UCL Professional
Services Careers Framework
Technical Professionals

January 2024

Contents

What should the Careers Framework be used for?

- Reflecting on opportunities and career pathways within your own job family.

- Considering career and progression options across other job families, or the wider institution.

- Understanding behaviours linked to a successful career at UCL.

- Thinking about transferable skills and personal strengths.

- Identifying your skills and experience gaps in reference to career progression.

- Building a personal development plan.

- Preparing for development or career conversations.

- Learning more about UCL colleagues and how they have successfully navigated their careers.

UCL Human Resources and your HR Business Partners can advise on all the above: www.ucl.ac.uk/hr.

UCL Professional Services Careers Framework – Technical Professionals

The Professional Services staff population at UCL work across the University, based either in centralised roles or locally in Faculties, Departments and Divisions. This group encompasses an extraordinary range of talent, skills and experience. The UCL Professional Services Careers Framework is designed to help staff to have better career conversations, plan meaningful development, and to experience fulfilling careers. This supports our long-range strategy, UCL 2034, and UCL's commitment to valuing staff.

For information on Career Frameworks and Pathways in other areas in UCL please search for 'Career Pathways' on the UCL website.

The Framework provides the following information within each job family:

- Core experience at professional levels within job families.

- Transferable skills associated with each professional level.

- Development activities that may support vertical and lateral career progression.

- UCL Ways of Working – behaviours linked to success at professional levels throughout the organisation.

The UCL Careers Framework for Technical Professionals should not be considered as an exhaustive resource, or as a guarantee of progression along any define career pathway, but rather as a tool to support you to consider, discuss and plan your career and development at UCL.

What is the Technical Professionals Careers Framework?

This framework is a development tool designed to support your thinking about your career progression and development in technical roles at UCL. It provides clarity and details about the job family, signposts potential opportunities to seek out for personal and professional development, highlights transferable skills against each role, and provides a complete overview of the UCL Ways of Working.

To help users understand the expected responsibilities at each level we have used the role outlines developed by the **National Technician Development Centre (NTDC)** as our starting point. This information provides a general list of responsibilities for technical staff at each grade, but we have tailored this, adding content which relates to the relevant specialist areas of work, to make the role profiles more comparable to existing UCL roles and, as such, more relatable to UCL staff. This includes matching similar UCL roles and grades to those outlined by NTDC. As the document that sets out these roles has been produced in consultation with a wide range of UK HEIs, this means that technical staff will be able to compare their role and grade across an industry standard.

This career framework uses the **Higher Education Technical Taxonomy (HETT)** framework as a model to illustrate the two distinct career pathways which have been identified for technical staff, that is Technical Managers and Specialist Technicians. The pathways show the complete journey through the technical grades, beginning at entry level and progressing to the pointwhere the pathways then branch off in two directions. Staff wishing to to focus on building and maintaining their specialist technical skills, would follow the Specialist Pathway, while those interested in working towards a more people and business focused role would follow the Management Pathway. The two options that we have set out indicates that staff working at Grade 7 would be at a point in their careers where they're starting to consider the future direction of their career, however we do recognise that this may occur earlier (for staff at Grade 6) in some areas.

UCL Dual-Track Pathways for Technical Professionals
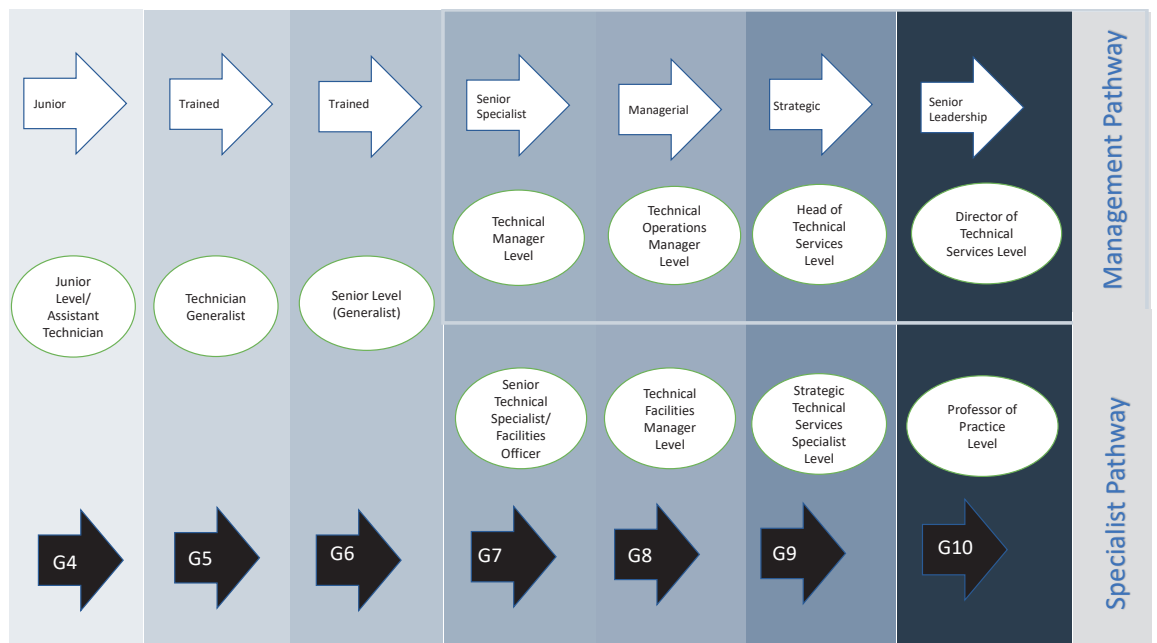
There are a number of related career frameworks being developed in UCL, regarding other groups of professionals who contribute to UCL's research and teaching missions. For example, a new framework for **Digital Research Professionals** developed by UCL ARC will cover professionals whose expertise is in the use of data and compute intensive methodologies for research, such as research software engineers, data scientists and informaticians. Similarly, a framework have been developed for IT professionals, led by Alan Harper in ISD. We are committed to interoperability and ease of movement between related professional families. These other frameworks will build on the work presented here for Technical Professionals, creating a coherent framework for professional career development in UCL.

Are you a thinker, a browser, a mover or a supporter? How might you use the Careers Framework?

The Professional Services Careers Framework aims to support your career whether you are based centrally or work in a Faculty, Department or Division. It provides clear and consistent information to help you to develop, and to plan your progress.

Depending on where you are in your career journey, the Framework could be used to inform conversations with your Line Manager by providing a foundation for discussions about your ongoing training and development needs, or preparation for the next stage in your career.

How can you use the Careers Framework?

Browsers

You are reflecting broadly on a career in one of the UCL Professional Service areas. You use the framework to look at the kinds of experiences and development you might need to join different job families at different grades. You are interest in transferable skills to see what pathway best suits you, and Ways of Working to understand our culture.

Thinkers

You are thinking about your longer term career, and may be deliberating between a few directions. You use the framework to understand how to gain the kind of experience you need to progress your longer term ambitions. You gain insight into the kinds of development you might consider to take action.

Movers

You are ready to progress, you know exactly where you want to go. You use a single page of this framework to gain information for your next move. You locate the professional job family and level you are interested in and find relevant information on job titles, experience, skills, development and Ways of Working.

Supporters

You are a manager, a coach, a mentor or a supportive friend. You use the framework to recruit, inspire and develop staff through meaningful conversations, even if you are not a subject matter expert in this professional field.

The framework is organised in the following categories:

Job Families

A job family represents a group of jobs that have similar professional characteristics. Although the level of responsibility will differ, the essential nature of activities carried out is consistent across the job family and there is a reasonable expectation that people would progress within the job family between levels.

This framework covers five job families in Technical roles at UCL.

1. **Research**
2. **Education**
3. **Enterprise and External Engagement**
4. **General Workshop & Laboratory Services**
5. **Leadership**

A single job family tends to represent an area of specialist expertise, described at different role levels. Many job roles within Technical Professionals, combine more than one of the Technical Professionals job families, meaning that the role holder has expertise in more than of the Technical Professionals specialisms. In using this framework for thinking about your development, consider how your role is reflected in one or a combination of the job families, and how you would like to build your career going forward. Consider where you would like to focus your energies in building experience in your area of interest and potentially increasing your specialisation within a certain job family. Use the information in the framework relating to development and transferable skills to support your thinking.

Personal and Professional Development

The Careers Framework highlights three ways in which Professional Services staff can actively develop their personal and professional skills:

1. **Learning on the job**
2. **Learning from others** (through observing and interacting with other people or groups)
3. **Formal learning** (classroom based).

These are derived from workplace learning theory that suggests:

> "The odds are that development will be about 70% from on-the-job experiences – working on tasks and problems; about 20% from feedback and working around good and bad examples of the need; and 10% from courses and reading."
> *Lombardo and Eichinger, 1996.*

The Professional Services Careers Framework points to relevant learning and development suggestions to reach the level at which they are displayed. For example, information displayed at an Advanced Level page refers to the development required to reach an Advanced Level role in that job family.

In most cases development options should not be considered as essential, but as useful suggestions to build, encourage and support staff to build expertise, confidence and experience to enable their next chosen move.

Mandatory training for certain roles (e.g. Health and Safety and GDPR) is not included on the job family pages, as this will be discussed and arranged directly with line managers. Look at the Learning and Development information on the UCL HR site to find more information on development provision. UCL also provides access to LinkedIn Learning, an online training resource.

Transferable Skills

The Transferable Skills Framework supports a flexible professional approach to career planning through highlighting abilities, attributes and behaviours that underpin effective performance. They give a preliminary basis for identifying where transferable skills could be helpful to job mobility, and provide a starting point for understanding strengths. These skills can be developed and refined through working experience or learning interventions as part of Personal and Professional Development. Refer to pages 28-29 for further information.

UCL Ways of Working

- **Personal Excellence**
- **Working Together**
- **Achieving our Mission**

These are UCL's ways of working, which describe how we work, the ways in which we do our jobs and relate to each other, our colleagues, students and stakeholders. They are based on UCL's values and culture, and are key to supporting our 2034 goals. These were identified in consultation with members of staff, and indicate ways of working that are likely to support a successful career at UCL at each level of the organisation. Refer to page 30-31 for further information.

Reference

Lombardo, M.M. and Eichinger, R.W. (1996). The Career Architect Development Planner (1st ed.). Minneapolis: Lominger.

Technical Professionals

Roles in the **Technical Professionals job families** provide technical and/or scientific support to the research, education and enterprise functions of the University. They offer research support to academic staff and students, and to enterprise and consultancy staff, for example by setting up and operating equipment, running analyses and tests, providing technical design services and giving technical advice. They support educational activities such as meetings, lectures and seminars, by setting up and operating equipment, and providing technical input to teaching programmes. At the higher levels the roles involve highly specialised technical advice and support or management responsibility for a substantial technical service or group.
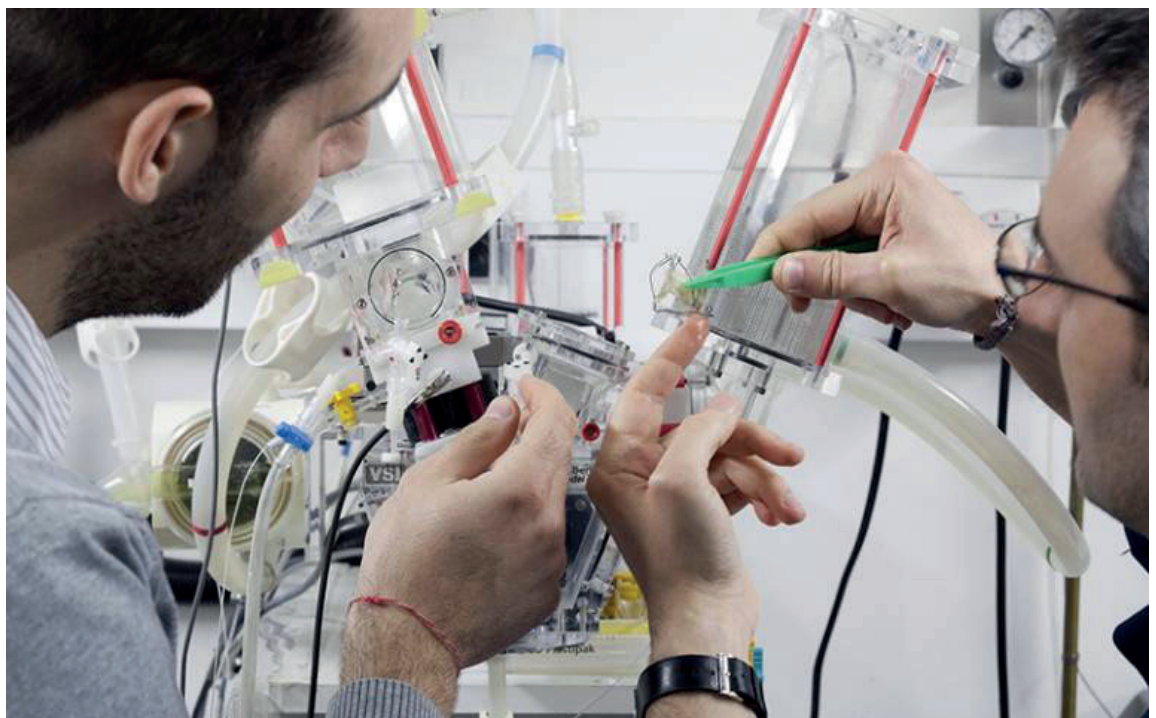
Job family: Research

Technicians, specialist engineers, research professionals and staff scientists, and technologists[1] make critical intellectual contributions to research through the provision of core technical excellence, and in maintaining and developing new technologies and methodologies.
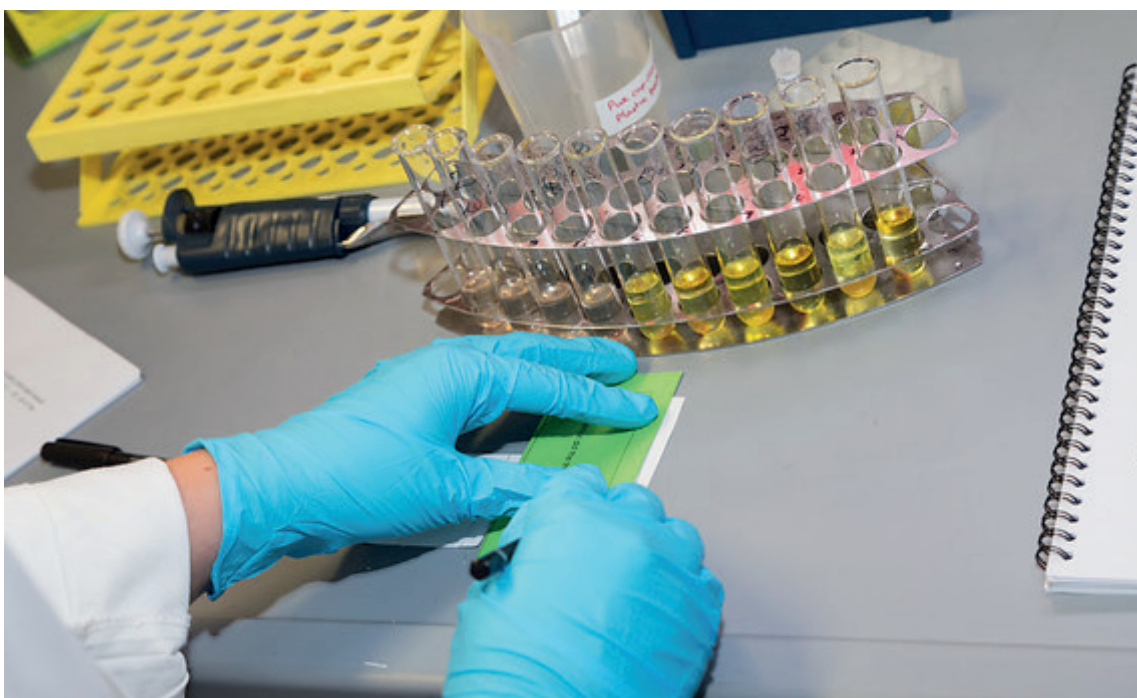
Technology Professionals can play a pivotal role in the development of technical skills that students and researchers need, being responsible for running, maintaining, and supporting research and innovation facilities and its resources. Many technicians are also researchers in their own right.

UCL's research strategy also establishes that "advancement and profile within UCL does not depend overly on easy metrics such as grant income or citation numbers that might penalise those who are advancing fields not yet fully appreciated by the wider research community, but instead suitably recognises and rewards creative and distinctive intellectual achievement". UCL strongly emphasises quality over quantity in research outputs.

Technical staff that contribute to research outcomes, are recognised by their contribution by means of fair attribution in the publications generated at a range of different levels depending on the level and relevance of the contribution going from acknowledgement of the use of facilities up to authorship when a significant contribution is made.

We encourage all researchers – and professional staff supporting the research endeavour – to view their work as part of a collective effort to help UCL make the most of its potential as a force for public good.

Technical Professionals within the research job family are expected to promote and encourage sustainable and professional practices in their fields, through appropriate professional bodies and activities. For example, laboratory workshop environment in relation to the University goals and Laboratory Efficient Assessment Framework (LEAF), and EDI activities.

1   https://www.ukri.org/wp-content/uploads/2020/10/UKRI-071020-StatementOfExpectationsTechnologySkillsSpecialists.pdf

Research Technical Professionals

Research – Grade 4

Typical roles: Trainee Technician, Assistant Archaeologist, Laboratory Support Staff, Laboratory Assistant

Transferable skills and competencies

APPLYING EXPERTISE AND TECHNOLOGY

WORKING WITH PEOPLE

FOLLOWING INSTRUCTIONS AND PROCEDURES

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities

- Report faults or damage to equipment or infrastructure and assist with simple maintenance tasks under supervision
- Promote and follow safe working practices
- Understand and follow safety paperwork, with the ability to identify and report hazards
- Conduct routine compliance tasks under supervision
- Maintain good housekeeping, assisting with waste disposal procedures and cleaning activities under supervision

Core responsibilities

- Contribute to meetings
- Make suggestions to improve the service
- Contribute to and support change
- Assist with stock control and stores operations under supervision
- Assist with record keeping, inventory and asset management under supervision
- Assist in moving/relocating instruments and equipment
- With a high level of accuracy, prepare routine reagents and materials adhering to standard operating procedures where necessary
- Operate simple equipment following instructions or standard operating procedures and interpret simple results under supervision
- Assist with calibration and testing of instruments/equipment, following instructions and standard operating procedures under supervision
- Organise laboratory spaces in preparation of scheduled activities
- Report faults or damage to infrastructure
- Set up and operate equipment following well-established procedures under supervision
- Provide basic demonstration and support to students in the laboratory space with safe working practices

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Take responsibility for the delivery of events e.g. external events and open days
Under close supervision, begin to take responsibility for more stretching tasks relevant to the current role, e.g. delivery of a module, procurement of simple consumables
Liaise with important stakeholders e.g., senior members of the team and students
Develop an understanding of essential processes and procedures under supervision of management

Learning from others

Shadow senior members of the team in the working environment
Expand knowledge of other classes do not come under the current remit
Join a Community of Practice

Formal learning

Accreditation/certification from a recognised Professional body

UCL Ways of Working

These describe expected behaviours in line with UCL culture and values (see pages 66-67).
For Ways of Working indicators and steps to development please refer to the Ways of Working website
www.ucl.ac.uk/human-resources/policies-advice/ways-working

Research – Grade 5

Typical roles: Assistant Technician, Animal Technician, Technician

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- Report faults or damage to equipment or infrastructure, and assist with simple maintenance tasks
- Promote and follow safe working practices
- Understand and follow safety paperwork, with the ability to identify and report hazards
- Conduct routine compliance tasks
- Assist in Maintaining good housekeeping, waste disposal procedures and cleaning activities

Core responsibilities
- Contribute to meetings
- Make suggestions to improve the service
- Contribute to and support change
- Assist with stock control and stores operations
- Assist with record keeping, inventory and asset management
- Conduct portering duties
- With high accuracy prepare routine buffers/reagents and materials adhering to standard operating procedures where necessary
- Operate simple equipment following instruction or standard operating procedures and interpret simple results
- Organise laboratory spaces in preparation of scheduled activities
- Set up and operate equipment following well-established procedures
- Assist with the induction of new staff
- Check and stock consumables
- Carrying out experiments according to protocols
- Input into writing and review of standard operating procedures

Transferable skills and competencies

APPLYING EXPERTISE AND TECHNOLOGY

WORKING WITH PEOPLE

PRESENTING AND COMMUNICATING INFORMATION

(see pages 64-65)

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Take responsibility for undertaking work independently, carrying out tasks without supervision
Participate in activities to support continuous improvement e.g., particularly in the Induction process
Conduct accurate record keeping and actively find ways to improve internal processes
Develop report writing skills
Apply additional training or acquired knowledge to day-to-day tasks

Learning from others

Work with others to broaden skill base in areas such as experimental design, data analysis, health and safety, etc.
Work shadow colleagues to gain an understanding of new or different work practices
Join a Community of Practice

Formal learning

Undertake training on the use of specialist equipment and techniques relevant to role
Apply for training through a mid-career apprenticeship programme

UCL Ways of Working

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Research – Grade 6

Typical role: Technician, Research Technician, Research Assistant

Transferable skills and competencies

DECIDING AND INITIATING ACTION

APPLYING EXPERTISE AND TECHNOLOGY

WORKING WITH PEOPLE

(see pages 64-65)

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- Complete routine equipment maintenance and repairs
- Liaise with suppliers and manufacturers to resolve simple problems
- Advise novice users on basic equipment capabilities
- With the academic lead, establish and maintain a safe/compliant working environment
- Assist/complete and update routine safety paperwork (dependent on the risk owner)
- Hold specific safety responsibilities
- Organise and complete compliance tasks
- Maintain up-to-date health and safety knowledge, providing support and advice to others

Core responsibilities
- Ensure effective delivery of objectives by planning and managing own workload
- Assist the academic lead with the day-to-day running and supervision of laboratory spaces
- Allocate work to one or more students
- Work collaboratively to deliver objectives, including sharing best practice
- Contribute to progress and management meetings
- Manage a small budget, monitoring resource usage and maintaining supplies of key items
- Assist with stores operations including ordering, receiving, processing, and distributing goods
- Source and negotiate with suppliers for routine items
- Provide a high standard of research support, including contributing to reports and publications
- Provide a high standard of teaching support, including preparing for classes and field work – (experimental work and analyse data)
- Conduct research experiments following protocols
- Support taught course projects by contributing to experimental design and data acquisition
- Prepare and manufacture a range of simple specimens/samples
- Report infrastructure faults and support small-scale building works
- Manage equipment bookings, calculate charges/costs and assist with re-charging
- Update and deliver local inductions, and provide training and demonstrations of techniques and equipment
- Input data and maintain databases

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Write advanced reports and read papers in relation to the testing, compliance and routine maintenance of equipment
Take on responsibility for more complex tasks e.g. completing personal licence application (Home Office) and undertaking licenced procedures
Seek out opportunities to learn new skills
Take on a specific role within a research project
Develop a level of expertise in a specific piece of equipment

Learning from others

Work shadow colleagues to gain an understanding of new or different work practices
Join a Community of Practice

Formal learning

Manufacturer-led training for highly specialised equipment/processes
Accreditation/certification from a recognised Professional body
Apply for training through a mid-career apprenticeship programme

UCL Ways of Working

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Research – Grade 7

Typical Role: Senior Technician, Technical Specialist, Senior Research Technician, Specialist Lead Technician, Database Officer, Research Fellow, Lab Coordinator, Research Nurse, Laboratory Manager, Engineer, Project Manager, Staff Scientist, Data Scientist, Research Software Engineer

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- Complete a range of maintenance activities and repairs
- Liaise with suppliers and manufacturers to resolve problems and investigate replacement options
- Advise advanced users on advanced equipment or software or data capabilities demonstrating how results can be achieved
- Create department policies and contribute to improving and implementing policy/practice to support research enhancements within area of expertise
- By developing local procedures, establish and maintain a safe/compliant working environment
- Oversee compliance tasks ensuring timely completion and maintenance of appropriate records
- Complete accident reporting and assist with investigations

Core responsibilities
- Provide management, motivation, and support to a technical team of broad remit
- Schedule, prioritise and monitor work and performance in line with demands and deadlines
- Assist with recruitment of technical staff
- Hold delegated responsibility from the academic lead for the planning, operation, and supervision of a facility or laboratory space
- Work collaboratively with other areas to ensure efficiency and elimination of duplicated effort
- Organise and facilitate progress and management meetings
- Be a key contributor to service development, delivery, and planning
- Oversee local record keeping, inventory and asset management
- Manage one or more budgets monitoring resource usage. Depending on the role, and requirements of the area of work, this could involve undertaking the procurement of equipment for purchases up to £50,000
- Source and negotiate with suppliers for a range of items including specialist parts/equipment
- Create, update, and implement procedures to deliver an aligned, efficient and effective service
- Support taught course projects by delivering skilled technical support
- Design, develop and deliver inductions, demonstrations and training covering a broad range of activities (not limited to techniques and equipment)
- Assist managers with the identification of training and development needs
- Develop a expert, deep and broad knowledge and skills base in their technical and research areas, sharing with others
- Mentor junior staff
- Conduct research experiments and troubleshoot protocols
- Participate in committees, procedural training, writing standard operating procedures and risk assessments
- Liaise with contractors for on and off site visits
- Contribute to research publications as a co or lead author, or contribute to outputs as appropriate to the role (e.g. research papers, conference presentations, provision of internal/external services)
- Lead and design record maintenance
- Lead small estates projects and contribute to large-scale estates projects

Transferable skills and competencies

WRITING AND REPORTING

ANALYSING

ACHIEVING PERSONAL WORK GOALS AND OBJECTIVES

(see pages 64-65)

Research – Grade 7

Personal and professional development

Development options to consider when working towards this level

**Learning on
the job**

Undertake procurement
processes
Contribute to research project
funding applications e.g.
costings for consumables,
equipment purchase and design/
construction
Build management and
supervision skills e.g.,
procurement process, dealing
with conflict, presentation skills.
Build knowledge and experience
to become a subject matter
expert in areas of responsibility

**Learning
from others**

Join a committee or Community
of Practice
Participate and contribute to
appropriate academic/ research
meetings
Seek out opportunities to
contribute to a journal club

Formal learning

UCL Leadership and/or
Management training
Apply for training through a
mid-career apprenticeship
programme
Accreditation/certification from a
recognised Professional body

UCL Ways of Working

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Research – Grade 8 – Specialist Pathway

Typical Roles: Senior Technical Specialist, Specialist Services Research Technician, Senior Research Software Engineer, Senior Data Scientist, Senior Engineer, Senior Project Manager

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- Advise and oversee purchases relevant to the specialism ensuring compliance and alignment to facility priorities
- Plan and oversee all maintenance and repair activities including the completion of in-house, highly skilled repairs and maintenance
- Ensure that all equipment, software or data linked to the specialism is appropriately maintained
- Lead investigations into new purchases/modifications
- Ensure all safety paperwork relevant to the specialism is completed/reviewed
- Oversee completion of all compliance tasks related to the specialist area
- Maintain relevant up-to-date health and safety knowledge providing expert support/advice

Core responsibilities
- May provide direct line-management support, schedule, prioritise and monitor work and performance in line with demands and deadlines
- Supervise other staff and students working within the specialism
- Organise and facilitate meetings as necessary and attend and present at School/Department meetings and forums
- Lead the introduction and development of new and cutting-edge equipment and techniques
- Undertake the procurement of equipment for purchases up to £50,000
- Hold overall responsibility for ensuring that the specialist area delivers against the needs of teaching and research, and that all assets relating to the specialism are utilised
- Provide highly-skilled and highly-specialised teaching, research and taught course support. This will include the development of new techniques, new practical class activities and course/module planning, and may include delivery of taught material within accredited courses alongside academic staff.
- Ensure that the management of facilities relating to the specialism is robust and compliant
- Assess, develop and implement training and development arrangements relating to the specialism
- Maintain in-depth specialist knowledge, sharing with others e.g. presenting at conferences
- Mentor/coach junior staff
- Design and provide specialist training and training materials to research students and staff at all levels.
- Conduct complex research experiments contributing to the experimental design

Transferable skills and competencies

DECIDING AND INITIATING ACTION

LEADING AND SUPERVISING

PLANNING AND ORGANISING

(see pages 64-65)

Research – Grade 8 – Specialist Pathway

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Lead on emergency response in areas of responsibility
Liaise with Department Safety Officer during their investigations
Participate in outreach activities and those which contribute towards Institutional Citizenship
Liaise with and learn directly from equipment specialists or application specialists
Provide data analysis for grant applications and manuscripts
Provide fundamental support to MSc PhD students on a day-to-day basis
Provide academic input as a thesis committee member or review MSc dissertations.
Understand high value procurement and tender processes
Contribute to the text of funding applications, or apply for external funding

Learning from others

Gain knowledge from others by visiting other sites with similar settings
Attend relevant conferences, presenting where appropriate
Attend builder user groups
Attend safety standards meetings for specialist equipment/processes
Attend and participate in a range of meetings, e.g. Department/Divisional operations, team, strategic, committees (research and other)

Formal learning

Membership with relevant learned societies (e.g. RMS).
Accreditation/certification from a recognised professional body
Project Management and Continuous Improvement qualifications
Training on finance and admin responsibilities
Line management training

UCL Ways of Working

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Research – Grade 8 – Management Pathway

Typical Roles: Technical Manager, Facility Manager, Technical Manager, Deputy Unit Manager, Senior Research Software Engineer, Senior Data Scientist

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- Advise and oversee significant equipment purchases ensuring compliance and alignment to School/Department priorities in conjunction with Senior Specialist Technicians where appropriate
- Ensure that all equipment is appropriately maintained in conjunction with Senior Specialist Technicians where appropriate
- Work with Principal Investigators/supervisors to implement the University's health and safety policy, with responsibility for translating this into effective local policies and procedures
- Hold specific safety responsibilities (e.g. membership of School/Department level committees)
- Ensure all necessary safety paperwork is completed/reviewed across the School/Department
- Oversee completion of all compliance tasks across the School/Department
- Lead safety inspections and accident investigations
- Maintain up-to-date health and safety knowledge providing expert support/advice to others

Core responsibilities
- Provide management, motivation and support to the School/Department technical team developing the team to keep pace with changing teaching, research and technology needs
- Contribution to the recruitment process of technical staff
- Manage all space and its allocation ensuring that it is used to maximum effect
- Lead the development of School/Department services and facilities ensuring that they remain fit-for-purpose and deliver maximum benefit
- Lead change-management initiatives at a local level in collaboration with more senior staff
- Hold responsibility for the effective operation of stock control, whole life costings and asset management/inventory systems across the School/Department
- Manage School/Department budgets and those relating to specific projects ensuring that appropriate and compliant systems are in place to deal with purchasing
- Contribute data to influence budget-setting processes
- Hold overall management responsibility for designated facilities ensuring that local facility management arrangements are robust and compliant
- Oversee School/Department security and access control arrangements
- Assess, develop, and implement School/Department-wide training/development arrangements
- Mentor/coach junior staff
- Plan and manage the remodelling and design process of new work space to facilitate specialty environments
- Contribute to funding applications for large equipment purchases
- Manage access to TRAC-listed facilities

Transferable skills and competencies

DECIDING AND INITIATING ACTION

LEADING AND SUPERVISING

PLANNING AND ORGANISING

(see pages 64-65)

Research – Grade 8 – Management Pathway

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Lead on emergency response in areas of responsibility
Liaise with Department Safety Officer during their investigations
Participate in outreach activities and those which contribute towards Institutional Citizenship
Liaise with and learn directly from equipment specialists or application specialists
Provide data analysis for grant applications and manuscripts
Provide fundamental support to MSc PhD students on a day-to-day basis
Provide academic input as a thesis committee member or review MSc dissertations.
Understand high value procurement and tender processes
Contribute to the text of funding applications, or apply for external funding

Learning from others

Gain knowledge from others by visiting other sites with similar settings
Attend relevant conferences, presenting where appropriate
Attend builder user groups
Attend safety standards meetings for specialist equipment/ processes
Attend and participate in a range of meetings, e.g. Department/ Divisional operations, team, strategic, committees (research and other)
Work shadow colleagues to gain an understanding of new or different work practices
Join a Community of Practice
Access mentoring support from a colleague or local mentoring scheme
Attend internal or external networking events

Formal learning

Line management training
UCL Leadership and/or Management training
Apply for training through a mid-career apprenticeship programme
Accreditation/certification from a recognised Professional body

UCL Ways of Working

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Research – Grade 9 – Specialist Pathway

Typical Roles: Specialist Technician / Senior Technical Specialist, Principal Research Software Engineer, Principal Data Scientist, Principal Engineer, Principal Project Manager

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- Advise and oversee all equipment purchases relevant to the specialism ensuring compliance and alignment to facility priorities
- Plan and oversee all maintenance and repair activities including the completion of in-house, highly skilled repairs and maintenance
- Ensure that all equipment linked to the specialism is appropriately maintained
- Lead investigations into new equipment purchases/modifications
- By developing local procedures, establish and maintain a safe/compliant working environment within the specialist area
- Hold specific safety responsibilities relevant to the specialism
- Ensure all safety paperwork relevant to the specialism is completed/reviewed
- Oversee completion of all compliance tasks related to the specialist area
- Complete accident reporting and assist with investigations
- Maintain in-depth and up-to-date health and safety knowledge relevant to the specialism

Core responsibilities
- May provide direct line-management support, schedule, prioritise and monitor work and performance in line with demands and deadlines
- Supervise other staff and students working within the specialism
- Undertake the procurement of equipment for purchases up to £50,000
- Design and provide specialist training and training materials to research students and staff at all levels.
- Conduct complex research experiments contributing to the experimental design
- Lead on/prepare outputs as appropriate to the role, contributing to the development of the individual's or UCL's reputation.
- Specialise in a skillset deemed to be expert in their area and/or including project management of major technical projects
- Hold responsibility for the overall technical project management of research projects, including the design and implementation of systems
- Contribute to research outputs, including research papers, as a co- or lead author.
- Apply for grant funding from appropriate external funding agencies and internal funding programs.
- Work collaboratively with other research groups in UCL in addressing major research questions. This involves work at the cutting edge of the technology, where high level technical expertise in this field is required
- Lead your own research programme and disseminate research findings both within UCL, and externally in the form of publications, presentations and reports.

Transferable skills and competencies

DECIDING AND INITIATING ACTION

LEADING AND SUPERVISING

COPING WITH PRESSURE AND SETBACKS

(see pages 64-65)

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Conduct outreach activities to work with academics e.g. summer schools
Seek out authoring opportunities e.g. contributing to books and research papers
Seek out opportunities to engage in TechTransfer projects

Learning from others

Work shadow senior members of the team
Attend and present at conferences
Represent UCL/Faculty/Department through participation in external working groups/committees
Organise and present at various research technique workshops

Formal learning

Membership with relevant learned societies (e.g. RMS).
Accreditation/certification from a recognised professional body
Project Management and Continuous Improvement qualifications
Training on finance and admin responsibilities
UCL Leadership training

UCL Ways of Working

These describe expected behaviours in line with UCL culture and values (see pages 66-67).
For Ways of Working indicators and steps to development please refer to the Ways of Working website
www.ucl.ac.uk/human-resources/policies-advice/ways-working

Research Technical Professionals

Research – Grade 9 – Management Pathway

Typical Roles: Technical Operations Manager, Biological Services Unit Manager, Head of Technical Services, Principal Research Software Engineer, Principal Data Scientist

Transferable skills and competencies

FORMULATING STRATEGIES AND CONCEPTS

PERSUADING AND INFLUENCING

DEVELOPING RESULTS AND SETTING CUSTOMER EXPECTATIONS

(see pages 64-65)

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- Ensure that the University's health and safety policy is translated into effective local policies and procedures
- Ensure all necessary safety paperwork is completed/reviewed across the College/Faculty
- Ensure that all compliance tasks are completed
- Lead safety inspections and accident investigations
- Maintain up-to-date health and safety knowledge providing expert support/advice to others

Core responsibilities
- Provide management, motivation and support to the College/Faculty technical teams developing the teams to keep pace with changing teaching, research and technology needs
- Ensure that all work is appropriately scheduled in line with priorities and deadlines
- Maintain oversight of all technical staff recruitment within the College/Faculty
- Oversee space management and allocation across the College/Faculty
- Lead the development of College/Faculty services and facilities ensuring that they remain fit-for-purpose and deliver maximum benefit
- Lead change-management initiatives in collaboration with more senior staff
- Produce options papers, proposals, and reports for senior management review
- Ensure that inventory and asset management is appropriately managed across the College/Faculty
- Oversee the management of all College/Faculty facilities, monitoring budgets and overall performance
- Maintain oversight of all large-scale building works leading on those of a significant value/impact
- Coach staff
- Develop and implement policy, compliance and ways of working for the specific environment/equipment
- Contribute to research outputs, including research papers, as a co- or lead author.
- Apply for grant funding from appropriate external funding agencies and internal funding programs.
- Initiate and lead on the recruitment of technical staff

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Contribute to the text of funding applications, or apply for external funding
Provide academic input as a thesis committee member or review MSc dissertations.
Understand high value procurement and tender processes
Participate in outreach activities and those which contribute towards Institutional Citizenship

Learning from others

Work shadow senior members of the team
Attend and present at conferences
Represent UCL/Faculty/Department through participation in external working groups/committees
Organise and present at various research technique workshops

Formal learning

Membership with relevant learned societies (e.g. RMS).
Accreditation/certification from a recognised professional body
Project Management and Continuous Improvement qualifications
Training on finance and admin responsibilities
UCL Leadership training

UCL Ways of Working

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Case Studies

Neil Hughes

Head of Technical Staff,
Department of Earth Sciences

I am currently the Head of Technical Staff for the Department of Earth Sciences where I am responsible for managing the technical staff and the technical needs of the department.

In addition to my management duties, I primarily work as a Mechanical Engineer providing high level mechanical engineering design and development skills to build state-of-the-art scientific instruments to facilitate the department's research groups. Much of the research apparatus in my department are unique prototype high pressure systems which have been developed in house by myself and my engineering colleagues.

The work is very diverse and consists of many roles and responsibilities including the management of the engineering and technical aspects of major research projects and research laboratories involving supervision and training of academic staff and students in the effective and safe operation of potentially dangerous laboratory equipment. The troubleshooting of complex research equipment to ensure continued running of experimental research programmes. The design and development of highly specialised state-of-the-art scientific novel instruments, using Computer Aided Design (CAD) and Finite Element Analysis (FEA) software, to high performance, quality, and safety standards.

The preparation of detailed engineering drawings to high standards ready for production and the production of high tolerance components using a variety of mechanical workshop machinery including CNC operated and conventional machines. This varied engineering role along with my management responsibilities encompasses many of the job families to some extent but leans heavily towards the research family.

I started out at UCL in 1986 when I joined the Universities apprenticeship program as a Mechanical apprentice, after always having a big interest in Engineering at school. The apprenticeship delivered extensive training in the use of all machine tools and techniques for precision manufacture. Throughout the apprenticeship I worked in a number of the Universities workshops in different departments including Physics & Astronomy, Electrical Engineering, Chemical Engineering as well as a spell in the design office in Physics and Astronomy learning technical drawing and Computer Aided Design techniques.

On successful completion of my apprenticeship I moved to the department of Earth Sciences (or Geology as it was known then) working as a mechanical technician supporting the department and its research groups. In my time as an apprentice and mechanical technician, I also undertook further part time studies, achieving Ordinary and Higher Diplomas and an Honours degree in Mechanical & Production Engineering. These studies allowed me to further enhance the essential practical skills that I had learnt during my apprenticeship, to give me the expert knowledge to design and develop prototype high pressure systems.

Over the years, after gaining more experience, expertise, and responsibilities I was subsequently promoted to an Experimental Officer and then Senior Experimental Officer. These were academic related grades, as my role was recognised as essential to the academic team for enabling the research by delivering prototype scientific equipment and contributing to academic publications.

I would advise anyone looking to follow a similar path to make the most of any training opportunities that come your way to enhance your qualifications and knowledge. In such a role technology is always advancing and you want to keep abreast of developments to maximise your knowledge to improve on how things can be done. There is a wealth of technical talent working within UCL, who often don't know each other exist, that is where the Communities of Practice are of huge benefit to share knowledge, equipment and generally support each other. I would encourage people to seek out their relevant Community of Practice and join.

Job family: Education

Technical Professionals in the Education job family play a vital role in supporting student learning at UCL. Although many staff in this area will be responsible for setting up practical classes, a large number will contribute for the designing, delivering, and assessing students' work. Technical staff at UCL, contribute to deliver teaching to undergraduates, postgraduate students and also members of staff.

Technical staff play a vital role in teaching and supporting the learning of students within UK higher education (HE). They are increasingly being relied upon to design and deliver teaching and learning activities and, in many cases, to engage in formative and summative assessment.

Technical staff at UCL are also encouraged to apply and engage on 'teaching fellowship' accreditation programmes, awarded by Advance HE (formerly HEA) and their professional standards framework. UCL is accredited to award Advance HE Fellowship accreditation, through the ARENA centre and several technical professionals at UCL are accredited with AFHEA, FHEA and SFHEA.

Education – Grade 4

Typical roles: Trainee Technician, Junior Technician, Assistant Archaeologist, Laboratory Support Staff

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- Report faults or damage to equipment or infrastructure and assist with simple maintenance tasks under supervision
- Promote and follow safe working practices
- Understand and follow safety paperwork, with the ability to identify and report hazards
- Conduct routine compliance tasks under supervision
- Maintain good housekeeping, assisting with waste disposal procedures and cleaning activities under supervision

Core responsibilities
- Contribute to meetings
- Make suggestions to improve the service
- Contribute to and support change
- Assist with stock control and stores operations under supervision
- Assist with record keeping, inventory and asset management under supervision
- Assist in moving/relocating instrument and equipment
- With a high level of accuracy, prepare routine reagents and materials adhering to standard operating procedures where necessary
- Operate simple equipment following instructions or standard operating procedures and interpret simple results under supervision
- Assist with calibration and testing of instruments/equipment, following instructions and standard operating procedures under supervision
- Organise laboratory spaces in preparation of scheduled activities
- Set up and operate equipment following well-established procedures under supervision
- Support teaching and training of students in technical skills
- Organise learning spaces in preparation of scheduled activities
- Provide basic demonstration and support to students in the laboratory space with safe working practices
- Assist with the induction of new staff
- Assist with Laboratory Efficient Assessment Framework (LEAF) award application
- Conduct manual handling of instruments and equipment

Personal and professional development

Development options to consider when working towards this level

Learning on the job	Learning from others	Formal learning
Liaise with stakeholders e.g., senior members of the team and students	Shadow senior members of the team in the working environment	Fellowship of the Higher Education Academy – Advance HE via UCL Arena Centre
Develop an understanding of essential processes and procedures under supervision	Expand knowledge of other classes do not come under the current remit	Health and safety training
	Join a Community of Practice	Accreditation/certification from a recognised professional body

UCL Ways of Working

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www.ucl.ac.uk/human-resources/policies-advice/ways-working

Transferable skills and competencies

RELATING AND NETWORKING

WORKING WITH PEOPLE

PRESENTING AND COMMUNICATING INFORMATION

(see pages 64-65)

Education Technical Professionals

Education – Grade 5

Typical roles: Assistant Technician, Technician

Transferable skills and competencies

APPLYING EXPERTISE AND TECHNOLOGY

PRESENTING AND COMMUNICATING INFORMATION

LEARNING AND RESEARCHING

(see pages 64-65)

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- Report faults or damage to equipment or infrastructure and assist with simple maintenance tasks
- Promote and follow safe working practices
- Understand and follow safety paperwork, with the ability to identify and report hazards
- Conduct routine compliance tasks
- Maintain good housekeeping, assisting with waste disposal procedures and cleaning activities

Core responsibilities
- Contribute to meetings
- Make suggestions to improve the service
- Contribute to and support change
- Assist with stock control and stores operations
- Assist with record keeping, inventory and asset management
- Conduct manual handling of instruments and equipment
- With a high level of accuracy, prepare routine reagents and materials adhering to standard operating procedures where necessary
- Operate simple equipment following instruction or standard operating procedures and interpret simple results
- Assist with calibration and testing of instruments/equipment, following instructions and standard operating procedures
- Organise laboratory spaces in preparation of scheduled activities
- Set up and operate equipment following well-established procedures
- Provide basic demonstrations and support to students in the laboratory space ensuring safe working practices are explained and used
- Assist with the induction of new staff
- Assist academic staff with the preparation of lecture demonstration
- Assist with preparation and running of outreach events for schools and colleges
- Contribute to and support Laboratory Efficient Assessment Framework (LEAF) award application

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Take responsibility for the delivery of events e.g. external events and open days

Under close supervision, begin to take responsibility for delivery of a module including procurement of simple consumables

Liaise with important stakeholders e.g. senior members of the team and students

Develop an understanding of essential processes and procedures under supervision of management

Learning from others

Shadow senior members of the team in the working environment

Expand knowledge of other classes do not come under the current remit

Join a Community of Practice

Formal learning

Fellowship of the Higher Education Academy – Advance HE via UCL Arena Centre

Attend Health and safety training

Accreditation/certification from a recognised professional body

UCL Ways of Working

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Education – Grade 6

Typical role: Teaching Technician

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- Complete routine equipment maintenance and repairs
- Liaise with suppliers and manufacturers to resolve simple problems
- Advise on equipment capabilities
- With the academic lead, establish and maintain a safe/compliant working environment
- Assist/complete and update routine safety paperwork (dependent on the risk owner)
- Hold specific safety responsibilities relevant to the area of work
- Organise and complete compliance tasks
- Maintain up-to-date health and safety knowledge, providing support and advice to others

Core responsibilities
- Ensure effective delivery of objectives by planning and managing own workload
- Assist the academic lead with the day-to-day running and supervision of laboratory spaces
- Allocate work to one or more members of technical staff
- Work collaboratively to deliver objectives
- Contribute to progress and management meetings
- Manage a small budget, monitoring resource usage and maintaining supplies of key items
- Assist with stores operations including ordering, receiving, processing, and distributing goods
- Source and negotiate with suppliers for routine items
- Provide a high standard of teaching support, including preparing for classes and field work
- Provide support to students through tuition
- Prepare and deliver tutorials to students
- Support taught course projects by contributing to experimental design and data acquisition
- Prepare and manufacture a range of simple specimens/samples
- Report infrastructure faults and support small-scale building works
- Manage equipment bookings, calculate charges/costs, and assist with re-charging
- Update and deliver local inductions
- Provide training and demonstrations of techniques and equipment
- Take responsibility for the successful delivery of assigned laboratory classes
- Share skills and best practice
- Manage arising issues with a solution-focused attitude
- Manage the maintenance of machinery and equipment as required
- Contribute to risk assessments
- Write standard operating procedures
- Manage the Laboratory Efficient Assessment Framework (LEAF) award application

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Provide detailed written and verbal feedback to students
Explore opportunities to take on acting-up duties

Learning from others

Join special interest groups, and/or network groups to learn about best practice in other areas of UCL, as well as external groups to learn about other organisations and sectors
Join a Community of Practice
Attend conferences
Develop understanding of people and lab management by shadowing and covering for senior technicians

Formal learning

Attend Health and safety training
Relevant training through Higher Education and Technician Educational Development (HEaTED)
Fellowship of the Higher Education Academy – Advance HE via UCL Arena Centre
Specialist instrument training as required
Apply for training through a mid-career apprenticeship programme
Accreditation/certification from a recognised professional body

UCL Ways of Working

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Transferable skills and competencies

APPLYING EXPERTISE AND TECHNOLOGY

WORKING WITH PEOPLE

PRESENTING AND COMMUNICATING INFORMATION

(see pages 64-65)

Education – Grade 7

Typical Role: Senior Technician/Technical Specialist, Senior Teaching Technician

Transferable skills and competencies

ANALYSING

PLANNING AND ORGANISING

ACHIEVING PERSONAL WORK GOALS AND OBJECTIVES

(see pages 64-65)

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- Create documentation (such as standard operating procedures) that include maintenance/repair protocols
- Hold responsibility as the point of contact for specific instruments within the Department
- Advise advanced users on advanced on equipment capabilities demonstrating how results can be achieved
- By developing local procedures, establish and maintain a safe/compliant working environment
- Creating risk assessments for laboratory activity
- Hold responsibility for the implementation of safety controls; ensuring controls are widely communicated and implemented
- Oversee compliance tasks ensuring timely completion and maintenance of appropriate records
- Complete accident reporting and assist with investigations
- Manage equipment maintenance, e.g. arranging servicing, buying and replacing parts and consumables

Core responsibilities
- Provide management, motivation, and support to a technical team of broad remit
- Schedule, prioritise and monitor work and performance in line with demands and deadlines
- Assist with recruitment of technical staff
- Hold delegated responsibility from the academic lead for the planning, operation, and supervision of a variety of laboratory spaces
- Organise and facilitate progress and management meetings
- Be a key contributor to service development, delivery, and planning
- Contribute to and support change
- Oversee local record keeping, inventory and asset management
- Manage one or more budgets monitoring resource usage
- Source and negotiate with suppliers for a range of items including specialist parts/equipment
- Provide a broad range of skilled research and technical support
- Prepare and manufacture a range of specimens/samples with limited direction
- Contribute to small- and large-scale building works
- Manage local security and access control arrangements
- Deputise in the absence of laboratory manager(s)
- Design, develop and deliver inductions, demonstrations and training covering a broad range of activities (not limited to techniques and equipment)
- Assist managers with the identification of training and development needs
- Develop a broad knowledge and skills base, sharing with others
- Mentor junior staff
- Assist with procurement of higher value items that require tender
- Provide delegated safety responsibility for the class
- Oversee the entire laboratory organisation process, ensuring timely completion of appropriate records and procedures
- Oversee the successful delivery of all teaching in the designated area of work
- Plan the logistics across various practical sessions
- Manage several modules
- Hold responsibility of spaces
- Improve lab sustainability through the Laboratory Efficient Assessment Framework (LEAF)
- Lead on the Laboratory Efficient Assessment Framework (LEAF) award application

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Provide mentoring support to apprentices

Ensure compliance with health and safety in areas that are not your direct responsibility

Take responsibility for the delivery of specific projects

Provide detailed written and verbal feedback to students

Write articles and letters for professional body magazines and newsletters

Learning from others

Build relationships with senior team members

Join and participate on safety committees

Engage with college-wide initiatives

Attend conferences and symposiums

Work in collaboration with professional bodies

Join a Community of Practice

Formal learning

Industrial qualifications related to role and area of work

Accreditation/certification from a recognised professional body

Attend advanced Health and Safety training Programme training

Fellowship of the Higher Education Academy – Advance HE via UCL Arena Centre

Apply for training through a mid-career apprenticeship programme

UCL Ways of Working

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Education – Grade 8 – Specialist Pathway

Typical Roles: Senior Technical Specialist, Instructor Dental Technician

Transferable skills and competencies

DECIDING AND INITIATING ACTION

LEADING AND SUPERVISING

COPING WITH PRESSURE AND SETBACKS

(see pages 64-65)

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- Advise and oversee all equipment purchases relevant to the specialism ensuring compliance and alignment to facility priorities, while ensuring that resources and equipment remain current and relevant
- Plan and oversee all maintenance and repair activities including the completion of in-house, highly skilled repairs and maintenance
- Ensure that all equipment linked to the specialism is appropriately maintained
- Lead investigations into new equipment purchases/modifications
- Hold specific safety responsibilities relevant to the specialism e.g., laser safety advisor
- Ensure all safety paperwork relevant to the specialism is completed/reviewed
- Maintain relevant up-to-date health and safety knowledge providing expert support/advice

Core responsibilities
- Provide direct line-management support, schedule, prioritise and monitor work and performance in line with demands and deadlines
- Supervise other staff and students working within the specialism, providing support which ensures that staff and students knowledge remains current to fulfil the future needs of teaching
- Organise and facilitate meetings as necessary and attend and present at School/Department meetings and forums e.g., academic and teaching meetings
- Lead the introduction and development of new and cutting-edge equipment and techniques
- Contribute to and support local change
- Manage budgets relating to the specialism, monitoring resource usage
- Contribute data to influence budget setting processes
- Hold overall responsibility for ensuring that the specialist area delivers against the needs of teaching and research, and that all assets relating to the specialism are utilised
- Provide highly skilled and highly-specialised teaching, research and taught course support. This will include the development of new techniques or new practical class activities
- Ensure that the management of facilities relating to the specialism is robust and compliant
- Assess, develop, and implement training and development arrangements relating to the specialism
- Maintain in-depth specialist knowledge, sharing with others e.g. presenting at conferences
- Mentor/coach junior staff
- Contribute to module and course planning meetings
- Undertake recruitment responsibilities. This will include the creation of job descriptions and conducting interviews
- Line manage junior technical staff

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Take on secondary support for other instruments and spaces
Undertake training e.g. introduction to financial/budget awareness
Undertake training on managing internal processes
Develop new health and safety protocols
Train junior members of the team to retain expertise and knowledge within the team

Learning from others

Work shadow colleagues to learn more about different roles and responsibilities
Join a Community of Practice

Formal learning

Formal and/or industrial qualifications related to role and area of work
Accreditation/certification from a recognised professional body
Apply for training through a mid-career apprenticeship programme
UCL Leadership and/or Management training
Fellowship of the Higher Education Academy – Advance HE via UCL Arena Centre

UCL Ways of Working

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Education – Grade 8 – Management Pathway

Typical Roles: Technical Manager, Operations Manager

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- Advise and oversee significant equipment purchases ensuring compliance and alignment to School/Department priorities in conjunction with Senior Specialist Technicians where appropriate
- Ensure that all equipment is appropriately maintained in conjunction with Senior Specialist Technicians where appropriate
- To be responsible for the implementation of the University's health and safety policy, translating this into effective local policies and procedures
- Hold specific safety responsibilities (e.g. membership of School/Department level committees)
- Ensure all necessary safety paperwork is completed/reviewed across the School/Department
- Oversee completion of all compliance tasks across the School/Department
- Lead safety inspections and accident investigations
- Maintain up-to-date health and safety knowledge providing expert support/advice to others

Core responsibilities
- Provide management, motivation and support to the School/Department technical team developing the team to keep pace with changing teaching, research and technology needs
- Schedule, prioritise and monitor work and performance in line with demands and deadlines
- Be responsible for the recruitment of all technical staff
- Manage all space and its allocation ensuring that it is used to maximum effect
- Organise and facilitate meetings as necessary and attend and present at School/Department meetings and forums
- Lead the development of School/Department services and facilities ensuring that they remain fit-for-purpose and deliver maximum benefit
- Lead change-management initiatives at a local level in collaboration with more senior staff
- Hold responsibility for the effective operation of stock control, whole life costings and asset management/inventory systems across the School/Department
- Manage School/Department budgets and those relating to specific projects ensuring that appropriate and compliant systems are in place to deal with purchasing
- Contribute data to influence budget-setting processes
- Hold overall management responsibility for all facilities ensuring that local facility management arrangements are robust and compliant
- Manage the Department's teaching laboratories, technical teaching staff and resources to ensure efficient delivery of department's laboratory teaching timetable
- Oversee School/Department security and access control arrangements
- Assess, develop, and implement School/Department-wide training/development arrangements
- Design, develop and deliver inductions, demonstrations and training covering a broad range of activities (not limited to techniques and equipment)
- Develop and maintain a broad knowledge and skills base, sharing with others
- Mentor/coach junior staff
- Develop new health and safety protocols
- Sign-off the SOP Risk Assessment for the technician spaces
- Manage several modules
- Contribute to the Departments strategic planning for teaching

Transferable skills and competencies

DECIDING AND INITIATING ACTION

LEADING AND SUPERVISING

COPING WITH PRESSURE AND SETBACKS

(see pages 64-65)

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Take on secondary support for other instruments and spaces
Undertake training e.g., introduction to financial/budget awareness
Undertake training on managing internal processes
Develop new health and safety protocols
Train junior members of the team to retain expertise and knowledge within the team

Learning from others

Work shadow colleagues to learn more about different roles and responsibilities
Join a Community of Practice

Formal learning

Formal and/or industrial qualifications related to role and area of work
Accreditation/certification from a recognised professional body
UCL Leadership and/or Management training
Apply for training through a mid-career apprenticeship programme
Fellowship of the Higher Education Academy – Advance HE via UCL Arena Centre

UCL Ways of Working

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Education – Grade 9 – Specialist Pathway

Typical Roles: Technical Operations Manager, Head of Technical Services

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- By developing local procedures, establish and maintain a safe/compliant working environment within the specialist area
- Hold specific safety responsibilities relevant to the specialism e.g. laser safety advisor
- Ensure all safety paperwork relevant to the specialism is completed/reviewed
- Oversee completion of all compliance tasks related to the specialist area
- Complete accident reporting and assist with investigations
- Maintain in-depth and up-to-date health and safety knowledge relevant to the specialism
- Maintain relevant up-to-date health and safety knowledge providing expert support/advice

Core responsibilities
- May provide direct line-management support, schedule, prioritise and monitor work and performance in line with demands and deadlines
- Supervise other staff and students working within the specialism
- Undertake the procurement of equipment for purchases up to £50,000
- Design and provide specialist training and training materials to research students and staff at all levels.
- Conduct complex research experiments contributing to the experimental design
- Lead on/prepare outputs as appropriate to the role, contributing to the development of the individual's or UCL's reputation.
- Specialise in a skillset deemed to be expert in their area and/or including project management of major technical projects
- Hold responsibility for the overall technical project management of research projects, including the design and implementation of systems
- To maintain and run a state-of-the art core facility, which meet the needs of UCL, including a service users
- To work collaboratively with other research groups in UCL in addressing major research questions. This involves work at the cutting edge of the technology, where high level technical expertise in this field is required
- To lead your own research programme and disseminate research findings both within UCL, and externally in the form of publications, presentations and reports.
- To bring skill and rigour of our part of the collaboration to match the input from the collaborators on the biological problem under investigation.
- To supervise the provision of the core facility this largely through management of staff and oversee the quality of the service, its cost effectiveness and the appropriate use of its resources.
- Contribute to research outputs, including research papers, as a co- or lead author.
- Apply for grant funding from appropriate external funding agencies and internal funding programs.

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Undertake strategic planning in specific area of responsibility
Gain practical experience of line management
Develop a clear understanding of the main HR processes to support line management of staff

Learning from others

Establish good working relationships with academics and faculty senior management
Join a Community of Practice
Conference attendance/presentation
Represent department/faculty/UCL at external network meetings/working groups

Formal learning

UCL Leadership and/or Management training
Apply for training through a mid-career apprenticeship programme
Fellowship of the Higher Education Academy – Advance HE via UCL Arena Centre

UCL Ways of Working

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Transferable skills and competencies

FORMULATING STRATEGIES AND CONCEPTS

PERSUADING AND INFLUENCING

DEVELOPING RESULTS AND SETTING CUSTOMER EXPECTATIONS

(see pages 64-65)

Education – Grade 9 – Management Pathway

Typical Roles: Technical Operations Manager, Head of Technical Services

Transferable skills and competencies

FORMULATING STRATEGIES AND CONCEPTS

PERSUADING AND INFLUENCING

DEVELOPING RESULTS AND SETTING CUSTOMER EXPECTATIONS

(see pages 64-65)

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- Advise and oversee significant equipment purchases ensuring compliance and alignment to College/Faculty priorities
- Ensure that all equipment is appropriately maintained in conjunction with School/Faculty technicians
- Ensure that the University's health and safety policy is translated into effective local policies and procedures
- Hold specific safety responsibilities
- Ensure all necessary safety paperwork is completed/reviewed across the College/Faculty
- Ensure that all compliance tasks are completed
- Lead safety inspections and accident investigations
- Maintain up-to-date health and safety knowledge providing expert support/advice to others

Core responsibilities
- Provide management, motivation and support to the College/Faculty technical teams developing the teams to keep pace with changing teaching, research and technology needs
- Ensure that all work is appropriately scheduled in line with priorities and deadlines
- Maintain oversight of all technical staff recruitment within the College/Faculty
- Oversee space management and allocation across the College/Faculty
- Lead the development of College/Faculty services and facilities ensuring that they remain fit-for-purpose and deliver maximum benefit
- Lead change-management initiatives in collaboration with more senior staff
- Produce options papers, proposals, and reports for senior management review
- Ensure that inventory and asset management is appropriately managed across the College/Faculty
- Manage College/Faculty budgets (including trading accounts) and those relating to specific projects ensuring that appropriate and compliant systems are in place to deal with purchasing
- Contribute data to influence budget setting processes
- Oversee the management of all College/Faculty facilities, monitoring budgets and overall performance
- Maintain oversight of all large-scale building works leading on those of a significant value/impact
- Oversee College/Faculty security and access control arrangements
- Assess, develop and implement College/Faculty-wide training/development arrangements
- Coach staff
- Oversee small- and large-scale buildings works
- Contribute to research outputs, including research papers, as a co- or lead author.
- Apply for grant funding from appropriate external funding agencies and internal funding programs.

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Undertake strategic planning in specific area of responsibility
Gain practical experience of line management
Develop a clear understanding of the main HR processes to support line management of staff

Learning from others

Establish good working relationships with academics and faculty senior management
Represent department/faculty/UCL at external network meetings/working groups

Formal learning

UCL Leadership and/or Management training
Line Management training
Apply for training through a mid-career apprenticeship programme
Fellowship of the Higher Education Academy – Advance HE via UCL Arena Centre

UCL Ways of Working

These describe expected behaviours in line with UCL culture and values (see pages 66-67).
For Ways of Working indicators and steps to development please refer to the Ways of Working website
www.ucl.ac.uk/human-resources/policies-advice/ways-working

Case Studies

Helena Wong

Senior Chemistry Teaching Laboratory Technician, Department of Chemistry

I am the Senior Chemistry Teaching Laboratory Technician of the Physical Chemistry undergraduate teaching laboratories, in the Christopher Ingold Building. My role is to provide continuity, full oversight, and operational management of the Graham Physical Chemistry teaching lab. This includes stock control, procurement, provision of resources, budget management, equipment and instrument maintenance, lab infrastructure, building services, waste management and Health and Safety. With assistance from 0.5 FTE Grade 6 Natural Science Technician (whom I task manage) and a full-time Grade 4 technician (whom I line manage), I provide technical support for 900+ Chemistry undergraduates in years 1 to 3. This number is not inclusive of the students in other programmes of NatSci, Life Science and Chemistry MSci projects that we (as a team) also support.

A major part of my role is supervising the preparation of all teaching lab sessions to ensure their smooth and safe delivery, to maximise learning outcomes and the student experience. To achieve this, I advise on feasible timetabling, deliver instrument and equipment training to both staff and students, suggest and assist in developing new lab activities, work with academics to improve existing practical classes and teaching methods, advise on the procurement of new instrumentation, equipment and troubleshoot technical issues as and when they develop. Basically, anything that is required to ensure the learning outcomes of the lab activity is achieved together with good student experience.

I also implement sustainable practices, support physical and mental health needs of all students, and support equity for all students in the Graham Lab. Preparation of internal and external demonstration resources also falls under my remit. In 2019, I oversaw the refurbishment of the analytical teaching labs. Since 2018, I have been a volunteer assessor for the professional awards of RSciTech and RSci status on behalf of the Royal Society of Chemistry (RSC).

I did my Chemistry degree and my PhD in Synthetic Organic Chemistry at the University of Bristol. After my PhD I took a career break to bring up a young family, re-entering the workforce in 2004 as a Biology Technician in a foundation school, followed by a chemistry post in a grammar school from 2007 until 2011. This allowed me to juggle childcare responsibilities until my children were of a more independent age.

I started my current post at UCL in 2019 arriving from King's College London where I had been a Teaching Technician of the chemistry labs in Pharmacy, mental health 1st aider and deputy radiation protection supervisor of the department. I made this move from organic to physical chemistry to recognise my potential and facilitate my career progression. My journey at King's started in 2011 as a Junior Technician, despite my previous qualifications, knowledge and experience. In my time at King's, I helped relaunch the Chemistry department (which opened in 2012), oversaw the refurbishment of the teaching labs in 2014, sat on the Development, Diversity and Inclusion committee (from 2018) and the Athena Swann application committee of the department (2015). I was also a founding member of the core focus group at King's to drive the Technicians' Commitment movement (2016), and one of the first at King's to be professionally registered as RSci in 2013. My sustainability champion work for labs started at Kings in 2017.

My journey to where I have arrived has not been conventional. My proactiveness and willingness to volunteer for additional and challenging responsibilities has equipped me with skills which prove my capabilities and potential, while giving me the experience and opportunity to grow, develop and secure the position I am presently in.

Outside of my own personal ambitions, I maintain a commitment to participate in activities that will support the recognition of, and promote career progression opportunities for, all Technical Professionals at UCL. Through my active engagement with UCL's Technical Manager's Group, the RSC, and other collaborative groups, I will continue to work towards improvements that the technical community have long deserved.

Case Studies

Martyn Towner

Natural Sciences Technician, Department of Chemistry

I'm a Natural Sciences Technician and I've worked in the Chemistry Teaching labs for just under a decade. My role mainly focuses on supporting the delivery of the laboratory practical classes as part of the technical team but also to take lead on technical support for Third year Organic/Inorganic modules along with some Post Graduate modules. I'm also responsible for maintaining spectroscopic instrumentation within the Teaching labs (including training provision, sample preparation and troubleshooting) as well as providing induction, training and troubleshooting on the departmental XRD instrument. I also manage an instrument booking system used for both teaching and research supporting specific requirements or adaptions per instrument.

I went to college to do my A-levels and after not getting into the university I hoped for, was offered the chance to apply for a technician role. I supported the practical classes with preparation of chemicals, cleaning glassware supporting the lab space in the sports centre. I spent two years at the college before going to study Chemistry at university where I achieved a 1st class degree. In the weeks after exams but before results were made available, I wondered what I should do. I initially wanted to be a teacher and if not, an industrial chemist but found it hard to find suitable roles and I wanted a break from studying. I looked back to being a technician and after applying for a few places, I managed to get the Natural Sciences role at UCL starting Sept 2013 at a Grade 5 position.

Since then, I've discovered my passion for education and helping others, my role has developed from simply cleaning benches and helping students with equipment issues to being responsible for certain module delivery and having direct impact on discussions relating to lab organisation and implementation. I was regraded to a Grade 6 in August 2017 and become responsible for the implementation (from the technical side) of the new Third Year Organic/Inorganic labs. This involved adapting experiments to suit provisions in the lab, chemical purchases, lab layout as well as equipment availability. Over the last few years my role has substantially grown in terms of complexity, responsibility and input. I am involved throughout the entire process of the lab development. This includes advising on experiment suitability, safety, and organising lab classes (reviewing student groups with respect to experiments etc). This increase in involvement stems from 2020 where I proposed how labs could occur in a COVID suitable environment. After COVID we've had an increase in student numbers and once again I was singled out as the person who will ensure the labs can be run smoothly and to provide solutions to issues regarding experiments.

Not only have I dramatically increased my input and support for lab classes I have also provided innovative ideas to improve the student experience, sustainability and the safety processes in the lab. I've developed digital NMR submissions to reduce errors and allow students to get their data via email. I've created Standard Operating procedure template and have supported the technical team in utilising them and improving overall safety procedures within the lab. I have had several successful projects that positively impacts student experience and sustainability such as implementing a water chiller system for rotary evaporators that reduce dramatically the amount of Dry Ice being used and improved solvent collect that would otherwise enter the atmosphere.

My advice to those looking to enter the technical field is simply to be passionate about what you do and understand the impact you can have. Students often rely on the support of technical staff to guide them through processes or understanding the techniques. I feel this is because, as technical staff, we are invested in ensuring students get the most out of their practical time, we put a lot of effort in setting it up! More than that though, at least for me, I want to students to come out of their degree trained in a variety of techniques and instrumentation with the confidence to use them. Being a technician is like being a teacher without all the marking! You really can have a positive impact of the student's experiences which will last with them throughout their career. Who knows, maybe the support shown to them helps inspire them to support others.

What's next for me? It's 2023 and I'm currently in the School of Pharmacy on secondment learning all sorts of new skills with a fantastic technical team. I'm still a Grade 6 in my substantive role and will return to continue supporting lab classes at the higher level. I hope to progress further in terms of responsibility and see lab management/Lab co-ordinator as the career goal I'd like to achieve. I want to be able to continually improve the lab spaces, support education and help maintain a positive lab environment for all students.

Job family: Enterprise and External Engagement

This Job Family covers a wide range of predominantly externally directed activities, and knowledge exchange activities directed at collaboration with agencies and stakeholders outside of academia, including businesses, industry and the public. Some of these activities are delivered by the same types of technicians, engineering specialists and technologists referred to in the Research job family.

Public engagement brings members of the public into UCL's research and teaching, as active participants, practitioners, and advisers.

The undertaking and delivery of commissioned projects or commercial services for external bodies and, businesses or clients brings the knowledge and expertise of UCL technical staff into contact with professional and industry-based partners and clients as well as ensuring public benefit of research arising from this work.

Technical Professionals working within Enterprise and External Engagement job family, might be engaged with activities ranging from outreach activities, such summer schools, and open days to delivering consultancy to industry, to creating unique research instruments in collaboration with or under contract to external partners.

Enterprise and External Engagement – Grade 4

Typical roles: Assistant Technician, Assistant Archaeologist, Laboratory Assistant

Transferable skills and competencies

RELATING AND NETWORKING

PRESENTING AND COMMUNICATING INFORMATION

DEVELOPING RESULTS AND SETTING CUSTOMER EXPECTATIONS

(see pages 64-65)

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
• Engaging with local, national, or international organisations outside of academia
• Identify, investigate, sample, record and process range of data
• Understand and follow safe working practice, safety paperwork and reporting hazards

Core responsibilities
• Contribute to delivery of commissioned projects for industry-based clients
• Assist with training of students and junior staff
• Provide support for the delivery of public events and engagement
• Contribute to meetings
• Assist with stock control, equipment and stores
• Operate simple equipment following instruction or SOPs
• Organise laboratory spaces and archives
• Report faults or damage to equipment and assist with simple maintenance tasks
• Assist with the induction of new staff
• Liaise with external bodies and suppliers

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Develop technical skills and knowledge
Awareness of relevant standards and guidance
Build experience of project types, tasks
Develop application of your technical skills in a commercial/ industry setting
Refine record keeping accuracy
Develop observational skills
Develop teamworking
Develop methodological approaches

Learning from others

Shadow experienced members of the team in the working environment
Ask for feedback on your work
Discuss with your peers complex problems and learn from their responses

Formal learning

Join a professional body to gain wider sector awareness and engagement
Sector relevant Health & Safety training, Dignity at Work, Relevant degree, apprenticeship or sector training programme

UCL Ways of Working

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Enterprise and External Engagement – Grade 5

Typical roles: Assistant Technician, Technician

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- Promote and follow safe working practices
- Report faults or damage to equipment and assist with simple maintenance tasks
- Understand and follow safety paperwork, with the ability to identify and report hazards
- Conduct routine compliance tasks
- Maintain good housekeeping, assisting with waste disposal procedures and cleaning activities

Core responsibilities
- Contribute to meetings
- Make suggestions to improve the service
- Contribute to and support change
- Assist with stock control and stores operations
- Assist with accurate record keeping, inventory and asset management
- Conduct portering duties
- With high accuracy prepare routine reagents and materials adhering to SOPs where necessary
- Operate simple equipment following instruction or SOPs and interpret simple results
- Organise laboratory spaces in preparation of scheduled activities
- Report faults or damage to infrastructure
- Set up and operate equipment following well-established procedures
- Assist with the induction of new staff, and contribute to the training of students and junior staff
- Provide customer service to members of the public to promote events and services
- Liaise with external bodies and suppliers
- Supervise junior staff

Transferable skills and competencies

APPLYING EXPERTISE AND TECHNOLOGY

WORKING WITH PEOPLE

DEVELOPING RESULTS AND SETTING CUSTOMER EXPECTATIONS

(see pages 64-65)

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Develop analytical skills
Develop report writing skills
Develop problem-solving skills to deal with complexity
Take responsibility for undertaking work independently, carrying out tasks without supervision
Participate in activities to support continuous improvement
Develop accurate record keeping skills
Apply additional training or acquired knowledge to day-to-day tasks
Read publications relevant to field and incorporate learning into your work

Learning from others

Work shadow colleagues to gain an understanding of new or different work practices
Use peer groups to share experiences and knowledge
Work shadow more senior members of the team in the working environment
Join a professional body to gain wider sector awareness and engagement

Formal learning

Apply for training through a mid-career apprenticeship programme
Sector relevant Health & Safety training, Dignity at Work, Inclusive working
Apply for accredited membership to a professional body
Sector relevant training in standards, guidelines, ethics

UCL Ways of Working

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Enterprise and External Engagement – Grade 6

Typical role: Technician, Research Technician, Junior Engineer

Transferable skills and competencies

APPLYING EXPERTISE AND TECHNOLOGY

PRESENTING AND COMMUNICATING INFORMATION

WRITING AND REPORTING

(see pages 64-65)

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- Liaise with suppliers and manufacturers to resolve simple problems
- •With the senior staff, establish and maintain a safe/compliant working environment
- •Assist/complete and update routine safety paperwork (dependent on the risk owner)
- •Hold specific safety responsibilities dependent on individual department specialisms/needs.
- •Organise and complete compliance tasks
- •Maintain up-to-date health and safety knowledge, providing support and advice to others

Core responsibilities
- Ensure effective delivery of objectives by planning and managing own workload
- •Assist the senior lead with the day-to-day running and supervision of laboratory spaces
- •Allocate work to one or more members of technical staff
- •Work collaboratively to deliver objectives
- •Contribute to progress and management meetings
- •Manage a small budget, monitoring resource usage and maintaining supplies of key items
- •Assist with stores operations including ordering, receiving, processing, and distributing goods
- •Source and negotiate with suppliers for routine items
- •Provide a high standard of research support, including contributing to reports and publications
- •Provide a high standard of teaching support, including preparing for classes and field work
- •Support team/project/event by contributing to experimental design and data acquisition
- •Update and deliver local inductions
- •Provide training and demonstrations of specialist expertise, techniques and equipment
- •Share skills and best practice
- Hold responsibility for supervision of teams while also managing workloads and priorities.
- Writing and publishing reports and papers

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Seek out secondment opportunities
Leadership responsibility for short term cover during periods of annual leave
Refine writing skills to advanced level
Develop high level analytical skills on more complex datasets
Take on responsibility for more complex tasks
Take on a specific role within a research project
Develop a level of expertise in a specific area

Learning from others

Shadow senior members of the team in the working environment
Undertake coaching and mentoring opportunities
Speak/present at public outreach events
Seek feedback on all aspects of work and use constructively
Join special interest groups, and/or network groups to learn about best practice in about other organisations and sectors
Join a Community of Practice
Attend conferences

Formal learning

Accreditation/certification from a recognised Professional body e.g. CIfA (Chartered institute for Chartered Institute for Archaeologists for Archaeology-specific roles)
UCL Leadership and/or Management training
Soft skills training Post-graduate qualification
Apply for training through a mid-career apprenticeship programme
Sector relevant training in standards, guidelines, ethics

UCL Ways of Working

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Enterprise and External Engagement – Grade 7

Typical Role: Senior Technician, Technical Specialist, Technical Manager, Lab Coordinator, Engineer, Project Manager

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- •By developing procedures and protocols, establish and maintain a safe/compliant working environment
- •Assist with the completion and updating of a wide range of safety paperwork (in some areas Technical staff my lead on this activity)
- •Complete accident reporting and assist with investigations
- •

Core responsibilities
- •Provide management, motivation, and support to a technical team of broad remit
- •Schedule, prioritise and monitor work and performance in line with demands and deadlines
- •Assist with recruitment of technical staff
- •Hold delegated responsibility from the senior lead for the planning, operation and supervision of a variety of laboratory spaces
- •Organise and facilitate progress and management meetings
- •Be a key contributor to service development, delivery and planning
- •Contribute to and support change
- •Oversee local record keeping, inventory and asset management
- •Manage one or more budgets monitoring resource usage
- • Produce quotations for external services or consultancy charges
- Produce project brief/specifications in line with current sector standards
- •Source and negotiate with suppliers for a range of items including specialist parts/equipment
- •Create, update and implement procedures to deliver an aligned, efficient and effective service
- •Provide a broad range of skilled advice on the area of expertise, to external stakeholders
- •Support taught external facing course projects by delivering skilled technical support
- •Prepare and manufacture a range of specimens/samples/parts/procedures with limited direction
- •Manage local security and access control arrangements
- •Design, develop and deliver inductions, demonstrations and training covering a broad range of activities (not limited to techniques and equipment)
- •Assist managers with the identification of training and development needs
- •Develop a broad knowledge and skills base, sharing with others
- Mentor junior staff
- Liaise with external bodies on a regular basis including other professional stakeholders, clients, professional bodies, etc.
- Collaborate with suppliers and manufacturers to publish technical notes and case studies directly related to areas of expertise
- Collaborate with external academics and industry partners to plan and execute work packages directly related to areas of expertise
- Contribute and lead on the publication of reports and papers
- Plan and/or participate on public engagement events

Transferable skills and competencies

APPLYING EXPERTISE AND TECHNOLOGY

PRESENTING AND COMMUNICATING INFORMATION

ANALYSING

Enterprise and External Engagement – Grade 7

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Establish relationships with external suppliers
Express an interest in research and publications
Support staff within different areas of Enterprise and External Engagement Undertake public speaking and presenting
Build greater sector/commercial awareness

Learning from others

Work shadow senior members of the team at meetings and areas of responsibility
Participate in working groups, special interest groups and attend conferences

Formal learning

Accreditation/certification from a recognised Professional body Chartership
Finance/budget training
Project and programme management training
UCL Leadership and/or Management training
Line Management training
Apply for training through a mid-career apprenticeship programme

UCL Ways of Working

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Enterprise and External Engagement – Grade 8 – Specialist Pathway

Typical Roles: Senior Technical Specialist, Senior Engineer, Senior Project Manager

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- Advise and oversee specific equipment purchases relevant to the specialism ensuring compliance and alignment to facility priorities
- Plan and oversee specific maintenance and repair activities including the completion of in-house, highly-skilled repairs and maintenance
- Ensure that specific equipment linked to the specialism is appropriately maintained
- Lead investigations into new equipment purchases/modifications
- Hold specific safety responsibilities relevant to the specialism e.g. laser safety advisor
- Ensure specific safety paperwork relevant to the specialism is completed/reviewed

Core responsibilities
- Lead external facing income generating projects.
- Ensure that reports are generated and delivered to external 'customers'
- Oversee completion of all compliance tasks related to the specialist area
- Complete accident reporting and assist with investigations
- Maintain in-depth and up-to-date health and safety knowledge relevant to the specialism
- Maintain relevant up-to-date health and safety knowledge providing expert support/advice
- Provide direct line-management support, schedule, prioritise and monitor work and performance in line with demands and deadlines
- Supervise other staff and students working within the specialism
- Work collaboratively with other areas of the University to achieve efficiency and elimination of duplicated effort
- Organise and facilitate meetings as necessary and attend and present at School/Department/cross-institution meetings and forums
- Lead the introduction and development of new and cutting-edge equipment and techniques
- Contribute to and support local change
- Contribute data to influence budget setting processes
- Hold overall responsibility for ensuring that the specialist area delivers against the needs of teaching and research, and that all assets relating to the specialism are utilised
- Provide highly-skilled and highly-specialised teaching, research and taught external facing course support. This will include the development of new techniques or new practical class activities
- Ensure that the management of facilities relating to the specialism is robust and compliant
- Maintain in-depth specialist knowledge, sharing with others e.g. presenting at conferences
- Mentor/coach junior staff
- Organise multidisciplinary interest groups involving staff from a range of specialisms to create a hub for sharing recent publications, projects, etc.
- Contribute to grant/project planning
- Manage local security and access control arrangements

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Liaise and contribute to external bodies to comply with British standards and international standards
Work with other institutions and teams to enable the completion of work

Learning from others

Work on other sites to enable the smooth delivery of work
Join a Community of Practice
Attend conferences

Formal learning

Accreditation/certification from a recognised professional body
UCL Leadership and/or Management training
Line Management training
Apply for training through a mid-career apprenticeship programme

UCL Ways of Working

These describe expected behaviours in line with UCL culture and values (see pages 66-67).
For Ways of Working indicators and steps to development please refer to the Ways of Working website www.ucl.ac.uk/human-resources/policies-advice/ways-working

Transferable skills and competencies

DECIDING AND INITIATING ACTION

LEADING AND SUPERVISING

PLANNING AND ORGANISING

(see pages 64-65)

Enterprise and External Engagement – Grade 8 – Management Pathway

Typical Roles: Technical Manager, Section Head, Assistant Director

Transferable skills and competencies

DECIDING AND INITIATING ACTION

LEADING AND SUPERVISING

PLANNING AND ORGANISING

(see pages 64-65)

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- To be responsible for the implementation of the University's health and safety policy, translating this into effective local policies and procedures
- Hold specific safety responsibilities (e.g. membership of School/Department level committees)
- Ensure specific necessary safety paperwork is completed/reviewed across the School/Department
- Oversee completion of specific compliance tasks across the School/Department
- Lead safety inspections and accident investigations
- Maintain up-to-date health and safety knowledge providing expert support/advice to others

Core responsibilities
- Advise and oversee significant equipment purchases
- Ensure that specific equipment is appropriately maintained in conjunction with Senior Specialist Technicians where appropriate
- Provide management, motivation and support to the School/Department technical team developing the team to keep pace with changing teaching, research, professional and technology needs
- Schedule, prioritise and monitor work and performance in line with demands and deadlines
- Be responsible for the recruitment of all technical staff
- Work collaboratively with other areas of the University to achieve efficiency and elimination of duplicated effort
- Organise and facilitate meetings as necessary and attend and present at School/Department/Cross-Institution meetings and forums
- Lead the development of School/Department services and facilities ensuring that they remain fit-for-purpose and deliver maximum benefit
- Lead change-management initiatives at a local level in collaboration with more senior staff
- Hold responsibility for the effective operation of stock control, whole life costings and asset management/inventory systems across the School/Department
- Manage School/Department budgets and those relating to specific projects ensuring that appropriate and compliant systems are in place to deal with purchasing
- Contribute data to influence budget-setting processes
- Hold overall management responsibility for all facilities ensuring that local facility management arrangements are robust and compliant
- Assess, develop and implement School/Department-wide training/development arrangements
- Design, develop and deliver inductions, demonstrations and training covering a broad range of activities (not limited to techniques and equipment)
- Develop and maintain a broad knowledge and skills base, sharing with others
- Mentor/coach junior staff

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Hone leadership and people management skills
Seek opportunities to improve influencing skills, change management
Build experience of major change projects
Enhance commercial and financial awareness for relevant sector
Gain experience of managing larger/complex teams

Learning from others

Establish strategic relationships with internal and external bodies and committees e.g. communities of practice and the Technical Manager Group Network with senior colleagues across UCL and other institutions

Formal learning

UCL Leadership and/or Management training
Accreditation/certification from a recognised Professional body
Project management training

UCL Ways of Working

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Enterprise and External Engagement – Grade 9 – Specialist Pathway

Typical Roles: Head of Technical Services, Principal Engineer, Principal Project Manager

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- Advise and oversee significant equipment purchases ensuring compliance and alignment to College/Faculty priorities
- Ensure that the University's health and safety policy is translated into effective local policies and procedures
- Hold specific safety responsibilities
- Lead safety inspections and accident investigations

Core responsibilities
- Provide leadership, management, motivation, and support to the College/Faculty technical teams developing the teams to keep pace with changing teaching, research and technology needs
- Ensure that all work is appropriately scheduled in line with priorities and deadlines
- Maintain oversight of all technical staff recruitment within the College/Faculty
- Oversee space management and allocation across the College/Faculty
- Lead the development of College/Faculty services and facilities ensuring that they remain fit-for-purpose and deliver maximum benefit
- Lead change-management initiatives in collaboration with more senior staff
- Produce options papers, proposals and reports for senior management review
- Ensure that inventory and asset management is appropriately managed across the College/Faculty
- Manage College/Faculty budgets (including trading accounts) and those relating to specific projects ensuring that appropriate and compliant systems are in place to deal with purchasing
- Contribute data to influence budget setting processes
- Oversee the management of all College/Faculty facilities, monitoring budgets and overall performance
- Maintain oversight of all large-scale building works leading on those of a significant value/impact
- Oversee College/Faculty security and access control arrangements
- Contribute to research outputs, including research papers, as a co- or lead author.
- Apply for grant funding from appropriate external funding agencies and internal funding programs
- Contribute to research outputs, including research papers, as a co- or lead author
- Apply for grant funding from appropriate external funding agencies and internal funding programs.
- Coach staff.

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Seek opportunities to contribute to strategic and financial planning
Take on a project related to organisational change and innovation
Contribute/chair/co-chair meetings
Engage senior stakeholders with plans/ideas for change
Play key role in senior meetings

Learning from others

Build network of senior colleagues across UCL and in external organisations
Maintain links with sector bodies and peers
Seek feedback from team

Formal learning

Strategic thinking and planning
Financial management
UCL Leadership and/or Management training

UCL Ways of Working

These describe expected behaviours in line with UCL culture and values (see pages 66-67).
For Ways of Working indicators and steps to development please refer to the Ways of Working website
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Transferable skills and competencies

PERSUADING AND INFLUENCING

CREATING AND INNOVATING

ENTREPRENEURIAL AND COMMERCIAL THINKING

(see pages 64-65)

Enterprise and External Engagement – Grade 9 – Management Pathway

Typical Roles: Technical Operations Manager, Director, Research and Innovation Lab Manager, Head of Technical Services

Transferable skills and competencies

PERSUADING AND INFLUENCING

CREATING AND INNOVATING

ENTREPRENEURIAL AND COMMERCIAL THINKING

(see pages 64-65)

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- Advise and oversee significant equipment purchases ensuring compliance and alignment to College/Faculty priorities
- Ensure that the University's health and safety policy is translated into effective local policies and procedures
- Hold specific safety responsibilities
- Lead safety inspections and accident investigations

Core responsibilities
- Provide leadership, management, motivation, and support to the College/Faculty technical teams developing the teams to keep pace with changing teaching, research and technology needs
- Ensure that all work is appropriately scheduled in line with priorities and deadlines
- Maintain oversight of all technical staff recruitment within the College/Faculty
- Oversee space management and allocation across the College/Faculty
- Lead the development of College/Faculty services and facilities ensuring that they remain fit-for-purpose and deliver maximum benefit
- Lead change-management initiatives in collaboration with more senior staff
- Produce options papers, proposals and reports for senior management review
- Ensure that inventory and asset management is appropriately managed across the College/Faculty
- Manage College/Faculty budgets (including trading accounts) and those relating to specific projects ensuring that appropriate and compliant systems are in place to deal with purchasing
- Contribute data to influence budget setting processes
- Oversee the management of all College/Faculty facilities, monitoring budgets and overall performance
- Maintain oversight of all large-scale building works leading on those of a significant value/impact
- Oversee College/Faculty security and access control arrangements
- ontribute to research outputs, including research papers, as a co- or lead author.
- Apply for grant funding from appropriate external funding agencies and internal funding programs.
- Coach staff

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Seek opportunities to contribute to strategic and financial planning
Take on a project related to organisational change and innovation
Contribute/chair/co-chair meetings
Engage senior stakeholders with plans/ideas for change
Play key role in senior meetings

Learning from others

Build network of senior colleagues across UCL and in external organisations
Maintain links with sector bodies and peers
Seek feedback from team

Formal learning

Strategic thinking and planning
Financial management
UCL Leadership and/or Management training

UCL Ways of Working

These describe expected behaviours in line with UCL culture and values (see pages 66-67).
For Ways of Working indicators and steps to development please refer to the Ways of Working website
www.ucl.ac.uk/human-resources/policies-advice/ways-working

Case Studies

Louise Rayner

Director of Archaeology South-East, UCL Institute of Archaeology

I am the Director of Archaeology South-East (ASE) which is a contract and research unit for commercial archaeology and heritage services and part of the UCL Institute of Archaeology.

My role has overall responsibility for all aspects of ASE's operations, providing strategic and organisational leadership, while also contributing to the delivery of the research and teaching objectives of the Institute. This includes oversight of our 100+ staff who are predominately technical archaeologists and heritage specialists, as well as a small PS team who undertake our administration, HR and finance transactions. The team are based across three offices located in Sussex, Essex and London, from which we undertake work across the surrounding regions – so my role involves travelling to these offices and sites to visit staff and projects.

ASE is a Registered Organisation of the Chartered Institute of Archaeologists (CIfA), which is the leading professional body for archaeologists working in the UK. As well as being an accredited member myself (MCIfA), I am also the Responsible Post Holder at ASE, with ultimate responsibility for all of our historic environment work. Accredited membership of a professional body is important because it evidences my skills, competence, understanding and ethical commitment to carry out archaeological work in the public interest. It's an important benchmark that external clients and stakeholders can have confidence in.

The ASE team undertake projects for a wide range of commercial clients, mainly within the construction sector and related to large-scale housing developments and infrastructure. This work is usually required in fulfilment of planning conditions attached to development so we work closely with our clients, consultants, local authority planners and monitors, and other stakeholders to design and deliver projects. Archaeological projects can be very complex and we have to ensure the work meets the required sector standards, are carried out safely and ethically, and in an effective and efficient way. ASE also works on research and engagement projects with partners such as the Council for British Archaeology, the National Trust, South Downs National Park and other local government bodies and heritage organisations.

Project management, people management and communication are essential parts of my role and I have spent much of my career learning and developing these skills and knowledge. I also spend a lot of time working on financial aspects such as annual budgets, cost analyses, and quotes as our commercial contracts are open

to competitive tender. Working with external clients and third parties can be challenging, especially when these sectors operate very differently from a HEI like UCL, but it is also very rewarding when we make really significant discoveries and the importance of what we do becomes clear to all parties. Archaeology is very much a team-centred discipline and I love working in a collaborative setting where everyone's individual skills and knowledge come together to tell the stories of how people lived in the past.

I have a BA Archaeology degree from York and a MSc in Archaeological Material from UCL. My specialist research area is Roman pottery and I've had the opportunity to work on some amazing material from London and across the south-east. I've been involved in development-led archaeology since 1994, working for other commercial archaeology organisations before having a change and joining Birkbeck, University of London in 2003, where I was the Archaeology Programme Manager in the Faculty of Continuing Education. Here I had responsibility for a large programme of courses and sessional lecturers, as well as doing quite a bit of teaching myself. This gave me good experience of the Higher Education environment which really helped when I joined UCL. The mix of commercial and education experience was key to securing my first role at UCL and I've always seen having a diverse range of skills and experience as key to my career progression.

I've been at UCL since 2005 and my first post at ASE was part of the senior management team as Head of Post-Excavation and Specialist Services. During these years, I learnt a huge amount about building and developing a team, growing a client base and supporting staff with CPD and training. I've always tried to be the best advocate for my team and ensure they have the resources, support and facilities needed to do their work.

As a developing leader, I took part in the UCL Senior Women in Leadership programme which was important for building my network across UCL and also encouraging me to really focus on the type of leader I wanted to be. It also introduced me to coaching and I subsequently completed the Coach@UCL training course and continue to work with coachees to build up my experience and gain hours towards accreditation. I have always enjoyed finding new ways to learn and develop and aspire to embed that within our culture at ASE. My work with the Technical Managers Group has continued building engagement and contacts across UCL – working collaboratively again – it's really what gives me the most satisfaction!

Job family: General Workshop & Laboratory Services

Technical Professionals within this job family will delivery infrastructure for education and research activities. These technicians and engineers will apply their technical skills and specialties within their disciplines to run samples, build or repair equipment, perform routine inspections, troubleshoot issues with equipment, create and operate specialist test and calibration facilities, perform calibrations, or provide specialist service or support and expertise.

Their work will not only benefit the lab and workshop users, but they will also have academics and professional services as their customers.

Job family: General Workshop & Laboratory Services
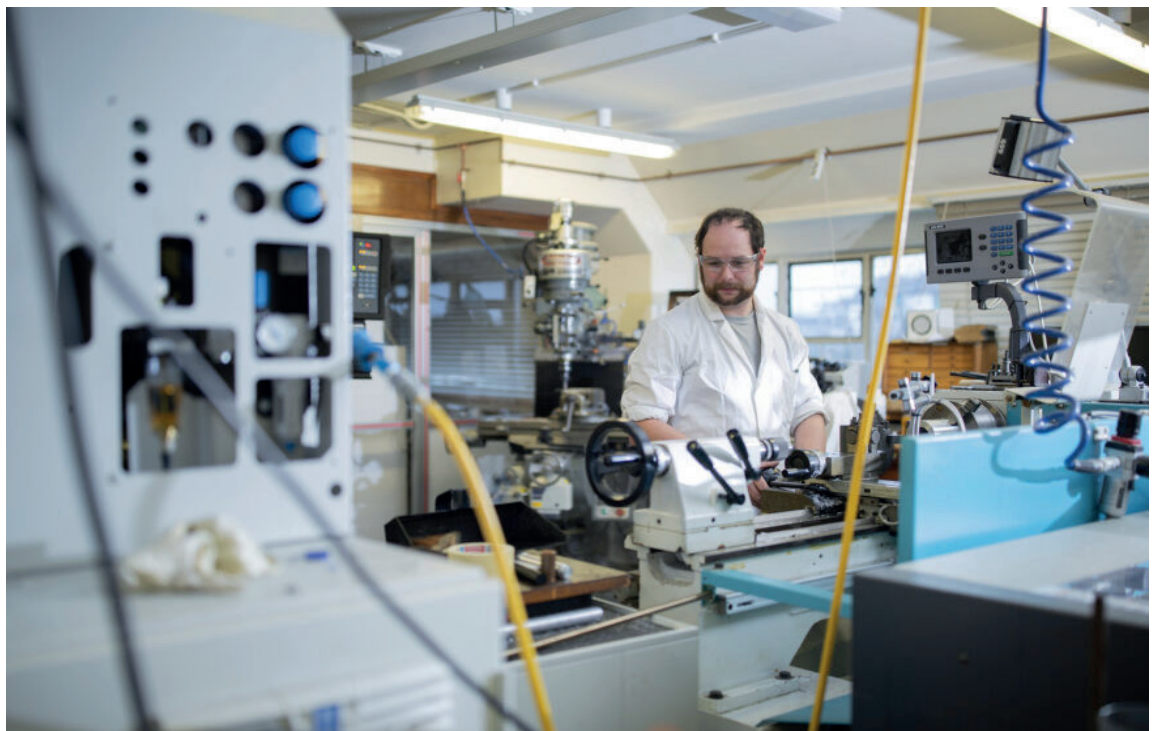
General Workshop & Laboratory Services – Grade 4

Typical roles: Laboratory Support Staff

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- Report faults or damage to equipment and assist with simple maintenance tasks
- Promote and follow safe working practices
- Understand and follow safety paperwork, with the ability to identify and report hazards
- Conduct routine compliance tasks
- Maintain good housekeeping, assisting with waste disposal procedures and cleaning activities

Core responsibilities
- Contribute to meetings
- Make suggestions to improve the service
- Contribute to and support change
- Assist with stock control and stores operations
- Assist with record keeping, inventory and asset management
- Conduct portering/manual handling duties
- Operate simple equipment following instruction or standard operating procedures
- Organise laboratory spaces in preparation of scheduled activities
- Report faults or damage to infrastructure
- Set up and operate equipment following well-established procedures
- Set up lab coats and laundry

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Gain awareness of how to use basic IT applications
Conduct lab inductions for PhDs students and staff (to consider size of the lab and hazard level)

Learning from others

Work shadow colleagues to gain an understanding of new or different work practices
Join a Community of Practice
Access mentoring support from a colleague or local mentoring scheme

Formal learning

Manual handling training
First Aid training
Fire Warden training

UCL Ways of Working

These describe expected behaviours in line with UCL culture and values (see pages 66-67).
For Ways of Working indicators and steps to development please refer to the Ways of Working website
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Transferable skills and competencies

PLANNING AND ORGANISING

DEVELOPING RESULTS AND SETTING CUSTOMER EXPECTATIONS

FOLLOWING INSTRUCTIONS AND PROCEDURES

(see pages 64-65)

General Workshop & Laboratory Services – Grade 5

Typical roles: Assistant Technician, Animal Technician, Technician, Cleanroom Technician

Transferable skills and competencies

APPLYING EXPERTISE AND TECHNOLOGY

WORKING WITH PEOPLE

PLANNING AND ORGANISING

(see pages 64-65)

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- Report faults or damage to equipment and assist with simple maintenance tasks
- Promote and follow safe working practices
- Understand and follow safety paperwork, with the ability to identify and report hazards
- Conduct routine compliance tasks
- Maintain good housekeeping, assisting with waste disposal procedures and cleaning activities

Core responsibilities
- Contribute to meetings
- Make suggestions to improve the service
- Contribute to and support change
- Assist with stock control and stores operations
- Assist with record keeping, inventory and asset management
- Conduct portering duties
- With high level of accuracy, prepare routine reagents and materials adhering to standard operating procedures where necessary
- Operate simple equipment following instruction or standard operating procedures and interpret simple results
- Organise laboratory spaces in preparation of scheduled activities
- Report faults or damage to infrastructure
- Set up and operate equipment following well-established procedures
- Assist with the induction of new staff and students
- Supervise and provide support to students, staff and workshop users of equipment (if applicable)
- Develop an understanding of fire, health & safety and Control of Substances Hazardous to Health (COSHH) regulation

Personal and professional development

Development options to consider when working towards this level

Learning on the job	Learning from others	Formal learning
Develop an understanding of how to carry out simple equipment maintenance	Work shadow others to gain an understanding of how to use equipment in workshops	Manual handling training
Develop an understanding of how to troubleshoot equipment within area of work		Microsoft Software (Word, Excel)
Understand the requirements of specific procedures e.g., clean-up for particular classes or substances, simple ordering and pipetting		Control of Substances Hazardous to Health (COSHH) training
Learn about materials most commonly used in the workshops		Fire Warden training
Conduct background reading on materials, processes, machines etc		General workshop health & safety
		Industry/job specific software training to gain basic proficiency

UCL Ways of Working

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General Workshop & Laboratory Services – Grade 6

Typical role: Workshop Technician, Research Technician, Store Assistant, Laboratory Technician, Junior AIT Engineer

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- Complete routine equipment maintenance and repairs
- Liaise with suppliers and manufacturers to resolve simple problems
- Advise on equipment capabilities
- Working with the faculty manager, establish and maintain a safe/compliant working environment
- Assist/complete and update routine safety paperwork (dependent on the risk owner)
- Hold specific safety responsibilities
- Organise and complete compliance tasks (role/department dependent)
- Maintain up-to-date health and safety knowledge, providing support and advice to others

Core responsibilities
- Ensure effective delivery of objectives by planning and managing own workload
- Assist the academic lead/workshop manager with the day-to-day running and supervision of laboratory spaces
- Allocate work to one or more members of technical staff (this may be dependent on the area of work and/or the role)
- Work collaboratively to deliver objectives
- Contribute to progress and management meetings
- Assist with record keeping, inventory and asset management
- Manage a small budget, monitoring resource usage and maintaining supplies of key items (this may be dependent on the area of work and/or the role)
- Assist with stores operations including ordering, receiving, processing, and distributing goods
- Source and negotiate with suppliers for routine items
- Provide a high standard of research support, including contributing to reports and publications
- Provide a high standard of teaching support, including preparing for classes and field work
- Support taught course projects by contributing to experimental design and data acquisition
- Prepare and manufacture a range of simple specimens/samples
- Report infrastructure faults and support small-scale building works
- Manage equipment bookings, calculate charges/costs using a pre-existing framework or costing scheme and assist with re-charging (in some areas, this may involve TRAC costing)
- Update and deliver local inductions
- Provide training and demonstrations of techniques and equipment
- Share skills and best practice
- Prepare standard operating procedures and work instructions for methods and/or equipment

Transferable skills and competencies

APPLYING EXPERTISE AND TECHNOLOGY

WRITING AND REPORTING

DEVELOPING RESULTS AND SETTING CUSTOMER EXPECTATIONS

(see pages 64-65)

General Workshop & Laboratory Services – Grade 6

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Specialise in specific areas of responsibilities e.g. to be a point of contact for specific instruments and tools
Broaden knowledge of different materials, machinery and processes
Coordinate access to resources and facilities for stakeholders
Develop the ability to use personal initiative to work proactively
Gain additional experience and be able to provide evidence of completed projects
Develop people skills to interact with staff, students, academics.
Complete the manufacturing of parts that require a specialist apprenticeship to achieve the tolerances required (post-successful apprenticeship)

Learning from others

Increase knowledge to aid troubleshooting processes e.g., include sample preparation and analysis of data; common CAD software issues
Work shadow other colleagues to learn how to carry out risk assessments
Join a Community of Practice
Access mentoring support from a colleague or local mentoring scheme

Formal learning

UCL RiskNet training
Fire Warden training
Relevant training through Higher Education and Technician Educational Development (HEaTED)

UCL Ways of Working

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General Workshop & Laboratory Services – Grade 7

Typical roles: Senior Technician/Technical Specialist, Senior Technician, Senior Workshop Technician, Senior Manufacturing Technician, Database Officer, Lab Coordinator, Laboratory Manager, Stores Manager, Safety Advisor, Deputy Safety Officer, AIT Engineer

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- Liaise with suppliers and manufacturers to resolve problems and investigate replacement options
- Advise on equipment capabilities demonstrating how results can be achieved
- By developing local procedures, establish and maintain a safe/compliant working environment
- Oversee compliance tasks ensuring timely completion and maintenance of appropriate records
- Complete accident reporting and assist with investigations

Core responsibilities
- Provide management, motivation and support to a technical team of broad remit
- Schedule, prioritise and monitor work and performance in line with demands and deadlines
- Assist with aspects of the recruitment process of technical staff
- Hold delegated responsibility from the academic lead for the planning, operation and supervision of a variety of laboratory spaces
- Work collaboratively with other areas to ensure efficiency and elimination of duplicated effort
- Organise and facilitate progress and management meetings
- Be a key contributor to service development, delivery and planning
- Contribute to and support change
- Oversee local record keeping, inventory and asset management
- Supervise all stores operations
- Source and negotiate with suppliers for a range of items including specialist parts/equipment
- Create, update and implement procedures to deliver an aligned, efficient and effective service
- Provide a broad range of skilled research support
- Support taught course projects by delivering skilled technical support
- Prepare and manufacture a range of specimens/samples with limited direction
- Support or oversee small- and large-scale building works
- Manage local access arrangements and/or processes
- Design, develop and deliver inductions, demonstrations and training covering a broad range of activities (not limited to techniques and equipment)
- Assist managers with the identification of training and development needs
- Develop a broad knowledge and skills base, sharing with others
- Mentor junior staff
- Conduct lab inspections

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Take leadership responsibility for short term cover during periods of annual leave
Develop specialised knowledge in a specific area of responsibility
Contribute to strategic processes e.g. calculate costing and recharges for facilities (applicable to smaller non-TRAC facilities only)
Working on new technology, involvement in research projects
Contributing to a project led by a specialist

Learning from others

Shadow other team members in their area of responsibility
Seek out secondment opportunities
Join a Community of Practice
Access mentoring support from a colleague or local mentoring scheme

Formal learning

Specific health and safety training e.g. formal safety qualifications
Industry recognised qualifications/training
Accreditation/certification from a recognised Professional body
UCL Leadership and/or Management training

UCL Ways of Working

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Transferable skills and competencies

ANALYSING

PLANNING AND ORGANISING

COPING WITH PRESSURE AND SETBACKS

(see pages 64-65)

General Workshop & Laboratory Services – Grade 8 – Specialist Pathway

Typical Roles: Senior Technical Specialist , Senior AIT Technician

Transferable skills and competencies

DECIDING AND INITIATING ACTION

ADAPTING AND RESPONDING TO CHANGE

LEADING AND SUPERVISING

(see pages 64-65)

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- Advise and oversee all equipment purchases relevant to the specialism ensuring compliance and alignment to facility priorities
- Plan and oversee all maintenance and repair activities including the completion of in-house, highly skilled repairs and maintenance
- Ensure that all equipment linked to the specialism is appropriately maintained
- Lead investigations into new equipment purchases/modifications
- Hold specific safety responsibilities relevant to the specialism e.g. laser safety officer
- Ensure all safety paperwork relevant to the specialism is completed/reviewed
- Oversee completion of all compliance tasks related to the specialist area
- Complete accident reporting and assist with investigations
- Maintain in-depth and up-to-date health and safety knowledge relevant to the specialism
- Maintain relevant up-to-date health and safety knowledge providing expert support/advice

Core responsibilities
- Provide direct line-management support, schedule, prioritise and monitor work and performance in line with demands and deadlines
- Supervise other staff and students working within the specialism
- Work collaboratively with other areas of the University to achieve efficiency and elimination of duplicated effort
- Organise and facilitate meetings as necessary and attend and present at School/Department meetings and forums
- Lead the introduction and development of new and cutting-edge equipment and techniques
- Contribute to/support local change
- Manage budgets relating to the specialism, monitoring resource usage
- Source and negotiate with suppliers for a range of items including specialist parts/equipment
- Contribute data to influence budget setting processes
- Hold overall responsibility for ensuring that the specialist area delivers against the needs of teaching and research, and that all assets relating to the specialism are utilised
- Provide highly skilled and highly-specialised teaching, research and taught course support. This will include the development of new techniques or new practical class activities to students and staff at all levels
- Ensure that the management of facilities relating to the specialism is robust and compliant
- Assess, develop and implement training and development arrangements relating to the specialism
- Contribute to the design of technical projects to enable the development of unique prototype scientific apparatus. This may include the manufacture of quality assured components and the dimensioned drawings of the specialised tolerance standards etc.
- Contribute to the design of mechanical components would include detailed Finite Element Analysis and material specification required for critical applications
- Maintain in-depth specialist knowledge, sharing with others e.g. presenting at conferences
- Mentor/coach junior staff
- Assist with the recruitment of new staff
- Ensure invoices and internal transfers are processed correctly

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Provide short term cover during periods of annual leave, for senior management
Provide consultancy with internal and external stakeholders
Develop and deliver training sessions for staff
Review grant funding applications and publications
Edit academic papers
Co-develop specialised equipment and device with leading manufacturers
Take a leading role in a small project, building scientific apparatus (working with others),
Designing parts and sending them to contractors,
Developing processes and techniques

Learning from others

Work shadow other team members in their area of responsibility
Seek out secondment opportunities
Access mentoring support from a colleague or local mentoring scheme
Attend and present at relevant conferences
Participate in boards and international committees

Formal learning

Accreditation/certification from a recognised professional body
Specialised training related to the specific area
UCL Leadership and management programmes
Apply for training through a mid-career apprenticeship programme

UCL Ways of Working

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General Workshop & Laboratory Services – Grade 8 – Management Pathway

Typical Roles: Technical Manager, Deputy Unit Manager, Facilities and Lab Operations Manager, Building Manager, Safety Officer

Transferable skills and competencies

DECIDING AND INITIATING ACTION

ADAPTING AND RESPONDING TO CHANGE

LEADING AND SUPERVISING

(see pages 64-65)

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- Advise and oversee significant equipment purchases ensuring compliance and alignment to School/Department/Faculty/Research Centre/Research Group priorities in conjunction with Senior Specialist Technicians where appropriate
- Ensure that all equipment is appropriately maintained in conjunction with Senior Specialist Technicians where appropriate
- To be responsible for the implementation of the University's health and safety policy, translating this into effective local policies and procedures
- Hold specific safety responsibilities (e.g. membership of School/Department/Faculty/Research Centre/Research committees)
- Work with Principal Investigators to ensure all necessary safety paperwork is completed/reviewed across the School/Department
- Lead safety inspections and accident investigations
- Maintain up-to-date health and safety knowledge providing expert support/advice to others

Core responsibilities
- Provide management, motivation and support to the School/Department/Faculty/Research Centre/Research technical team developing the team to keep pace with changing teaching, research and technology needs
- Schedule, prioritise and monitor work and performance in line with demands and deadlines
- Be responsible for the recruitment of all technical staff
- Manage all space and its allocation ensuring that it is used to maximum effect
- Work collaboratively with other areas of the University to achieve efficiency and elimination of duplicated effort
- Organise and facilitate meetings as necessary and attend and present at School/Department/Faculty/Research Centre/Research meetings and forums
- Lead the development of School/Department services and facilities ensuring that they remain fit-for-purpose and deliver maximum benefit
- Lead change-management initiatives at a local level in collaboration with more senior staff
- Hold responsibility for the effective operation of stock control, whole life costings and asset management/inventory systems across the School/Department/Faculty/Research Centre areas
- Contribute data to influence budget-setting processes
- Hold overall management responsibility for all facilities ensuring that local facility management arrangements are robust and compliant
- Lead small- and large-scale buildings works
- Oversee School/Department/Faculty/Research Centre/Research Group security and access control arrangements
- Assess, develop and implement School/Department/Faculty/Research Centre/Research-wide training/development arrangements
- Develop and maintain a broad knowledge and skills base, sharing with others
- Mentor/coach junior staff
- Ensure invoices and internal transfers are processed correctly
- Manage specific specialist laboratory or facility areas of work

General Workshop & Laboratory Services – Grade 8 – Management Pathway

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Provide short term cover during periods of annual leave, for senior management

Provide consultancy with internal and external stakeholders

Develop and run training sessions for staff

Deputise for day to day tasks as required for the line manager

Take ownership of projects at a higher level

Delegate pieces of work to junior members of staff

Leading on small facility, equipment, leading on large scale design/developing engineering projects or policy projects

Provide advice on the implementation of policy,

Provide costs of equipment and/ or infrastructure for research funding applications and other projects,

Developing an understanding of how lab/workshops are managed

Learning from others

Work shadow other team members in their area of responsibility

Seek out secondment opportunities

Seek out mentoring opportunities

Attend and present at relevant conferences

Participate in boards and international committees

Formal learning

Accreditation/certification from a recognised professional body

Specialised training related to the specific area

UCL Leadership and/or Management training

Apply for training through a mid-career apprenticeship programme

UCL Ways of Working

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General Workshop & Laboratory Services – Grade 9 – Specialist Pathway

Typical Roles: Senior Technical Expert, Senior Technical Specialist, Principal AIT Engineer

Transferable skills and competencies

PERSUADING AND INFLUENCING

CREATING AND INNOVATING

ENTREPRENEURIAL AND COMMERCIAL THINKING

(see pages 64-65)

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- Specialise in a skillset deemed to be expert in their area and/or including project management of major technical projects
- Be responsible for the overall technical project management of research projects, including the design and implementation of systems
- Lead a major technical project, facility or team.
- By developing local procedures, establish and maintain a safe/compliant working environment within the specialist area
- Hold specific safety responsibilities relevant to the specialism e.g. laser safety officer
- Complete accident reporting and assist with investigations
- Maintain in-depth and up-to-date health and safety knowledge relevant to the specialism

Core responsibilities
- Provide direct line-management support, schedule, prioritise and monitor work and performance in line with demands and deadlines
- Supervise other staff and students working within the specialism
- Work collaboratively with other areas of the University to achieve efficiency and elimination of duplicated effort
- Organise and facilitate meetings as necessary and attend and present at School/ Department meetings and forums
- Lead or contribute to and support local change
- Manage budgets relating to the specialism, monitoring resource usage
- Source and negotiate with suppliers for a range of items including specialist parts/equipment
- Contribute data to influence budget setting processes
- Hold overall responsibility for ensuring that the specialist area delivers against the needs of teaching and research, and that all assets relating to the specialism are utilised
- Provide highly skilled and highly-specialised teaching, research and taught course support. This will include the development of new techniques or new practical class activities
- Ensure that the management of facilities relating to the specialism is robust and compliant
- Contribute to research outputs, including research papers, as a co- or lead author.
- Apply for grant funding from appropriate external funding agencies and internal funding programs.
- Mentor/coach junior staff

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Develop an understanding of managing budgets
Management of workshop/lab.
Manage a large piece of equipment as a key operator
Take on delegated responsibility for the management of a key project/s; aspiring to manage large scale projects independently

Learning from others

Work shadow colleagues to gain an understanding of new or different work practices
Join a Community of Practice
Access mentoring support from a colleague or local mentoring scheme
Attend internal or external networking events
Seek out secondment opportunities
Conference attendance and presentation where possible

Formal learning

Accreditation/certification from a recognised Professional body
Relevant training through Higher Education and Technician Educational Development (HEaTED)
UCL Leadership and/or Management training
Apply for training through a mid-career apprenticeship programme

UCL Ways of Working

These describe expected behaviours in line with UCL culture and values (see pages 66-67).
For Ways of Working indicators and steps to development please refer to the Ways of Working website
www.ucl.ac.uk/human-resources/policies-advice/ways-working

General Workshop & Laboratory Services – Grade 9 – Management Pathway

Typical Roles: Technical Operations Manager, Biological Services Unit Manager, Advanced Manufacturing Manager, Head of Technical Services

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- Hold responsibility for a large facility or multiple number of laboratories
- Ensure that the University's health and safety policy is translated into effective local policies and procedures
- Hold specific safety responsibilities
- Ensure that all compliance tasks are completed
- Lead safety inspections and accident investigations
- Maintain up-to-date health and safety knowledge providing expert support/advice to others

Core responsibilities
- Provide management, motivation and support to the College/Faculty technical teams developing the teams to keep pace with changing teaching, research and technology needs
- Ensure that all work is appropriately scheduled in line with priorities and deadlines
- Maintain oversight of all technical staff recruitment within the College/Faculty
- Oversee space management and allocation across the College/Faculty
- Lead the development of College/Faculty services and facilities ensuring that they remain fit-for-purpose and deliver maximum benefit
- Lead change-management initiatives in collaboration with more senior staff
- Produce options papers, proposals and reports for senior management review
- Ensure that inventory and asset management is appropriately managed across the College/Faculty
- Manage College/Faculty budgets (including trading accounts) and those relating to specific projects ensuring that appropriate and compliant systems are in place to deal with purchasing
- Contribute data to influence budget setting processes
- Oversee the management of all College/Faculty facilities, monitoring budgets and overall performance
- Maintain oversight of all large-scale building works leading on those of a significant value/impact
- Oversee College/Faculty security and access control arrangements
- Assess, develop and implement College/Faculty-wide training/development arrangements
- Coach staff
- Set up and chair departmental/faculty committees e.g. health and safety, infrastructure
- Lead on cross faculty engagement and interactions
- Oversee departmental/faculty operations on all levels
- Contribute to research outputs, including research papers, as a co- or lead author.
- Apply for grant funding from appropriate external funding agencies and internal funding programs.

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Develop understanding of managing budgets
Management of workshop/lab.
Lead on major design/developing engineering projects
Leading outside of your area of expertise
Develop higher level communication and negotiation skills

Learning from others

Work shadow colleagues to gain an understanding of new or different work practices
Join a Community of Practice
Access mentoring support from a colleague or local mentoring scheme
Attend internal or external networking events
Attend conferences and utilise opportunities to present

Formal learning

Accreditation/certification from a recognised professional body
UCL Leadership and/or Management training
Apply for training through a mid-career apprenticeship programme
Budget management training

UCL Ways of Working

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Transferable skills and competencies

PERSUADING AND INFLUENCING

CREATING AND INNOVATING

ENTREPRENEURIAL AND COMMERCIAL THINKING

(see pages 64-65)

Case Studies

Niamh Grace

Workshop Manager, The Bartlett Manufacturing and Design Exchange (B-made)

My current role is manager of the Bloomsbury workshop for The Bartlett Manufacturing and Design Exchange (B-made), part of the Bartlett School of Architecture in the UCL Faculty of the Built Environment. I work with a team of specialists who work across all the various courses imparting physical and digital technological solutions and manage/lead a team of 13 people ranging from Grade 8 to 5, along with 1 apprentice.

In 1985 I dropped out of Art College in Dublin to pursue a Modelmaking apprenticeship, turning a passion for making into a skill I could travel with. I did my apprenticeship in sheet thermoplastics and resin and silicone casting. There were three small firms in Ireland that made models and I spent my school holidays working in one, which also subsidised my college fees.

In 1987 I moved to London where all 10 of the modelmaking firms offered me work, but I chose Arup who offered me an apprenticeship making models in wood. There were eight of us in the workshop that made models for Arup Associates (Architects) and Arup and Partners Engineers. I was the youngest employee at the time, and the only female. The first job I worked on was the area around Saint Paul's where I carved a statue of St Anne, and I later went on to specialise in quick sketch models.

I spent some time traveling around Australia working as a modelmaker in various architectural practices, making card models of Sydney Opera House, Adelaide shopping Centre, Newcastle town Centre and managing Backpackers Down Under, in Brisbane. From 1991to 1996 I continued freelance modelmaking in Europe working on projects such as the Eurostar terminal Waterloo, new parliamentary buildings in Westminster, Heathrow terminal buildings, BBC Broadcasting House, and Reichstag Berlin. I also taught Modelmaking in The Caribbean School of Architecture in Kingston, Jamaica.

I updated my education by taking a City and Guilds NC/CNC programming course at South Thames College, in the evenings, and from 1996 to 2010 I ran my own 200 sq metre architectural modelmaking workshop in East London with a core team of 8 (gearing up to 20 when required). I trained some of the staff in an apprenticeship style, often working with universities providing internships, and providing work experience opportunities to secondary school students.

I then decided to retrain as a schoolteacher while my son was young, graduating with a First Class Honours degree (BA(Hons) Design &

Technology Education with QTS) from Goldsmiths College in 2014. I did my QTS in a STEM FE college teaching Engineering and Product design. My teaching qualification and experience gave me the skills required to manage teams and finances in an educational institute, as well as an understanding of how to motivate and focus a team when you are, or are not, the owner of the workshop.

In September 2018 I joined UCL as the Analogue Workshop Manager in the Bartlett School of Architecture. I had originally applied for a Teaching Fellow position, but it was suggested at the interview that my skillset was more suited to a management role. With a restructure in April 2019, I became the Workshop Manager which also included responsibility for the digital parts of the workshop such as CNC.

In 2019 I became a core member of Engineering Technical Staff Community of Practice (CoP) which is involved in working with 'Staff who perform skilled applications of knowledge and processes through accurate manufacturing to produce bespoke components.' This opened new conversations for me with other colleagues in the wider technical staff community.

My current role entails being a Workshop Manager, Personal Tutor, Teacher, Project Manager, Deputy Departmental Safety Officer and recently a Departmental tutor to MA /MLA landscape students. I have first-hand experience of managing records of maintenance (should incidents in the workshop lead to safety investigations), ordering supplies, machines and replacements; maintaining inventories of equipment and other assets while responding to institute plans, managing budgets, control regular and capital purchases, communicate constantly with internal and external stakeholders including the preparation of reports and the monthly bulletin for B-made.

My current and previous roles have involved the recruitment and management of staff, managing their working schedules and supporting their induction and training. My job is extremely rewarding as I feel I am contributing to the future workforce while keeping a link to practice outside HEI.

Lately, I had the pleasure to participate in organising the inaugural 'Technical Staff Showcase at UCL' with the pivotal role of using my experience with exhibitions to organise the exhibition space of such a beautiful event.

I am looking forward to the future and hope to continue inspiring the students, staff and apprentices I work with at B-made.

Leadership Level

All four job families provide opportunities to progress into Grade 10 leadership roles. A leader at this level will typically be a Professor of Practice or Director of Technical Services and will have gained extensive experience and specialisation in several different job families. They may have a track record of nationally or internationally recognised achievement and engagement.

Typical Roles: Professor of Practice, Professorial Research Fellow, Professorial Data Scientist, Professorial Research Software Engineer, Director of Technical Services, Senior Principal Engineer

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities
- Develop and lead bids for future equipment purchases/maintenance programmes or research programmes in technical fields as a principal or co-investigator.
- Develop and maintain collaborations with external bodies in the supply and delivery of the service
- Lead on all Technical Services health and safety matters
- Be a member of the University Health and Safety Committee
- Maintain up-to-date health and safety knowledge, providing expert support/advice to others

Core responsibilities
- Ensure that effective management and reporting arrangements exist across the service
- Ensure utilisation of University space/resources generating proposals for improvement
- Develop productive relationships between academic and technical staff
- Leads a group of staff to ensure goals are delivered with budgetary and resource constraints, makes judgements and decisions regarding the level of staffing and resources
- Contribute to the development of University policies and procedures, leading on technical matters
- Liaise with College/Faculty academics to ensure that the service delivers all curriculum and research requirements
- Devise appropriate action plans for investment in the maintenance and strategic development of technical support staff, services and facilities
- Provide transformational and change-oriented leadership focussed on creating a collaborative style of working
- Build relationships with sponsors to understand needs and manage expectations to enhance reputation and ensure fulfilment of commitments
- Deploy and manage the University's technical budgets
- Lead the management, development and utilisation of all technical facilities ensuring that these continue to deliver all curriculum and research requirements
- Oversee all significant building projects to ensure suitability and incorporation of appropriate technical services facilities
- Establish a forum/network for communication between all technical staff in order to identify priorities and devise well-informed plans for strategic development
- Develop and promote professional standards and encourage participation in CPD
- Contribute to research outputs, including research papers, as a co- or lead author.

Transferable skills and competencies

APPLYING EXPERTISE AND TECHNOLOGY

FORMULATING STRATEGIES AND CONCEPTS

ADAPTING AND RESPONDING TO CHANGE

(see pages 64-65)

Leadership Level

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Working on strategies (e.g. first draft)
Leading a major project; initiating new and creative ideas resulting in successful implementation
Seek out opportunities to develop confidence and credibly represent UCL in high profile settings (e.g. chairing/presenting to large groups.

Learning from others

Engagement in discreet/ individual projects which have a defined start and end date
Access mentoring support from a colleague or local mentoring scheme
Attend internal or external networking events
Attend conferences and utilise opportunities to present

Formal learning

Accreditation/certification from a recognised professional body
UCL Leadership and/or Management training
Apply for training through a mid-career apprenticeship programme
Budget management training
NEBOSH/IOSH qualification
ILM Level 5 +
Working towards CSci or CEng

UCL Ways of Working

These describe expected behaviours in line with UCL culture and values (see pages 66-67).
For Ways of Working indicators and steps to development please refer to the Ways of Working website
www.ucl.ac.uk/human-resources/policies-advice/ways-working

Case Studies

Professor Christopher Thrasivoulou

Professorial Research Fellow, Division of Biosciences

My current position is multifaceted and encompasses a diverse range of responsibilities and skill sets. My specialist role as the Director of Biosciences Imaging Facility, a lead Science Technology Platform (STP), in the Faculty of Life Sciences (FLS), comprises two hubs. 1) the Centre for Cell & Molecular Dynamics (CCMD) and 2) UCL-Zeiss Multiscale Imaging Centre (UZMIC); both units have seen significant development under my leadership over the past 21 years. The UZMIC hub is one of the first UK Zeiss Centres of Excellence, opened in 2018 and was the culmination of many years of negotiations with key stakeholders (Zeiss & UCL). The imaging hubs comprise of several confocal and multiphoton microscopes. Additional capabilities include super-resolution, high content imaging systems, Lightsheet microscopy, Raman Confocal, micro–X-Ray CT scanners, and specialist image analysis software workstations.

My career at UCL started 45 years ago (October 1978) in the Department of Anatomy as a junior Technician. I always had a passion for science, and particularly biology, since my very early childhood and always knew this was the career pathway that I wanted to follow (my dream was to be an Astronaut after watching the Apollo Moon landing as young boy, but I knew that would never happen!). However, being a first-generation immigrant from Cyprus, coming to the UK at 3 years of age, my parents had zero experience of how to guide my secondary school education and I had no idea that I could go to university for free to pursue a degree. I left school with a handful of CSE's/O-levels and 2 A-levels (Biology and Art…. yes, I know, a weird combination). I joined a small pharmaceutical company in London for 18 months as a Junior Technician in the pharmacology department and embarked on a OND, Day-Release course in Biology. Although I enjoyed the work, my Head of Department did not like me for some reason and made my life at work very difficult, so knowing that I could never progress in the company, I resigned. One month later I joined the Royal Free Hospital School of Medicine (RFHSM), in the Anatomy Department as a junior technician working in the dissecting room (embalming cadavers, helping with the teaching, dissecting/prosecting cadavers for teaching and specimen preparation for our museum).

I continued my higher education and gained my ONC, then my HND in biological sciences. In 1981, one of the Anatomy lecturers asked me if I was interested in helping him with his research projects, which I was more than happy to do, and within a couple of years I was spending 2 – 3 days a week doing research on the role of gut microcirculation in duodenal ulcers, where I taught myself how to build specialist microscopes for intravital imaging. I was soon promoted to full Technician, and a couple of years later to Senior Technician with a few joint-author publications. In 1985 I joined the lab of a new PI in the department, working on the effects of caloric restriction in the ageing peripheral nervous system. This was a small research group, but soon grew, with 3 – 4 PhD students, 2 Post-docs, a few MSc/BSc students, along with work experience students, one other technician and myself. This is where I honed my microscopical imaging skills and developed new protocols for quantitative image analysis techniques. I gained a vast amount of experience running the technical services of the lab and supervising BSc/MSc students. I embarked on my own projects, writing scientific papers, contributing to grant applications, attending conferences, giving talks/seminars, teaching on the MBBS undergraduate program, and in 1989, I was promoted to Chief Technician.

In the early 1990's I decided that if I wanted to progress my career as a research scientist, I would need to gain a PhD, but as I had no formal Degree (BSc) I had to sit an entrance exam to demonstrate that I had the academic knowledge as well as the practical skills to qualify for entry into the PhD program, after which I registered for a part-time PhD in the same lab. It was hard going keeping up with my PhD studies and running the lab, whilst also coping with the responsibilities of a young family. However, with the tremendous support of my wife and PI of the lab I finally graduated in 1998, with a PhD in Neuroanatomy. During this period (1996), I was promoted to Senior Chief Technician.

The number of research projects and size of the lab had extended considerably during that time, my PI and I developed a number of key quantitative microscopical techniques, and we were fortunate to get grant finding for, one for the first in the UK, Confocal microscopes. This revolutionised scientific research and our lab soon had another confocal and we became the unofficial image hub for the RFHSM.

Some years after the merger of RFHSM and UCL (1998), in 2002 I was asked to transfer to the UCL Bloomsbury Campus and run the Confocal Imaging Unit in the department of Anatomy & Developmental Biology. I was excited to accept this role and I knew that I wanted to continue with my research interests, so I accepted the position on the basis that I could continue with my existing collaborations and seek new collaborations at UCL. Shortly after my transfer to the UCL campus, I got promoted to Senior Experimental Research Officer. This promotion was critical for me as it gave me the academic status that allowed me to

apply for grants independently and supervise PhD students. Up until then I had supervised many BSc/MSc students and undertook the day-to-day supervision of PhD's, but I could not be a primary/secondary supervisor of a PhD student.

Through my leadership, staff recruitment/training, equipment grants success and extensive track record in imaging, I ensure that the unit can deliver an imaging solution for almost any sample. The unit has an excellent national and international reputation for delivering a high quality and impactful imaging service, evidenced by the number of external users that choose to use our unit I manage a team of four highly qualified specialist technicians with strong cell biology and physics backgrounds, whose responsibilities are to help users with comprehensive imaging advice, training, help with advanced imaging techniques, image processing and analysis. I encourage my staff to forge collaborations with research group leaders and become intellectually involved in their projects, culminating in co-authorships. The unit supports the research of over 900 registered users from more than 60 diverse research groups across the whole of UCL. We also have users from many other UK universities as well as EU collaborators and some industry users. The facility has been very successful in terms of its research output, equipment grant funding (>£5M since 2016), translating in attracting talented research staff to UCL.

I have always been a very active citizen of UCL and served on many committees over the years and currently sit on five committees. I forged collaborations with several research groups within Biosciences and other faculties and external universities. The unit was originally a departmental facility and became a Divisional facility in 2014/15 and our user base increased significantly, serving the whole of UCL; and it was during this time, I was promoted to Principal Research Fellow. My publications increased significantly as did the reputation of the unit nationally and internationally and I have since been fortunate in attracting more funding, both internal (CEF) funding and external (BBSRC/MRC/WELCOME) to purchase more cutting-edge technology microscopes. I have invested heavily over the years in developing networks, along with senior colleagues from across UCL and key decision makers, to form external links with industry and forged close partnerships with microscope manufacturers. This has proved to be important to ensure the efficient running of our core facilities especially as I lead a key Science Technology Platform. I have always been outward looking and our external appearance is critical to the success of the facility, as good publicity feeds down to external agencies, such as grant awarding bodies and enhances/reinforces UCL's reputation as a Centre of Excellence for Imaging.

I am an ardent supporter for promoting the contribution that UCL's technical community make to the success of UCL's world class research, teaching and education, and I am a member of Technical Managers Group (TMG), as well as a vocal committee member of the Technical Staff Project and Vice Chair of the Survey Reporting Group (SRG). I am a founding member of the London Consortium of Imaging Facilities Managers. This Communities of Practice group' (COP) was conceived and formed 5 years ago by the imaging facilities mangers of the Crick Institute, Institute of Child Health, Imperial and UCL. Our inaugural meeting was held at the Crick Institute and attend by 14 London-based facility mangers. The group has grown to 26 members; each manager hosts a meeting at their institute where we can exchange knowledge and practises. I am deeply passionate about promoting STEM in schools and have always taken on 6th form work experience students as well summer students to give them experience of working in a research lab. We have students from disadvantaged London schools visit our unit throughout the year as part of their extracurricular outreach STEM program, which is extremely popular and successful.

In 2023, I was promoted to Professorial Research Fellow, for my contributions to the UCL research community, teaching/training, UCL citizenship and external engagement. Then again in 2023, I won the Papin Prize for Core Research Facility at the The UK Higher Education Technicians Summit.

My technical career pathway has not been one that one might call a 'traditional route', although one could argue that my early career, certainly fits that description. I have always had a very positive attitude to my work and never focused on the negative, but asked 'what did I learn from that experience and what can I do differently to solving the problem? To enjoy and thrive in one's work, one must be proactive and willing to put themselves forward for challenging tasks; only in this way can one develop their craft and build their skills and experience.

My advice to all technicians is, listen to and seek advice from people within your community and even consider getting a mentor to help guide your career path. Everyone will at some point/s in their career have key events/opportunities that present themselves, it is how we react to these opportunities that will impact on our career outcomes; you just have to recognise the opportunities and be ready and prepared to act. I never thought for one moment during my early career that I would get a professorship, and I still think of myself as a technician, because that is what my skills and thinking define me as, and I am proud to say that.

Transferable Skills

UCL uses a transferable skills and competency framework to highlight abilities and attributes that underpin effective performance. This approach supports a flexible and inclusive professional approach to career planning. Considering transferable skills can be a starting point in identifying opportunities for job mobility, and in supporting you to recognise and build on your personal strengths. Individuals can develop and refine these transferable skills through working experience and through learning interventions as part of their Personal and Professional Development.

UCL uses the Universal Competency Framework (UCF) to discuss transferable skills. The UCF has been developed for use across different sectors, professions and countries (see Bartram, D. 2002).

**DECIDING AND
INITIATING ACTION**

Making decisions. Taking responsibility. Acting with Confidence. Acting on own initiative. Taking action. Taking calculated risks.

RELATING AND NETWORKING

Building rapport. Networking. Relating across levels. Managing conflict. Using humour.

**APPLYING EXPERTISE
AND TECHNOLOGY**

Applying technical expertise. Building technical expertise. Sharing expertise. Using technology resources. Demonstrating physical and manual skills. Demonstrating cross-functional awareness. Demonstrating spatial awareness.

**FORMULATING STRATEGIES
AND CONCEPTS**

Thinking broadly. Approaching work strategically. Setting and developing strategy. Visioning.

**ADAPTING AND RESPONDING
TO CHANGE**

Adapting. Accepting new ideas. Adapting interpersonal style. Showing cross-cultural awareness. Dealing with ambiguity.

Reference

Bartram, D., 2006. The SHL universal competency framework. Surrey, UK: SHL White Paper.

LEADING AND SUPERVISING

Providing direction and co-ordinating action. Supervising and monitoring behaviour. Coaching. Delegating. Empowering staff. Motivating others. Developing staff. Identifying and recruiting talent.

WORKING WITH PEOPLE

Understanding others. Adapting to the team. Building team spirit. Recognising and rewarding contributions. Listening. Consulting others. Communicating proactively. Showing tolerance and consideration. Showing empathy. Supporting others. Caring for others. Developing and communicating self-knowledge and insight.

ADHERING TO PRINCIPLES AND VALUES

Upholding ethics and values. Acting with integrity. Utilising diversity. Showing social and environmental responsibility.

PERSUADING AND INFLUENCING

Making an impact. Shaping conversations. Appealing to emotions. Promoting ideas. Negotiating and gaining agreement. Dealing with political issues.

PRESENTING AND COMMUNICATING INFORMATION

Speaking fluently. Explaining concepts and opinions. Articulating key points of an argument. Presenting and public speaking. Projecting credibility. Responding to an audience.

WRITING AND REPORTING

Writing correctly. Writing clearly and fluently. Writing in an expressive and engaging style. Targeting communication.

ANALYSING

Analysing and evaluating information. Testing assumptions and investigating. Producing solutions. Making judgements. Demonstrating systems thinking.

LEARNING AND RESEARCHING

Learning quickly. Gathering information. Thinking quickly. Encouraging and supporting organisational learning. Managing knowledge.

CREATING AND INNOVATING

Innovating. Seeking and introducing change.

PLANNING AND ORGANISING

Setting objectives. Planning. Managing time. Managing resources. Monitoring progress.

DEVELOPING RESULTS AND SETTING CUSTOMER EXPECTATIONS

Focusing on customer needs and satisfaction. Setting high standards for quality. Monitoring and maintaining quality. Working systematically. Managing quality processes. Maintaining productivity levels. Driving projects to success.

FOLLOWING INSTRUCTIONS AND PROCEDURES

Following directions. Following procedures. Time keeping and attending. Demonstrating commitment. Showing awareness of safety issues. Complying with legal obligations.

COPING WITH PRESSURE AND SETBACKS

Coping with pressures. Showing emotional self-control. Balancing work and personal life. Maintaining a positive outlook. Handling criticism.

ACHIEVING PERSONAL WORK GOALS AND OBJECTIVES

Achieving objectives. Working energetically and enthusiastically. Pursuing self-development. Demonstrating ambition.

ENTREPRENEURIAL AND COMMERCIAL THINKING

Monitoring markets and competitors. Identifying business opportunities. Demonstrating financial awareness. Controlling costs. Keeping aware of organisational issues.

UCL Ways of Working

UCL Ways of Working. These describe ways of working that reflect UCL's culture and values. They are designed to support you to understand and navigate expectations around how we work successfully.

These ways of working were identified in consultation with members of staff, and provide detail and example around ways of working that are likely to support a successful career at UCL at each level of the organisation.

Descriptors for UCL Ways of Working

PERSONAL EXCELLENCE	
Commitment	We are persistent in our shared commitment to our goals, our 2034 mission, and to taking care of ourselves, our students and each other.
Outstanding Service	We take pride in delivering a positive and proactive service to our colleagues and communities, striving for high quality outcomes and smarter ways of working.
Integrity	We insist on honesty, inclusion and respect for each other in line with UCL's core values, recognising excellence in different forms. We take full accountability for our actions and leading by positive example.

WORKING TOGETHER	
Communication	We communicate with intention and clarity, building strong relationships – listening and responding with fairness and compassion.
Collaboration	We work creatively in empowered cross-functional teams and partnerships, where we build trust and recognise each other's contributions.
Shared Learning	We create learning-focused working environments, where we ask challenging questions, encourage respectful inquiry, seek continuous improvement and development, and value constructive feedback.

ACHIEVING OUR MISSION	
Vision	We know why our work is important to our 2034 mission, and we respond to the 'bigger picture', drawing out opportunities through being ambitious, united and forward-thinking.
Innovative Practice	We review our practices and innovate where necessary to use our resources effectively, to achieve our aims and support our mission into 2034 and beyond.
Ownership	We understand our responsibilities for delivering timely and effective outcomes, which we achieve through decisive, clear strategies, and well-communicated, consultative plans.

Transferable Skills and UCL Ways of Working are crucial to recruiting and retaining talented staff. They can be used:

- By individuals and managers at UCL to consider and discuss meaningful personal and professional development.

- By managers to who are making hiring or progression decisions to thoroughly explore HOW people work as well as WHAT they do.

To find detailed indicators and examples of how the ways of working can be related to different grades, look at the 'UCL Ways of Working' on the UCL website: www.ucl.ac.uk/human-resources/policies-advice/ways-working