ual: london college of communication

Job Title	Salary
Creative Technology Specialist Technician (T+L)	£34,326 - £42,155
Contract Length	**Hours/FTE**
Permanent	35
Grade	**Location**
4	Elephant & Castle
Accountable to	**College/Service**
Technical Coordinator Creative Technology and Motion Graphics	London College of Communication

Purpose of Role

To provide professional technical expertise, guidance and advice in the area of programming, electronics and digital interactive development for the delivery of technical activities within the Creative Technology Lab technical area at the London College of Communication.

To support students from across the college, and in particular those from BA Interaction Design Arts, BA Information & Interface Design, MA Interaction Design Communication and the wider Interaction Design and Visual Communication programme.

To provide support for student learning, informal and formal training and instruction, and the development of proficiency of physical computing, creative coding, projection mapping, and relevant platforms, tools and methodologies.

Duties and Responsibilities

- To provide support and guidance in the use of physical computing, creative coding, projection mapping, and related technologies.

- To support students in understanding the use of computational thinking, technological scoping, logic and best practices to realise art and design projects, and solve complex problems using digital tools.

- To support students in producing screen-based and physical prototypes for interactive, audio, visual and kinetic experiences.

- To support students in the use of tools and techniques related to or supportive of the practice of physical computing, creative coding, and projection mapping, including but not limited to:

    o the use of APIs and other network-based protocols;

    o command line tools;

    o managing and versioning code;

    o accessing and utilising open source code and libraries;

    o prototyping with electronics and microcontrollers;

    o through-hole and surface mount soldering and rework;

    o the use and integration of advanced A/V equipment.

- To take responsibility for the day-to-day operation of the Creative Technology Lab technical area, which may involve the following:

    o being available in the Lab to assist with student queries;

    o directing students to appropriate resources or other staff members;

    o overseeing timetabling for bookable areas and loans of specialist equipment that fall under purview of the role;

    o working with academic staff and students in classrooms where appropriate.

- To deliver and supervise creative coding and physical computing activities across a range

of courses, providing expert guidance and advice to students. These may take the form of:

- o one-to-one student support on individual projects;
- o formal one-off workshops;
- o formal, course-aligned ongoing workshops and tutorials;
- o informal tutorial sessions with students;
- o inductions into software, equipment and processes for students using the Creative Technology Lab technical area.

- To provide feedback to Course Leaders, Technical Coordinators and Technical Managers regarding service levels and student requirements and actively contribute to improving student experiences in the Creative Technology Lab technical area.

- To contribute, as a member of the Creative Technology and Motion Graphics technical team, to the development of technical resources and knowledge in the Creative Technology Lab technical area, including assisting curriculum planning, research and commercial activities.

- To contribute and collaborate with technical team members, as required, to ensure the key priorities and levels of service are met successfully.

- To ensure compliance with health and safety requirements through risk and COSHH assessments of equipment and materials used in the Creative Technology Lab technical area.

- To contribute to planning, development and delivery of learning activities supporting student learning and research, liaising with Course Leaders and academic staff informally and formally in course meetings.

- To provide formal or informal sessions to students that may include demonstration, instruction with a process/technique, coaching with the development and proficiency of a particular skill, technique or process.

- To contribute to the project planning and delivery of exhibitions and events within the college, including:

- o assisting with setup and testing of supported projects for exhibitions;
- o liaising with academics, students and Events teams regarding technical requirements, availability of equipment and health & safety considerations for shows and other events;
- o providing technical support and assistance with equipment for other events (e.g. open days, hosted meet-ups) where needed.

- To work at an agreed level within the terms of the glossary of key terms (describing teaching & learning relationships between technicians and students). This may include workshops, directed learning and collaborations with other technical areas. This will include inductions into software, equipment and processes for students using the Creative Technology Lab technical area.

- To continuously develop skills and knowledge in relevant areas through research, experimentation and professional practice projects in order to maintain an understanding of the changing and developing nature of the area of physical computing, creative coding and interactive technology design and development.

- To diagnose and resolve problems of a highly technical, complicated nature that involve research, testing and documentation of problematic scenarios.

- To identify and procure equipment and materials for the Creative Technology Lab, as agreed with the Technical Coordinator and Technical Manager, and the maintenance, repair and renewal of existing equipment where necessary.

- To liaise internally and externally with professionals and recognised practitioners and

artists, attend conferences and exhibitions to share and develop ideas, knowledge and expertise that can be translated to support for learning and research activities.

- To be involved with the design, production and development of appropriate teaching and learning materials to suit stakeholder courses by identifying developing areas of interest or need in specific relevant technologies amongst staff and students and working to revise existing workshops or write new ones as needed.

General

- To perform such duties consistent with your role as may from time to time be assigned to you anywhere within the University.

- To undertake health and safety duties and responsibilities appropriate to the role.

- To work in accordance with the University's Equal Opportunities Policy and the Staff Charter, promoting equality and diversity in your work.

- To undertake continuous personal and professional development, and to support it for any staff you manage through effective use of the University's Planning, Review and Appraisal scheme and staff development opportunities.

- To make full use of all information and communication technologies in adherence to data protection policies to meet the requirements of the role and to promote organisational effectiveness.

- To conduct all financial matters associated with the role in accordance with the University's policies and procedures, as laid down in the Financial Regulations.

Key Working Relationships

- Head of Technical Resources

- Technical Resources Manager

- Technical Coordinator – Creative Technology and Motion Graphics

- Team members

- Technical staff

- Course staff

- University and College staff

- Suppliers and industry partners

Specific Management Responsibilities

Budgets
Access to Creative Technology Lab and Extended Reality Lab budgets.

Staff
None

Other
Shared responsibility for safety of users and security of equipment in the immediate working environment.

Signed: Christopher Purday
                      Head of Technical Resources
                      Recruiting Manager

Date of last review: 13 July 2018

Job Title: Creative Technology Specialist Technician (T+L)   Grade: 4

Person Specification	

Specialist Knowledge/ Qualifications	Postgraduate or undergraduate degree in a relevant field, such as:
	
	• Interaction Design
	• Creative Computing
	• Computational Arts
	• Information Experience Design
	• Software Engineering
	• Computer Science
	• Electronics Engineering
	
	Skills essential to the role include:
	
	• Fluency in at least two established and current programming languages:
	    o C/C++/C#
	    o Java
	    o Objective-C/Swift
	    o JavaScript/ECMAScript
	• Demonstrable knowledge of electronics and circuit design.
	• Understanding of tools, workflows and practices in programming, electronics and microcontrollers.
	• Ability to quickly learn new development platforms.
	• Working knowledge of code and version management (e.g. Git).
	• Knowledge of deployment practices for networked applications, such as DNS, hosting, TCP/IP, FTP and SSH.
	• Understanding of health and safety and risk management in the workplace.

Relevant Experience	Experience of teaching and/or demonstrating techniques related to electronics or programming and electronics. Experience of working in Windows, Linux and macOS at both GUI and CLI levels. Experience of digital arts software, such as After Effects, Premiere Pro, Photoshop and Illustrator. Experience in at least three of the following areas: • Physical computing (e.g. Arduino, Particle, Raspberry Pi, BeagleBone, DMX). • Networked applications (e.g. Node.js, web APIs). • 2D/3D graphics rendering (e.g. Processing, p5.js, openFrameworks). • Generative or parametric design. • Image, video or sound manipulation (e.g. Max/MSP).

	• Projection mapping (e.g. MadMapper). • Computer vision.
Communication Skills	Communicates effectively orally, in writing and/or using visual media. Able to explain complex technical concepts to a diverse audience in an inclusive and accessible way.
Research, Teaching and Learning	Uses effective teaching, learning or professional practice to support excellent teaching, pedagogy and inclusivity.
Planning and Managing Resources	Effectively plans, prioritises and organises work to achieve objectives or projects on time.
Teamwork	Works collaboratively in a team and where appropriate across or with different professional groups.
Student Experience or Customer Service	Makes a significant contribution to improving the student or customer experience to promote an inclusive environment for students, colleagues or customers.
Creativity, Innovation and Problem Solving	Identifies innovative and creative solutions to resolve problems.

HERA Ref: SICOM Tech 3