

## Water Infrastructure & Resilience CDT (WIRe CDT) Programme Regulations 2019-2027

**Code: 8209F**

*Notes:*

- (i) *These programme regulations should be read in conjunction with the University's Doctor of Philosophy (Integrated) Degree Regulations, Doctor of Philosophy Examination Conventions, and Examination Conventions for Taught Masters Degrees.*
- (ii) *A core module is a module which a student must pass, and in which a fail mark may neither be carried nor compensated; such modules are designated by the board of studies as essential for progression to a further stage of the programme or for study in a further module.*
- (iii) *A compulsory module is a module which a student must take and pass.*

### **1. Programme structure**

The programme comprises a taught element and a research element. The taught element consists of 80 credits of compulsory technical modules, any taught modules deferred will be taken in subsequent academic years to ensure the full 80 credits are acquired by the PhD candidate before award is granted.

- 3 MSc Modules delivered by the CDT lead University, Cranfield (induction year 1), see 2 (a) below
- 2 MSc Modules of choice at either the host University (Newcastle) or one of our partner Universities at Cranfield and/or University of Sheffield (years 1, 2 and/or 3), see 2 (e) below
- 3 MSc 10 credit Summer Challenge Modules in years 1, 2 and 3) delivered by University of Sheffield, Newcastle University and Cranfield University, see 2 (c) below
- Four units of transferable skills (TSP) attendance is mandatory, non-credit bearing at Cranfield (year 1), University of Sheffield (year 2), Wetsus (at Cranfield) (year 3) and Newcastle University (year 4), see 2 (b) below,
- The programme is available for study in full-time and part time mode,
- The period of study for full-time mode shall normally be not less than 4 years, starting in September.

### **2. The taught element**

- (a) Taught modules are taken during the four years of the programme, see below details of Cranfield induction MSc Modules delivered in semester 1 and Summer Challenge Modules projects are determined by each individual delivering University at the beginning of each next academic year.

<i>Module code</i>	<i>Descriptive title</i>	<i>Total Credits</i>	<i>Credits Sem 1</i>	<i>Credits Sem 2</i>	<i>Credits Sem 3</i>	<i>Level</i>	<i>Type</i>
EXT8008	Water & Wastewater Treatment Principles	10	10			7	
EXT8029	Water in Cities	10	10			7	
EXT8030	Water Resilience	10	10			7	

EXT8031	University of Sheffield	10		10		7	
EXT8032	Newcastle University	10		10		7	
EXT8033	Cranfield University	10		10		7	

- (b) Throughout the 4 years, the PhD candidate will complete 4 compulsory non-credit bearing transferrable skills modules (TSP). In Semester 1 of the first year, they will study at Cranfield University “Being an effective researcher”. In Semester 2 of the second year, they will study their second TSP at University of Sheffield, “Communication & Leadership”. In semester 3 of the third year, all PhD candidates will study the third TSP Wetsus at Cranfield University “Business Skills Challenge Wetsus”. In semester 2 of the fourth year, all PhD candidates shall take their fourth TSP at Newcastle University “The thesis & beyond”.
- (c) In years 1, 2 and 3 each candidate must attend a compulsory one-week Summer Challenge (normally July) hosted by one of the three partner universities. If the candidate is unable to complete their 3<sup>rd</sup> Summer Challenge by year 3, one can be deferred until year 4, which must be authorised and pre-approved by the CDT Director and Newcastle University PI.
- (d) During their four-year studentship each candidate will be invited to attend the Institute Of Water Annual Conference, WIRe CDT National Debate and UKRIC Conference as a minimum.
- (e) During the term of the programme, the PhD candidate shall also complete a minimum of two 10 credit bearing compulsory MSc modules offered by any of the WIRE CDT partner institutions. The PhD candidate will be signposted to available MSc modules at Newcastle University, University of Sheffield and Cranfield University and should identify modules which are beneficial for their academic/project development. The modules should be agreed by the PhD candidate’s academic and industrial supervisor before making a request to the partner institution in question, subject to availability and space on the MSc Module. If a MSc module is identified at a different institution to Newcastle University, Cranfield University & University of Sheffield, this would be subject to the authorisation of the lead academic supervisor of the PhD candidate provided the institution award was equivalent to the UK MSc 10 credit award.

### 3. The research element

On satisfactory completion of the first year of the taught component (see 5 below), the PhD candidate will undertake an individual research project leading to the submission of a doctoral thesis which should not exceed 50,000 words (inclusive of notes, but excluding bibliography and appendices)

### 4. Assessment methods

Details of the assessment pattern for each taught module are explained in the module outline. Assessment of the PhD thesis is by *viva voce* examination as specified in the Doctor of Philosophy Assessment Regulations by one external academic examiner and one internal academic examiner.

### 5. Progression

Each PhD candidate's academic progress shall be monitored annually by the WIRe CDT Programme Management Group in a manner which is consistent with the University's Code of Practice for Research Degree Programmes. In addition, in order to progress beyond the first year, the PhD candidate must (i) after the application of compensation (up to 10 credits) have obtained a weighted average mark of at least 50 for the 30 credits of taught technical modules in Semester 1 of the first year; (ii) have failed no more than 10 credits and; (iii) have no module marks below 40. A candidate failing up to 10 credits of these modules will have the right to one reassessment of each failed module.

#### **6. Award of a Master of Philosophy (MPhil) degree**

PhD candidates who are unable to progress at any point may be permitted to undertake a Master of Philosophy (MPhil) research project. Such candidates shall be eligible for the award of a Master of Philosophy degree if they satisfy the requirements for the award as specified in the Assessment Regulations for Master of Philosophy Degrees.