

Appendix I:

Requirements for Jointly Awarded PhD Degree in Water Resources Engineering Tsinghua University and the University of Melbourne

This document applies to all PhD candidates in Water Resources Engineering of the Jointly Awarded PhD Degree program between the University of Melbourne and Tsinghua University, as per the Memorandum of Understanding executed by the Department of Infrastructure Engineering, the University of Melbourne and the Department of Hydraulic Engineering, Tsinghua University.

1. Program Mission Statement

The Jointly Awarded PhD Degree is to encourage students to develop an in-depth understanding of the fundamental concepts of Water Resources Engineering, while, at the same time, broadening their perspective by sampling other research and education environments. Moreover, this Jointly Awarded Degree Program should enhance the development of cooperative research collaboration between the two Departments.

2. Admission of Program

Each of the Partner Departments must independently arrange for admission of the PhD candidate in accordance with their own procedures and according to their selection criteria and other entrance requirements. Applicants for PhD candidature should complete applications for each University. The financial arrangements between partner departments for student support and examinations should be agreed to in each case.

3. Duration of Program

Each PhD candidate should spend a minimum of 18 months at Tsinghua University and a minimum of 12 months at the University of Melbourne in a way that enables the PhD candidate to meet the PhD Program requirements at each Department. A prolonged period may be approved upon application, which should be made 3 months before the expiry of the period of the agreement.

4. Supervision

The PhD candidate shall have at least one supervisor in each Department. Both supervisors are responsible for the progress of the doctoral degree work. The supervisors undertake to jointly exercise their advisory function in respect of the doctoral degree candidate in compliance with the current regulations at each University. They also undertake to consult each other regularly concerning the progress of the research work.

5. Program Procedures and Requirements

- **Personal study plan**

The PhD candidate must complete his/her personal study plan after consultation with their supervisors in the first months after registration, and then submit the plan to the departmental Graduate Program Office at Tsinghua University.

- **Qualifying Examination**

All PhD candidates should complete a Qualifying Examination at their lead University. Exceptions to this policy due to extenuating circumstance must receive prior approval from the PhD administration office at both Universities.

- **Thesis Proposal/Confirmation of candidature**

Each PhD candidate must complete their thesis proposal/confirmation procedure to the agreement of both supervisors or PhD committees. This examination consists of both written (about a 5,000 word report) and oral (20-30 min presentation) components in a way that enables the PhD candidate to meet the PhD Program requirements of each Department.

- **Progress Review**

Each PhD candidate is required to complete a formal written and oral progress review annually. The Progress review provides an opportunity for supervisors and the advisory committee at both the home and host universities to review and evaluate progress on the research project, and to identify any potential difficulties in candidature.

- **Final Thesis Presentation/Completion Seminar**

Each PhD candidate is required to make a presentation of their research findings at their home or host University in the three month period prior to submitting their thesis for examination.

- **PhD Thesis**

The PhD thesis is written succinctly and in good English. The normal length of a PhD thesis is 60,000-80,000 words, exclusive of words in tables, maps, bibliographies and appendices. Each PhD thesis must include an 800-1000 word abstract in Chinese.

- **PhD Thesis Examination**

Each thesis needs four examiners normally. Two examiners are nominated by the University of Melbourne and two examiners are nominated by Tsinghua University.

- **Thesis Defense**

Each PhD candidate needs to conduct a Thesis Defense. Normally, this will be done via video conference for a PhD candidate from the University of Melbourne. Exceptions to this policy due to extenuating circumstance must receive prior approval from both Universities.

- **Degree Requirements in academic publication**

During the study period, each PhD candidate, as a first author (Supervisors as the first author, graduate students can be second author, the paper must be signed by both Universities), must publish academic papers to meet the requirements of the Department of first registration at Tsinghua University.

- **Academic activities**

Each PhD candidate must attend sufficient academic activities to meet the minimum requirements from both universities.

6. Credit Requirements

A Ph.D candidate with/without a Masters degree must receive at 12/24 or more credits from qualified courses listed in the Department of Infrastructure Engineering, the University of Melbourne (UoM) and the Department of Hydraulic Engineering, Tsinghua University (THU). Among them, at least 6 credits must be received from the following courses at the Host University. Note

that the word “course” below is to be interpreted as “subject” in the context of the University of Melbourne and 3 credits in Tsinghua University are equivalent to 12.5 points at the University of Melbourne.

(1) Philosophy and/or history/or Culture and language(≥ 4 Credits)

Each PhD candidate should select at least two course (≥ 4 credits) in the Host University from the following list that is provided by the University of Melbourne and Tsinghua University. A maximum of 6 credit points can be accumulated from these courses. University of Melbourne students must take a Chinese language course as one course unless exempted because of proficiency. Tsinghua University hosted students must achieve an IELTS ≥ 7.0 prior to graduation.

● Chinese Culture and Society	60610082	2 Credits	THU
● Chinese Philosophy	60610132	2 Credits	THU
● Comparison Study of Chinese Society and Culture	60610142	2 Credits	THU
● Language (Chinese)		2 Credits	THU
● A History of Nature	HPSC20002	3 Credits	UoM
● From Plato to Einstein	HPSC10001	3 Credits	UoM
● Darwinism: history of a very big idea	HPSC20001	3 Credits	UoM
● God and the Natural Sciences	HPSC20020	3 Credits	UoM
● Social Technologies	HPSC20010	3 Credits	UoM
● iSociety: Technology & Contemporary Life	HPSC20009	3 Credits	UoM

(2) Specialized courses (≥ 2 Credits)

Each PhD candidate should select at least one course (≥ 2 credits) from the following list that is provided by the Department of Infrastructure Engineering, University of Melbourne and the Department of Hydraulic Engineering, Tsinghua University. Other technical courses may be taken with approval from the PhD Supervisor.

● Quantitative Environmental Modelling	ENEN90031	3 Credits	UoM
● Sustainable Infrastructure Engineering	CVEN90043	3 Credits	UoM
● Engineering Site Characterisation	CVEN90044	3 Credits	UoM
● Engineering Project Implementation	CVEN90045	3 Credits	UoM
● Civil Hydraulics	CVEN90051	3 Credits	UoM
● Environmental Analysis Tools	ENEN90032	3 Credits	UoM
● Monitoring Environmental Impacts	ENEN90028	3 Credits	UoM
● Sustainable Water Resources Systems	CVEN90019	3 Credits	UoM
● Environmental Applied Hydrology	ENEN90034	3 Credits	UoM

● Water and Waste Water Management	ENEN90029	3 Credits	UoM
● Contaminant Hydrogeology	ENEN90030	3 Credits	UoM
● Remote Sensing	GEOM90005	3 Credits	UoM
● Research Methods	COMP90044	3 Credits	UoM
● Management of Technological Enterprises	ENGM90010	3 Credits	UoM
● Management and Leadership for Engineers	ENGM90015	3 Credits	UoM
● International River Basin Management**	ENEN90037	3 Credits	UoM
● River Basin Integration Management	80040103	3 Credits	THU
● Advanced Remote Sensing Hydrology	80040242	2 Credits	THU
● Project Delivery	80910202	2 Credits	THU
● Comparison study of River Basin Governance and Management**	Y0040231	2 Credits	THU

** Joint Tsinghua University/University of Melbourne course. Students can take only one version.