1. Job Details

Job title: Workshop Manager (Electronics)

School/Support Department: Physics

Unit (if applicable):

Line manager: Colin Thomson, Technical Services Manager

2. Job Purpose

To manage the Electronics Workshop, a design, manufacturing, and repair facility, producing work for the School, and for other College and UoE customers.

3. Main Responsibilities

1. Supervise the operation of all aspects of the workshop, including the other two technical staff, ensuring satisfactory throughput of work and appropriate quality control. 10%

2. Discuss and evaluate customer requirements, then provide project costings, designs, drawings and other appropriate records. 10%

3. Design and develop electronic and electrical circuits to a professional standard, often including the design of complex multi-layer printed circuits. 40%

4. Supervise and participate in the construction of equipment utilising the above designs. 20%

5. Supervise the maintenance and repair of a wide range of complex equipment. 10%

6. Advise on all aspects of electrical safety within the School, and supervise implementation of the PAT electrical safety testing programme. 10%

4. Planning and Organising

- Assess time and effort to complete each project and schedule up to 3 months in advance.
- Plan order placement for components, equipment, etc., to enable work programme to be kept on track.
- Plan, schedule, and supervise the implementation of the PAT testing programme covering all electrical equipment throughout the School.

5. Problem Solving

- Evaluate staff and student requirements, interpreting often unformed or specious ideas and concepts. Determine specific requirements before designing a solution to suit.
- Problems faced cover the full spectrum from micro-electronics to power engineering.
- Solutions vary accordingly, but may involve the design of sophisticated electronic circuits, which would usually be followed by the design of a complex printed circuit board. Equally, the solution may involve high current/high power devices requiring appropriately hard-wired pieces of equipment to be built.
6. Decision Making

- Allocate work to two other electronics workshop technicians, matching skill sets and workload against work programme and timescales.
- Decide on work method, materials to be used, etc., to achieve optimum balance between acceptable standard of output, and time and cost taken to achieve it.
- Provide advice and guidance on all electronic and electrical matters to colleagues within the School, and occasionally to those from other Schools.

7. Key Contacts/Relationships

- First point of contact with all who wish to use the electronics workshop, whether internal or external, staff, student, or other customers.

8. Knowledge, Skills and Experience Needed for the Job

- Degree in Electronics.
- Minimum 10 years experience in a broad range of electronic/electrical backgrounds
- Good inter-personal and communication skills.
- In depth knowledge of computer based design tools e.g. circuit evaluation software, PCB CAD packages.
- Sound knowledge of Microsoft Office.

9. Dimensions

- Directly responsible for operation, safety and security, of electronics workshop (85 sq.m.) and the very wide range of equipment therein. Replacement value in excess of £150k.
- Direct reports from 2 other workshop technicians.
- Indirect supervision of technicians involved in PAT programme (14 in total).
- Approx. 100 of the School’s staff and PG students are experimentalists who require support from the electronics workshop.
- Approx. 12 major projects, 130 minor projects/jobs, and 45 items for repair are handled on average each year.
- Responsible for placing orders averaging £12k p.a.

10. Job Context and any other relevant information

- The Electronics Workshop sees a very wide range of problems which are not normally considered part of a single discipline e.g. repair of a large 3-phase machine tool is a completely different skill to designing circuits using the latest in micro-chips.