the key indicators that define a research career in Engineering.

SPECIFIC COMPETENCE SC2. Use effectively the existing scientific databases (WOS, Scopus, IEE Xplore, ...), together with the social research networks (ResearcherID, ORCID, ResearchGate ...) and tools to generate curriculum vitae (CVN, CIENTIA platform...)

SPECIFIC COMPETENCE SC3. Understand the calls at regional, national and international level suitable for post-doc researchers in the Engineering domain, considering different aspects such as training, placement, skill promotion or mobility.

SPECIFIC COMPETENCE SC4. Identify the calls at regional, national and international level most attractive to develop I+D+I projects. Acquire the schemes, knowledge and basic skills to manage I+D+I projects

Pre-requisites / prior knowledge

Awareness of the need to be part of the research ecosystem, where within research groups obtaining research projects to cover funding of research resources is key.

Contents

Unit 1. Introduction to researcher career (1 hour – Alfonso Bahillo). PreDoc grant calls. Social networks for research (ORCID, ResearcherID, ResearchGate, PUBLONS...). Academic figures in universities and research centres. The importance of accreditation (ANEP) Importance of impact publications (how to identify a good magazine, congress, how to assess an article, ...).

Unit 2. Key indicators (2 hours – Alfonso Bahillo). Features and importance of the different sections of a Normalized Curriculum Vitae. Software registries. Pre-Doc placements (grants available, choice of

universities, needed documentation). Importance of having an heterogeneous CV (articles in magazines, congresses and books, participation in projects, software registries, membership of international networks, research placements, …). ANECA (what is, how is each section assessed, importance of having an accreditation). CIENTIA platform (what is and what can be do through it).

Unit 3. Calls for PostDoc research grants (3 hours – Alfonso Bahillo). Objective, beneficiaries and requirements for researchers to access those grants: Ikerbasque, Juan de la Cierva Formación e Incorporación, Ramón y Cajal, Torres Quevedo, Industrial PhDs, JIN national plan, ERC (Starting, Advanced, Consolidator, Proof of Concept), José Castillejo, Fulbright, Salvador de Madariaga, STSM, Marie Skłodowska-Curie. Internationalization networks: COST and H2020-CSA

Unit 4. Basic and applied research projects (6 hours – Aitor Goti). Science and Technology plans at regional, national and European level. Horizon 2020. Research projects taxonomy. Good practices to present research projects.

Level of the course

Intermediate

Methodology

Next, the methods and techniques used during the course are summarized and the research strategy is defined:

- *Lecture.* The lecturer presents the contents of the course in a detailed and organized manner, within the lecture room. The contents, available during the lectures, will be made available in advance to the students (as slides) and classified by units.
- *Practical cases*: exposition, analysis and sharing of practical cases
- *Individual work.* The students will carry out a set of guided practical activities associated to the course units.

Language of instruction

English

Mode of instruction

In-class and virtual attendance

Number of places

PhD students: 30

Personnel: 10

Assessment

Brief questionnaire to identify the suitable grant or call depending on whether individual personal promotion or research projects are sought.

Number of hours

12

Bilbao Campus

- Month when the course begins: December 2023
- Dates:
    - o Monday, 11 December 2023 (15:00-18:00)
    - o Tuesday, 12 December 2023 (15:00-18:00)
    - o Wednesday, 13 December 2023 (15:00-18:00)
    - o Thursday, 14 December 2023 (15:00-18:00)