



QUEEN'S  
UNIVERSITY  
BELFAST

WILLIAM J. CLINTON  
LEADERSHIP  
INSTITUTE

# ADVANCED MANUFACTURING PROGRAMME



Centre For  
Competitiveness

SHAPING  
A BETTER  
WORLD  
SINCE 1845



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# SHAPING THE FUTURE OF MANUFACTURING



## OVERVIEW



The Advanced Manufacturing Leadership Programme is designed to develop the critical skills, practical management and leadership competencies of manufacturing sector supervisors working on the production front line.

This programme is developed in partnership with experts from the Centre for Competitiveness, CforC. As a Queen's University not-for-profit body, CforC are committed to developing innovation, productivity and quality in NI organisations to support excellence, growth and boost competitiveness for a global market.

This unique programme synergises our exceptional Queen's Management School academic focus, Centre for Competitiveness expertise and the William J. Clinton Leadership Institute mission to develop impactful future manufacturing leaders through our dynamic learning experience.

For manufacturers to maximise opportunities for sustainable business growth in the age of Industry 4.0, leadership must be enhanced throughout the organisation. The Advanced Manufacturing Leadership Programme builds leadership from the frontline upwards, feeding the future of the manufacturing industry through investment in its people asset base.

## WHO IS THIS PROGRAMME FOR



This programme is for manufacturing sector supervisors and those aspiring to rise to mid-level managers. Moving from leadership principles to design thinking, from Industry 4.0 manufacturing techniques to finance and strategy, this programme will give you and your organisation an injection of leadership energy into the most critical area of operations – the production line.

Inspired by German leadership-development practices, the Advanced Manufacturing Leadership Programme boosts the capabilities of one of the most valuable assets in any manufacturing operation, its supervisors and team leaders.

On the Advanced Manufacturing Programme you will learn how to;

- Boost your personal management capabilities with cutting edge leadership practices and insights
- Lead your team with confidence
- Implement practical tools and techniques for effective manufacturing operations
- Increase sustainability
- Enhance labour productivity
- Embrace digital transformation
- Address competitive pressures of Industry 4.0
- Apply frameworks to analyse industries, customers, and firms, using these tools to identify opportunities for value creation and innovation

# YOUR LEADERSHIP PATHWAY TO SUCCESS

As a manufacturing supervisor you will have excellent knowledge of processes or operations, understand the recurring issues and be best placed to suggest improvements. Your next step is to acquire the range of skills to lead in a manufacturing environment.

This programme will develop help your transition from frontline manager to business person, giving you the commercial understanding and technical skills to play a bigger role in your organisation. And, in the age of Industry 4.0, when the challenges and opportunities are too great for top-down direction alone, we will give you the know-how to help deliver digital transformation from the bottom up.

You shall gain the tools and techniques to coach people, to manage processes and to detect opportunities for continuous improvement. Discover a range of business skills to understand company strategy, the drivers of cost and value and how to have a bigger impact on customer and supplier relationships.

The Advanced Manufacturing Leadership Programme will be the first step in enhancing your current job quality. Increasing your potential to make a wider contribution to your company's success, it offers talented, motivated individuals a pathway from supervisor to company management.

# PROGRAMME OVERVIEW

<p><b>MODULE 1</b> THE FRONTLINE MANAGER AS A LEADER</p> <p>MONTH 1 1 DAY</p>	<p><b>MODULE 2</b> THE FRONTLINE MANAGER AND THEIR TEAM</p> <p>MONTH 1 1 DAY</p>	<p><b>MODULE 3</b> THE FRONTLINE MANAGER IN THE DIGITAL AGE</p> <p>MONTHS 1 &amp; 2 2 DAYS</p>	<p><b>MODULE 4</b> THE FRONTLINE MANAGER'S DAY - PLANNING</p> <p>MONTH 2 2 DAYS</p>
<p><b>MODULE 5</b> THE FRONTLINE MANAGER'S DAY - EXECUTING</p> <p>MONTH 2 2 DAYS</p>	<p><b>MODULE 6</b> FINANCE AND THE FRONTLINE MANAGER</p> <p>MONTH 3 2 DAYS</p>	<p><b>MODULE 7</b> THE FRONTLINE MANAGER'S TOOLKIT</p> <p>MONTHS 3 &amp; 4 4 DAYS</p>	<p><b>MODULE 8</b> THE FRONTLINE MANAGER AS A BUSINESSPERSON</p> <p>MONTH 5 2 DAYS</p>

# MODULE OUTLINE

## MODULE 1

### The Frontline Manager as a Leader

Duration: 2 days

This module introduces participants to the programme and to each other. It then introduces them to theories of Management and Leadership, and their application in day-to-day business. Students will also learn about teams and personality types and understand how team performance is influenced by a variety of factors.

Learning Outcomes:

1. Understand differences between managing and leading, and the challenges of leading change.
2. Understand principles of effective team working
3. Understand different motivations and perspectives of team members.

## MODULE 2

### The Frontline Manager and their Team

Duration: 1 day

This module builds on the learning in Module 1 by developing participants' understanding of effective team-working and team leadership. Participants learn about emotional intelligence and practise key communication skills.

Learning Outcomes:

1. Understand the dynamics of building relationships within teams and the importance of emotional intelligence.
2. Understand how skills are managed through training to develop versatility.
3. Increase awareness of the use of targets, objectives, performance reviews.

## MODULE 3

### The Frontline Manager in the Digital Age

Duration: 2 Days

This module introduces students to the key concepts of Industry 4.0 and the technologies transforming manufacturing in the 2020s. They are introduced to the principles of Design Thinking and tasked as a group with designing a digital solution to an operational challenge.

Learning Outcomes:

1. Gain a thorough understanding of the key technologies and principles contributing to Industry 4.0.
2. Identify opportunities for the adoption of transformative technology within their own business.
3. Learn the principles of Design Thinking and practise them through the co-design of a digital solution to a current operational challenge.

## MODULE 4

### The Frontline Manager's Day- Planning

Duration: 1 Day

This module strengthens students' understanding of production planning and the methods used to optimise manufacturing processes. They are introduced to the principles of production control and shown how to calculate capacity constraints and determine schedules and inventory.

Learning Outcomes:

1. Demonstrate awareness of the inputs and outputs of the production planning process.
2. Strengthen appreciation of the constraints on production and the tools adopted to manage them effectively.
3. Learn how tools of production control are applied and how key metrics are used to manage production areas more effectively.

## MODULE 5

### The Frontline Manager's Day - Executing

Duration: 2 days

This module introduces students to the management of performance in terms of SQPC (Safety, Quality, Productivity, Cost). Students will learn the theory and practice of Continuous Improvement, the Visual Factory, and techniques to monitor and control the workplace.

Learning Outcomes:

1. Gain a thorough understanding of the principles of SQPC and the frontline manager's role in delivering it.
2. Learn how Design Thinking techniques can be used to sustain a culture of continuous improvement.
3. Understand the importance of data and the Visual Factory; share best practices with the class for measuring and utilising critical data.

## MODULE 6

### Finance and the Frontline Manager

Duration: 2 Days

This module develops participants' ability to engage with the finances of their business, using financial information in their roles. The module is highly interactive, assumes no prior financial knowledge, and builds essential skills through direct teaching, discussion, and individual and group activities.

Learning Outcomes:

1. Understand the importance of budgeting and cash flow to a business.
2. Interpret key financial metrics and use them to identify opportunities for greater efficiencies.
3. Appreciate the financial aspects to be considered when planning operational changes in a manufacturing business.

## MODULE 7

### The Frontline Manager's Toolkit

Duration: 4 Days

This module introduces students to the key tools required to manage the workplace effectively and sustainably. Students are guided through the use of performance data and Lean tools to eliminate waste and increase efficiency through standardisation.

Learning Outcomes:

1. Understand the link between Lean and Sustainability.
2. Learn techniques to eliminate waste in the workplace, including value-stream mapping, SMED, and process mapping.
3. Understand the value of a problem-solving culture.
4. Learn how to use the techniques of Design Thinking in the maintenance of a continuous-improvement culture.

## MODULE 8

### The Frontline Manager as a Businessperson

Duration: 2 Days

This module introduces students to the essential elements of business practice and how companies manage markets, supply chains, and strategy. The module will conclude with an exploration of what a sustainable, digital business might look like in 2030, and how participants in the programme will be able to contribute to the success of their own company.

Learning Outcomes:

1. Draw together learning throughout the Programme to understand how manufacturing businesses and industries might evolve over the next decade.
2. Understand how changes within their business's ecosystem will change students' own work environment.
3. Confirm that Sustainability and responsible management must be the foundation of future work.



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## PROGRAMME DETAILS

This is an immersive five month training programme where budding manufacturing managers will be given the tools to help transform their manufacturing business.

This in person experience is delivered over five months, with 16 days on campus at The William J. Clinton Leadership Institute at Riddel Hall, Queen's University Belfast.

Our online Learning Management System will support your learning throughout with videos, case studies, and required reading materials.

**Price £4995**

Payment options are available please get in touch to discuss

## CONTACT US

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Belfast, BT9 5EE

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## EXCEPTIONAL EXECUTIVE EDUCATION EXPERIENCE

The Clinton Leadership Institute develops unique learning experiences with the aim of creating real impact for leaders, managers and their organisations. Our mission, while addressing future work skills and workplace requirements, is to empower and develop leaders and future generations of leadership to create positive social and economic impact for a better world. Our executive programmes synergise the rich Queen's University academic heritage with cutting edge leadership thinking and techniques from experts at William J. Clinton Leadership Institute and Queens Management School. Real world industry and exciting new developments from our university research centres to build leadership expertise, transform individual and organisational performance and boost competitive edge.

### OUR ACCREDITATIONS

Queen's Management School and the William J. Clinton Leadership Institute has been awarded the prestigious and internationally recognised accreditation for management and business schools. EQUIS is the leading international system of quality assessment, improvement, and accreditation of higher education institutions in management and business administration. It is managed and run by the European Foundation for Management Development (EFMD) and its fundamental objective, linked to the mission of the EFMD, is to raise the standard of management education worldwide.

Making a real difference for women and enabling all staff to achieve their maximum potential.



The Advanced Manufacturing Leadership programme is a rich in person, on campus experience.



We will challenge your mind-sets, provide multiple perspectives to learn from and enable the transfer of knowledge back into your organisation.



Build relationships, network, share experiences and benefit from our deeply interactive peer connected environment

The programme is spread over six months and includes access to our secure, online campus learning management platform with articles, videos and case studies to amplify learning on the go.



# PROGRAMME FACULTY



## DR DAVID PAULSON

Dr David Paulson is a Professor of Practice at Queen's Management School, teaching Resilience, Leadership and Contemporary Management on the Queen's University MBA programme. David is committed to supporting the development of staff at all levels in all types of organisation. He features as a leadership expert on both Custom and executive development leadership programmes at the Clinton Leadership Institute.

David's professional career has combined leadership practice with a lifelong commitment to education and learning. He has held management positions in public service, manufacturing and service organisations at home and internationally. Before coming to Queen's, he spent thirteen years as Managing Director of SMEs in automotive-parts manufacturing and related businesses.

David is also a qualified executive coach, accredited with the Academy of Executive Coaching, and works with executives and entrepreneurs to help them realise their potential and address current challenges.



## WILLIAM USSHER

William Ussher is a Senior Executive at the Centre for Competitiveness, Belfast, with core responsibility for supporting the development of Lean and Innovative cultures in the manufacturing sector.

He is a highly experienced leader with 20 years' experience gained in the Automotive sector where he held senior Operations leadership roles. For the past 8 years William has supported many Manufacturing companies in implementing business and process improvement projects. He has also been involved in assessing and preparing improvement roadmaps on innovation and supply chain strategies.

He has developed several training and coaching Programmes based on the 'learning by doing' approach, where teams plan and implement on-site improvement projects using Lean tools in a methodical and structured way.

William is highly engaging and is focused on developing the next generation of world class manufacturing organizations through development of their people asset.



## DR LOUISE O'MEARA

Louise brings twenty-five years' experience in supporting leaders and managers to focus and optimize the creativity, energy and spirit of others to achieve success at the 'double bottom line', achieving outstanding results. Louise is an accredited Academy of Executive Coaching (AoEC) coach and a member of the Association of Coaching (AC) and is highly experienced coaching and facilitating public and private sector executives at a wide range of organisations. Louise has developed significant expertise in facilitating process design, strategic planning and change management with multi-stakeholder teams. Louise holds a Bachelor of Social Science (Honours) and an Advanced Certificate in Group Psychotherapy. She received her PhD in Leadership and Collaboration in 2016.



## ENDA YOUNG

Enda is a highly experienced trainer and experiential learning facilitator, delivering programmes internationally for the Leadership Institute. Enda helps companies to build and optimise their leadership capabilities, driving organisational performance through their people. Enda is a negotiation and conflict resolution specialist and is particularly interested in improving resilience and communication skills to empower leaders through challenging times. Enda is a qualified executive coach and energises participants with his high energy, motivational, real-world approach.



## MICHAEL ALDOUS

Michael is a business and leadership expert with a particular interest in the ownership and organisation of companies. Michael earned his Doctorate from the London School of Economics and Political Science and an MBA from the IE Business School, Madrid. He is the Director of the Queen's MBA programme and leads the Management School's research and teaching in business strategy.

## PROGRAMME FACULTY



### JULIE MCCANDLESS

Julie McCandless is a Professor of Practice in Business Management at Queen's Management School. She has a particular interest in business-transformation programme delivery, enhancing company performance through operational innovation and customer experience strategies. A graduate of Queen's, Julie spent twenty years leading major change projects as a director in global consulting companies, working across financial services, retail and government sectors. She is responsible for developing Queen's Management School's relationships with businesses in Northern Ireland and internationally.



### DANIELLE MCCONVILLE

Danielle is a Senior Lecturer in Queen's Management School. She is a qualified accountant (Chartered Accountants Ireland), having trained with EY and worked with a wide range of clients. Danielle holds a PhD in Accounting from QUB. She has extensive experience in teaching finance and accounting to non-accountants, and is an engaging and knowledgeable facilitator, both in person and in online teaching. She was recently awarded a Queen's Teaching Award for Sustained Excellence.



### COLM HIGGINS

Colm has over 30 years' experience in Digital research and design and manages several demonstrators of digital technologies at the NITC. His team covers a wide spectrum of digital tools and helps SME's and larger organizations develop and implement improvements in their processes.

## PROGRAMME FACULTY



### GEORGE WILSON

George brings over 20 years' experience working with organisations from a variety of sectors in developing and implementing business improvement strategies. George has conducted many Lean, business excellence and relationship assessments, and has provided Improvement programme mentoring in many SMEs resulting in a range of certifications, accreditations and awards for improved performance.



### DR ALAN BLAIR

Alan has 35+ years' experience in the private, public and academic sectors, primarily in innovation and business development. He has managed research and innovation in various organisations and has advised government bodies on policy in these areas.



### DR PAUL MADDEN

Paul is experienced in promoting, developing, and managing advanced technology projects on a regional, national, and international basis. He has facilitated "consortium engineering" for innovative technology development projects resulting in industrial collaboration partnerships across Europe.



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