

**Role summary**

Urban Designer (Procedural Modelling Specialist) plays a crucial role in enhancing the efficiency, realism, and versatility of digital content creation through the application of algorithmic approaches. Playing a key part in our Urban Design team, the Urban Designer (Procedural Modelling Specialist) will specialize in creating digital content particularly 3D models, using procedural generation algorithms and rules to create complex and realistic geometry.

**Role Definition**

**Job title:** Urban Designer (Procedural Modelling Specialist)  
**Reporting to:** Partner, ultimately to Head of Urban Design

**Responsibilities**

- Use algorithmic approaches to develop bespoke 3D procedural models for masterplanning and design.
- Develop and implement procedural generation rules to generate complex and realistic geometry, ensuring accuracy and consistency in digital content.
- Work closely with architects, urban designers, and other team members to understand project requirements and integrate procedural modelling seamlessly into the design workflow.
- Develop workflows to integrate CityEngine models with Rhino, Unreal Engine, and ArcPro
- Stay abreast of industry trends and emerging technologies, actively contributing ideas and solutions to enhance procedural modelling techniques within the architectural practice.
- 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.
- Thorough knowledge of and compliance with F+P procedures and standards

**Qualities and Skills required**

- Experience with ArcGIS CityEngine for urban modelling.
- Proficiency in developing CGA rules for procedural urban modelling of block and street typologies.
- Able to demonstrate ability to undertake the above responsibilities
- Legally able to work in the country in which the position is based
- Excellent organisational skills
- Able to manage sensitive and sometimes confidential information
- Self motivated and able to take responsibility
- 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
- Flexible attitude
- Able to build good relationships at all levels, internally and externally
- Resilient to cope with conflicting demands, able to prioritise duties and work effectively under pressure.
- Able to work as part of an effective team assisting and supporting team members

**Desirable:**

- Familiarity with ArcGIS Urban / ArcGIS online
- Experience in creating 3D GIS webapps

- Experience in Python
- Familiarity with Rhino/Grasshopper and Unreal Engine

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.