

Role Definition

Job title: Smart Buildings Consultant – Full Time or Part Time/Permanent, Associate

Reporting to: Project Leader/Job Captain of the current project on a day-to-day basis and ultimately to the Senior Partner

Job Description:

F+P prides ourselves on being a market leader in architecture and engineering, working globally with high-profile clients.

Smart Buildings integration plays a key role in digitally enabling the built environment to provide a technologically enhanced project commensurate with our client's needs. We have an exciting opportunity for a Smart Buildings Specialist who wants to be part of a growing multidisciplinary engineering team in London.

You will collaborate on projects both nationally and internationally. The role will include design delivery, operational narrative, technical specification, and production of REVIT models and drawings.

Responsibilities:

- Represent the company professionally and diligently
- To provide discipline leadership
- Establish and maintain strong working relationship with internal and external stakeholders, design teams, authorities, utilities, and associated organisations
- Attend all meetings with client, project team, contractors etc
- Undertake and deliver high-quality detailed engineering design; including analysis, schematics, drawings, diagrams, models, specifications and other documents required
- Review and management of project from inception to post construction duties
- Good knowledge of relevant legislations, standards, regulations, guides and good practice
- To have thorough knowledge of and compliance with Foster + Partners procedures and standards
- To contribute and assist, as required by the Project Leader or Senior Partner, or nominated Engineer
- Equity, diversity & inclusion (EDI) is a core priority. To support and champion the embedding of this focus as a collective workforce responsibility, EDI should be integrated, where relevant, into all workstreams

Qualities and Skills required:

Educated to Masters degree level in a relevant subject such as Mechanical, Electrical Engineering, Information Technology, Telecommunications or Computer Sciences, and a Chartered member of a professional institute such as the Institute of Engineering and Technology, British Computer Society, or Chartered Institute of Building Services Engineers.

Technical and interpersonal skills:

Appropriate level of knowledge in designing and managing Smart Buildings integration into the architectural and engineering design.

- Familiarity with the RIBA plan of work or American Institute of Architects (AIA) design stages.
- Understanding of Digital strategy relating to the built environment, including user-centric smart services, system interoperability, and digital platforms
- IoT devices and sensor placement, in accordance with user experience
- Awareness of systems integration principles and the role of platform-based solutions (e.g. IoT platforms, data gathering models and building analytics tools) in enabling data-driven building operations
- Previous experience with building systems and protocols integration
- Familiarity with cybersecurity and privacy regulations related to user data
- Understanding of data transmission in computer networks
- Ability to understand and formulate design decisions and present for discussion
- Ability to use a variety of media in the development and documentation of a design project
- Ability to produce design specifications, reports, schematics, and layout drawings

- Excellent organisational skills as well as written and verbal communication skills. Demonstrate teamwork and leadership
- Good interpersonal skills and the ability to work independently and as part of an effective team. Demonstrate client-facing and stakeholder engagement
- Able to build good relationships at all levels, internally and externally
- Resilient in coping with conflicting demands, prioritising duties, and working effectively under pressure.
- Provide a relevant CPD record for the last two years.

Desirable skills:

- Relevant experience in ICT/AV/Security systems design, preferably with an engineering design consultancy or contractor
- Awareness of Telecommunication industry standards such as TIA, IEEE and BSEN and BICSI
- Familiarity with connectivity technologies, such as TCP/IP, LAN, PON and Ethernet, BACNet, LoRaWAN, etc
- Knowledge of Data Communication Network fundamentals (e.g., switches, routers, and firewalls) and design of LAN/WAN networks
- Knowledge of Structured Cabling systems - passive network infrastructure, including cabling systems, patch panels, racks and enclosures
- Familiarity with data communication network security and protocols
- Understanding of telecommunication infrastructure planning – Entrance Rooms, Main Equipment Rooms, Secondary Equipment Rooms, Risers, and Pathways as per industry standards
- Understanding of wireless network coverage planning – Cellular (DAS), satellite, and Wi-Fi systems
- Understanding of the engineer's role in the coordination and integration of project information, digital strategies, and management
- Regular liaison with Architecture, MEPF team, and external stakeholders
- Familiar with data network interfaces and connectivity requirements of ELV systems, Smart building systems, and IoT sensing devices
- Understanding of financial aspects of running a design project on time and on budget
- Ability to use some of the following: Autodesk Revit, Adobe InDesign, Microsoft Package.

This description reflects the core activities of the role but is not intended to be all-inclusive. Other duties within the group/department may be required in addition to changes in the emphasis of duties as required occasionally. There is a requirement for the post holder to recognise this and adopt a flexible approach to work. Job descriptions will be reviewed regularly and, where necessary, revised following organisational needs. Any major changes will be discussed with the postholder.