

Candidate Information

Position:	Project Engineer (Discrete Event Simulation)
School/Department:	AMIC
Reference:	26/113314
Closing Date:	Monday 18 May 2026
Salary:	£35,136 - £40,316 per annum.
Anticipated Interview Date:	Thursday 28 May 2026
Duration:	3 years

JOB PURPOSE:

AMIC - A £100M investment through the Belfast Region City Deal - is a collaborative, innovative powerhouse of advanced manufacturing set to elevate our region globally.

We are supporting economic growth and prosperity for Northern Ireland by creating high quality jobs and increasing inward investment through high value manufacturing innovation clusters.

We are driving industrial transformation, paving the way for future technologies and competing globally with a more sustainable focus.

When you join our team, you will have access to the latest advanced industrial technologies and have the opportunity to grow and develop as an engineer and technology leader. Our mission is to provide you with the environment to innovate and create impact.

Our launch team of experienced staff has core capabilities in digitalising manufacturing, smart design, sustainable polymers & composites and nanotechnologies & photonics. We are excited to be expanding the team throughout 2026 and beyond.

We are seeking to recruit a Project Engineer to develop capability in Discrete Event Simulation (DES) and digital manufacturing techniques to support innovation and industrial decision-making. This role is suited to an early-career engineer who will be supported to learn and apply simulation, data analytics, and system modelling approaches to real-world industrial challenges.

The successful candidate will support senior colleagues in modelling, analysing, and improving manufacturing and supply chain systems, contributing to AMIC's advanced manufacturing activities and "Factory of the Future" vision.

You will work collaboratively with academia, technology providers, national technology centres, and industry to deliver projects focused on digital manufacturing and system optimisation.

MAJOR DUTIES:

1. Contribute to high quality industrial research, development, and knowledge transfer in digital manufacturing and simulation.
2. Support the development and application of Discrete Event Simulation models representing manufacturing and industrial systems.
3. Assist in analysing system performance using data and simulation outputs to identify bottlenecks, risks, and improvement opportunities.
4. Work with industrial data (production, process, and supply chain) to support model development, validation, and analysis.
5. Support the translation of real-world processes into structured digital and simulation-based representations.
6. Contribute to the planning, development, delivery, maintenance, and monitoring of AMIC projects.
7. Participate constructively in multi-disciplinary research activities, including staff training and development.
8. Through senior colleagues engage with industrial partners to support the transfer of AMIC capabilities into commercial R&D teams.

9. Assist in fostering successful industry-academic engagement that will deliver innovation projects at scale.
10. Communicate technical findings, including simulation outputs and analytical insights, to both technical and non-technical stakeholders.
11. Produce high quality technical reports and demonstrations to support project delivery and future funding opportunities.
12. Carry out routine administrative tasks to ensure project goals are completed on time and within budget.
13. Undertake any other duties that may reasonably be requested by management.

ESSENTIAL CRITERIA:

1. Honours degree or equivalent in a relevant engineering discipline, science, or a related discipline with significant relevant industrial experience OR minimum HND in a related engineering discipline with recent and relevant industrial experience.
2. Evidence of strong analytical and problem-solving skills, with the ability to break down complex systems into structured components.
3. Ability to understand and interpret processes, workflows, or systems (e.g. manufacturing, logistics, or service systems).
4. Experience working with data, including analysis, manipulation, or visualisation (e.g. Excel, Python, MATLAB, Power BI or similar).
5. Ability to interpret data and extract meaningful insights to support decision-making.
6. Demonstrable ability in logical or computational thinking, such as modelling, coding, or structured problem-solving.
7. Evidence of delivering work or projects to agreed deadlines and within scope.
8. Excellent written and verbal communication skills, including the ability to communicate complex technical information to non-specialist audiences.
9. Demonstrated willingness and ability to learn new tools, techniques, and technologies.
10. Willingness to visit collaborative partners and to attend meetings and conferences nationally and internationally as requested.

DESIRABLE CRITERIA:

1. Exposure to Discrete Event Simulation or modelling tools (e.g. Simio, AnyLogic, PlantSIM or similar).
2. Experience in process improvement, operations research, or systems modelling.
3. Knowledge or experience of manufacturing systems or supply chain operations.
4. Experience with data analytics, statistical analysis, or data visualisation.
5. Basic programming experience (e.g. Python, C# or similar).
6. Understanding of digital twin technologies or Industry 4.0 concepts.
7. Experience of collaborative research and effective team working.
8. Experience of working with industrial partners (OEMs or SMEs).
9. Postgraduate qualification in a relevant discipline.

ADDITIONAL INFORMATION:

This role is designed as a development pathway into Discrete Event Simulation and digital manufacturing. Full training and mentorship will be provided to support the successful candidate in building expertise in simulation, data-driven decision making, and digital twin technologies within an industrial context.