Role Definition

Job Title: Design Systems Analyst (SMG)

Reporting to: Head of Specialist Modeling Group (SMG) on a day to day basis and ultimately to the Senior Partner

Responsibilities

- Develop the advanced methodology for the control of geometry and modeling for the design, simulation and analysis of architectural projects
- Work closely with project teams to assist in all stages of design, documentation, fabrication and construction
- Investigate new methodologies and tools for modeling techniques for use in a project-driven research environment
- Maintain an up-to-date knowledge of Computer Aided Design in the Built Environment
- Promote within project teams the use of new methodologies developed by the group
- Liaise with the other members of the ICT Group to ensure effective application of ICT systems
- Thorough knowledge of and compliance with Foster + Partners procedures and standards
- To contribute, or otherwise assist, as required
- 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
Essential

- Able to demonstrate ability to undertake the above responsibilities
- Legally able to work in the country in which the position is based
- Have an Industry recognised diploma or degree in the relevant field
- Specialist in one or more of the following areas: environmental design, advanced geometric modeling, computational design, advanced visualisation techniques, BIM, animation, computer programming and parametric modeling.
- Expert knowledge of Computer Aided Design software and awareness of the world of CAD/CAE/CAM/BIM
- Expert in a range of design and production software such as Microstation, Rhino, Revit, Dynamo, Grasshopper, Generative Components and Digital Project / CATIA
- Understanding of geometry and its impact on architecture, 3D workflows and construction
- Knowledge and understanding of digital fabrication technologies
- Understanding and experience of the processes of design, fabrication and construction and the impact on them of complex geometry
- Programming skills in one or more of the following languages: Java, Javascript, Processing, C#, VBA, Python
- Experience utilizing geometric design logic as part of a 3D project workflow to incorporate early stage simulation as well as project delivery and operational goals.
- Resilient to cope with conflicting demands, able to prioritise duties and work effectively under pressure
- Good written, verbal and graphical communication skills
- Able to demonstrate initiative and a proactive approach to daily tasks
- Good interpersonal skills and able to work independently and as part of an effective team
- Excellent organisational skills
- Ability to manage sensitive and sometimes confidential information
- Self-motivated and able to take responsibility
- Flexible attitude

- Able to build good relationships at all levels, internally and externally
- Able to work as part of an effective team assisting and supporting team members

Desirable
- Experience of the following programming languages and APIs: OpenGL
- Experience of web development using HTML, CSS, Javascript, WebGL

This description reflects the core activities of the role but is not intended to be all-inclusive and other duties within the group/department may be required in addition to changes in the emphasis of duties as required from time to time. 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 in accordance with organisational needs. Any major changes will be discussed with the post holder.