

Candidate Information

Position: Head of Digital Factory
School/Department: BRCD AMIC
Reference: 25/112406
Closing Date: Monday 24 February 2025
Salary: £62,087 - £71,945 per annum.
Anticipated Interview Date: Friday 7 March 2025

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.

Our launch team of over 40 staff has core capabilities in digitalising manufacturing, smart design, polymers & composites and nanotech & photonics. We're excited to be expanding the team throughout 2024 and 2025.

JOB PURPOSE:

We are seeking an experienced, dynamic leader with strong expertise and experience in digital manufacturing R&D, to lead implementation of technology strategy and business development for the AMIC Digital factory Group and oversee operational & financial delivery.

As a member of the AMIC senior management team, you will work with the executive leadership to develop and implement our digital factory technology roadmap. You will be responsible for leading a team to hit financial and programme delivery targets for the group, developing and managing multiple-work streams of activity, managing significant project resources and mitigating major risks and issues. You will establish a UK wide and global reputation for the group, establishing key research and industrial partnerships and securing funds to advance the technology strategy and deliver impact for the industrial sector in NI and beyond.

The AMIC Digital Factory group has a broad scope focussed on deployment of digital technologies into manufacturing processes and environments to drive quality, productivity and sustainability. The group is organised into a number of teams working on a matrix structure with the digital technologies distinct from the manufacturing processes where these are deployed. These include digitalisation, digital manufacturing & simulation, automation, machining, metrology, assembly, welding & fabrication. The group also supports digital manufacturing across the other three AMIC groups; smart design, nanotechnology and photonics and sustainable polymers and composites.

MAJOR DUTIES:

1. Technology Strategy:
 - a. Work with AMIC leadership to shape technology strategy, where you will engage stakeholders, initiate, develop, implement and lead a comprehensive technology strategy aligned with the centre's overall business goals ensuring major risk mitigation is considered at all stages.
 - b. Lead the identification, selection, implementation, and integration of key technologies in Digital factory to ensure operational efficiency and agility.
 - c. Oversee the research and development (R&D) function in Digital factory, driving innovation whilst exploring emerging technologies that align to current and/or future centre objectives.
 - d. Manage the Digital factory technology budget and resources effectively to maximise performance.
 - e. Foster a culture of continuous improvement, collaboration and technological excellence within the Digital factory group.
2. Business Development:
 - a. Develop and lead complex multi-stakeholder engagement strategies both internally and externally, building strong internal and external commitment to planned business development projects.
 - b. Identify and evaluate new business opportunities particularly focussed on Digital factory, aligned with AMIC's technology roadmap and lead implementation of the strategy as it relates to polymers and composites.
 - c. Drive strategies that result in market expansion and revenue growth for Digital factory.
 - d. Represent AMIC and Digital factory Group at industry events and conferences, building insight, long-term relationships, brand awareness and thought leadership.
3. Operational & Financial Delivery:
 - a. Lead the day to day coordination of all operational aspects of the research group.
 - b. Ensure delivery of financial and growth targets for the group
 - c. Ensure delivery of quality project outputs on time and on budget
 - d. Work with executive leadership to develop and evolve AMIC operational processes, monitoring and reporting, with responsibility for implementation in the Digital factory Group.
4. Leadership and Communication:
 - a. Build and lead a high-performing team of Digital factory analysts, scientists and engineering professionals.
 - b. Effectively communicate the technology vision and strategy to all stakeholders, both internal and external, with expertise in Digital factory.
 - c. As part of AMIC senior management, deliver Centre success and alignment through close collaboration across all capability groups and functional areas
 - d. Foster a culture of openness, transparency, and trust within the organisation.

ESSENTIAL CRITERIA:

1. Honours degree, equivalent or higher qualification in Manufacturing, Engineering, or a related field or substantial relevant working in a similar role.
2. Significant evidence of leading R&D teams in advanced manufacturing and digital manufacturing, including motivating and developing a collaborative team to meet financial and programme delivery targets across multiple work streams.
3. Significant and relevant experience in a leadership role within digital manufacturing research and innovation that has delivered demonstrable industry impact.
4. Recent and relevant proven track record in developing successful industry and academic stakeholder relationships and delivering high quality, on time, and within budget project outcomes for a range of complex and innovative projects.
5. Strong and evidenced understanding of business development principles and practices.
6. Strong track record in securing or contributing successfully to multi-million (+£1m) R&D funding applications from local, national and international bodies.
7. Robust and resilient, with strong presence and the ability to confidently deliver complex messages to a diverse and demanding audience and the ability to negotiate and influence at all levels.
8. An analytical mindset with the ability to manage and mitigate risk, with a positive creative instinct to develop solutions to support the objectives of the Advanced Manufacturing Innovation Centre.
9. Excellent communication skills – ability to communicate effectively with colleagues across the institution as well as with outside agencies and a strong commitment to collaboration and collegiality.
10. Demonstrable ability to build networks with and to influence funding bodies, major corporate partners and key stakeholders.
11. Demonstrable commitment to the mission and values of Queen's University Belfast, AMIC and the objectives of the Belfast Region City Deal.
12. Passionate about innovation and driving business growth through technology.

DESIRABLE CRITERIA:

1. Hold a postgraduate qualification in a relevant field.
2. Significant evidence of technical excellence and understanding of innovation in both digital technologies in a manufacturing environment and manufacturing processes such as machining and fabrication.
3. Relevant professional qualification.
4. Demonstrable experience of research commercialisation in one or more of the following areas:
 - a. Data analytics & AI in a manufacturing environment.
 - b. Manufacturing process and factory simulation.
 - c. Automation and assembly.
 - d. Machining & metrology.
 - e. Fabrication.
5. Experience of successful collaboration and working with international OEMs and SMEs.