**Faculty of Creative and Cultural Industries**

**The Institute of Industrial Research in collaboration with Datum Electronics, Portsmouth**

**KNOWLEDGE TRANSFER PARTNERSHIP (KTP) ASSOCIATE – GRADUATE ENGINEER**

**Fixed term contract for 45 weeks**

**10006879**

**Information for Candidates**

# THE POST

Please see the attached job description and person specification.

**TERMS OF APPOINTMENT**

Salary of circa £25,000 depending on qualification and experience, paid into a bank or building society monthly in arrears.

Although an employee of the University of Portsmouth’s, you will be working at Datum Electronics, Portsmouth.

The Appointee will be entitled to join the Local Government Pension Scheme. The scheme's provisions include an index-linked pension with an option to exchange some pension for a lump sum on retirement together with dependants’ benefits. Contributions by the employee are subject to tax relief.

There is a probationary period of six months during which new staff are expected to demonstrate their suitability for the post.

There is a comprehensive sickness and maternity benefits scheme.

It is the University's policy to take up references for candidates called for interview and to ask successful candidates to submit documentary evidence of their qualifications on taking up their appointment.

If the position has a requirement for a Criminal Records Bureau Disclosure, this will be stated in the advert. The Criminal Records Bureau Application Form will be provided once the selection process has been completed.

All applications must be submitted by Midnight (GMT) on the closing date published.

**UNIVERSITY OF PORTSMOUTH – RECRUITMENT PAPERWORK**

1. **JOB DESCRIPTION**

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| **Job Title:** | KTP Associate - Graduate Engineer  |
| **Faculty/Centre:** | Faculty of Creative and Cultural Industries |
| **Department/Service:****Location:** | Institute of Industrial Research (IIR) |
| **Position Reference No:** | 10006879 |
| **Cost Centre:** | 42679 |
| **Responsible to:** | Professor David Brown and Dr Edward Smart |
| **Responsible for:** | N/A |
| **Effective date of job description:** | 22nd October 2012 |

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| **Purpose of Job:** |
| Shaft power signals contain valuable information relating to the condition of the transmission system. This information, if understood and analysed, can lead to in-depth measurement of performance, energy use and diagnose faults. The objective of this programme is to collect and understand this information, analyse the data and prove its value in commercial application. |

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| **Key Responsibilities:** |
| **Duties and responsibilities:*** Literature review on current technical sensor designs and products
* Create a well-documented technical specification under a version control system
* Regular and accurate reporting to academic and industrial supervisors
* Taking initiative to monitor and manage agreed objectives
* Create mathematical models using Matlab
* Ability to undertake experiments following scientific research principles
* Work with the project team (academic and industrial) to develop a data analysis model
* Implement the findings of the experiments to develop a prototype
* Working closely with the company engineers and customers to understand the requirements of the analysis model
* To produce a good quality conference paper during the project
* Carry out other duties as may be reasonably required by industry and academic supervisors
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| **Working Relationships:** |
| The KTP Associate will be employed by the University of Portsmouth, as a member of the Institute of Industrial Research (IIR). As part of the job, the KTP Associate will interact with the following personnel in the university:Professor David Brown (Lead Academic of the project)Dr. Edward Smart (Academic supervisor)Mr. Michael Buchan (Academic team)The project itself will be overseen by a Local Management Committee which will include the Academic team and the Industrial team to support the running and delivery of the programme. |

1. **PERSON SPECIFICATION**

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| **No** | **Attributes** | **Rating** | **Source** |
| **1.** | **Specific Knowledge & Experience** |  |  |
|  | Experience in using Matlab | E | AF, S |
|  | Experience with creating mathematical models  | E | AF, S |
|  | Understanding sensor systems | E | AF, S |
|  | Experience in working with industry  | D | AF, S |
|  | Understanding embedded system | D | AF, S |
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| **2.** | **Skills & Abilities** |  |  |
|  | Computer programing skills (e.g. C code or equivalent) | E | AF, S |
|  | Demonstrate good attention to detail, including excellent numeric skills | E | AF, S |
|  | Ability to work to deadlines | E | AF |
|  | Good verbal and written communication skills | E | AF, S |
|  | Excellent report writing skills | E | AF |
|  | Ability to project manage | D | AF, S |
|  |  |  |  |
| **3.**  | **Education &/or Training** |  |  |
|  | Degree in Mechanical Engineering, Electronic Engineering and Applied Physics (2.1 or above) | E | AF, S |
|  |  |  |  |
| **4.** | **Other Requirements** |  |  |
|  | Experience of “hands-on” experimentation | D | AF |
|  | Self motivation and ability of working independently and within a team | D | AF |
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**Legend**

Rating of attribute: E = essential; D = desirable

Source of evidence: AF = Application Form; S = Selection Programme (including Interview, Test, Presentation, References)

**JOB HAZARD IDENTIFICATION FORM**

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| **Please tick box(s) if any of the below are likely to be encountered by the applicant.** |
| International travel  | X | Ionising radiation  |  |
| Manual Handling  |  | Asbestos, Lead |  |
| Human tissue/body fluids EPP Worker (Exposure Prone Procedures) |  | Driving on University business Mini-bus, Van, bus, forklift truck |  |
| Genetically modified Organisms  |  | Food Handling  |  |
| Noise > 80 DbA  |  | Substances to which COSHH applies |  |
| Skin irritants/sensitisors  |  | Small print /colour coding (electrical)  |  |
| Night Dutybetween 2200 hrs and 0600 hrs |  | Working at heights / with drains / in confined spaces |  |
| Display Screen Equipment  | X | Access to children  |  |
| Repetitive tasks  | Stress (workplace/workload demands, changes within dept etc) |  |
| Other (please specify)  |
| Please give details of any of the above as necessary: |

**Line Manager/Supervisor to sign below:**

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| **Signed** |  |
| **Name (block capitals)** | DAVID BROWN |
| **Date** | 22nd October 2012 |
| **Extension number** | 4446 |