

Wind Farm Maintenance Advanced Scheduling (KTP Associate)

Department	Electronic and Electrical Engineering (www.strath.ac.uk/engineering/electronicalelectricalengineering/)		
Faculty	Faculty of Engineering (www.strath.ac.uk/engineering/)		
Staff Category	KTP Associate	Reference No	577567
Reports To	Dr James Carroll (Knowledge Base Supervisor) Graham Martin (Company Supervisor)	Grade:	RS79
Salary Range:	Up to £40k p.a. plus £6k training and development budget	Contract Type:	Fixed Term (36 months)
FTE	I (35 hours/week)	Closing Date	29/02/2024

Job Advert

The Department of Electronic and Electrical Engineering in partnership with Turner Icení (<https://www.turnericensi.com/>) are seeking to appoint a KTP Associate to work in the areas of wind turbine operation and maintenance planning, risk-based maintenance scheduling and data driven failure prediction. The post will be predominantly based at the Turner Icení site in Glasgow with visits to the University of Strathclyde campus.

Turner Icení, part of the privately owned and funded Turner Group of Companies head quartered in Glasgow, operate as an established provider of managed work-packages into wind sector projects. Turner Icení benefit from over 10 years' experience in delivering services to the on and offshore wind markets. Specialities include the provision of O&M turbine services, asset management including condition monitoring, inspection works and other associated services. Turner Icení have been involved in every stage of the wind farm life cycle. Their number one business objective of delivering safe and time/cost efficient solutions to their clients using cutting edge technology/service methods.

The KTP will focus on delivering a system optimised in the prediction of certain fault types and to further enhance condition monitoring systems to prepare and schedule part replacement before catastrophic failure. The system will reduce operating and maintenance costs for asset owners through the utilisation of an optimal repair schedule.

The project is part of the Knowledge Transfer Partnership (KTP) programme that aims to help businesses to innovate and grow by working with UK universities. Successful Knowledge Transfer Partnership projects are funded by UK Research and Innovation through Innovate UK and are part of the government's Industrial Strategy. To find out how KTP works and the vital role you will play if you successfully secure a KTP Associate position please visit: www.ktpws.org.uk

The position also offers the KTP Associate the following benefits:

- £2,000 per year to spend on personal training
- Opportunity of a permanent position with the company; 70% of host companies make a permanent job offer to their Associate at the end of the project
- Take on a role that bridges academia and business
- Apply your academic knowledge to a real life challenge
- Gain a further professional qualification

- You'll 'own' your own project, linked to both a university and a business whose experienced teams will provide you with full support. Applying academic knowledge to a real world challenge, this is a chance to deliver impact and shape your career.
- Dedicated coaching, mentoring and personal development, as you manage your own personal training budget

To be considered for the role you will be expected to have Hons/MSc/PhD in electrical engineering, mechanical engineering or computer science, or significant relevant experience in addition to relevant Hons/MSc degree. For a full list of role requirements please see the person specification below.

Job Description

Brief Outline of Job:

This role will involve defining and creating new offerings related to wind turbine maintenance, risk based scheduling and data driven failure prediction. Building on existing Turner Icenis data, tools and offerings, the Associate will work with Turner Icenis, the University of Strathclyde and other external partners to create, test and improve wind turbine maintenance planning offerings.

Main Activities/Responsibilities:

1.	Gain full understanding of Turner Icenis existing offerings and overview of University of Strathclyde wind energy expertise
2.	Wind farm O&M process mapping with Turner Icenis and partners
3.	Utilise Turner Icenis data for data driven failure prediction of wind turbine components
4.	Identify and implement risk-based maintenance planning systems
5.	Combine data driven and risk-based approaches for wind turbine maintenance planning

Person Specification

Educational and/or Professional Qualifications

(E=Essential, i.e. a candidate must meet all essential criteria to be considered for selection, D=Desirable)

E1 Hons/MSc/PhD in electrical engineering, mechanical engineering or computer science, or significant relevant experience in addition to relevant Hons/MSc degree

Experience

D1 Experience of Matlab, Python and or C software/programming languages would be beneficial.

E2 Experience of data analytics techniques

E3 Experience of technical writing and presentation

D2 Wind Energy Maintenance Experience in Academia or Industry

D3 Risk and Reliability Engineering Experience in Academia or Industry

Job Related Skills and Achievements

D4 Knowledge of wind turbine technology, condition monitoring, data analysis/trending, machine learning techniques, and/or signal processing techniques would be beneficial.

D5 Knowledge of risk-based maintenance practices such as RPN methodology would be beneficial

D6 Knowledge of process optimisation methodologies would also be beneficial

Personal Attributes

E4 Motivated, confident and self-reliant, with the ability to engage both management and staff

E5 Awareness of commercial drivers

E6 Strong written and verbal communication skills to engage all project state holders

Application Procedure

Applicants are required to complete an application form including the name of three referees who will be contacted without further permission, unless you indicate that you would prefer otherwise. Applicants should also submit a Curriculum Vitae and a covering letter detailing the knowledge, skills and experience you think make you the right candidate for the job. Applicants should also complete the Equal Opportunities Monitoring Form.

Other Information

Further information on the application process and working at Strathclyde can be found on our website (<http://www.strath.ac.uk/hr/workforus>).

Informal enquiries about the post can be directed to Dr James Carroll, Reader (j.carroll@strath.ac.uk).

Conditions of Employment

Conditions of employment relating to the KTP Associate staff category can be found at: [Conditions of Employment](#).

Rewards and Benefits

Our staff have access to a wide range of outstanding benefits that include financial rewards, family friendly and wellbeing benefits and career development opportunities, details of which can be found [here](#).

Probation

Where applicable, the successful applicant will be required to serve a 6 month probationary period.

Pension

The successful applicant will be eligible to join the Universities' Superannuation Scheme. Further information regarding this scheme is available from [Payroll and Pensions](#).

Relocation

Where applicable, the University offers a relocation package to support new employees who meet the eligibility criteria. The relocation package is offered as a contribution towards costs incurred, and is designed to be flexible, allowing staff to use the financial support available in the way that will be most helpful to them. Further details are outlined in the Relocation Policy.

Interviews

Formal interviews for this post will be held on a date to be confirmed.

Equality and Diversity

The University of Strathclyde is a socially progressive institution that strives to ensure equality of opportunity and celebrates the diversity of its student and staff community. Strathclyde is people-oriented and collaborative, offering a supportive and flexible working culture with a deep commitment to our equality, diversity and inclusion charters, initiatives, groups and networks.

We strongly encourage applications from Black, Asian and minority ethnicity, women, LGBT+, and disabled candidates and candidates from lower socio-economic groups and care-experienced backgrounds.

University Values

The University's Values capture what we're all about: who we are, what we believe in and what we stand for. [Our Values](#) have been derived from how we act and how we expect to be treated as part of Strathclyde.

