



THE ARCHITECTURAL ASSOCIATION

Robotic Fabrication Technician

Salary:	£36,000 to £38,000 per annum
Location:	London- Bedford Square
Department:	Digital Prototyping
Reports to:	Head of Digital Prototyping
Contract Type:	Permanent
Hours of work:	Full-time; 35 hours Mon-Fri

Role Overview:

The Digital Prototyping Lab (DPL) is seeking an enthusiastic and dedicated individual to join the team and become an integral part of the AA's digital fabrication facility.

The DPL has a custom-built robotics cell, which houses two KUKA robotic arms and several tools for use in architectural education. The primary role of the Robotic Fabrication Technician will be to provide crucial expertise in robotics by teaching, supporting and developing student projects. The role will be based in Bedford Square but will also involve collaborating with developments at Hooke Park, with trips to the AA's rural campus when required.

Aside from Robotics, this role includes working closely with DPL staff to maintain the smooth running of the lab, including the supervision and teaching of students using laser cutting, CNC milling and various 3D printing technologies.

The Robotic Fabrication Technician will report to the Head of Digital Prototyping and collaborate with DPL staff and student assistants.

Main Duties and Responsibilities:

- Manage and run the DPL Robotics facility.
- Operate and teach students how to use the equipment: KUKA KR-60 & KR-30
- Develop and experiment with new in-house end-effectors / tooling for the robotic arms
- Develop and teach in DPL workshops across the school year and develop instructional materials.
- Integration of third-party end effectors as required.
- Teach and instruct DPL student assistants within the lab

- Provide tutorials to students on the different technologies the lab has to offer
- Supervise the safe operation by students of all DPL equipment
- Help manage and operate staff run DPL equipment: including CNC, resin and SLS 3D printers.
- Help in the general maintenance and upkeep of the DPL
- Provide support to Hooke Park and Design and Make students including travelling to the Hooke Park campus in Dorset when required.
- Set up of the robot arms and other DPL equipment for tests, demonstrations and experiments
- Assist students and staff in all DPL technologies.

Person Specification

Knowledge, Skills and Experience

- Experience in robotic fabrication, including the ability to develop custom scripts in grasshopper, as well as the creation of different end-effector tools.
- Coding in python or C-sharp, as well as experience with Arduinio/Raspberry Pi desired.
- Experience with operating KUKA robotic arms and its training modulus (not mandatory but preferred)
- Advanced knowledge of Rhinoceros 3D and Grasshopper software
- Excellent communication skills with experience supervising students in a higher education environment
- Excellent organisational and problem solving skills
- Previous teaching experience (not mandatory, but preferred)
- Experience in digital fabrication and the operation and file preparation of laser-cutters, 3-axis CNC machines and different 3D printing technologies, including resin and SLS printing (not mandatory, but preferred)
- Knowledge of various machine maintenance