



# FCT Exploratory Research Projects 2013

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## Guide for Peer Reviewers

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# 1. INTRODUCTION

## FCT mission

*Fundação para a Ciência e a Tecnologia*, I.P. (FCT), the Portuguese Foundation for Science and Technology, is the public agency responsible for implementing the Portuguese Science and Technology government policy.

FCT started its operations in August 1997 succeeding the previous equivalent agency, JNICT, created in the 1980s.

FCT's mission consists of continuously promoting the advancement of scientific and technological knowledge in Portugal, exploring opportunities that become available in any scientific or technological domain to attain the highest international standards in the creation of knowledge and to stimulate their diffusion and contribution to improve education, health, environment, and the quality of life and well-being of the general public.

This mission is mainly accomplished through the funding, subsequent to peer review evaluation, of applications presented by institutions, research teams or individuals in public open calls, and also through cooperation agreements and other forms of support in partnership with universities and other public or private institutions, in Portugal and abroad.

FCT's main functions are:

- to promote, finance, follow and evaluate science and technology institutions, programs, projects and qualification of human resources;
- to promote and support infrastructure for scientific research and technological development;
- to promote the diffusion of scientific and technological culture and knowledge, especially when relevant for educational purposes in close collaboration with the *Ciência Viva* agency;
- to stimulate the update, interconnection, reinforcement and availability of science and technology information sources.

FCT funds all areas of knowledge, including exact, natural and health sciences, engineering, social sciences and humanities.

## Grants for research projects

The funding of research projects by FCT is based on peer reviewing of applications submitted online under an open call. Evaluation is organized by scientific fields and 25 scientific areas cover the 4 scientific domains, corresponding to the Scientific Councils of FCT (cf. Annex):

- Life and Health Sciences;
- Exact Sciences and Engineering;
- Natural and Environmental Sciences;
- Social Sciences and the Humanities.

Each call entails a public announcement outlining the required features of the applications and the evaluation criteria to be applied. The rules under which the applications and the accepted projects are governed are stated in a public document entitled: [Regulations Governing Access to Funding for Scientific Research and Technological Development Projects](#).

FCT regularly opens calls for projects in all scientific domains.

The [2013 FCT Call for Exploratory Research Projects](#) in all scientific domains is open between 30<sup>th</sup> May and 2<sup>nd</sup> July 2013.

All projects submitted will be judged on the basis of scientific merit, irrespective of the major purpose of the funding requested. **The evaluation of the proposals by each panel is determined by scientific area.**

## 2. 2013 CALL

The Public Announcement of the Call is publicized on the FCT website and disseminated by a mass email to all researchers registered on FCT databases.

For [this Call](#), only Exploratory Research Projects are admissible. This type of projects concerns a more open configuration of scientific research and is intended for the exploration of ideas or concepts deemed to have great originality and/or innovative potential.

### Submission

Applications are submitted online via a specially designed [FCT Web application](#).

The Principal Investigator (PI) will identify, from a given list, the primary scientific area and sub-area of the project, and will indicate up to 4 keywords which characterize the proposed scientific activity. This will facilitate the assignment of applications to reviewers.

The PI has the possibility to choose a secondary scientific area and sub-area, which is of instrumental importance, particularly in the case of multidisciplinary projects. This second choice does not alter the evaluation panel allocation, defined by the primary scientific area.

It should be emphasized that **each researcher can only submit one proposal as PI**. Also, only researchers who obtained their **PhD between 2003 and 2009**, and who are **not PI on other FCT projects** as of 1st January 2014, may apply as principal investigator in this call.

### Main Rules

According to the Regulations governing the access to funding of Scientific Research and Technological Development projects:

- The content of the application **should be written in English**, and a version in Portuguese of the Title and the Summary is also required.
- Projects whose approval would make the PI or any member of the team exceed 100% full time equivalent (FTE) of time dedicated to FCT research projects will not be funded. This condition is to be verified by FCT.

- Each PI must have a minimum of 35% of his/her time allocated to the project. For the remaining research team members a minimum percentage of 15% applies (these conditions are automatically verified during the application submission).
- The **funding conditions** for this Call establish 1 year as maximum duration of the project, eventually extended to up to 18 months, and a maximum funding of 50,000 Euros.
- The recipient entities and the PI must agree to comply with the applicable national and European community norms, namely as regards competition, environment, equal opportunity and gender, and public contracting whenever applicable. In cases of projects involving:
  - Animal experimentation, the PI must vouch for the research team's compliance with EU directives and the relevant Portuguese laws regarding the protection of animals used for experimental and other scientific purposes.
  - Regarding the donation, procurement, testing, processing, storage, distribution and preservation of human tissues and cells, the PI must vouch for the research team's compliance with EU directives and the relevant Portuguese laws on standards of quality and safety.
  - The dissemination strategy of research outputs of the projects, including considerations of open access, shall be taken into account in the evaluation.
- Funded items (cf. [Regulations](#)):
  - **Human Resources**, including grants associated with the project (not applicable to public servants) or contracts specially signed for the project; grants within research projects may be of the following types (whose nature is explained in section [Glossary and Translations](#) of this guide):
    - ❖ [BCC – Invited Scientist Grant](#)
    - ❖ [BPD – Post-doctoral Grant](#)
    - ❖ [BI – Research Grant](#)
    - ❖ [BIC – Scientific Initiation Grant](#)
    - ❖ [BTI – Research Technician Grant](#)

For all grant schemes, the monthly amount to be paid to the grant holder is fixed and established by FCT. The cost considered in each application automatically assumes the authorized monthly cost of the grant, with the number of months fixed by the PI.  
Salaries of public servants are not funded.

- **Missions** in Portugal and abroad;
- **Consultants**;
- **Acquisition of goods and services and other current expenses** directly related to execution of the project, and the intervention of licensed auditors or accountants;

- **Registration abroad of patents, copyrights, utility models and designs**, national models or brands associated with other forms of intellectual property, namely fees, prior art searches and consultants' fees;
  - **Adaptation of buildings and facilities** when essential to carrying out the project including installation of equipment and other resources, provided that these costs do not exceed 10% of the total eligible cost of the project. The percentage bound in this item is automatically checked by the submission tool. Applications cannot be locked if this condition is not verified.
  - **Acquisition of scientific and technical instruments** essential to the project and which shall remain attached to the project during the period of its execution.
  - **Overheads** up to 20% of the funding for direct costs. The percentage bound in this item is automatically checked by the submission tool. Applications cannot be locked if this condition is not verified.
- All members of the research team involved in the application must submit their CV in English and follow a set of rules when writing it (cf. [Guide for the Elaboration and Submission of R&D Project Applications](#)).

### 3. EVALUATION CRITERIA

The evaluation and selection process is based on the following main four review criteria:

- A. Scientific merit and innovative nature of the project from an international standpoint;
- B. Scientific merit of the research team;
- C. Feasibility of the work plan and reasonability of the budget;
- D. Contribution to the body of knowledge in the field and improvement in the competence of the scientific community.

Application of these criteria shall take into account, among other considerations, the following:

- A. For **criterion A**:
  - i.) Relevance and originality of the project proposed (based on the state-of-the art in a given scientific area and previous work done by the proposing team);
  - ii.) Methodology adopted for carrying out the project;
  - iii.) Expected results and their contribution to scientific and technological knowledge;
  - iv.) Resulting publications and articles;
  - v.) Contribution towards promoting and disseminating science and technology;
  - vi.) Production of knowledge that can contribute to benefits to society or to the business sector.
- B. For **criterion B**:
  - i.) Scientific productivity of the team evaluated according to criteria accepted internationally by the different scientific communities (ranging from references to publications and citations in published works as used by the basic and

- engineering sciences, to performance and artistic work in the arts, or monographs and books in the humanities and social sciences);
- ii.) Abilities and skills to adequately execute the proposed project (team configuration, PI's qualifications);
  - iii.) Ability to involve young researchers in training;
  - iv.) Availability of the team and non-duplication of objectives in relation to other projects underway;
  - v.) Degree of internationalization of the team;
  - vi.) Degree of success in previous projects of the PI (in the case of young PIs, this requirement must be assessed based on the potential revealed by the PIs curriculum vitae in the absence of prior concrete accomplishments);
  - vii.) Level of commitment of any companies participating in the project (if applicable).<sup>1</sup>

C. For **criterion C**:

- i.) Organization of the project in terms of the proposed objectives and resources (duration, equipment, size of the team, institutional and management resources);
- ii.) Institutional resources of the participating entities, in particular of the Principal Contractor (PC) (technical-scientific, organizational and managerial and, where appropriate, co-funding capacity on the part of companies).

D. For **criterion D**:

- i.) Contribution to the body of knowledge and competence of the National Science and Technology System (expected effects and results); potential for economic return of the technology (where applicable).

## 4. EVALUATION PROCESS AND PROCEDURES

### General information

- **Applications will be assessed by evaluation panels** covering the 4 scientific domains, corresponding to the scientific councils of FCT.
- Each evaluation panel consists of a number of experts appointed by the Board of Directors of FCT.
- The experts will be of recognized competence in the scientific areas of the applications to be evaluated but will not be active scientists affiliated with Portuguese institutions.
- Each panel is headed by the Panel Chair and its composition will be published on the FCT website.

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<sup>1</sup> The application overview has the indication if a participating entity is a for profit organization.

- **Each application** will be remotely and individually evaluated by **two panel members**. One of the panel members will be appointed as the **panel reader** for the application. The other member is considered a **regular reader**.
- The distribution of the applications by the panel members will consider Conflicts of Interest and the matching of scientific competences.
- Whenever a particular expertise is not covered by the panel members, external reviewers might be invited to provide an assessment of the application in consideration. The name of the external reviewers will not be made public.
- The first time a reviewer logs in the evaluation web page, he/she has to sign a [Confidentiality Statement](#), and prior to every individual online review all panel members have to sign an acknowledgement of the Terms of Reference for the evaluation exercise.
- During the panel meetings, all applications will be discussed, **ranking lists will be prepared** and an **evaluation report** for each application will be produced.
- Each panel must issue a **final report** on its activities.
- There is an allocated FCT team for each evaluation panel which is the contact point for the reviewers.

## Evaluation stages

The evaluation of the research applications involves the following stages:

### Evaluation Panel Assembly

- The constitution of the evaluation panels will take into consideration the number of applications for each research area /sub-area, a good gender balance as well as a fair geographic and institutional distribution of evaluators; the involvement of experts from industry, active in research, may also be considered.
- For each evaluation panel a chair will be invited. The panel chair will be a regular member of the panel with the added duties of moderating the panel meeting and conveying the results of the discussions to the Board of Directors of FCT.
- The panel members might be asked to give support to FCT during the period spanning from the evaluation meeting to the final decision (e.g., review of eventual appeals presented by the PI).

### Pre-Meeting Activities (Individual reviews)

- Each application will be remotely and individually evaluated by **two panel members**.
- **Both panel members must submit their individual evaluation** for each proposal in the Individual Reviewer Evaluation Form and lock the review.

- For each application, one of the panel members will be designated as the **panel reader**. Based on the two individual reviews, the panel reader will draft the **Panel Evaluation Report** of the application. This draft must be submitted and locked before the panel meeting.
- Reviewers must submit their assessment for each proposal in the **Individual Reviewer Evaluation Form**, including:
  - the rating and comments for each of the four evaluation criteria;
  - an overall rating of the project;
  - a general comment on the application;
  - funding recommendation, without specifying the amount;
  - confidential comments to the evaluation panel, if necessary.

The assessment should take into account the following **guidelines**:

- the explanatory comment for each criterion should be succinct but substantial. This comment should address the relative importance of the criterion and the extent to which the application actually meets the criterion;
- Comments should also be impeccably polite. If so decided by the panel, the comments may be reproduced totally or partially in the feedback to applicants.
- the overall rate of the project should be based on the reviewer's own judgment of the merit of the overall application without resorting to any sort of quantitative algorithms;
- the global explanatory comment for the project should be substantial and fully explain the reviewer's judgment on the application stating recommendations regarding the research work and the project organization;
- possible modifications to the work plan may be recommended, with proper justification;
- confidential comments to the evaluation panel may be provided.

**Both ratings and comments are critically important.** The individual review ratings and comments are the starting point for the panel discussions and for the panel final rating.

### **Meeting Activities (Panel evaluation)**

- In each panel meeting all applications of the panel and their evaluation reports will be available to all panel members.
- During the panel meeting **all applications will be discussed**. However, based on the **individual evaluations** and the **impact score** given by the reviewers, the panel will consider 2 groups of applications:
  - **High-impact applications / Dissonant overall rated applications / Any other application deliberated by the panel**  
These applications will be presented to the panel by the panel reader, with further considerations by any other panel member, particularly the regular reader of the application.
  - **Consonant low and medium-impact applications**  
These applications will be summarily discussed.

- It is the duty of each **evaluation panel** to:
  - elaborate the **Panel Evaluation Report** for each application (in the Panel Evaluation Form) to be transmitted to the applicants;
  - generate a **ranking list** of all evaluated applications.
  - prepare a **Panel Report** with a summary of the meeting and comments regarding the evaluation process;
  - close the panel.
  
- The **proposals' final ratings** and the **comments to be made available to the applicants** are discussed and decided by the evaluation panel during the meeting, and included in the **Panel Evaluation Form** by the panel reader.
  
- The panel reader must submit the panel assessment (comments to be transmitted to the applicants) in the **Panel Evaluation Form**, including:
  - the rating and the comments for each of the four criteria to be transmitted to the PI;
  - the overall rating of the project, to be transmitted to the PI;
  - a general comment on the application to be transmitted to the PI;
  - recommended amount for funding to be transmitted to the PI (when the application is recommended for funding).
  - confidential comments to FCT, if necessary.
  
- The final panel assessment should take into account the following guidelines:
  - All comments should take the form of a statement with respect to the criteria under evaluation; the general comment should specify the key strengths and weaknesses (if any).
  
  - Panel Members shall:
    - avoid comments that give a description or a summary of the application;
    - avoid the use of the first person or equivalent: "I think..." or "This reviewer finds...";
    - always use dispassionate and analytical language: avoid dismissive statements about the PI, the proposed science, or the scientific field concerned;
    - avoid asking questions, as the PI will not be able to answer them;
    - evaluate the proposed work and not the work you consider should have been proposed.
  
- The **Panel Report**, with a summary of the meeting and comments regarding the evaluation process, should be organized in two main parts:
  - Part I – Evaluation**, including, but not limited to:
    - working methodology adopted by the panel;
    - identification of potential Conflicts of Interest issues and their resolution.

**Part II – Recommendations to FCT**, on the various aspects of the evaluation that might help FCT to improve procedures in future calls. Please refer, among other considered important:

- comments and criticism on the application form, with suggestions for possible improvements;
- comments on the material available to the panel members, in particular the guide for Peer Reviewers;
- strong and weak aspects of the evaluation web application;
- strong and weak aspects of the FCT team;
- strong and weak aspects on logistic aspects (travel, hotel, meeting).

This **report should be signed by all evaluation panel members**.

## FCT Evaluation Webpage

The username and password sent to each individual reviewer gives access through <https://www.fct.mctes.pt/evaluation> to the list of projects under evaluation by the corresponding reviewer. Please see the Instructions on the top of the menu.

For each application, the following is available and indispensable:

- a statement on Conflict of Interest;
- all information submitted in the application form. In this form, the name of each team member has a link to his/her CV and the financed projects by the same PI have a link to the project description and results;
- the information in the application form can be printed and a pdf file can be generated with it. See the links on "Print this page" and "Instructions to view and print this page" for this purpose.
- different applications by the research team members (even in different scientific areas), for the sake of detecting superposition of objectives or resources;
- the Individual/Panel Evaluation Form;
- the possibility to SAVE the submitted evaluation report. This means that the uploaded information will be kept for future revision;
- the need to LOCK the submitted evaluation report. This means that the reviewer will no longer be able to modify the uploaded information.
- an indication of the work done and yet to be done by the reviewer.

## Evaluation timeline

The evaluation timeline is established by FCT's Board of Directors and conveyed to the evaluation panel chair and members. The date of the final meeting of the evaluation panel is established in advance by FCT that carries out all logistic arrangements.

## 5. SCORING SYSTEM

The FCT grant application scoring system uses a 9-point scale:

Impact	Score	Additional Guidance on Strengths/Weaknesses
High	9	Exceptionally strong with essentially no weaknesses
	8	Extremely strong with negligible weaknesses
	7	Very strong with only some minor weaknesses
Medium	6	Strong but with numerous minor weaknesses
	5	Strong but with at least one moderate weakness
	4	Some strengths but also some moderate weaknesses
Low	3	Some strengths but with at least one major weakness
	2	A few strengths and a few major weaknesses
	1	Very few strengths and numerous major weaknesses
<b>Minor weakness:</b> An easily addressable weakness that does not substantially lessen impact. <b>Moderate weakness:</b> A weakness that lessens impact. <b>Major weakness:</b> A weakness that severely limits impact.		

A **score of 9** indicates an exceptionally strong application with essentially no weaknesses. A **score of 1** indicates an application with serious and substantive weaknesses with very few strengths; **5** is considered an average score.

Impact is the project's likelihood to have a sustained, powerful influence on the research field(s) involved:

- **High impact** = 7 to 9;
- **Medium impact** = 4 to 6;
- **Low impact** = 1 to 3.

**Each of the four criteria** is rated using this 9-point scale with whole numbers only (no decimal ratings). Reviewers have to identify strengths and weaknesses (if any) for each criterion and should provide context for their comments based on the application.

Reviewers give an **overall rating** to each application which is based on their own judgment of the merit of the overall application without resorting to any sort of quantitative algorithms. **The overall rating should reflect the reviewer's overall evaluation, not a numerical average of individual criterion scores.** An application does not need to be strong in all criterion scores to be judged likely to have major impact. The overall rating is also expressed as a scope mark from 1 to 9. Reviewers should provide a paragraph summarizing the factors that informed their overall rating.

Each review criterion should be assessed based on how important each review criterion is to the work being proposed. As a result, a reviewer may give only moderate scores to some of the review criterion but still give a high overall impact/priority score because the one review criterion critically important to the research is rated highly; or a reviewer could give mostly high criterion ratings but rate the overall impact/priority score lower because the one criterion critically important to the research being proposed is not highly rated.

Accordingly, the ranking of **applications with the same overall rating** takes into account the following order of importance for each criterion:

- A – 40%
- B – 30%
- C – 10%
- D – 20%

## 6. CONFIDENTIALITY AND CONFLICT OF INTEREST

### Confidentiality

The confidentiality of written applications must be protected. All reviewers involved in the evaluation are asked not to copy, quote or otherwise use material contained in the applications. All reviewers are requested to sign a statement of confidentiality relative to the contents of the project applications and to the results of the evaluation.

The text to be accepted, which appears the first time each reviewer uses his/hers username and password to access the evaluation area, is the following:

#### STATEMENT OF CONFIDENTIALITY

Thank you for accepting to participate in the scientific evaluation of Research Projects submitted to the Portuguese Foundation of Science and Technology (*Fundação para a Ciência e a Tecnologia*, I.P.) – FCT.

The reader of this message pledges, on his/her honour, not to quote or use in any way, the contents of the project applications, nor to make available, other than to FCT or the evaluation panel, the results of the evaluation of project applications.

### Conflict of interest (CoI)

Reviewers that have submitted any **applications to the present Call**, both as PI or team member, **have to decline** participating in the evaluation process.

Circumstances that could be interpreted as a **disqualifying conflict of interest** are laid down in the following criteria:

1. First-degree relationship, marriage, life partnership, domestic partnership;
2. Personal interest in the application's success or financial interest by persons listed under no.1;
3. Current or planned close scientific cooperation;
4. Dependent employment relationship or supervisory relationship (e.g. teacher-student relationship up to and including the postdoctoral phase) extending five years beyond the conclusion of the relationship;
5. The affiliation or pending transfer to this or to a participating institution;

6. Researchers who are active in a council or similar supervisory board of the applying institution are excluded from participating in the review and decision-making process for applications originating from this institution;

**A potential conflict of interest** may exist, even in cases not covered by the clear disqualifying conflicts indicated above, in the following circumstances:

7. Relationships that do not fall under no. 1, other personal ties or conflicts;
8. Financial interests of persons listed under no. 7;
9. Participation in university bodies other than those listed under no. 6, e.g. in scientific advisory committees in the research environment;
10. Research cooperation within the last three years, e.g. joint publications;
11. Preparation of an application or implementation of a project with a closely related research topic (competition);
12. Participating in an on-going scientific or inter-personal conflict with the applicant(s).

Before starting the evaluation of each application, and in order to be able to access the evaluation form, the individual reviewer needs to complete a CoI Declaration, as follows:

#### **Conflict of Interest Declaration**

Please state:

- No, I have no conflict
- Yes, I have a strong conflict (see **Disqualifying CoI**)
- It is possible that I have a conflict (see **Potential CoI**)

Add any comments below.

The **individual reviewer** will not be able to proceed in case of a strong conflict of interest. In this case the individual reviewer is required to inform the FCT team of the situation, for project re-allocation. The final panel report must mention all Potential CoI declared.

Should a CoI emerge for any **panel member**, the Panel Chair should solve it supported by the FCT team and make an explicit mention of it on the panel final report.

## **7. GLOSSARY AND TRANSLATIONS**

### **Portuguese to English Translation and explanations**

**Agregação** = Aggregation. This is an academic title. It attests

- i.) the quality of the academic, professional, scientific and pedagogical curriculum
- ii.) the capacity to carry out research work
- iii.) the capability to coordinate and carry out independent research work.

and is issued to PhD holders after a public exam by a jury. The exam is required by the candidates and takes places during two days.

**Doutoramento** = PhD, doctoral degree

**Mestrado** – Master’s degree

**Licenciatura** = BA (3, 4 or 5 years graduate course)

**Bolsa** = Grant, fellowship

**Bolsheiro** = Grant Holder, fellow

**BCC** = Bolsa de Cientista Convidado = Invited Scientist Grant

- Invited scientist grants are designed for doctoral degree holders with scientific curricula of notable merit, for the purpose of developing and carrying out research activities in Portuguese science and technology institutions, including directing and coordinating of research projects.
- The total duration of this type of grant can vary between one month and three years.

**BPD** = Bolsa de Pós-Doutoramento = Post-doctoral Grant

- Post-doctoral grants are intended for individuals who have already completed a doctoral degree, preferably within the last five years, for the purpose of carrying out advanced research in Portuguese or foreign scientific institutes of recognized merit.

**BI** = Bolsa de Investigação = Research Grant

- These research grants are available for bachelor, graduation or master degree holders for the purpose of obtaining scientific training in research projects or in Portuguese science and technology institutions.
- These grants are, in principle, one year in length, renewable for up to a total of three years, and cannot be awarded for periods of less than three consecutive months.

**BIC** = Bolsa de Iniciação Científica = Scientific Initiation Grant

- Scientific initiation grants are designed primarily for students who have completed at least 3 years of higher education (1<sup>st</sup> cycle or equivalent) for the purpose of obtaining scientific training by participating in research projects in Portuguese institutions.
- These grants are, in principle, one year in length, renewal for up to two years, contingent on good scholastic performance. They cannot be awarded for periods of less than three consecutive months.

**BTI** = Bolsa de Técnico de Investigação = Research Technician Grant

- Research technician grants are designed to provide for additional specialized training of technicians to support the operation and maintenance of scientific laboratory equipment and infrastructures and other activities relevant to the Portuguese scientific and technological system.
- The length of this type of grant varies, up to a total of five years, and cannot be awarded for periods of less than three consecutive months.

**NUTS** = Nomenclaturas de Unidades Territoriais para fins Estatísticos – Denomination of the Territorial Units for Statistical purposes

## Glossary

**Associate Laboratory** = Private not-for profit and public research institutions together with State Laboratories can join in an association, named Associate Laboratory, aiming at the achievement of special objectives of the national science and technological policy. The status of Associate Laboratory is granted by the Ministry of Science, Technology and Higher Education, for periods not exceeding 10 years, upon recognition of their Excellence.

**Autonomous Regions** = Madeira and Azores Islands

**FEDER** = European Regional Development Fund

**FTE** = Full Time Equivalent

**MEC** = Ministry of Education and Science

**Postdoctoral fellow** = a PhD holder that has a Post-doctoral grant

## 8. ANNEX – SCIENTIFIC AREAS AND DOMAINS

### Life and Health Sciences

Scientific Area	Scientific Sub-area	Acronym
Neurosciences, Ageing and Degenerative Diseases	Neurosciences - Molecular and Cellular	NEU-NMC
	Neurosciences - Systems, Clinical and Behavioral	NEU-SCC
	Biology of Ageing	NEU-BEN
	Organs and Systems Degeneration	NEU-OSD
Immunology and Infection	Immunology and Inflammation	IMI-IMU
	Microbiology and Infection	IMI-MIC
Diagnostic, Therapies and Public Health	Epidemiology	DTP-EPI
	Public Health and Environmental Factors	DTP-SAP
	Pharmacology and Toxicology	DTP-FTO
	Physiology of Exercise and Sport Sciences	DTP-DES
	Clinical Research	DTP-PIC
Biomedicine	Oncobiology	BIM-ONC
	Mechanisms of Disease	BIM-MEC
	Metabolism and Nutrition	BIM-MET
	Regenerative Medicine	BIM-MED
Experimental Biology	Genetics and Genomics	BEX-GMG
	Cellular and Molecular Biology	BEX-BCM
	Developmental Biology	BEX-BID
	Computational Biology and Bioinformatics	BEX-BCB

## Exact Sciences and Engineering

Scientific Area	Scientific Sub-area	Acronym
Materials Science and Engineering	Biomaterials	CTM-BIO
	Ceramics and Glass	CTM-CER
	Materials for Energy Production and Storage	CTM-ENE
	Nanomaterials and Devices	CTM-NAN
	Polymers and Composites	CTM-POL
	Structural Materials	CTM-MAT
Bioengineering, Biotechnology and Biochemistry	Biological Engineering	BBB-EBI
	Metabolic Engineering and Microbial Physiology	BBB-MET
	Systems and Synthetic Biology	BBB-BSS
	Bioprocesses Engineering and Biocatalysis	BBB-EBB
	Cell and Tissue Engineering	BBB-ECT
	Biotechnology	BBB-BIO
	Nanobiotechnology and Biosensors	BBB-NAN
	Biomedical Engineering	BBB-BMD
	Imaging and Biosignals	BBB-IMG
	Biomechanics	BBB-BMC
	Structural Biology and Proteomics	BBB-BEP
	Biochemistry and Biophysics	BBB-BQB
Civil and Mining Engineering	Structures	ECM-EST
	Transports	ECM-TRA
	Urbanism	ECM-URB
	Geotechnics	ECM-GEO
	Hydraulics	ECM-HID
	Constructions	ECM-COM
	Mining Engineering	ECM-MIN
Electrical Engineering and Computer Engineering	Automation, Control and Robotics	EEI-AUT
	Electronics and Computers	EEI-ELC
	Power Systems	EEI-EEL
	Signal Processing	EEI-PRO
	Telecommunications	EEI-TEL
	Programming Science and Technology	EEI-CTP
	Software Engineering and Information Systems	EEI-ESS
	Intelligent Systems, Interfaces and Multimedia	EEI-SII
	Organisation of Computing Systems and Networks	EEI-SCR
Mechanical Engineering and Engineering Systems	Automation Systems and Robotics	EMS-CRO
	Industrial Management	EMS-GIN
	Energy and Environment	EMS-ENE
	Mechanical Project	EMS-PRO
	Mechanical Technology	EMS-TEC
	Transports	EMS-TRA
	Engineering Systems	EMS-SIS
Physics	Nuclear Physics, Elemental Particles and High Energies	FIS-NUC
	Atomic and Molecular Physics	FIS-ATO
	Plasmas and Nuclear Fusion Physics	FIS-PLA
	Condensed Matter Physics and Nanotechnology	FIS-NAN
	Optics and Photonics	FIS-OPT

Scientific Area	Scientific Sub-area	Acronym
	Astronomy and Astrophysics	FIS-AST
Mathematics	Algebra and Combinatorics	MAT-ALG
	Analysis	MAT-ANA
	Numerical Analysis, Optimization and Mathematical Modeling	MAT-NAN
	Calculus of Variations, Differential Equations and Dynamical Systems	MAT-CAL
	Geometry and Topology	MAT-GEO
	Logics and Computing Theory	MAT-LOG
	Statistics, Stochastic Processes and Analysis	MAT-STA
Chemistry and Chemical Engineering	Chemical Physics	QEQ-QFI
	Organic Chemistry	QEQ-QOR
	Inorganic Chemistry	QEQ-QIN
	Analytical Chemistry	QEQ-QAN
	Supramolecular Chemistry	QEQ-SUP
	Computational Chemistry	QEQ-COM
	Medicinal Chemistry	QEQ-MED
	Chemical Reaction Engineering	QEQ-ERQ
	Product Engineering	QEQ-EPR
	Processes and Systems Engineering	QEQ-EPS
	Separation Processes	QEQ-PRS
	Transport Phenomena and Thermodynamics	QEQ-FTT

## Natural and Environmental Sciences

Scientific Area	Scientific Sub-area	Acronym
Environment and Global Changes	Global Environmental Change	AAG-GLO
	Sustainable Management of Resources	AAG-REC
	Environmental Technologies	AAG-TEC
	Environmental Modelling and Assessment	AAG-MAA
Animal Science and Veterinarian Science	Animal Production and Welfare	CVT-WEL
	Animal Health and Epidemiology	CVT-EPI
	Animal Nutrition	CVT-NUT
	Breeding and Genomics	CVT-GEN
	Reproduction Technology	CVT-REP
	Livestock Biodiversity and Conservation	CVT-LIV
Agricultural and Forestry Sciences	Forest Sciences	AGR-FOR
	Crop Production	AGR-PRO
	Bio-based Product Technology	AGR-TEC
Biological Sciences	Biodiversity and Conservation	BIA-BIC
	Microbiology	BIA-MIC
	Evolution and Phylogenetics	BIA-EVF
	Plant Biology	BIA-PLA
	Animal Biology	BIA-ANM
Geosciences	Meteorology and Climate	GEO-MET
	Geophysics and Geochemistry	GEO-FIQ
	Geology	GEO-GEO
	Remote Sensing and Geodesy	GEO-REM
Marine Sciences	Wide Ocean and Deep-sea Systems	MAR-PRO
	Estuarine, Coastal and Littoral Systems	MAR-EST
	Marine Biotechnology, Fisheries and Aquaculture	MAR-BIO
	Energy and Marine Technologies	MAR-TEC

## Social Sciences and the Humanities

Scientific Area	Scientific Sub-area	Acronym
Individuals, Institutions and Markets	Economics	IIM-ECO
	Finance	IIM-FIN
	Management	IIM-GES
Institutions, Values, Beliefs and Behavior	Sociology	IVC-SOC
	Anthropology	IVC-ANT
	Political Science	IVC-CPO
	Law	IVC-JUR
	Communication and Information Sciences	IVC-COM
	Education and Science Policy	IVC-PEC
	History and Philosophy of Science and Technology	IVC-HFC
	Social Studies of Science and Technology	IVC-ESCT
Environment, Space and Population	Geography	ATP-GEO
	Demography	ATP-DEM
	Urban and Regional Studies	ATP-EUR
	Environmental Studies	ATP-EAM
	Architecture	ATP-AQI
	Landscape Architecture	ATP-ARP
The Human Mind and its Complexity	Applied Psychology	MHC-PAP
	Clinical Psychology and Psychological Evaluation	MHC-PCL
	Cognitive Psychology, Neuropsychology and Social Cognition	MHC-PCN
	Educational and Developmental Psychology	MHC-PED
	Community and Health Psychology	MHC-PSC
	Social and Organisational Psychology	MHC-PSO
	Linguistics	MHC-LIN
	Education Sciences	MHC-CED
	Philosophy	MHC-FIL
	Ethics	MHC-ETI
	Religion	MHC-REL
Cultures and Cultural Production	Literary Studies	CPC-ELT
	Art Studies	CPC-EAT
	Visual Arts	CPC-VIS
	Performing Arts	CPC-PER
	Design	CPC-DES
	Media Arts	CPC-ARM
	Music and Musicology	CPC-MMU
	Comparative Studies	CPC-CMP
	Art History	CPC-HAT
	The Study of the Human Past	Archaeology
History		EPH-HIS
Cultural Heritage		EPH-PAT