UNIVERSITY OF WARWICK

Job Description

Job title	Project Engineer – Controls
Department	WMG
Grade	FA6

Job purpose (a brief summary of the role)	You will be employed to work on a project on the topic intelligent and innovative automation systems in collaboration with industry and academic partners.
Duties and responsibilities	**PROJECT SPECIFIC RESPONSIBILITIES** • Support the creation of technical project objectives, such as the development, testing, evaluation of automation systems and associated engineering methods and technologies. • Manage the delivery of project objectives, the planning of the specific tasks required and key milestones and ensure projects are delivered to plan. • Research new automation design/commissioning tools and integration concepts. • Conduct lab or desktop-based work to support the delivery of defined project objectives. Also, support the ASG team with such experimental or development work to ensure the work supports the delivery of client projects. • Managing client expectations with regards to project delivery, ensure good communication to progress or problems. • Assess legacy automation systems or manual manufacturing processes regarding the usability of advanced automation systems. • Ensure that Health and Safety standards and requirements are followed throughout the engineering phase. • Contribution to academic publication, grant writing, teaching, training, administrative tasks, and dissemination events. • Responsible for writing or supporting technical reports and presentations, ensuring they are concise and communicate the project and its findings. Ensure reports are suitable for the dissemination of data or technical jargon to varied audiences. • To keep up to date with the business or technical relevant developments within the areas of Automation Systems, Robotics and Digital Manufacturing. **DUTIES:** 1. To provide specialist technical recommendations, practical tools and design resolution advice for manufacturing and performance within the project, particularly on (e.g. PLC based automation systems, robot arm based automation, autonomous mobile robots, commissioning and maintenance of mobile systems). 2. To share information with colleagues and produce recommendations. 3. To manage research aspects of the project including contributing to academic publications, technical reports and other presentations and dissemination methods. 4. To assist with the development and delivery of teaching and training materials to disseminate the research findings in a format that will encourage successful implementation. 5. To identify, operate and install suitable equipment to support the project objectives. Carrying out suitable tests to evaluate the equipment performance effect on product to push forward the boundaries of current knowledge in each topic area. 6. To record and track the delivery of outputs during research & identify routes for achievement of targets.

Person Specification

The Person Specification focuses on the essential and desirable knowledge, skills, experience and qualifications required to undertake the role effectively. This is measured by (a) Application Form, (b) Test/Exercise, (c) Interview, (d) Presentation.

Essential Criterion No.	Essential Criterion Description	Measured by
E1	A good honours degree in a relevant subject or relevant experience.	A
E2	A willingness to carry out experimental work.	A & C
E3	A good understanding of technologies/experience in PLC programming, robot programming, system integration and commissioning, embedded systems, industrial IoT, modelling and simulation of automation systems.	A,C & D
E4	Experience in experimental design, data analysis and interpretation including the ability to rapidly adapt and learn new skills in the area of applied automation, robotics and digitalisation.	A,C & D
E5	Experience of manufacturing processes engineering and automation systems design.	A,C & D
E6	Experience of industrial R&D and first implementation in 'real world' environment.	A & C
E7	Project planning and reporting skills.	A & C
E8	Experience of making recommendations for process improvements.	A & C
E9	Ability to deliver rapid, commercially focused results, with well-honed problem-solving skills.	A & C
E10	Good effective communication (oral and written) skills, presentation and training skills.	A,C & D
E11	Good interpersonal skills, with a flexible approach to working.	A,C & D
E12	Ability to work independently and as part of a team on research programmes.	A & C
E13	Ability to initiate, plan, organise, implement and deliver programmes of work to tight deadlines.	A & C
E14	Competency in IT and familiarity with a computerised environment.	A & C
E15	A range of Quantitative and/or Qualitative research skills.	A & C

Desirable Criterion No.	Desirable Criterion Description	*Measured by*
D1	A doctorate level qualification in a relevant research area.	A & C
D2	A significant level of relevant product development experience in an industrial context.	A,C & D
D3	Some experience in development and delivery of training material.	A & C
D4	A sound ability to analyse and interpret data.	A & C