



UCM CODE OF GOOD PRACTICE IN PhD

The Code of good practice for the development and supervision of doctoral theses constitutes a set of recommendations and commitments to ensure the quality of the doctoral process. It sets a standard of requirements for PhD researchers, as well as for all members of the thesis supervisory teams; it describes measures to promote quality and clarifies the roles and responsibilities of PhD researchers and supervisors.

This standard complements the national legislation and internal regulations of the UCM, which can be found on the website of the PhD School, and aims to adapt the UCM to the European Strategy for Human Resources Research (HRS4R). The Code includes a series of annexes that deal with specific aspects of research, such as ethical principles codes, good practice in research, authorship and plagiarism, management of research data, and others, which should be considered an integral part thereof.

The main responsibility of doctoral students is to carry out high quality research that leads to the defence of the PhD thesis and to contribute to the academic environment through their active participation. The supervisory team must ensure guide the PhD researcher in this process and introduce him or her into internal, national and international research groups and networks. This code is intended to provide guidance and ensure the quality of these processes.

Scope

This Code of Good Practices in PhD aims to improve the quality of doctoral theses and their supervision processes at the UCM.

A good PhD thesis (a) represents an important contribution to the area of knowledge in which it is developed, (b) addresses a topic of interest to the scientific community and also to society as a whole, and (c) brings significant innovations in its development, or in its results.

The UCM Code of Good Practice in PhD is applicable to all parties involved in the process of designing, developing and defending a PhD thesis, in all UCM PhD programmes in force (this includes PhD researchers, thesis directors, tutors, coordinators of PhD programmes and the corresponding collegiate bodies).

The "Written Commitment for the Supervision of PhD researchers", signed by the supervisor, tutor, PhD researcher and a representative of the Academic Committee of the corresponding PhD programme, includes the commitment to apply this Code of Good Practice.

The supervisory team

The PhD researcher supervisory team consists of the tutor, the director and a maximum of two co-directors, when appropriate.

The UCM PhD School will promote the participation of external advisors in the quality committees and/or in the academic committees of the PhD programmes. Among other functions, these advisors may propose actions to follow up and improve the training and supervision plans of doctoral students.

Hereinafter, supervisor and co-supervisor shall be named "supervisor". Both share the profile requirements as well as responsibilities. Where the co-supervisor in training is addressed, this shall be clearly identified. The co-supervisor in training is an active researcher, who develops the supervision under the guidelines of the other supervisor(s).



The coordination of the supervisory team is essential to a smooth development of the doctoral process:

- The supervisor is responsible for the coordination of the supervisory team.
- The supervisor must evaluate the composition of the supervision resources and arrange them so they are adequate. The allocation of responsibility between the members of the supervisory team should be explicitly agreed as early as possible. The supervisor must organize a joint meeting with at least the co-supervisor and the tutor, at the start of the process.
- The supervisory team must ensure that their contributions to the supervision are in accordance with the project's overall goals, and keep the team informed about their contacts with the PhD researcher.
- The supervisor is the PhD researcher's most important academic contact and has the primary academic responsibility. The supervisor must initiate regular supervision and provide the necessary follow-up for the student throughout the PhD period.
- The supervisory team should facilitate working conditions, conciliation of family life and work, when possible, and the compatibility of the tasks of the PhD thesis with activities that promote the integral development of the PhD researcher.
- The supervisor must assess whether the work meets the quality requirements for a PhD thesis, before submitting it.
- The supervisor and the tutor are responsible for assessing their own supervisory skills and capacity and for their further development and improvement.
- The supervisor and the tutor must report non-conformances and concerns to the academic committee of the PhD programme.

The profile of a good supervisor

The supervisor is responsible for the physical and intellectual climate in which the PhD researcher develops his/her research project. He/she plays a stimulating, coordinating and evaluating role for the entire duration of the doctoral process. In addition, the supervisor ensures that during his/her training the PhD researcher can also acquire other essential skills that will enable him/her to move on to another job, within or outside academia, after the completion of the doctoral programme.

A good supervisor has the qualities necessary to ensure the correct context and support for each of his/her PhD researchers

- The supervisor is an active researcher and has built up a solid reputation. This can be deduced from scientific publications, citations, invitations to contribute at conferences and successful bids for research funding, amongst other merits.
- The supervisor works in a research area that is sufficiently related to the area in which the PhD researcher is carrying out his/her research, so as to be able to give the necessary supervision.
- A good supervisor limits the number of doctoral theses under her/his direction to his/her supervisory capacity and time availability. The direction of a thesis entails a workload of at least fifty hours per year. The maximum number of theses to be directed simultaneously should not exceed three.
- If it is his/her first supervisory role individually, has already co-supervised at least one PhD during the entire process until the thesis was approved.



- The supervisor is responsible for the quality of the research plan of the PhD researcher, and must endorse it every year, according to the monitoring and evaluation procedures and results.
- The supervisor ensures close supervision. The supervision includes ample opportunity for the PhD researcher to discuss planning, implementation and results of the research with qualified researchers. The research group, the department and the PhD programme examine how the PhD researcher can be offered efficient and high-quality supervision. Regular contact moments between the PhD researcher, the supervisor and/or the supervisory team are at the heart of good supervision.
- Concrete ensure the tasks of the supervisor and/or the supervisory team, are:
 - to ensure compliance with current doctoral regulations;
 - to help and guide the PhD researcher plan, implement and if necessary adjust the research; this includes assisting the PhD researcher in the definition and delimitation of the aim and scope of the thesis, bearing in mind the knowledge and skills of the student, the opportunity of the research proposed, the workload and the possibility to complete it within the timeline established by applicable regulations;
 - to help the PhD researcher place the research in a broader context;
 - to help the PhD researcher interpret and analyse the research results obtained;
 - to encourage the PhD researcher to present his/her work, to be present on these occasions on a regular basis and to give the PhD researcher feedback on his/her performance;
 - to challenge the PhD researcher to think critically about his/her own research work;
 - to introduce the PhD researcher to the world of research by (a) involving him/her in research that is being carried out in the research group and in teaching duties of the department if appropriate; (b) by bringing him/her into contact with other researchers within the research area and international networks, by for example encouraging him/her to take an active part in conferences and to work at another top research institution;
 - to promote mobility (inter-sectoral, geographical, interdisciplinary, public-private);
 - to provide the PhD researcher with as many opportunities as possible to be the first author of publications that encourage and enable the evaluation of the work being done, in accordance with the usual practice in each field of research;
 - to ensure the participation of the PhD researcher in the possible benefits and recognitions derived from the exploitation of the results of PhD research;
 - to comply with administrative procedures; in particular, review the PhD researcher's document of activities on a regular basis and fill in the administrative documentation that the PhD researcher requires for his/her procedures; to issue the report for the annual evaluation of the research plan with the greatest diligence, especially if the report is not positive, in order to make the necessary corrections and modifications and not to cause defencelessness in the PhD researcher.
- The supervisor creates a research environment in which fair and honest scientific conduct (e.g. good data management, responsible authorship, avoiding conflict of interest) are the norm (see checklist). In addition, the supervisor provides clarity concerning the nature of dishonest conduct within the context of the scientific domain. In the event of any problems, the supervisor takes suitable action, in consultation with the PhD researcher.
- Together with the tutor and the PhD researcher draws up a plan for the doctoral training, which includes instrumental scientific-technical training as well as training in transversal skills (language skills, good practices, intellectual property and exploitation of results, authorship, among others). The supervisor and tutor inform the PhD researcher about the courses on offer at the UCM (in the context of the PhD School and the Office for Internships and Employment) and discuss with the PhD researcher how to flesh out the training programme. Furthermore, the supervisor makes the PhD researcher aware of any interesting opportunities in the area of additional training or education within and outside the UCM. The supervisor



ensures (together with the dean or head of department) that teaching and other duties of the PhD researcher are organised so as not to jeopardise the completion of the doctoral degree within the time given and so that, if relevant, these duties remain within the limits of the professional status of the PhD researcher.

- Is jointly responsible for ensuring compliance with legislation relating to the health and environment protection, in particular the proper management of chemical, biological and radioactive waste. In the case of research involving biological agents, it will ensure that the biosecurity conditions for the PhD researcher and for the environment are met.
- The supervisor is jointly responsible for the efficient progress of the doctoral process. Ensures that PhD researcher completes his/her thesis within the established deadline.
- The supervisor must ensure that the thesis meets the quality requirements before it is submitted.
- The supervisor should encourage the PhD researcher to seek resources to complement his/her research activities.
- Provides the PhD researcher ample notice about any career opportunities within and outside the academia after the doctoral degree has been obtained, including specific information about the academic and professional career and steps.
- The supervisor is jointly responsible for creating an stimulant professional work environment and for the integration of the PhD researcher into the research group. This includes taking into account any personal matters that may have an impact on the research.

The profile of a good PhD researcher

The main responsibility of the PhD researcher is to acquire the necessary skills for the development of his/her PhD thesis. They must also take responsibility for cultivating their skills and advancing their careers within or outside the academic world, and for fulfilling commitments related to the funding of their research, where appropriate.

A good PhD researcher possesses and acquires the qualities necessary to mature into an independent researcher, with autonomy to choose and develop his/her own lines of research:

- The PhD researcher is proactive and undertakes the necessary efforts to ensure good progress in his/her doctoral research project. The PhD researcher:
 - actively engages in setting up the research questions that are addressed in the PhD thesis project;
 - is jointly responsible for developing the research methodology that will be used to address the research questions;
 - is responsible for planning, implementing and, where necessary, modifying the research;
 - is responsible for interpreting and analysing the research results obtained;
 - puts the research in a broader context;
 - reflects critically on the research process undertaken;
 - facilitates the close communication and collaboration with the supervisory team;
 - meets the deadlines established by the supervisory team and the PhD programme, and with the administrative procedures, particularly the activity report and the annual research plan;
 - actively participates in meetings, seminars, workshops, congresses and other activities designed for the PhD training.



The PhD researcher can rely on close supervision from the supervisor and the rest of the members of the supervisory team. The PhD researcher's active contribution to research planning and the interpretation and analysis of results increases as doctoral research progresses, resulting in an independent researcher who can design, develop, implement and adapt an extensive research process. The PhD researcher:

- Takes advantage of the opportunities offered by the supervisor and others to be part of suitable research networks and builds up networks of his/her own where possible and recommended (e.g. by actively participating in scientific conferences, by working at another research institution,...).
- Together with the supervisor ensures that the doctoral research results in publications and/or other realisations of which he/she is author; where appropriate, he/she may be named as first author, taking into account the common practice within the discipline. To prepare such publications, the PhD researcher must have the support of the supervisor and the supervisory team (see checklist).
- Is aware of and adheres to the generally accepted norms of fair and honest scientific conduct (see checklist).
- Ensures that data generated during the research are always available on request, and transmitted to supervisor before he/she leaves the UCM. In this respect the PhD researcher abides by the principles of correct data management according to the law, to the current methods in the research unit and the UCM policy concerning research data management. The PhD researcher respects the intellectual property rights relating to concepts and findings of the UCM and takes proper care of materials and equipment (see checklist).
- Together with the supervisory team compiles a plan for the doctoral programme. In this plan, attention is focused on activities and training for doctoral research on the one hand, and the acquisition of various competences that ensure the quality and efficiency of the doctoral research and prepare the PhD researcher for a professional career within or outside the university after the doctoral degree, on the other hand. The PhD researcher ensures that the activities in the context of the doctoral programme are completed within the proposed deadlines.
- Is jointly responsible for the efficient progress of the research and strives to complete his PhD thesis within the legally established deadlines. He/she diligently complies with the deadlines established by the supervisory team and the bodies responsible for PhD programmes, as well as with the administrative deadlines concerning the required documentation.
- To the best of his/her ability the PhD researcher integrates in the research group and respects the cooperation agreements in place.
- Brings to light any problems and challenges as quickly as possible, first informing the supervisor and/or the supervisory team, so that a suitable solution can be found.
- May actively participate in the representative bodies of the UCM, the PhD programme and the PhD School.

The profile of a good tutor

A good tutor is a PhD, working at UCM, preferably at a department and/or School different from the one of the supervisor, and has supervised at least one PhD thesis.

The tutor is responsible for the adequacy of the PhD researcher's training and research to the principles of the doctoral programme and the PhD school. The tutor:

- Watches over the training process of the PhD researcher, both concerning the development of the tasks of the PhD thesis project as well as the training activities.



- Ensures the existence of adequate conditions, facilities, means and procedures to develop the PhD thesis.
- Regularly reviews the PhD researcher's document of activities to ensure the proper development of research and training tasks.
- Issues, within the established deadlines, the reports corresponding to the annual evaluation of the research plan and document of activities and, in the event of unfavourable reports being issued, informs sufficiently in advance to establish corrective measures.
- Completes, within the established deadlines, the administrative documentation that the PhD researcher requires for the required procedures.
- Facilitates the PhD researcher's relationship with the supervisor, in order to guarantee an adequate development of the PhD thesis and avoid possible conflicts.
- Promotes the values inherent to good research, in particular ethical principles, honesty, social responsibility, continuing training, professionalism, accountability, transparency of research and the importance of publication of results (see checklist).
- Promotes the participation of PhD researcher in the representative bodies of the UCM, as established in the regulations.
- Facilitates, as far as possible, the PhD researcher's development ensuring that his/her essential tasks are focused in performing the PhD thesis.

Recommendations for other actors involved

In addition to the supervisory team, other actors are involved in doctoral training, such as the bodies responsible for PhD programmes, the PhD School, administrative services and research support services. All of them must:

- Collaborate, with their own means and with agility, in the development of the PhD thesis.
- Facilitate the integration of PhD students into the university environment and the PhD programme.
- Advise the PhD researcher concerning the administrative tasks necessary for the development of the PhD researcher's training programme.
- Facilitate the establishment of smooth relations between the actors involved in the PhD thesis.

Conflict resolution

PhD researchers and supervisory teams must communicate any difficulty, concern, disagreement or conflict as soon as possible, so that a solution can be addressed and agreed to allow for the proper further development of the activities. The team will try to resolve any conflict amicably whenever possible.

If this is not possible, they shall communicate the conflict to the academic committee of the PhD programme, which shall proceed to gather the necessary information or reports concerning the situation, in order to suggest a solution. Should a member of the supervisory team be also member of the academic committee of the PhD programme, the PhD researcher may recuse him/her and he/she shall not be involved in the resolution of the conflict.

In the event the academic committee of the PhD programme does not find a solution, or the suggested solution is not accepted by the PhD researcher or the member(s) of the supervisory team, the conflict shall be



communicated to the Management Committee of the PhD School. The latter will study the case and offer a solution to the parties involved, with the utmost diligence so as not to harm any of the parties.

Conciliation, mediation and arbitration will guide the action of all the bodies involved in the process, within the framework of the applicable regulation.

Ultimately, PhD students will be able to present their case to the UCM Ombudswoman's Office, and all parties will be able to do so before the Internal Affairs Office of the UCM.

References:

For the preparation of this document, many similar documents have been analyzed, among which we highlight especially:

KU Leuven (Belgium), Charter of the PhD researcher and the supervisor

NTNU (Norway), PhD Handbook

University of Cambridge (United Kingdom) Research best practice – Cambridge students

Irish Universities Quality Board (Ireland), Good practice in the organisation of PhD programmes in Irish higher education

Université Paris Saclay (France) Doctoral charter

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HR EXCELLENCE IN RESEARCH

List of annexes under construction.