

JOB DESCRIPTION

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| Job Title: | Precision Mechanical Engineer |
| Department / Unit: | Physics Department – Mechanical Workshop |
| Job type | Full-Time, Permanent |
| Grade: | RHUL 6 |
| Accountable to: | Technical Operations Manager |
| Accountable for: | None |
| Purpose of the Post | |
| <p>The Physics Department is part of the School of Engineering, Physical and Mathematical Sciences (EPMS). This role will be part of the Technical team that supports the research and teaching in the department.</p> <p>The Precision Mechanical Engineer will provide support across a number of research groups and the teaching laboratory.</p> | |
| Key Tasks | |
| <ol style="list-style-type: none"> 1. Construct and develop a range of specialised equipment and components to support cutting edge research projects. A high degree of accuracy is essential, using the full range of workshop machines, skills, software and techniques. The Precision Mechanical Engineer will be required to work closely with an originator of a design, using detailed drawings or basic sketches and verbal instructions. 2. Give advice on design, materials and methods where appropriate. 3. Provide technical support to Academic staff, research assistants and postgraduate students. To plan, advise and liaise with academic and research staff where appropriate. 4. To draw up specifications for custom built equipment. 5. To support the design, construction, development, installation and operation of research apparatus. 6. Ensure compliance with health and safety regulations. 7. Continuous professional development, learning new skills and techniques with CAD software and workshop machinery. | |
| Other Duties | |

The duties listed are not exhaustive and may be varied from time to time as dictated by the changing needs of the University.

The post holder will be expected to undertake other duties as appropriate and as requested by their manager, including providing appropriate cover in cases of staff absence or vacancies.

The post holder may be required to work at any of the locations at which the business of Royal Holloway is conducted.

Internal and external relationships

The post holder will be required to work closely with all colleagues within the Physics department and may be required to liaise with other staff in the EPMS School from time to time.

PERSON SPECIFICATION



Details on the qualifications, experience, skills, knowledge and abilities that are needed to fulfil this role are set out below.

Job Title: Precision Mechanical Engineer

Department: Physics

| | Essential | Desirable | Tested by (Application Form, Interview, Test) |
|--|-----------|-----------|---|
| Knowledge, Education, Qualifications and Training | | | |
| City and Guilds or equivalent in Mechanical Engineering | X | | App Form |
| Knowledge of health and safety procedures relevant to this post | | X | App form/Interview |
| Skills and/or Abilities | | | |
| Ability to use a wide range of hand operated machinery, including lathes, milling machines etc | X | | App Form/Interview |
| Ability to work with a variety of materials and techniques | X | | App Form/Interview |
| Ability to develop solutions from limited information | X | | App Form/Interview |
| Ability to undertake tasks that require a high level of attention to detail and accuracy | X | | Test |
| Ability to apply creative problem-solving techniques in machining | X | | App Form/Interview |
| Ability to work from sketches and consultations | X | | App form/Interview |
| Ability to communicate at a high level both orally and in writing | X | | App Form/Interview |
| Ability to interact effectively with people at all levels within the department | X | | App form/Interview |
| Good organisational skills and ability to work prioritise workload | X | | App form/Interview |
| Experience | | | |
| Experience in precision engineering and/or instrument making | X | | App form/Interview |
| Experience of CNC operation and programming | | X | App Form/Interview |
| TIG or arc welding, brazing and soldering | | X | App form/Interview |
| Experience of a research environment workshop | | X | App form/Interview |
| Other requirements | | | |
| Committed to personal development and training courses | X | | App Form/Interview |
| Willingness to work after normal hours on some occasions | | X | App Form/Interview |