



Job title	Research Fellow in Wearable Technology for Pregnancy Monitoring	Job family and level	Research and Teaching Level 4
School/ Department	Engineering	Location	University Park Campus

Purpose of role

We have an exciting opportunity for an ambitious PhD qualified Engineer to design and develop a new wearable technology for monitoring during pregnancy. We are particularly interested in creating a new technology for monitoring the placenta. This involves the integration of optical and electrical human body sensors into an electronic system, their characterisation and measurements on pregnant participants.

	Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role)	% time per year
1	▪ Demonstrate construction	30%
2	▪ Laboratory based device evaluation	30%
3	▪ Field based evaluation	20%
4	▪ Engagement with subcontractors	10%
5	▪ Present results at project process meetings	5%
6	▪ Write papers for submission to peer-reviewed journals and conferences	5%

Person specification

	Essential	Desirable
Skills	▪ Ability to build strong alliances with colleagues and stakeholders, develop network of contacts and build trust ▪ Establishes credibility and works cooperatively with others ▪ Written and verbal communication is clear, well-structured and easy to understand ▪ Awareness and understanding of clinical studies ▪ Organised and methodical with ability to manage own time and workload effectively ▪ Monitors the progress of work against project milestones and/or agrees standards of work ▪ Able to analyse and carefully present data for presentations ▪ Plans and coordinates own work to meet objectives and development plans ▪ Flexible approach to problem solving ▪ Excellent IT skills	
Knowledge and experience	▪ Development and implementation of instrumentation for monitoring during pregnancy ▪ Fibre optics sensors in the field of healthcare ▪ Implementation of instrumentation in an MRI environment ▪ Electronic circuit design ▪ An understanding of medical device regulations to ensure compliance and safe use of technology ▪ Data capture, recording of data and report writing to a professional standard.	
Qualifications, certification and training (relevant to role)	▪ PhD in Fibre Optic Sensing, Electrical & Electronics Engineering or related subject.	



Expectations and behaviours

The University has developed a clear set of core expectations and behaviours that our people should be demonstrating in their work, and as ambassadors of the University's strategy, vision and values. The following are essential to the role:

Valuing people	Is friendly, engaging and receptive, putting others at ease. Actively listens to others and goes out of way to ensure people feel valued, developed and supported.
Taking ownership	Is clear on what needs to be done encouraging others to take ownership. Takes action when required, being mindful of important aspects such as Health & Safety, Equality, Diversity & Inclusion, and other considerations.
Forward thinking	Drives the development, sharing and implementation of new ideas and improvements to support strategic objectives. Engages others in the improvement process.
Professional pride	Is professional in approach and style, setting an example to others; strives to demonstrate excellence through development of self, others and effective working practices.
Always inclusive	Builds effective working relationships, recognising and including the contribution of others; promotes inclusion and inclusive practices within own work area.

Key relationships with others



