

Training Needs Analysis (TNA) based on the Researcher Development Framework (RDF)

This Training Needs Analysis (TNA) is designed as a tool to support you as a postgraduate researcher in identifying and planning for your personal and professional training needs. It is based on the [Vitae Researcher Development Framework \(RDF\)](#). The RDF is a nationally recognised framework for researchers for all levels. It is made up of four main domains:

Domain A: Knowledge and Intellectual Abilities

Domain B: Personal Effectiveness

Domain C: Research Governance and Organisation

Domain D: Engagement, Influence and Impact

These domains are then further categorised into 12 sub-domains.

How to use this form

If you are completing your first TNA, please complete this form by referring to the RDF. It is advisable to download the [full framework](#), which contains all the descriptors. You can log on to the Vitae pages by using your University of Edinburgh login details. You should also refer to other sources of information such as School webpages, and the [IAD brochure](#) (in which all workshops are mapped to the RDF). You may also want to refer to the [IAD online TNA](#). You should then discuss your responses with your supervisor.

Tip: Do not stress if any areas are unclear to you at this stage, discuss and clarify with your supervisor.

You should then repeat this process, completing a new TNA form, on an annual basis. You should arrange a meeting with your supervisor to discuss this and bring along the completed form from the previous year so that you can summarise how you addressed the training needs you identified. You should then discuss and note down if any additional training needs have emerged and set your priorities for the coming year.

Personal Development Plan: Training Needs Analysis (TNA)

Student Name Mylene Receveur				School/Institute		School Of Geosciences	
Start Year	2019	Current academic Year	2020/2021	Full Time/Part Time	Full Time	Supervisor Name (s)	Christopher McDermott

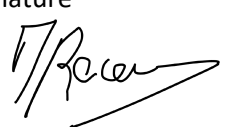
RDF Sub-domains	Experience/ training already undertaken	Areas for development	Action – how will this be addressed?	Priority level (high, intermediate or low)	Review date
Domain A: Knowledge and Intellectual Abilities					
A1 Knowledge Base	<p>Modelling experience with OGS used for PhD research. Attended courses:</p> <ul style="list-style-type: none"> - “Hydrogeology-2” and “Computational mathematics in Geophysics” (UoE). - Coding club (UoE) - “Modelling Geothermal Reservoirs in CMG” (CMG). - Datacamp courses in Python. <p>Use of GitHub and Overleaf to store and access data.</p> <p>Attended workshops: “The Writing Process”, “Top tips for writing an abstract”, “Top Tips for Writing a Literature Review”.</p>	<p>Documentation and evaluation of research processes.</p> <p>Familiarization with information & data preservation to store and manage modelling results.</p>	<p>Discuss with IT.</p> <p>Complete IAD course “Good Practice in Research Data Management” and UoE “MANTRA data management online course”</p>	Intermediate	02/2021
A2 Cognitive Abilities	Defined PhD research questions, wrote literature review and currently progressing on methods descriptions and	Develop critical thinking for modelling results and get confidence in presenting &	Participate to conferences / networking	high	05/2021 (World Geothermal Congress)

	<p>results analysis for two scientific papers. Good abilities in synthesising information from different sources.</p> <p>Marking of Hydrogeology-1 essays from undergraduate and Masters students through (i.e. review of discussions about hydrogeology concepts).</p>	discussing own results among peers.	Keep up to date progress log.		
A3 Creativity	<p>Attended a series of seminars/webinars related or not to the PhD topic (i.e. EUBAP, GeoEnergy, IES, WING...).</p> <p>Abilities to link and adapt methods employed by peers to own problematics.</p> <p>Regularly look at literature or discuss with peers to seek new ideas/approaches to solve problems and get critical feedbacks.</p>	<p>Identify and asks useful challenging questions to show curiosity.</p> <p>Develop skills in constructively defend research outcomes.</p>	Attend IAD course "Creative Problem Solving for Researchers"	Intermediate	03/2021
Domain B: Personal Effectiveness					
B1 Personal Qualities	<p>Enthusiast for PhD research and its implication in current context. Developed independence and responsibility for my PhD project (i.e. by submitting abstract for conferences) but seek for support, guidance and feedback on work from supervisory team when necessary.</p> <p>Happy to encourage undergraduate students and help them to get their own critical thinking about problem sets / science topics.</p>	Need to work on self-confidence about personal skills and validity of ideas/results.	IAD course "Imposter Syndrome"	high	TBC

B2 Self-Management	Set of monthly deadlines. Take time to think if research approach needs to be adapted considering new discoveries and publications. Seek help when necessary. Maintain a good work-life balance (i.e. part of student Committee and Grant Institute running group)	Need to keep track of progress on weekly basis (i.e. progress log) and allow time for unexpected (i.e. modelling time). Has difficulties to focus on finishing up writing manuscripts.	<i>Use of Jupyter Notebook to store results and comments at the same place.</i> Participate to a writing retreat.	high	1/2021
B3 Professional and Career Development	Stay up-to-date with job offers in the UK and abroad (active LinkedIn account) and open to new possibilities. Started to establish a career network through conferences (i.e. London Geothermal Symposium, GRC 2020) and by participating to webinars (i.e. WING). Seek interactions with students from other universities and professionals working on mine-water heat potential.	Need to be aware of possible transferable skills useful for future employers and maintain records of achievement/experience. Become pro-active to promote and maintain working relationship within and outside the university, get to be known as a researcher.	IAD course: "Managing your Work: Working with other people"	Intermediate	06/2021
Domain C: Research Governance and Organisation					
C1 Professional Conduct	Attended 2-day Field Work First Aid Training and applied those new skills when demonstrating on the field for "Hydrogeology-1" and "Earth dynamics" field trips. Other courses completed: <ul style="list-style-type: none"> - "Data Protection Training" - "Information Security Essentials" - "Equality-diversity" training - "An introduction to Copyright and Publishing" Workshop. 	Need to demonstrate more awareness to issues related to rights of other researchers and Ethics principles.	Participate to university debates.	low	03/2021

	Attended Ethic, ICT and Information Risk Management courses as part of CASE placement at the Coal Authority. Ask for review of supervisors/collaborators (i.e. Coal Authority) before sharing data and submitting abstracts.				
C2 Research Management	Set research goals and intermediate deadlines to progress on PhD project. Use of Open-source software (OGS, QGIS), store on GitHub data and develop re-usable Python scripts.	Need to better adapt project management strategies to PhD project to keep it on track.	IAD course “Practical Project Management”	High	TBC
C3 Finance, Funding and Resources	Keep track of RTSG and CASE Budget.	Develop skills on grant/funding applications. Take advantage of the resources/infrastructures available at the University to conduct my research.	Apply for <i>Overseas Research Visit & Conference Funds</i>	Intermediate	TBC
Domain D: Engagement, Influence and Impact					
D1 Working with others	Organised a series of seminars as part of the student committee. Encourage PhD students from all years and research Masters student to promote their work by participating to those monthly seminars. Support the learning of students when involved in tutoring and demonstrating activities (“Hydrogeology-1”, “Hydrogeology-2”, “Computational mathematics in Geophysics” ...).	Need to seek for more collaborations within the university.	IAD workshop: “Public Speaking, Networking and Engaging”	High	TBC

D2 Communication and Dissemination	Became familiar with social media (LinkedIn, twitter) and started a blog (not published yet) to share about my research to large audience. Created Google Scholar account to have visibility within the scientific community. Has attended a workshop from Elsevier about Publishing in Journals.	Improve communication skills (i.e. articulate ideas clearly to a diverse and non-specialist audience), and ability to discuss on my work with confidence. Need to be more proactive on social medias	Search for a placement in governmental organisations to engage dialogue with policy makers and increase the impact of research outputs among the public.	Low	08/2020
D3 Engagement and Impact	Aware of importance of my research in the context it takes place and on its impact on society (i.e. low carbon energy needs). Participation in research meetings (i.e. seminars, conferences...). Interviewed for a Press Release from the Coal Authority. Has published an article about PhD research on WING UK newsletter. Has been tutoring and demonstrating for 6 different courses within the university of Edinburgh.	Seek to use blog as a way to promote public understanding of own research and facilitate interaction between research, public and policy makers.	IAD course: "Facilitation Skills for Public Engagement"	Low	08/2020

ANY OTHER COMMENTS	Student signature MReceveur 	Supervisor signature	Date 30/11/2020
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