Software Engineer Maritime Decarbonisation (KTP Associate)

Department	Naval Architecture, Ocean and Marine Engineering (www.strath.ac.uk/engineering/navalarchitectureoceanmarineengineering/)		
Faculty	Faculty of Engineering (www.strath.ac.uk/engineering/)		
Staff Category	Knowledge Transfer Partnership (KTP)	Reference No	635781
Reports To	Dr Sefer Anil Gunbeyaz, (Knowledge Base Supervisor); Stefano Scarpa (Company Supervisor)	Grade	RS79
Salary Range	Up to £45,000	Contract Type	24 months
FTE	1 (40 hours/week)	Closing Date	31/10/2024
Holidays	24 days + statutory days As per the company holidays.		
Pensions	Contributory pension scheme available to all staff including generous employer contribution.		
Training	KTP Associates spend 10% of their time on training and personal development including attendance at 2 compulsory Residential Modules. Professional Development with Organisational and Staff Development Unit (OSDU) plus external training if required.		

Job Advert

The Department of Naval Architecture, Ocean and Marine Engineering in partnership with London Offshore Consultants Limited (https://abl-group.com) are seeking to appoint a KTP Associate to develop a versatile decision-making software solution, enabling decarbonisation strategies for the maritime industry. The versatile software solution will focus on applying modelling and simulation techniques to estimate accurately energy and emission values for maritime assets. The innovative software solution will integrate simulation, energy, and emission models, focusing on ports and vessels against various policy and regulatory regimes -- a holistic approach to an inherently complex challenge. The post will be predominantly based at London Offshore Consultant's site in London with visits to the University of Strathclyde campus. London Offshore Consultants Limited (LOC) is a leading global consultancy, delivering energy, maritime, engineering & digital solutions to drive safety and sustainability in energy and oceans.

The associate will be working together with the University of Strathclyde and the University of Plymouth academics to transfer their collective specialist knowledge so the software can guide decision-makers and policymakers in adopting effective decarbonisation actions.

The position offers the KTP Associate the following benefits:

- 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
- the opportunity to make a difference in decarbonisation and in the effort to limit the adverse effects of climate change.
- Apply your academic knowledge to a real life challenge
- 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.
- KTPs offer extensive opportunities for graduates and post-grads, as you provide the link between an expert academic team and a dynamic company. This 'bridge' gives you unique and exceptional access to both worlds.

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- A fulfilling employment opportunity where you can apply your knowledge to turn a key strategic innovation idea in to reality
- The chance to implement strategic development within an innovative company
- Dedicated coaching, mentoring and personal development, as you manage your own personal training budget
- KTP Associates spend around 10% of their time in training and personal development. At the start of the KTP you get a training budget to manage – so you decide which courses would benefit you.

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

Job Description

Brief Outline of Job:

The Department of Naval Architecture, Ocean and Marine Engineering in collaboration with London Offshore Consultants Limited and University of Plymouth seeks a dynamic KTP Associate to spearhead the development of an adaptable decision-making software solution aimed at facilitating decarbonisation strategies within the maritime industry. This innovative solution will leverage advanced modelling and simulation techniques to accurately estimate energy and emission values for maritime assets, integrating seamlessly with various policy and regulatory frameworks. Key responsibilities include integrating cutting-edge decarbonisation trends into the software, engaging stakeholders through workshops and interviews, managing project timelines and budgets, and providing comprehensive training to internal staff. The ideal candidate will possess a strong background in software development, data science, data analysis, stakeholder engagement, and project management, coupled with a passion for sustainability, wanting to make a difference in decarbonising the maritime sector, and a keen understanding of the complexities of the maritime industry.

Main Activities/Responsibilities:

1.	Developing a versatile decision-making software solution, enabling decarbonisation strategies for the maritime industry
2.	Integrating the latest trends on decarbonisation options for the maritime assets and supply chain to the developed tool and the strategies
3.	Engagement with stakeholders to collect feedback opinions through organising workshops, interviews and structured discussions to ensure the tool is valid for the needs of the stakeholders.
4.	Data collection, understanding the maritime (ports, supply chain and ship operation) business models, stakeholder consultations, modelling knowledge, and interpretation of the results.
5.	Communicating complex information generated by the advanced simulations and intricate decision-making processes with the right level of simplicity.
6.	Ensuring the latest trends on decarbonisation options are closely followed.
7.	Project Management, understanding maritime stakeholders, business drivers, and ensuring that solutions meet customer requirements and market demands, in a cost-effective manner.
8.	Delivering training and communicating information to staff with varying levels of prior knowledge and competencies to develop a team for the sustainability of the decision support system.

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	Knowledge of computer programming including databases, web-based development, agile software development lifecycle and software project management
D1	Engineering degree (Naval Architect, Marine Engineer, Mechanical Engineer, Software Engineer, Computer Science) but also other engineering degrees could be considered or relevant industrial experience

Experience

D2	Knowledge of simulations (preferably discrete event simulation methods),
D3	Understanding of decarbonisation options for maritime assets and supply chain.
D4	Understanding of GHG emissions in vessels, ports and other fixed maritime assets.

D5	Generic understanding of the shipping industry and stakeholder awareness
D6	Knowledge of alternative fuels.
D7	Knowledge of cost-benefit analysis.
D8	Experience of working in a maritime environment (ports or shipowner).
D9	Background and experience with research methods.
D10	Knowledge of coding and software knowledge for tool development.

Job Related Skills and Achievements

D11	Ability to work as part of a team or individually.
D12	Ability to work with deadlines and managing own projects
D13	Understanding of simulation and decision making techniques (multicriteria, multiobjective and multiattribute

Personal Attributes

D14	Eagerness to learn
D15	Excellent communication and interpersonal skills. The ability to listen to, engage with and influence a range of internal and external stakeholders.
D16	Strong work ethic.
D17	Motivated and likes to take the initiative.

Other Relevant Factors

E2	Passion and interest in energy systems and decarbonisation

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 Sefer Anil Gunbeyaz, Naval Architecture, Ocean and Marine Engineering (sefer.gunbeyaz@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.

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.