

Department	School of Engineering and the Built Environment
Supervisors	Dr Masoud Sajjadian
Project Title	Building Performance in a Changing Climate
<p>PROJECT DESCRIPTION</p> <p>Despite the fact that many studies have been undertaken relating to climate change risks, there is still an urgent need for further investigations on the future performance of buildings under a changing climate. This PhD aims to create a simplified numerical tool to model, using cutting edge simulation tools in combination with AI methods, the following four aspects of building performance in the UK:</p> <ul style="list-style-type: none"> · Energy · Thermal Comfort · Indoor air quality · Acoustic <p>Based on future climate scenarios developed by IPCC, the project also develops AI-based algorithms to identify the influential factors on building performance during operation and discover where in design or construction phase, processes need refinements.</p> <p>Academic qualifications</p> <p>A first degree (at least a 2.1) ideally in Architectural Engineering with a good fundamental knowledge of Simulations and willingness to learn AI methods.</p> <p>English language requirement</p> <p>IELTS score must be at least 6.5 (with not less than 6.0 in each of the four components). Other, equivalent qualifications will be accepted. Full details of the University's policy are available online.</p> <p>Essential attributes:</p> <ul style="list-style-type: none"> • Experience of fundamental Building Performance • Competent in Artificial Intelligence • Knowledge of computer science • Good written and oral communication skills • Strong motivation, with evidence of independent research skills relevant to the project • Good time management <p>Desirable attributes:</p> <p>Candidate with a postgraduate qualification and work experience in the related area</p>	
Enquiries	For informal enquiries about this PhD project, please contact m.sajjadian@napier.ac.uk
Web page	https://www.napier.ac.uk/research-and-innovation/research-degrees/application-process

