

## TRAINING PATHWAY SPECIFICATION

Pathway name	Course code (where applicable)	Year
EnvEast Doctoral Training Partnership (DTP) Training Pathway		2017

**NOTE:** Whilst the University will make every effort to offer the training pathway as detailed, changes may sometimes have to be made for reasons outside the University's control (e.g. illness of a member of staff) or because of sabbatical leave.

### TP1 TRAINING PATHWAY SUMMARY

TP1.1	a	SCHOOL(S) OF STUDY	BIO, ENV, MTH, DEV
	b	FACULTY or FACULTIES	SCI, SSF
	c	NAME OF TRAINING PATHWAY LEAD	EnvEast DTP Director (Prof Bill Sturges, UEA-ENV)
TP1.2 <i>Note 1</i>	a	PATHWAY TITLE	EnvEast DTP PhD
	b	COURSE CODE (where applicable)	
	c	FULL/PART-TIME (please specify)	FT/PT
	d	LOCATION (UEA Norwich, Distance Learning)	UEA Norwich, and EnvEast Partner Institutes where students are registered in one of the above Schools at UEA
	e	AVAILABLE FROM (date)	October 2017
TP1.3	EXTERNAL INPUT (please list here the input from external organisations e.g. employers, partner institutions into the development of this pathway)		
	EnvEast Training and Progression Subgroup (T&PSG)		
TP1.4	FURTHER INFORMATION (web link to further information)	EnvEast Training is described in detail on our webpages at <a href="http://www.enveast.ac.uk/programme">http://www.enveast.ac.uk/programme</a> , and in the EnvEast Handbook ( <a href="http://www.enveast.ac.uk/handbook">http://www.enveast.ac.uk/handbook</a> ). Students will also receive updates by email on training opportunities, and they can consult the archive of opportunities. ( <a href="http://www.enveast.ac.uk/the-programme/current-enveast-training-opportunities">http://www.enveast.ac.uk/the-programme/current-enveast-training-opportunities</a> )	
TP1.5	AVAILABILITY BY AWARD (please tick all that apply)		
	Masters Degrees by Research	<input type="checkbox"/>	Master of Philosophy
	PhD (3-year)	<input checked="" type="checkbox"/>	PhD Integrated Studies (4-year)

PhD by Publication		Doctorate in Clinical Psychology	
Doctor of Education / Master of Education		Doctor of Medicine	
TP1.6	<b>MANDATORY ELEMENTS OF TRAINING</b>		
	<p>There are a substantial number of mandatory training elements incorporated into the EnvEast DTP Training Pathway, which are over and above the requirements of constituent Schools. For the avoidance of doubt, all mandatory requirements are listed in this document, but students are strongly advised to investigate the training opportunities of their own School of study.</p> <p>For further up-to-date information on the content of the EnvEast mandatory cohort training, please consult the handbook (<a href="http://www.enveast.ac.uk/handbook">www.enveast.ac.uk/handbook</a>)</p> <p><b>The following training is mandatory for all students:</b></p>		
	<b>Training component</b>		<b>How/when this will be delivered</b>
	Introduction to UEA and the research and training environment		During UEA-based induction. Students embedded at EnvEast Partners must attend: travel costs will be covered
	Equality and diversity training		Online training (using same material as for UEA staff)
	School Health and Safety induction (UEA)		During School induction for EnvEast students based at UEA, but ALSO for those hosted at partner institutes if they will be spending any significant period of study (i.e. more than just supervisory meetings) at UEA. <i>See below for <u>additional</u> H&amp;S training that is compulsory for <u>some</u> students.</i>
	Freedom of information		Online training (using same material as for UEA staff)
	Copyright		Online training (using same material as for staff)
	Participation in school seminar series and skills workshops		Within Schools
	<p><b>EnvEast cohort training</b> (for detailed synopsis of training offered at cohort events please see <a href="http://www.enveast.ac.uk/handbook">http://www.enveast.ac.uk/handbook</a>).</p>		
	Induction		Residential cohort training in October of first year
	Winter School		Residential cohort training in December of first year
	Cambridge ESS - EnvEast Doctoral Alliance (CEEDA) conference and workshops		Event in March/April every year – students are expected to attend and must give an oral presentation at least once during their PhD
	Summer School 1		Residential cohort training in June of first year
	Summer School 3		Residential cohort training in June of third year

**The following training is mandatory for some students:**

<b>Training component</b>	<b>Students for whom this is compulsory</b>
Research Ethics (PPD training run by FMH or SSF)	All SSF students, and all other students for whom research will involve human subjects, animals, or tissues
Data protection and information security training (online)	All SSF students, and all other students for whom research will involve data related to identifiable individuals
Home Office Licence (run externally)	All students for whom research will involve procedures on live animals
Sea Survival Training (run externally)	All students for whom research will involve working on board research vessels
First aid training	All students who will carry out fieldwork (see checklist for guidance)
Radioactive substances training (run by USS once a year)	All students for whom research will involve handling of radioactive substances or using ionising radiation
Training in teaching (detailed requirements vary between schools)	All students wishing to work as Associate Tutors (e.g. notably as Demonstrators) must complete their School's training requirements before an AT contract will be issued.
Training in literature searching using appropriate search engines such as Web of Science; Scopus or similar and use of bibliographic software such as EndNote	All students who do not already have extensive experience of literature searching and use of bibliographic software should attend relevant PPD sessions and/or access self-learning materials so that they can find, an appropriately cite, relevant literature by the time of the probationary review.
Preparation for the probationary review	EnvEast PGRs may opt to take SCI2RF4Y (SCI students) or CCETR23Y (DEV students) (preparation for / managing the Probationary Review), but there is significant overlap with material covered in the first mandatory EnvEast Summer School. Please note that for most students the Summer School takes place after the Probationary Review.

## TP2 PATHWAY LEARNING OUTCOMES

### TP2.1 Learning Outcomes

Our training programme is designed around the Vitae Researcher Development Framework (RDF) and the RCUK 'Statement of Expectations for Postgraduate Training'. The Vitae RDF is commonly used for planning, promoting and supporting the personal, professional and career development of researchers from postgraduate level to University Professors and industrial research leaders. It emphasises the knowledge, behaviours and attributes of successful researchers helping you to achieve as much as possible from your time as a postgraduate. EnvEast students will also use it to evaluate and plan their training.

The RDF is divided into four domains that encompass:

- A. **Knowledge and intellectual abilities** – the knowledge needed to do research
- B. **Personal effectiveness** – the qualities needed to be an effective researcher
- C. **Research governance and organisation** – the professionalism required
- D. **Engagement, influence and impact** – the skills needed to work with others and contribute to the wider environment

Within each of these domains there are further sub-domains and associated descriptors. Collectively these set out the wide-ranging knowledge, intellectual abilities, techniques and professional standards expected to do research, as well as the personal qualities, knowledge and skills to work with others and ensure the wider impact of research.

The RDF and its use to plan and evaluate training will be introduced in detail at the EnvEast induction. For full information on the RDF, visit the Vitae website: <https://www.vitae.ac.uk/>.

Achieving the learning outcomes may also be achieved through experiential learning activities e.g. attending and presenting at meeting and conferences, participating in outreach activities in schools contributing to School Open Days at UEA, working as an associate tutor, supervising undergraduate and masters' project students, scientific blogging, organising meetings and conferences and similar developmental activities. Participating in activities outside the research environment may also contribute to development through experiential learning e.g. on the organising committee of a sport, strong involvement with a charitable organisation; school governor etc.

### TP2.2 How will these learning outcomes be reviewed?

Each student will complete the EnvEast Initial Training Needs Analysis (TNA) self-assessment spreadsheet within six weeks of the beginning of their period of study, and develop a training and development plan for the first year of their research, as well as considering any longer-term objectives (e.g. in the context of possible careers after graduation). This process uses an electronic form developed specifically for EnvEast PGRs, **so students should use this form, instead of any other UEA TNA document**. The student will complete the form and discuss with their supervisor/team, who must then sign to confirm their approval. At this stage the supervisor must also identify any training courses they consider necessary for the student to undertake.

The student's skills development should be discussed at every interim progress meeting with their supervisory team.

At around the time of each annual review, including the probationary review, the student will complete an EnvEast Continuing Training Needs Assessment electronic document, with reference back to the Initial TNA and any foregoing Continuing TNAs. This will include a list of training completed to date, and a set of short reflective reports reviewing their progress towards meeting the learning outcomes of each of the RDF domains during the previous year, and setting training and development objectives for the following year. This should include both skills needed to do the research, the development of wider transferrable skills, and any particular skills that the student wishes to develop to help them achieve longer career goals.

The supervisory panel will discuss the student's development and future development needs with them and add comments to the student's reflective report. If the student's research progress is less than satisfactory, the panel should consider whether focussed development and/or training in particular skills would help to bring the research progress back on track. A satisfactory assessment of engagement with skill development, and achievement of the learning outcomes when the thesis title approval form is submitted will be required for the oral examination to take place.

EnvEast will furthermore, award an EnvEast Certificate of Completion on Postgraduate Training on successful completion of all elements of the EnvEast Training. These are described in the EnvEast Training Plan (<http://www.enveast.ac.uk/programme>), and include participation in all mandatory cohort training, timely provision of written work (literature review, draft thesis chapters, etc.), and adequate engagement with research-specific training, wider transferable skills training, employability actions, and experiential learning.

Due consideration is given to those with significant and relevant pre-existing training qualifications or experience, although we still expect all EnvEast students to attend all mandatory cohort events.

Adjustments will be made where necessary to accommodate part-time PGRs or students needing to interrupt their studies.

## TP2.3 Training Structure

The [EnvEast Doctoral Training Programme](#) sets out a number of cohort training activities and is conducted according to our Cohort Training Aims and Objectives which are informed by and aligned with the Vitae RDF. The programme is designed to

- Provide the student with the foundation research skills necessary to quickly and efficiently begin the planned programme of research;
- Enable the student to develop the advanced skills needed to successfully complete the research project, and importantly, which will be transferable to the post-graduation workplace;
- Provide the student with continuing personal and professional training in non-research specific areas, for example in enterprise, innovation, multidisciplinary working, and science communication;
- Offer the student career-specific training and support at every stage towards a successful transition to post PhD employment.

In completing the mandatory cohort training students will have participated in at least 20 of the minimum 30 days of training and development that UEA considers necessary before the PhD thesis can be examined.

Whilst recognising that flexibility is required due to individual student needs, training in addition to that provided as a cohort is expected to cover the following areas:

- Suitable and sufficient Advanced Research Training required for the student to effectively carry out your programme of research. This may be achieved through one or several training activities, but we expect will consist of a **minimum of 5 days of tuition per year**.
- We strongly recommend that students undertake additional Advanced Research Training beyond their immediate research area to achieve advanced capabilities in other areas of the environmental sciences. Of particular value may be transferable research skills such as statistics, computing (e.g. data management, programming/coding), and/or modelling.
- Sufficient CPD (continuing professional development) training (in addition to the cohort training) to achieve a broad portfolio of transferable skills for the workplace; this will likely require an investment in **2 days training per year**. These might include, for example, media/public engagement training; innovation/enterprise training; or more generic courses such as, project management, etc.
- Sufficient careers training as required in addition to the cohort training. For example, training in job-hunting; interview skills and practice; etc.
- Presentation (oral or poster) at an international conference.
- We also encourage additional experiential learning activities (not duplicating any of the above), for example: writing a blogpost; contributing to the E<sup>3</sup>I student club's activities; delivering a research seminar/presentation to your research group/department.

Additional training can be drawn from a wide variety of sources: the UEA PPD program; externally available training, including online training; MOOCs; training events; and subject specific training such as MAGIC courses available to students in MTH.

The Faculties will produce guidance documents, structured using the RDF, identifying the most common areas for development and the PPD courses and other training and development opportunities available in each.

## TP3 PATHWAY COHERENCE AND EMPLOYABILITY

### TP3.1 Learning Progression

How will progression in terms of skills, knowledge and understanding be reflected in the pathway between activities/courses in any one year and across the years as research degree candidates make progress through their course of study?

Training in year one (years 1 and 2 for part-time students) should focus particularly on mandatory training, and skills that are essential to allow the student to carry out their research. In subsequent years, students will be encouraged to develop the learning outcomes as articulated by the Vitae RDF. It is anticipated that most students will be at Phase 1 or 2 at the start of the degree and hence should progress from there. Some students may already be at the higher phases at the start and they should develop their capabilities further through the course of their research.

The student and the supervisory team will regularly assess and reflect on the student's skills development and formally record this on an annual basis, and this will be part of the assessment of whether progress is satisfactory.

An overall assessment of whether the student has engaged with the process of skills development will be made towards the end of the period of study. This assessment will be based on a combination of having achieved sufficient days' training, a review of the electronic training record, and the formal record of reflections by the student on what they have gained from their training and development studies.

### TP3.2 Feedback Cycle

Please explain how feedback from supervisors and others will support the coherence of the programme. How will this feedback impact on subsequent activities/courses?

The EnvEast T&PSG (Training and Progression Subgroup) will review all TNA reports and give feedback to the PGRs and their supervisors via a feedback form. If concerns have been raised by either the supervisor or student about training and development, or progress, then these will be communicated to the relevant School PGR Director and Training Coordinator as appropriate for review.

The Chair of the T&PSG or their designate will convene an annual discussion about training and development with School PGR Directors at SCI Graduate School Executive, with the involvement of a DEV/SSF representative where necessary. The DTP Director reports regularly to PGR Executive on EnvEast training and other developments.

Feedback from EnvEast PGRs is sought at almost every juncture: evaluation sheets are collected daily from all cohort training, from any EnvEast-sponsored training, on the TNA forms, on EnvEast Annual Report forms, etc. These are all reviewed by the T&PSG and inform the revision and planning of future training and training needs assessment.

### TP3.3 Employability

How is employability embedded into the pathway?

All students receive an introduction to the university careers service (and to the many opportunities/services they offer), including an opportunity to meet their designated PGR Careers Advisor, at their PhD induction session. The importance of being widely employable in the current job market is also highlighted at induction in a dedicated PPD/Training Overview session.

Career progression is reinforced at every Winter and Summer School, and during EnvEast Induction. At all of these we have talks about their career pathways from those who have undertaken postgraduate training: former PhD students, alumni, stakeholder representatives. We have training on CV writing, career progression, etc., embedded in our mandatory cohort training. This is also encouraged through our innovation programme (<http://www.enveast.ac.uk/innovation/enveast-enterprise-and-innovation-e3i->), E3i innovation club (<http://www.enveast.ac.uk/innovation/e3i-student-innovation-club>) and internship scheme (<http://www.enveast.ac.uk/professional-internships>).

In addition, numerous training sessions are run at UEA by the careers team, including sessions on preparing successful applications and achieving interview success in both academic and non-academic contexts, how to use the 'My Career Central' software effectively, and a 'PGR Opportunities Fair' run each May as a means of highlighting the importance of successful career planning at PhD level.

The development of transferrable skills will enhance student's employability. The Training Needs Analysis and annual reflective reports will encourage students to conceptualise how their skills are developing, to identify the skills that they need to maximise their employability in their chosen career and therefore be better placed to be able to respond to the requirements of person specifications when applying for jobs and to give concrete examples of how they can demonstrate that they have acquired these skills.