JOB DESCRIPTION /
TECHNICAL SPECIALIST (DIGITAL LAB)

University of Kent

Academic Divisions/ Divisional Operations: Technical Services

The University of Kent is a leading UK institution with an excellent reputation for outstanding teaching, strong research and international links. There are many new initiatives underway to build on existing strengths, such as Signature Research Themes, the Institute for Cultural and Creative Industries and the Kent and Medway Medical School.

The University is continuing to look to the future whilst responding to sector-wide challenges. Kent has set out a vision and strategy that builds upon strong foundations in education, student experience and research, embracing flexibility and growth to ensure a sustainable future for our community, and to enable the University to further its position and navigate these challenges successfully.

As part of this, we're reshaping our operating model to ensure our directorates and academic divisions are effective, efficient and focused sharply on delivering the University's ambition to be a leading civic university; delivering an outstanding student experience, outcomes, and world-leading research.

Reference:
AHUM-141-22R

Salary:
Grade 6

Contract:
Ongoing
Full time

Location:
Canterbury campus

Responsible to:
Technical Manager

Responsible for:
Activities: Specialist Technical Support Services

Job family:
Technical

Job purpose

Working as part of a technical support team providing a comprehensive, immediate and specialised support service for staff and students within the Division, the role of Technical Specialist helps to deliver timely and effective specialised research and teaching support to students, academic and research staff at all levels and visitors to the Division. A Technical Specialist will have a focus on a technical specialism possessing advanced technical skill and knowledge in a particular area. Using in depth technical skills the role holder will provide specialist support across the division, providing technical training and setting technical standards. A Technical Specialist will have extensive experience of specialist facilities and/or equipment, ensuring effective, safe and efficient use of resources managing operational availability and service levels.

Key accountabilities

The following are the main accountabilities for the job. Other duties, commensurate with the grading of the job, may also be assigned from time to time.

1. Use in-depth technical knowledge, and experience to provide specialist support across a range of activities. Work with limited guidance and instruction. Set and maintain technical standards.
2. Provide specialist technical support to end users utilising specialist software and equipment. Undertake activities which require specialist knowledge and skills to time and quality standards.
3. Liaise with staff across the wider University, as well as external service providers to ensure that detailed technical requirements are understood in the design and implementation of all activities relating to the subject area.
4. Operate complex technical equipment. Ensure equipment is maintained, serviced and repaired. Diagnose and rectify faults. Ensure current and future consumable needs are maintained to meet demand.
5. Diagnose faults, maintain and repair equipment and systems of a specialist nature, arranging contractor visits as required
6. To collaborate and work alongside colleagues to plan, organise and control activities so that the specialism is delivered to a high standard
7. To manage, review and implement appropriate procedures to maximise the efficient running of the technical work area under the direction of the specialist lead
8. Establish and maintain a safe and compliant working environment. Understand, promote and apply relevant legislation and guidance including COSHH, risk assessments and departmental health and safety protocols ensuring procedures are followed at all times. Take on specific safety roles where required
9. Use appropriate computational methods to analyse data to agreed timeframes; providing appropriate interpretation and evaluation. Ensure accurate completion of documentation, data and reports.
10. Contribute to the development of protocols, standard operating procedures and maintenance schedules for specialist technical activities
11. Assist with purchasing specialist technical products and services for divisional customer. Use knowledge and experience to provide recommendations and quotations, advising on specification and price.
12. Support budget holders to deliver effective financial controls, monitor resource usage and negotiate with suppliers for a range of items
13. Present technical information within own area of expertise at meetings, conferences etc. and take part in discussions to inform on scientific advancement
14. Draft and provide inductions, training and demonstrations of specialist techniques ensuring compliance with safety and regulatory guidelines to staff, students and external stakeholders
15. Review specialist areas and recommend changes to improve efficiency and quality.
16. Plan and monitor day to day, specialist technical activities to ensure work objectives are met.
17. Provide in class support to teaching activities. Undertake technician led teaching
18. To actively demonstrate a commitment to professional development by continuing to advance knowledge, understanding and competencies
19. Maintain up to date knowledge of the field, investigate and propose improvements to services, advocating best working practice

Key challenges and decisions

The following provide an overview of the most challenging or complex parts of the role and the degree of autonomy that exists.

1. Role holder uses both theoretical knowledge and practical experience to provide professional specialist advice and support in a technical or specialised field. Supporting both internal and external customers as well as training technical service colleagues. Ensuing the very best customer experience.

2. Use specialist knowledge to operate and support specialist facilities and resources, ensuing effective operation and service levels.

3. Establish and maintain health and safety in the given work area. Review activities and procedures. Undertake inductions and presentations to ensure a safe working environment.

4. Trouble shooting faults on high value, high demand resources. Work independently and as a team. Being able to work in a high-pressure environment to short time frames.

5. Provide excellent communication, passing specialist knowledge and skills to large groups. Support divisional teaching activities, where necessary provide practical technician led teaching.

Facts & figures

Kent Technical Services provide specialist support to all areas of the University including teaching, research, innovation and civic activities. There are 6 academic divisions within the University of Kent supported by embedded technical teams who provide specialist subject support, facility operation and resource management.

Internal & external relationships

Internal: Staff at all levels within the academic division and professional services areas; students

External: Specialist equipment and software suppliers; consultants; contractors; visitors and visiting academic researchers; alumni

The role holder is expected to demonstrate a commitment to equality, diversity and inclusion; promoting collaboration and positive partnerships, working harmoniously with colleagues, students and other stakeholders of all cultures and backgrounds.

Health, safety & wellbeing considerations

This job involves undertaking duties which include the following health, safety and wellbeing considerations:

- Working with machinery
- Manual handling – lifting and moving specialist IT equipment
- Regular use of Screen Display Equipment
- Conflict resolution
- Working in a hot environment with electrostatic charges

Further Technical Specialisms

Technical Services roles have common accountabilities across role types. The following provides an overview of any additional technical specialisms which are specific or unique to this role:

- Good understanding and knowledge of 2D and 3D Computer Aided Design software
    - Autodesk suite, Rhino, 3D Systems Geomagic
    - Adobe CC – Photoshop and Illustrator
- Experience managing graphical rendering processes and systems
    - Solve any rendering issues, ensuring all 2D and 3D rendering jobs are completed and scheduled
- Experience using Slicer software for Additive Manufacturing Technology and ability to adapt parameters/ settings to achieve cost/time/ quality requirements, from staff/ students.
- Knowledge and understanding of stereolithography
- The ability to Assist staff and student with file and data preparations for digital fabrication.
- Demonstrated experience preparing 3D Cad files for rapid manufacturing.
    - Knowledge and experience of STL (standard Tessellation Language) file types, and methods of fixing mesh geometry:
    Non-Manifolds/ Self-intersections/Creased Edges/ Spikes.
- Understanding of 3D scanning technology and associated software tools
    - Artec Eva, Faro Focus 3D, Breuckmann smartSCAN

Person specification

The person specification details the necessary skills, qualifications, experience or other attributes needed to carry out the job. Applications will be measured against the criteria published below.

Selection panels will be looking for clear <u>evidence</u> and <u>examples</u> in an application, or cover letter (where applicable), which back-up any assertions made in relation to each criterion.

Besides your technical skills and experience, you will have excellent interpersonal skills which ensure that colleagues and students find you approachable and you will build and maintain good working relationships with staff across the Division.

You'll be able to demonstrate the following skills, experience, abilities and personal interests:

Essential	Assessed via
• Educated to A level in a relevant subject or equivalent vocational qualifications	A, I
• Proven experience of working in a Technical support role	A, I
• Excellent theoretical knowledge in a related work area	A, I, T
• Experience operating and maintaining complex technical equipment	A, I
• Excellent working knowledge of safety regulations, legislation, and procedures. For example, Risk assessment, COSHH	A, I
• Experience in supporting the procurement of high value, specialist technical equipment. Providing specialist equipment and technology advice to others.	A, I
• Experience managing OR having oversight of budgets	A , I
• Excellent verbal and written communication skills, including clear and effective facilitation and presentation skills and the ability to produce clear and concise written materials	I
• Excellent troubleshooting, advanced problem solving and diagnostic skills, with an ability to assess highly technical problems and implement solutions within own expertise	A, I
• Good interpersonal skills with the ability to liaise independently with students and staff at all levels and build and maintain good working relationships with staff in many different departments.	I
• Experience of coaching or training others	A,I
• Organised with the ability to prioritise a wide range of workload with competing priorities	A, I
• Ability to work under own initiative but also collaboratively within teams	I
• Firm commitment to achieving the University's vision and values, with a passion for a transformative student experience and multidisciplinary, impactful research	I
• Commitment to deliver and promote equality, diversity and inclusivity in the day to day work of the role	I
• Demonstrate extensive experience in the further technical specialisms detailed in this role.	A, I
Desirable	Assessed via
• Experience of working within, and knowledge of, the Higher Education (or related) sector	A
• Experience overseeing the work of others	A, I
• Professional registration or willingness to work towards for example, RSciTech, EngTech, ICTTech	A
* A - Application; I - Interview; T - Test/presentation at interview stage	