
Job Level Descriptors

Technical Services Staff

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Job Level Descriptors

Technical Services Staff

1 Technical Services – Grade 3

1.1 Job Summary

Roles engaged in technical support work which is normally carried out to established routines but which is broad and varied in scope. Post holders at this level require minimum of one year's relevant work experience or Higher Grade qualifications, or equivalent, plus up to a year's relevant practical experience. In addition, post holders require formal training in order to have sufficient knowledge and skills, for example, to operate simple technical equipment, accurately monitor stock supplies and carry out straightforward maintenance of specialist equipment. The work of post holders will be task orientated, rather than being planned for weeks and months ahead. However, post holders have to prioritise their tasks to ensure that they are providing an effective technical support service. Post holders will exchange information with others and will communicate with individuals internally and out with the department and possibly outside the organisation. Post holders will exercise tact and diplomacy ensuring that factual information is clearly understood and transmitted by/to other parties. Post holders will deal with issues, e.g. handle straight forward maintenance which have been experienced before. However, when unusual situations are experienced, these are referred to other, more senior, technical staff.

1.2 Representative Work Activities

- Carry out straightforward tasks utilising technical machinery/equipment e.g. band saw, bench centrifuge, sieve shakers, balances.
- Carry out maintenance of technical equipment e.g. band saw, bench centrifuge.
- Monitor routine stock and supplies and prepare a list of items required to be ordered, checking orders with suppliers when necessary
- Set up equipment for laboratory experiments.
- Assist others e.g. students and staff to locate materials or equipment they may require.
- Comply with health and safety procedures affecting self and others.
- A degree of physical effort may be required, e.g. lifting/carrying, cleaning. May involve some exposure to an unfavourable working environment, e.g. exposure to chemicals, heat, dust or detergents.

1.3 Knowledge, Skills and Experience

- Postholders have the knowledge, skills and experience normally associated with learning gained through a minimum of one year's previous work experience within a technical related environment or Higher Grade/equivalent qualifications plus up to a year's practical experience in a technical environment.
- Knowledge gained through formal training to enable the straightforward maintenance and operation of specialist equipment.
- Able to prioritise own workload when required and ability to exchange information courteously and effectively.

1.4 Quality Indicators

- Work is carried out on time to prescribed standards
- Accuracy and attention to detail
- Dependability/reliability
- Flexible approach to duties
- Knowledge of, and adherence to, the University's Health and Safety and Equal Opportunities policies.

2 Technical Services – Grade 4

2.1 Job Summary

Practical technical roles which require up to 3 years relevant work experience. The alternative route to this level is through completion of a modern apprenticeship which is equivalent to an HNC level qualification and incorporates practical work experience. Roles at this level require a well developed working knowledge of a specialised system and/or specialist use of equipment. Post holders may require an understanding of the basic principles of the relevant scientific or technical discipline in order to operate within the role. The majority of work will be planned a day or two in advance, although occasional elements of the role may require more forward planning, e.g. weeks and months ahead. Post holders will need to be aware of timescales and will work within these to ensure that tasks are completed accurately and on time. Communication will primarily involve the clear transmission of factual information to stakeholders (e.g. students/other staff members), with an appropriate awareness of their needs/feelings. Post holders face a range of problems in their role, most of which have been experienced previously and for which solutions will have been established; post holders will directly apply their experience to these situations. When problems which have not been experienced before are encountered, these are normally referred to a line manager/supervisor.

2.2 Representative Work Activities

- Operate machinery/equipment e.g. balances, centrifuges
- Set up equipment for class practicals
- General maintenance and servicing of standard apparatus/equipment
- Under appropriate supervision, conduct routine experiments according to approved study plans and maintain appropriate records
- Safe disposal of contaminated waste
- Monitor routine stock and supplies and prepare a list of items required to be ordered
- General record keeping and technical data filing
- Check orders with suppliers and replenish stocks as directed
- Dispense and despatch materials or products according to approved documentation
- Assist others e.g. students and staff to locate materials or equipment they may require
- Preparation of culture media, stock cultures, routine solutions
- Comply with relevant health and safety procedures affecting self and others
- Resolve straightforward software and hardware problems
- A degree of physical effort may be required, e.g. lifting/carrying, cleaning. May involve some exposure to an unfavourable working environment, e.g. exposure to chemicals, heat, dust or detergents.

2.3 Knowledge, Skills and Experience

- Postholders have the knowledge, skills and experience normally associated with learning gained through previous relevant work experience, perhaps up to 3 years. Alternatively, completion of a modern apprenticeship, which incorporates appropriate practical experience
- Requires an understanding of the basic principles of the relevant scientific or technical discipline in order to operate within the role
- Plan and prioritise own defined work activities within established routines or procedures
- Ability to exchange factual information, verbally and in writing.

2.4 Quality Indicators

- All tasks are completed on time with competent end results
- Accuracy and precision
- Degree of initiative
- Courteous and effective exchange of factual information is facilitated.
- Demonstrating the development of technical skills
- Responsiveness to training/education
- Knowledge of, and adherence to, the University's Health and Safety and Equal Opportunities policies.

3 Technical Services– Grade 5

3.1 Job Summary

Technical roles which require qualifications equivalent to HNC level and normally approximately 5 years' relevant work experience or sufficient equivalent on the job experience. Post holders will assess problems and use experience or consult procedures to determine the most appropriate action. Post holders at this level will plan and organise their own work, co-ordinating the various strands of their responsibilities to ensure that end results are effectively achieved. This forward planning may be for weeks and months ahead and there may be some contribution with others to longer term developments within their unit/department. Post holders require sufficient communication skills to convey information and to provide explanations to stakeholders (e.g. students and staff). Precedent will often define the approach to be taken when undertaking duties, however post holders can determine what actions they will take within the parameters of existing procedures and policies. Supervision will normally be available when required, for example, in the event of unforeseen problems or issues. However, in general terms supervision is not close.

3.2 Representative Work Activities

- Operation and maintenance of workshop equipment, including hand tools, machine tools and PC aided manufacturing equipment
- Preparation of special (i.e. not generally commercially available) materials, compounds and solutions
- Extractions, analysis and determination of samples using (typically) specialised apparatus, spectrophotometer, chromatographic and electrophoresis equipment
- Calibration of electronic equipment/analytical instrumentation
- Ensure instrumentation is available and functional to enable laboratories to run successfully
- Maintain accurate records of test/experiments/technical procedures.
- Provide students with appropriate factual information on how experiments and instruments operate
- Assist students in the use of equipment and apparatus e.g. balances, microscopes, ph meters
- Carry out manufacturing using straightforward machinery e.g. milling, drilling, grinding
- Resolve routine work problems independently, referring more complex problems to senior colleagues
- Provide IT support to staff and students, including installation, maintenance and basic configuration of PCs, adhering to standard procedures devised for this purpose

3.3 Knowledge, Skills and Experience

- Postholders have the knowledge, skills and experience normally associated with learning gained through qualifications to HNC level or equivalent and normally approximately 5 years work experience within a technical related environment or sufficient equivalent on the job experience
- Working knowledge of relevant system, equipment, processes and procedures
- Understanding of health and safety regulations and procedures
- Good oral communication skills, plus sufficient written communication skills, for example, to write up experiments, establish and clarify facts and deal with enquiries
- Experience of undertaking a range of technical support activities without constant guidance
- Knowledge of PC software and systems, including the ability to set up and configure systems and trouble shoot problems to ensure first level support

3.4 Quality Indicators

- Competence with equipment, systems and technical tools.
- Ability to assess problems and take appropriate action
- Quality of technical service provided within a team
- Effective, accurate task completion
- Ability to plan and organise own workload/tasks
- Knowledge of, and adherence to, the University's Health and Safety and Equal Opportunities policies.

4 Technical Services – Grade 6

4.1 Job Summary

Technical roles requiring significant knowledge of a specialised system and/or specialist use of equipment. Post holders require knowledge and skills gained through qualifications equivalent to HNC level and normally approximately 7 years' relevant work experience or sufficient equivalent on the job experience. Post holders require a broad and deep understanding of a range of methods or procedures. A consistently high level of personal responsibility and initiative will be required to respond independently to queries and use judgement to deal with daily, unforeseen problems and circumstances, with limited guidance from a superior. Role holders at this level are often specialists, planning and co-ordinating their own work, normally over weeks and months ahead with an awareness of the activities of other team members or departments, since the post holder's activities either influence or are influenced by these.

At this level, post holders' overall priorities are set by a line manager with this manager reviewing results achieved and, as required, monitoring progress on previously delegated tasks. Post holders may supervise a number of staff, ensuring that work is appropriately allocated.

4.2 Representative Work Activities

- Perform precise calibration and readings on specialist machinery and, within own skills level, repair specialist equipment
- Manufacture customised devices e.g. specialised mechanical or electro-mechanical apparatus
- Carry out experiments according to guidelines, record results, carry out appropriate interpretation of these and present in a relevant manner
- Keep accurate stock records and process purchase orders and invoices
- Formally demonstrate, instruct and advise on equipment, techniques and experiments
- Test and maintain equipment using for example oscilloscopes, signal generators or following standard equipment procedures
- Ensure hazardous waste is properly identified, contained and disposed of
- Oversee the work of and delegate tasks to other technicians
- Training of technical staff in relevant techniques
- Liaise with academic staff in the preparation of work activities for research and teaching
- Responsible for the operation and maintenance of a specific laboratory/workshop environment
- Prepare and produce Risk Assessments

4.3 Knowledge, Skills and Experience

- Postholders have the knowledge, skills and experience normally associated with HNC level qualification or equivalent plus normally approximately 7 years relevant work experience within a technical related environment or sufficient equivalent on the job experience.
- Significant knowledge within a specialist field e.g. information technology, analytical chemistry, pharmaceutical science.
- Understanding of health and safety regulations and procedures
- May require supervisory skills and experience of delegating work appropriately to others.
- Good communication skills enabling the provision of appropriate information and explanation to stakeholders
- Able to take decisions within an appropriate level of authority, with line manager/supervisor involved in decision making only when necessary

4.4 Quality Indicators

- Competence with equipment, systems and technical tools
- Ability to co-ordinate own work and possibly that of others
- Ability to assess problems and take appropriate action
- Appropriate provision of technical service within a team
- Effective transfer of skills and knowledge to junior colleagues, other staff and students
- Knowledge of, and adherence to, the University's Health and Safety and Equal Opportunities policies.

5 Technical Services – Grade 7

5.1 Job Summary

Senior technical roles requiring significant technical and practical skills, with well developed working knowledge of technical or scientific practices acquired through HNC/HND and normally approximately 10 years relevant experience in a range of steadily larger, directly relevant roles or alternatively sufficient equivalent relevant experience. Roles providing advice and support to units/departments based on a combination of practical and theoretical knowledge in a technical or specialised field normally involving the deployment of resources, including people, within a sub-section of a department. Post holders will work within established procedures and practices, analyse and use their judgement to identify the best solution to a range of different problems and issues, offering recommendations to more senior managers in more complex situations. Post holders will be required to receive, understand and convey information which requires interpretation, analysis and careful explanation to others. Post holders will be expected to contribute to the development of new and enhanced operational procedures and to make a contribution to wider departmental procedures and policies.

5.2 Representative Work Activities

- Under Head of Department, ensure the satisfactory maintenance and security of buildings and plant
- Supervision of staff within a workshop/laboratory environment ensuring that work is appropriately delegated
- Work closely with academic staff to ensure the development of new or novel techniques and procedures within the technical service
- Advise Head of Department on the purchase of capital equipment and organise departmental stores where appropriate
- Satisfactorily maintain and provide expenditure/cost records
- Involvement in the selection and appointment of technical staff
- Coordination of the training of technical staff at lower levels
- Responsible for a group of laboratories and for liaising with academic and research staff to ensure that laboratory provision meets teaching and research needs
- Sign off relevant Risk Assessments as the competent individual
- Advise and gain the support of others (e.g. academic staff/students) in order to ensure the delivery of service objectives.

5.3 Knowledge, Skills and Experience

- Postholders have the knowledge, skills and experience normally associated with HNC/HND with normally approximately 10 years relevant experience or alternatively sufficient equivalent relevant experience.
- Thorough knowledge and understanding of the technical or scientific practices, procedures and products relevant to the role
- Experience of working independently, referring only unusual problems to senior colleagues.
- Working knowledge of the broader activities of the department
- Proven experience in an area of technical specialism
- Proven supervisory skills where appropriate
- Proven communication and interpersonal skills

5.4 Quality Indicators

- Ability to improve the quality of technical service provided to teaching staff and students.
- Satisfaction of staff and/or students with the quality of technical support provided
- Initiative and judgement shown when solutions are not obvious
- Effective organising and planning
- Performance of own and teams tasks to agreed time and quality standards
- Knowledge of, and adherence to, the University's Health and Safety and Equal Opportunities policies.

6 Technical Services – Grade 8

6.1 Job Summary

Senior technical members of staff who are in charge of a major complex of laboratories/ workshops within a large academic department or faculty. Post holders at this level require at least an HNC/HND/Degree with normally approximately 10 years vocational experience or alternatively sufficient equivalent relevant experience in a variety of steadily larger jobs. Post holders require a broad and deep understanding of a range of methods or procedures without necessarily requiring the conceptual understanding of how to create them or change them in a fundamental way. Rather, post holders will require significant management skills to lead and develop a large, multi-disciplinary workforce. They will delegate work to subordinates, who in turn, manage their own specialist teams. Post holders will work within established procedures and practices, analyse and use their judgement to identify the best solution to a range of different problems and issues, offering recommendations to more senior managers in complex situations. Post holders require skills of persuasiveness, assertiveness and diplomacy and will have to apply a substantial amount of personal influence within their interaction with others. Post holders will typically be required to solve problems where the optimal solution may not be immediately apparent and there is a range of information or where there is diverse, partial and sometimes conflicting data with a range of potential options available. Post holders will determine their own priorities and will exercise discretion as long as activities are broadly consistent with operational policies and precedents within their function. Post holders will be expected to influence policy through advising on the impact of policy/legislative change and implementation in their specific area/s of work. Post holders may exceptionally hold uniquely specialist roles, perhaps advising academic staff as the sole technical expert within a particular specialism on a faculty wide basis.

6.2 Representative Work Activities

- Contribute to departmental policies and procedures and contribute to annual strategic planning, pertaining to the technical area within the department
- Provide highly technical, specialist advice and recommendations to senior management and staff within the department
- Manage a team, responsible for delegating and supervising the work of others, including discipline and grievance procedures and staff welfare issues
- Make recommendations to HOD in relation to the future technical staffing needs of the department
- Assessing, after discussion with academic and technical staff, the forward needs of the department in respect of space, plant, apparatus and general equipment and the integration of this with existing facilities
- Responsible for training and development of others, including identifying training needs and providing formal and informal training
- Keep abreast of relevant legislation and ensure legislative compliance within technical department
- Within certain specialised areas, in collaboration with academic staff, conduct and write up research articles for publication as a named author
- Within the technical function, identify additional service/system requirements or shortfalls and coordinate and/or design the delivery of innovative solutions to maximise service quality, efficiency and continuity
- Under HOD, ensure satisfactory legal compliance within the technical area
- May be ultimately responsible for the stock control/purchasing system, liaising and negotiating with internal and external suppliers
- Manage and influence the setting of a large technical budget.

6.3 Knowledge, Skills and Experience

- Postholders have the knowledge, skills and experience normally associated with HNC/HND/Degree with normally approximately 10 years relevant experience or alternatively sufficient equivalent relevant experience demonstrating knowledge in technical, specialist field, developed through involvement in a series of progressively more demanding, relevant work roles
- Experience of working/responding independently and dealing with unforeseen problems and circumstances
- Planning and organisational skills, for examples workflow management.
- Advanced analytical, technical and problem solving skills
- Proven experience in area of technical specialism
- People management and interpersonal skills
- Ability to produce reports for senior departmental management

6.4 Quality Indicators

- Ability to organise and prioritise own and, where relevant, others activities to meet objectives.
- Contributes to and improves service quality within post holder's area of work.
- Workloads are delivered within deadlines to agreed standards
- Post holder is able to take own decisions within an appropriate level of authority with reference to Line Manager as necessary
- Quality of advice, analysis and interpretation of complex issues
- Contribution to research outcomes
- Appropriate training and resourcing of technical team
- Budget controlled in line with University standards
- Knowledge of, and adherence to, the University's Health and Safety and Equal Opportunities policies.