A characteristic of PhD research is that the PhD student carries out her/his research under the guidance of one or more supervisors. This code outlines the mutual expectations and responsibilities of the (co)supervisors and the PhD student, considered as important to successfully conclude the PhD track.

Principles for PhD students:

Main focus:

The PhD student is expected to mature into an independent researcher. This entails a process that is a joint responsibility of the supervisor(s) and the PhD student. To this end, the PhD student will perform research, which will result in the defense of a PhD thesis and publication of research papers. (S)he will also seek training in various fields that are either directly relevant for the PhD work or for her/his future career in science and society.

Attitudes to be acquired during the process by the student

- The PhD student should be open-minded, willing to learn and capable of critical thinking/analysis. (S)he will take the supervisor's criticism and constructive feedback into consideration or builds arguments not do so.
- The PhD student should make sure that (s)he is in frequent contact with the supervisor(s). Maintaining regular contact is considered to be a mutual responsibility of both the supervisor(s) and PhD student. The PhD student should let the supervisor(s) know when she/he needs support or guidance.
- The PhD student should **have a problem-solving attitude**: (s)he thinks about the topics (s)he would like to discuss with the supervisor ahead of time, write them down and possibly email them in advance. (S)he recognizes challenges and problems and will propose solutions.
- The PhD student should **manage his/her time well**. (S)he defines goals for the semester, year, and 4-year research period and aspires to complete the PhD in the foreseen timespan.
- (S)he should demonstrate a **good work ethics**. In addition, (s)he gradually becomes familiar with the appropriate rules, regulations, policies, and procedures i.e. with regard to ethics review and research integrity and acts upon them.
- The PhD student should be a team player. (S)he integrates in the research unit and
 relevant networks. While independent thinking is to be encouraged, the student has to
 respect the aims and context of his/her research project, which usually fit into
 commitments of the supervisor with regard to grant and/or consortium agreements.
- The PhD student should acquire **communication skills**. (S)he actively seeks opportunities to present her/his work at scientific meetings at various levels (local, national, international), applies for scholarships for conferences, writes research and review papers as soon as possible. (S)he communicates with peers, the larger scholarly community and with society in general about her/his areas of expertise.



Principles for supervisors:

There are 3 possible types of supervisors: ITM, home institute and PhD awarding university supervisor. The ITM and university supervisor or the home institute and university supervisor may be the same person. A home institute supervisor is only present in sandwich PhDs.

General tasks, expectations and responsibilities of supervisors

- The supervisor has several roles, including hierarchical head, coach and mentor.
 At the start of the PhD process, there is more emphasis on coaching, whereas to the end, the student should have acquired more independency, hence the supervisor will rather be a mentor.
- The supervisor aims to be an accessible advisor. Supervisors must discuss, assess and guide the progress of the PhD student at regular intervals. The necessary knowledge, time, commitment and access to resources to undertake the supervision should be guaranteed. When there is more than one supervisor, all parties should meet together regularly. It is expected that supervisors will comment on PhD student's written work within a mutually agreed turnaround period.
- Together with the student, the ITM and home institute supervisor also **guard the student's time** for her/his PhD research
- The supervisor should serve as a good **role model** of what a researcher does. (S)he should have research expertise relevant to the area of the PhD student's research.
- Cultural sensitivity: besides providing guidance on the "transcultural or universal" aspects of the scientific method, the supervisor should remain open to specific cultural background of the student and the research environment in his/her country.
- The supervisor has the responsibility to provide a stimulating research environment, including encouragement, support and guidance at all stages of the PhD research.
- The supervisor **assists in publications**: indicates possibilities for publication and acts as an advisor and critical reviewer during the publication process.
- The supervisor **assists in training**: helps the PhD student identifying specific areas in which the student requires development of skills (laid down in a 'Personal Training & Career Development Plan' see below) and refers the PhD student to the appropriate courses or sources of assistance.
- The supervisor assists in creating a network for the student by introducing him/her to other researchers in related areas, to external agencies, industry, or other institutional links.
- The supervisor guards the ethical and regulatory environment of the PhD process.
 (S)he should indicate which rules, regulations, policies, and procedures are important for the PhD process, including ethical review and research integrity.
 Both the student and the supervisor should comply with those rules. The supervisor also assists the PhD student to prepare applications for ethics and other approvals as required.



• The supervisor supports the PhD student in **career preparation**. The supervisor advises the PhD student on post-doctoral research opportunities, visiting fellow appointments or other career options.

Specific roles and responsibilities:

- The ITM supervisor must guarantee the academic quality and compliance with ITM regulations during the PhD process.
- The role of the home institute supervisor is to coach the sandwich PhD student when (s)he is working in the home country and to guarantee the academic quality and compliance with the home institute's regulations.
- The role of the university promoter is to guarantee the academic quality and compliance with the university/faculty PhD regulations.

Personal Training & Career Development Plan (PTCDP) as a tool

In consultation with the supervisor(s) the PhD student establishes a 'Personal Training & Career Development Plan', describing in detail the skills sets, knowledge, and abilities needed to acquire in order to achieve the goals set, both in terms of the actual PhD project and her/his further career.

To this end, the PTCDP contains mutual practical agreements on:

- the milestones and timelines with regard to performing the actual research,
- the timelines for writing of papers and of the thesis,
- which courses/workshops/seminars and skills training will be followed when,
- the frequency of meetings between the student and the supervisors.

The PTCDP has to be regularly updated. This update will be part of the Progress Report, to be evaluated by the PhD Committee.

