



Job Title: KTP Associate - Electronics Engineer

Unit/School: Cardiff School of Technologies

Grade: 5B/6A

HERA: RIS009

Core purpose of role

Cardiff Metropolitan University and Militec Ltd are partnering through a Knowledge Transfer Partnership (KTP) - a national programme that supports business innovation by linking industry with academic expertise and a highly qualified graduate, known as a KTP Associate. We are seeking to appoint a KTP Associate to work full-time on an innovative project focused on the development of smart small arms target systems. The successful candidate will be based primarily at Militec Ltd in Mountain Ash CF45 4ER, with academic support from Cardiff Metropolitan University, and will work closely with both industry and academic supervisors. Under the guidance of the project's academic and industry leads, the KTP Associate will play a central role in the design, development, testing, and implementation of advanced smart target technologies, as well as in the documentation and dissemination of key project outcomes. This role offers a unique opportunity to gain hands-on experience in applied research, product development, and knowledge transfer within a commercially focused environment.

Key responsibilities and contributions

- Lead, deliver and be a key point of contact for the project.
- Deliver the technical objectives of the project in collaboration with Cardiff Metropolitan University and Militec Ltd.
- Contribute to the design, development, and implementation of project deliverables in line with agreed objectives and timelines.
- Apply modelling, simulation, and experimental methods to support system development and performance evaluation.
- Support hardware prototyping, system testing, troubleshooting, and iterative refinement in laboratory and operational environments.
- Develop, maintain, and manage project data collection and recording processes in collaboration with partners and the wider project team.
- Translate academic research and engineering principles into practical, commercially viable solutions.
- Help develop, design, and manage the research project, employing a variety of methodologies and analysing the resulting data.
- Collaborate and write ethics forms for the project, in line with the University's ethical approval processes and data storage / GDPR guidelines.
- Build connections and undertake activities with relevant internal and external representatives from stakeholder groups to inform the development of the project.



- Contribute to the dissemination of research findings, through presentations to relevant stakeholders.
- Co-author research reports and publications on the research conducted as part of the project.
- Maintain and develop subject knowledge in those areas which are relevant to the project.

Person specification

Essential qualifications / Professional memberships

- A good honours degree in Electrical/Electronics/Mechatronics Engineering or in a related field or equivalent.

Essential experience, knowledge and skills

1. Strong technical capability in sensor integration, signal processing, and embedded systems.
2. Experience in electronics hardware prototyping, system integration, and validation.
3. Knowledge of acoustic emission sensing and/or electromagnetic sensing technologies.
4. Ability to engage effectively with academic, industrial, and external stakeholders
5. Strong analytical and problem-solving skills, with the ability to apply creativity and initiative to address complex technical challenges.
6. Ability to design, execute, and document experimental processes, including data collection, data management, and validation activities.
7. Ability to analyse and interpret quantitative data and experimental results to inform system design and decision-making.
8. Strong organisational skills, with the ability to manage time, prioritise tasks, and work independently toward project milestones.
9. Excellent written and verbal communication skills, with the ability to clearly convey complex technical information through reports, presentations, and meetings.
10. Competence in the use of standard software tools, including Microsoft Office, for documentation and project reporting.
11. Experience of working in an industry, commercial, or applied research setting.



12. Experience contributing to engineering or technology development projects.

13. Experience documenting technical work, results, or processes in a professional or project-based environment.

Additional Criteria for Grade 6

1. A Masters or PhD Electrical/Electronics/Mechatronics Engineering or a closely related discipline.
2. Proficiency in MATLAB and/or COMSOL for modelling, simulation, and analysis, alongside relevant programming skills.

Desirable

1. Team player and self-starter willing to work flexibly with regard to working pattern.
2. Evidence of undertaking continuing professional development (CPD).
Willingness to undertake future CPD.

Welsh skill requirements

Welsh is essential to our students and staff and is a key part of our provision and services. For every position at Cardiff Met, proficiency in Welsh language is either essential or desirable. You can find information about the levels by viewing our booklet: [Welsh language skills levels](#). If a skill is listed as essential in the table below, please ensure you demonstrate this in your online application form.

Language level and general descriptor	Listening	Reading	Speaking	Writing
A1 – Beginner Can understand and use familiar everyday expressions and very basic phrases in Welsh.	Desirable	Desirable	Desirable	Desirable
A2 - Basic user Can deal with simple, straightforward information and communicate in basic Welsh.				
B1 - Intermediate user Can communicate, to a limited level, in Welsh about things that are familiar and/or work related.				
B2 - Upper intermediate user Can express myself in Welsh on a range of topics and understand most of a conversation with a native speaker.				



<p>C1 - Fluent user Can communicate fluently in Welsh.</p>				
<p>C2 - Master user Can communicate fluently on complex and specialist matters in Welsh.</p>				

Disclosure & Barring Service requirements

This post does not require a DBS check.

The Associate must be eligible for UK defence security clearance prior to commencing the role.

Supporting information

The University is a dynamic organisation and changes may be required from time to time. This job description and person specification is not intended to be exhaustive.

The University is committed to the highest ethical and professional standards of conduct. Therefore, all employees are expected to have due regard for the impact of their personal behaviour and conduct on the University, students, colleagues, business stakeholders and our community. Each employee must demonstrate adherence to our Code of Professional Conduct. In addition, all employees should have particular regard for their responsibilities under Cardiff Metropolitan University’s policies and procedures.