



PhD DOUBLE DEGREE PROGRAMME AGREEMENT BETWEEN

Università degli Studi di Modena e Reggio Emilia

Via Università 4, 41100, Modena (Italy) represented by the Rector Prof. Carlo Adolfo Porro

AND

Technische Universität Wien (TU Wien)

Karlsplatz 13, 1040 Wien, Austria

represented by ao. Univ.-Prof. Dipl.-Ing. Dr. Kurt Matyas, Vice Rector for Academic Affairs.

Preamble

The Università degli Studi di Modena e Reggio Emilia (hereinafter referred to as UNIMORE) with its doctoral study programme in Information and Communication Technologies (ICT) and its registered office in Modena (Italy), Via Università n. 4, Italy, tax code/fiscal code and VAT No. 00427620364, represented by the pro–tempore Rector, Prof. Carlo Adolfo Porro,

and

the Technische Universität Wien (hereinafter referred to as TU Wien) with its doctoral study programmes in Technical Sciences and in Natural Sciences and its registered office Wien (Austria), Karlsplatz 13, A-1040 Wien, Austria, tax code/fiscal code and VAT No. ATU37675002, represented by ao. Univ.- Prof. Dipl.-Ing. Dr. Kurt Matyas, Vice Rector for Academic Affairs,

COLLECTIVELY referred to as the "Institutions" or the "Parties",

IN CONSIDERATION of the national laws and university guide lines governing Doctorate Courses of both Institutions,

IN CONSIDERATION of the internal regulations on Doctorate Courses of both Institutions,

RECOGNIZING their mutual interest in developing common research activities between the two Institutions through staff exchange and fostering young researchers' mobility, as well as promoting the internationalization process, and also

RECOGNIZING their mutual interest in broadening the spectrum and the breath of competence of young researchers, and in bringing together the teaching and research features of highly qualified European university and research centers with complementary expertise, and also

RECOGNIZING the global nature of today's business, industrial and social problems, and the need to address them by international cooperation,

HEREBY agree to start a collaboration to promote research, higher education, and the progress of science through the internationalization of their doctoral study programmes, the mobility and exchange of doctorate students and staff members according to the terms and conditions set forth in the following articles.

Article 1: Scope and Fields of Collaboration

In order to strengthen their scientific, educational and teaching cooperation, TU Wien and UNIMORE establish a common programme entitled PhD Double Degree Programme (hereinafter referred to as PhD-DDP), linking the PhD Programme in Information and Communication Technologies (ICT) delivered at UNIMORE (hereinafter referred to as PhD-ICT) and the PhD Programmes in Technical Sciences and in Natural Sciences (hereinafter collectively referred to as PhD-TUW) delivered at TU Wien and related doctoral thesis works.

This collaboration aims at:

- improving the international scientific research collaboration;
- offering an educational and scientific research training programme for PhD students with an international approach;
- offering an intensive training path covering both the basic and advanced aspects of the PhD Programme main topics in order to improve research, analytical, technical and instrumental skills useful to plan and manage innovative research projects.

Article 2 : General Terms and Conditions

As from the academic year 2021/2022, a double degree thesis procedure will be set up for the benefit of candidates jointly identified by the partners, hereunder referred to as "the candidates".

The research fields of the joint PhD-candidates will include the following subject areas:

- 1. applied mathematics,
- 2. ICT engineering.

Consequently, supervisors at UNIMORE will be members of the Department of Engineering "Enzo Ferrari", and supervisors at TU Wien will be members of the Department of Mathematics and Geoinformation.

The Partners will take responsibility for the publicity of the whole doctoral programme and for the promotion of the specific research projects proposed at their site.

During the visits, PhD students will be governed by the rules and regulations of the Partner Institution. Provision is made for credit transfer for educational activities attended at the Partner Institution.

Article 3: Number of students

A maximum of 3 students of each Institution per year will participate in the PhD-DDP. The selection process will be conducted internally according to the procedures decided by each participating programme, considering research topic, merit and existing joint projects.

Article 4: Admission and Enrollment

Students selected by the University of Modena and Reggio Emilia must possess a Master's Degree obtained in Italy or an equivalent qualification released by a foreign University in order to be admitted to the PhD Course. Moreover, they have to fulfill the admission requirements for doctoral-studies at TU Wien.

Students selected by the TU Wien must possess a Master's Degree obtained in Austria or an equivalent qualification released by a foreign University in order to be admitted to the PhD Course. Moreover, they have to fulfill the admission requirements for doctoral studies at the University of Modena and Reggio Emilia.

The candidate is enrolled regularly at both institutions, and each institution keeps a record of the students who are enrolled in the PhD-DDP. The registration must be renewed at the beginning of each academic year, and the candidate must pay tuition (registration) fees only to the home institution. There will be no incidence of any fees at the host institution.

Applicants from UNIMORE to PhD-DDP must complete the following steps and deadlines:

- 1. Admission as a PhD student in PhD-ICT and approval of PhD-ICT for participation in the PhD-DDP with indication of the co-supervisor of PhD-TUW and at PhD -ICT;
- 2. Registration as a regular student in PhD-TUW;
- 3. Maintenance of regular registration in PhD-ICT until its completion;
- 4. Documentation and proof of accomplishment of the other requirements for completion of the PhD-DDP in PhD-TUW and PhD-ICT, within the deadlines established by both institutions (as specified in Article 11).

Applicants from TU Wien to PhD-DDP must complete the following steps and deadlines:

- 1. Admission as a PhD student in PhD-TUW and approval of the participation in PhD-DDP with indication of the supervisor at TU Wien and the co-supervisor at UNIMORE;
- 2. Registration as a regular student in PhD-ICT;
- 3. Maintenance of regular registration in PhD-TUW until its completion;
- 4. Documentation and proof of accomplishment of the other requirements for completion of the PhD-DDP in PhD-TUW and PhD-ICT, within the deadlines established by both institutions (as specified in Article 11).

The internal rules and regulations of each participating programme must be made available in English to all interested parties. Each Institution guarantees to the students that the English language will be used during all the activities that are part of the PhD-DDP.

Article 5: Thesis Work

Each Institution will nominate a supervisor for each doctorate student enrolled in the PhD-DDP. Supervisors hire themselves to fully exert their supervising role over the student.

The assessment of the three-year thesis work activities makes reference to a common baseline of 180 ECTS (TU

Wien) = 180 CFU (UNIMORE) according to each Institution's internal rules. The student activity will be subject to evaluations according to the rules of the Institutions.

The preparation of the thesis will take place alternately at UNIMORE and TU Wien in one or more Work Periods for a minimum of 12 months to a maximum of 18 months at each institution.

A modulation in the length of these periods has to be duly authorized by both parties depending on practical exigencies or scientific opportunities resulting from work progress. During these periods exchange students will have the rights of regular doctoral students of the host Institution.

In the course of their studies for the double degree, exchange doctorate students will have to comply with the regulations for course work of both institutions, while credit transfer of course work is possible (see Article 2). The course work will be recorded and communicated to the partner institution by the supervisors. About one half of this activity should be chosen among those organized by each Institution.

The Host Institution will coordinate support for office space, library, laboratory and other privileges appropriate to the level and purpose of the visit, subject to the availability of resources.

Article 6: PhD Courses Duration and Completion Procedures

Completion of the PhD-DDP must occur within the timeframes of each participating programme. The possibility of deadline extensions must follow each Institution's internal rules.

The duration of the PhD-ICT is three years, considering the established student status, except for suspensions resulting from maternity leaves guaranteed by the Italian Law or extensions allowed by the Italian Ministry of University and Research (MUR).

The duration of the PhD-TUW is three years.

The duration of the PhD-DDP is three years, considering the established student status. An extension has to be approved by both parties.

The final thesis presented to both PhD-TUW and PhD-ICT must be written in English. The thesis should also include a summary in Italian and a summary in German.

The work of the candidate will be examined according to the regulations of both Institutions, also based on the reports of two independent external reviewers jointly chosen by the Institutions. The reviewers will provide a written evaluation of the thesis prior to the final oral examination. Upon positive evaluation the candidate will be admitted to the final PhD defense.

The doctorate will lead to a single oral examination.

This oral examination will be recognized by both Institutions. The oral examination will be in English and will include at least a short summary in German and Italian. Both supervisors will participate to the oral examination.

The jury will be composed of: (a) one professor in the role of president; (b) the two supervisors; (c) two reviewers, external to the academic Institutions of the Parties, chosen among scientists and renowned experts in the scientific field of the thesis.—Remote participation of the jury members is discouraged, but not forbidden.

Article 7: Title Award

According to the report of the examining board, students successfully defending their doctoral theses and completing all other requirements established by both PhD-ICT and PhD-TUW will be awarded both

- a PhD title in Information and Communication Technologies (ICT) ("Dottore di Ricerca in Information and Communication Technologies (ICT)") by UNIMORE and
- a PhD title in Technical Sciences ("Doktor der Technischen Wissenschaften (Dr. techn.)") or Natural Sciences ("Doktor der Naturwissenschaften (Dr. rer. nat.)") by TU Wien,

by means of two certificates, one issued by UNIMORE and another by TU Wien in accordance with their respective internal procedures. Each certificate should explicitly mention the PhD-DDP.

Article 8: Health Insurance, Safety in the Workplace and Financial Matters

The host Institution will treat visiting students and staff in the same manner as its own students, and thus visiting students will benefit from exactly the same safeguards and information, in line with the role assumed in the host Institution.

Depending on national regulations, the PhD candidate has to pay regard for sufficient health insurance coverage during the doctoral programmes including the mobility periods at the host Institution in accordance with the national law requirements of the host country.

- Italy: The student registration at UNIMORE includes an accident and liability insurance.
- Austria: The student registration at TU Wien includes an accident and liability insurance. Students from non-EU member states who do not have health insurance may purchase Austrian student health insurance ("Studentenversicherung") at "Österreichische Gesundheitskasse".

The partner Institutions are not bound to any financial obligations with regard to this doctoral thesis cotutorship, but will seek for sufficient resources which allow the candidate to carry out his/her scientific work successfully within the PhD-DDP.

Each Institution will be in charge of travel expenses for its own staff participating in the Examination Board, provided that there are available funds and that the participating staff follow all internal regulations for this activity.

Article 9: Intellectual Property Rights

The PhD students, the supervisors and the administrative staff will be duly informed of pertinent existing agreements regarding confidential information and intellectual property rights related to the research outcomes, its publication and protection. The two parties will jointly own the research results obtained during the development of the common programme activities and they undertake to protect, exploit and disseminate them according to the laws and regulations in force in each country. Further mediation will be conducted by each Institution's representatives for intellectual property matters.

Article 10: Disputes

The two parties undertake to resolve amicably and in the spirit of compromise any dispute arising from this agreement. In the event that the parties are unable to reach agreement, it is agreed that any dispute arising between the contracting parties, relating to the interpretation, execution and resolution of this agreement, will be referred to each Institution's legal representatives which will decide the matter in accordance with the law.

Article 11: Start date, Duration, Amendments, and Termination

The present agreement will begin on the date of its signature, and it will be valid for three consecutive editions of the PhD-DDP, for a total duration of six years, including an additional year to allow, for example, for schedules

which are not aligned between the Institutions. The first, second and third consecutive PhD Degree Programmes delivered by the University of Modena and Reggio Emilia will start in the academic years 2021/2022, 2022/2023, and 2023/2024 respectively. The first, second and third consecutive PhD Degree Programmes delivered by the TU Wien will start in the winter semesters 2021/2022, 2022/2023, and 2023/2024, respectively.

This Agreement may be amended or extended further, in six-year increments, by mutual written notification signed by the legal representatives of both Institutions.

The decision to recede must be notified to the other party by August 31, and it will be effective starting from the following academic year. The dissolution of the agreement must not prevent the enrolled students to proceed and graduate under this PhD-DDP.

Modena,March 2021 THE UNIVERSITY OF MODENA AND REGGIO EM	Wien,March 2021 ILIA TECHNISCHE UNIVERSITÄT WIEN (TU Wien)
PhD Course Coordinator Prof. ssa Sonia Bergamaschi ———————————————————————————————————	Dean of Academic Affairs Prof. Gernot Tragler ———————————————————————————————————
DIRECTOR OF THE DEPARTMENT Prof. Massimo Borghi	Vice rector for Academic Affairs Prof. Kurt Matyas ———————————————————————————————————
RECTOR Prof. Carlo Adolfo Porro	