

Advanced Manufacturing Training Centre of Excellence

Training Catalogue 2024









Rialtas na hÉireann Government of Ireland



Arna chomhchistiú ag an Aontas Eorpach Co-funded by the European Union











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Course Delivery Modes

To meet the diverse needs of companies and learners the AMTCE supports a variety of delivery modes supported by the latest in equipment, software, tools, and eLearning technologies.

Classroom

Course delivery in a physical classroom/training room in the AMTCE or another location.

Blended Delivery

Part course content delivery online and eLearning. Part course content in AMTCE or other locations.

Virtual Classroom

Course content delivery using eLearning and virtual classroom technologies.

Online Self-Directed

Learners on their own initiative engage and complete course content at their own pace within a defined time window.

An Introduction to the AMTCE

The Advanced Manufacturing and Training Center of Excellence (AMTCE) in Dundalk, Co Louth, was established in 2021, supported with funding from both Enterprise Ireland and SOLAS, to address the existing and emerging skills and training needs of the Irish manufacturing sector.

The centre, located in the Xerox Technology Park, is a world-class advanced and sustainable manufacturing training facility, that has and will provide the current and future workforce with the skills and knowledge needed to excel in Ireland's advanced and sustainable manufacturing industry. The AMTCE has identified an urgent need to accelerate the provision of these skills, and to equip Ireland's workforce with the tools to succeed in this demanding and dynamic sector.

The AMTCE aims to address this need head-on. Our vision is to have an internationally recognised state-of-the-art facility that serves as a hub for excellence in advanced and sustainable manufacturing training and innovation.

AMTCE training is practically orientated, with hands on experience with state-ofthe-art equipment, delivered by leading industry trainers using flexible delivery modes in response to identified industry needs.

If you are interested in accelerating in your career, or want to invest in the skills of your workforce, please reach out to us. The AMTCE team would be delighted to hear from you and to support you on your journey of learning through the AMTCE.

Martin G OBrien Chief Executive AMTCE



Industry

Employers

AMTCE training courses cover the skills and practices which will allow you to enhance your existing operations and to provide your business with a skills-based platform to adopt and successful utilise Industry 4.0 technologies and practices. The AMTCE provides:

- Training that suits your organisation's requirements
- Bespoke design and delivery of courses to address the latest industry technology trends
- Enablement of employee mindset change empowering them to embrace, drive, plan and execute the technology changes required to maintain business competitiveness





Learners

AMTCE trainings provide learners with the essential skills and knowledge required to deliver impact and value to companies wishing to utilise the latest technologies and practices in their operations.

The AMTCE courses deliver:

- Quality assured training delivered by leading industry practitioners and experts
- Funding supports under SOLAS Skills to Advance program which can provide up to 100% funding for eligible employees
- Hands-on experiential learning

AMTCE Training Facilities



Advance Metrology and Practices



Industrial Systems and Control



Additive Manufacturing



Optimisation of Manufacturing Operations



Industrial IoT



Data/ML/Al in Manufacturing



Management/ Organisational Behaviours /Processes for Industry 4.0



Advanced Construction Technologies



Subtractive Manufacturing

Welding



Smart Factory



AR / VR Technologies



Security



Robotics, Collaborative Robotics and Robotic Processes



Techniques, Operations and Processes for Food and Pharma



6 Advanced Manufacturing Centre of Excellence

Skills to Advance Training

The AMTCE delivers training funded under the **SOLAS Skills to Advance** policy. This is an education and training funding policy that supports people in current employment to develop and enhance their skills. Skills to Advance supports employees with upskilling and reskilling training opportunities, that enables progression in their current roles and the ability to adapt to the changing dynamics of the job market, whilst also offering support to employers with upskilling opportunities to develop their workforce.





Information for Employers

Skills to Advance supports employers to identify skills needs in their business and to respond to the changing nature of jobs and skills. With heavily subsidised upskilling and reskilling opportunities, businesses are supported to thrive and grow, enhancing company competitiveness in a fast-changing business sector, and driving effective regional and sectoral development. We work closely with enterprises to identify the regional and sectoral, current and future skills required to target emerging opportunities, to move with the changing industrial landscape and to invest and futureproof their workforce, by providing heavily subsidised upskilling and reskilling training programmes for their employees.

We can support Irish SMEs to help identify skill gaps, and to develop and deliver training tailored to the specific needs of a business.

Information for Employees

Employees can directly access training under this policy. The Skills to Advance initiative is designed to support employees in all parts of the workforce to access training with up to 100% funding, prioritising participation from employees that are currently in lower skilled jobs, and those at risk of economic displacement having a job that may become obsolete due to changes in technology, automation, digitalisation, outsourcing, changes in work practices, or as a result of structural change.



Robotics and Collaborative Robotics

» Robotics Micro-Qualification

- » Robotics
- Cobotics

Classroom based, blended and on-line trainings are scheduled through the year. For more information or to register for trainings click on the links provided.

CLICK HERE for more information

Course Name		Delivery Mode
MICRO QUALIFICA		
Principal Programm (URAM) 30 Credits	me - Using Robotics in Advanced Manufacturing	Blended/Virtual/Classroom
Overview	A minor award in Fundamentals of Robotics is the first module within the Special Purpose Award Utilising Robotics in Advanced Manufacturing.	
	MODULE 1 AMC22216 * will provide you with an introduction and grounding for the understanding of industrial robotics, industry specific use cases, business case rationale, and in the technical operation for industrial and mobile robotics in advanced manufacturing operations across a range of business verticals to include Aerospace, Metal Fabrication, Lifesciences, Plastics, Pharma, Electronics and Food and Drink sectors.	
MODULE 2 AMC22217* will introduce the use of industrial robotics and cobotics in manufacturing operations, their and disadvantages, and how they can be used in a variety of applications providing an overview of their use cases. The mathematical the business case, both financial and non-financial, for introducing automation. It will also provide the learner with an industrial robotics, cobotics and the technical operation of robotics and cobotics using case studies across various but as Aerospace. Metal Fabrication, Lifesciences, Plastics, Pharma, Electronics and Food and Drink sectors		s in manufacturing operations, their advantages, and an overview of their use cases. The module analyses t will also provide the learner with an understanding of using case studies across various business verticals such d Food and Drink sectors
	MODULE 3 AMC22218* will provide the learner with an understanding of how robots and cobots can be integrated in / applications and the importance robot integration in creating a safe and successful business environment. It will disc and commissioning of robotic systems. The module will provide an understanding of the fundamentals of robotic simut twin concept and virtual commissioning and how it differs from traditional commissioning. Learners will gain the knowl develop, test and operate robotic cells using a range of software tools. The module will introduce the international safe 10218-2 and explain its relevance to robot and cobot integration.	
MODULE 4 AMC22219* will provide the learner with the technical understanding of how to programme robot opera manufacturing environment. The module will also provide the learner with an understanding of how robots can be of peripheral equipment and End of Arm Tools (EOAT's), Programmable Logic Controllers (PLCs) and control system manufacturing systems and production environments. This module will present the principles and techniques for in logic controllers (PLCs) and robots into communication networks. The module will also address the use of simulation offline programming of robots and the optimisation of systems and robots outside of a production environment		g of how to programme robot operations in a derstanding of how robots can be combined with trollers (PLCs) and control systems into overall he principles and techniques for integrating programmable ill also address the use of simulation environments for e of a production environment
	MODULE 5 AMC22220* will provide the learner with an understanding of the cuincluding an appreciation of potential/possible future robotic applications and use of future trends in robotics including the shortening of supply lines, the trend tow learning, the adaptive and smart factory and the growth of the RaaS robots as a learners with an overview of how the growing global emphasis on sustainability, application of robotics.	rrent state of the art and future trends in industrial robotics e cases. The module will explore some of the key drivers ards easier setup and use, the adoption of AI and machine service business model. The module will also provide energy saving, and the circular economy is influencing the

* Further details of modules overleaf

Modules Associated with the Micro Qualification Programme

Course Name		Delivery Mode
AMC22216	QQI Level 6 Certificate Fundamentals of Robotics (Minor Award 5 credits)	Blended/Virtual/Classroom
Overview	Component 1: History and Evolution of Robotics and Return on Investment (ROI) Component 2: Robotic Terminology, Components, Systems and Manipulation Component 3: Robotics and Cobotics Health and Safety	
Learner Profile	Example arrner Profile The Fundamentals of Robotics programme is aimed at participants currently working as operatives, technicians, engineers and line managers, employed in advanced manufacturing sectors, who wish to develop knowledge, skills and competencies in areas such as via and sensor systems in manufacturing operations, the industrial internet of things (IIoT), cyber physical systems and automated robotics systems.	



AMC22217	QQI Level 6 Certificate Robotics Fundamentals and Application (Minor Award 10 credits)	Blended/Virtual/Classroom
Overview	Component 1: Industrial Robotics / Cobotics use cases, processes and optimisation in manufacturing operation Component 2: The Practical Application of Robotics Automation across Advanced Manufacturing Sectors Component 3: Functional Safety Management (FSM) and its implementation in Robotics/Cobotics Application	
Learner Profile	This programme is aimed at participants currently working as operatives, technicians, engineers and line managers, employed in advanced manufacturing sectors, who wish to develop knowledge, skills and competencies in areas such as vision and sensor systems in manufacturing operations, the industrial internet of things (IIoT), cyber physical systems and automated robotics systems.	



10 Robotics and Collaborative Robotics

Code	Course Name	Delivery Mode	Duration
AMC22218	QQI Level 6 Certificate Robotics Fundamentals and Integration (Minor Award 10 credits)	Blended/Virtual/Classroom	
Overview	Component 1: Robotic Integration Component 2: Robotic Cell Design and Operation Component 3: Safety Standards for Robotic Systems and System Integration		
Learner Profile	This programme is aimed at participants currently working as operatives, technicians, engineers and line managers, employed in advanced manufacturing sectors, who wish to develop knowledge, skills and competencies in areas such as vision and sensor systems in manufacturing operations, the industrial internet of things (IIoT), cyber physical systems and automated robotics systems.		

AMC22219	QQI Level 6 Certificate Robotics Fundamentals and Robot Programming (Minor Award 15 credits)	Blended/Virtual/Classroom
Overview	Component 1: Introduction to Robotic Programming, Simulation and System Integration Component 2: Robotic Automation and AI Component 3: Robotic Programming in Advanced Manufacturing Environments	
Learner Profile	This programme is aimed at participants currently working as operatives, technicians, engineers and line managers, employed in advanced manufacturing sectors, who wish to develop knowledge, skills and competencies in areas such as vision and sensor systems in manufacturing operations, the industrial internet of things (IIoT), cyber physical systems and automated robotics systems.	

AMC22220	QQI Level 6 Certificate Robotics Fundamentals Development and Trends (Minor Award 5 credits)	Blended/Virtual/Classroom
Overview	Component 1: The Development of Robotics and Cobotics Component 2: State of the Art in Industrial Robotics Component 3: Future Trends in Robotics	
Learner Profile	This programme is aimed at participants currently working as operatives, technicians, engineers and line managers, employed in advanced manufacturing sectors, who wish to develop knowledge, skills and competencies in areas such as vision and sensor systems in manufacturing operations, the industrial internet of things (IIoT), cyber physical systems and automated robotics systems.	

"The professionalism and level of service offered across all levels within the AMTCE make it a pleasure to interact / engage with.

The existence of the AMTCE was a key factor in AIS Automation Ltd re-locating from Dublin to Dundalk as we see this location becoming a hub of excellence and knowledge within the sphere of automation and the implementation of the "Industry 4.0, Factory of the Future".

A number of our Engineers undertook the advanced robotics training course at the centre which paid huge benefits in terms of customer satisfaction in the world class automation solutions we design and deliver.

The expertise and quality of the trainers gave our guys the best possible outcome.

As AIS Automation Ltd continues to grow, we expect to absorb and employ from the ranks of the highly trained people that emerge from the AMTCE centre."

Paul Donnelly I Managing Director, AIS Automation, Dundalk, Co. Louth



Code	Course Name	Delivery Mode	Duration
AMC22224	Robotics Introduction and Operation	Classroom/Workshop	2 Days
Overview	The participants in this course acquire a basic understanding of robotics and how different robot types are used in various settings and applications. Topics covered include identifying the different types of robots, robotic operation, safely moving the robot, different robotic coordinate systems, and an introduction to basic programming. Emphasis will be given to practical hands-on learning time on the robot. Recommended safety procedures are integrated into all training exercises.		
Learner Profile	Anybody with an interest in robotics. Individuals looking to get into the field of ro understanding of robot operation. Operators with little or no robotics experience	botics/automation. Individuals l	poking to build a technical

AMC21025	Introduction to Robotics – Intermediate Level	Classroom/Workshop	3 Days
Overview	The participants in this course will obtain the necessary knowledge required to perform robotic start up and calibration procedures and create structured robot programs via the robot teach pendant. Topics covered include, start-up procedures, teaching coordinate systems, robot programming, using I/O, and an introduction to subprogram calls, control functions, and continuous (approximation) statements. Recommended safety procedures are integrated into all training exercises.		
Learner Profile	Anybody with an interest in robotics. Individuals looking to get into the field of rounderstanding of robot operation. Operators with robotics experience.	nterest in robotics. Individuals looking to get into the field of robotics/automation. Individuals looking to build a technical robot operation. Operators with robotics experience.	

AMC21026	Introduction to Robotics – Advanced Level	Classroom/Workshop	5 Days
Overview	The aim of this course is to provide the learner with the knowledge of how to operate and program an industrial robot. Learners will perform commissioning procedures and create, modify and execute their own robot control program. Recommended safety procedures are integrated into all training exercises		
Learner Profile	Learners should have completed the Intermediate 3-day Robotics training or have	ve proven experience with robo	tics operation.

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Code	Course Name	Delivery Mode	Duration
AMC22225	Advanced Robotics Level 2 (Systems Integration and Robotic Vision Systems)	Classroom/Workshop	5 Days
Overview	This course will expand on the application knowledge fields of robot operation and programming to include theoretical contents from the fields of robot safety, cell design and configuration, vision systems, as well as fundamental legal aspects that need to be observed when commissioning. Recommended safety procedures are integrated into all training exercises.		
Learner Profile	Successful learners from 5-day advanced AMTCE robotics programme. Robot programmers looking to gain experience with integration technology. Individuals / companies looking to train / upskill robot programmers. Technical people looking to upskill / reskill. Advanced programmers looking for an introduction to Simulation technology. Advanced programmers looking to gain exposure in cell commissioning and configuration tasks. Advanced programmers looking to gain experience or training required.		

AMC21039	Introduction to Innovation in Robotics	Online/Workshop	4 Weeks	
Overview	The aim of this course is for learners to identify and evaluate deployment opport organisation and identify where the greatest business impact can be achieved. F training exercises.	im of this course is for learners to identify and evaluate deployment opportunities for robotics and automation within their isation and identify where the greatest business impact can be achieved. Recommended safety procedures are integrated into all ig exercises.		
Learner Profile	This training course is ideally suited to technicians, engineers, designers, managers and those involved in automated project and design work.			

AMC21082	Industry 4.0 Automation Pyramid Technologies	Online/Self-directed	30+ Hours over 4 Weeks
Overview	Learners will be provided with an understanding of the technologies and systems that form the industrial automation pyramid.		
Learner Profile	Learners applying for this course should be individuals in a technical role looking to develop into different areas of engineering.		



Code	Course Name	Delivery Mode	Duration
AMC22160	Teach Pendant Operator FANUC	Classroom/Workshop	1 Day
Overview	This standard basic course covers the tasks and procedures to safely operate a presentations and demonstrations, this course offers a series of lab exercises fo to the classroom presentations and are intended to reinforce what the student has Recommended safety procedures are integrated into all training exercises. Reconstraining exercises.	robot fitted with a handling tool or the student to complete Lab e as learned through actual hand ommended safety procedures a	I .In addition to exercises relate directly s on experience are integrated into all
Learner Profile	Anybody with an interest in robotics. Individuals looking to get into the field of rol understanding of robot operation. Operators with little or no robotics experience.	botics/automation. Individuals le	ooking to build a technical

AMC22110	ABB IRC5 Programming and Operation	Classroom/Workshop	4.5 Days
Overview	The learner will learn basic programming – how to run the robot in both manual Learn to use instructions like Move, Compact IF, IF Then, While and Test. The cand cycle times and include safety instructions / system description / program of messages and logs / programming RAPID / tool centre points / work object coor numbers / flexpendant messaging instructions / evaluating cycle times / task me integrated into all training exercises.	and automatic and interrogate to burse also cover working with r beration / jogging the robot usir dinates / decision making instru mory structure. Recommended	the event and error logs. numbers, memory structure ng the joystick / event uctions / working with d safety procedures are
Learner Profile	This course is designed for a beginner to become familiar with the entire robotic	system including the mechanic	cal and control systems.
	·		

AMC21024	Robotic Welding	Classroom/Workshop	5 Days
Overview	This course is designed to introduce learners to robotic welding and provide the skills necessary to perform welding tasks with an industrial robot. Recommended safety procedures are integrated into all training exercises.		
Learner Profile	Learners should have completed the Intermediate training course or can demon also understand welding processes.	strate a working knowledge eq	uivalent. Learners should



Advanced Construction Technologies

- » 3D Concrete Printing
- » BIM
- » Revit
- » Civil 3D
- » Drones

Classroom based, blended and on-line trainings are scheduled through the year. For more information or to register for trainings click on the links provided.



Code	Course Name	Delivery Mode	Duration
AMC22141	Essentials of 3D Construction Printing	Classroom and 3DCP Training Facility Drogheda	2 Days
Overview	This course will provide learners with a comprehensive overview of 3D construction manufacturer's type, equipment, the processes, the materials, the opportunities, a uses of the technology will be explored together with areas requiring further resear provide context to its application, present the opportunities and Business case for	on printing including the evolutio and limitations of the technology arch. The course hopes to demy 3DCP and share views on the f	n of 3d construction printing, Potential markets and stify the 3DCP process and uture of 3DCP technology.
Learner Profile	This course is suitable to anyone with an interest in 3DCP, new building techniq sectors to include contractors, tradespeople, architects, engineers, quantity survadditive manufacturing profession.	ues and especially those in con veyors, to those working within	struction and related any construction related or
			LEARN MORE

AMC22227	Fundamentals of BIM Construction	Live Online Class	12.5 hours
Overview	course is designed to provide learners with a fundamental understanding of the principles, standards, specifications and guidance on to manage BIM processes and information management.		
Learner Profile	This training is suitable for learners working within construction and related sector advance in their career opportunities.	ors who wish to increase their s	kills knowledge and to
			LEARN MORE

AMC22229	Essentials to Revit Architecture	Live Online Class	10 hours
Overview	On successful completion of this course learners will understand the concepts of Building Information Modelling (BIM) and get an introduction to the tools for parametric building design and documentation using Revit Architecture.		
Learner Profile	This course is aimed at new users of Revit software and suitable for learners working within construction and related sectors who wish to increase their skills knowledge and to advance in their career opportunities.		





Code	Course Name	Delivery Mode	Duration
AMC22226	3D Essential AutoCAD Civil	Live Online Class	3 Consecutive Days
Overview	AutoCAD Civil 3D software supports a wide range of survey and civil engineering so that design changes update dynamically – so your civil objects – alignments the data changes. Learning how to use these tools effectively is your key to wor 3-day AutoCAD Civil 3D Essentials course.	ng tasks. It creates intelligent re a, profiles, terrain models, pipe n rking smarter in civil projects. Yr	elationships between objects networks - all update when ou gain these skills in our
Learner Profile	This training is suitable for learners working within construction and related sect advance in their career opportunities.	cors who wish to increase their	skills knowledge and to
			LEARN MORE

AMC22231	EU Open Category A2 Course	Classroom	1 Day
Overview	This Course will allow succesful learners to fly a CE marked Drone closer to uninvolved persons during your Drone Operations, under certain circumstances. The A2 Open Category licence will allow some commercial operations again under certain circumstances.		
Learner Profile	It is for beginners or experienced drone operators who want to operate in the A2	Open Category.	

AMC22142	EU Specific Category Theoretical Ground School Course	Classroom	2 Days
Overview	This course covers all subjects that the IAA have deemed necessary for Drone Operations on Fixed-Wing. Multi-Rotor UAVs and Vertical Take-off And Landing. Successful learners will become a holder of an Operational Authorisation Cert.		
Learner Profile	This course is suitable for beginners from any commercial field, specifically con students must be set up on the MYSRS Portal and have completed A1/A3 proof	struction, quantity surveyors an of online training course.	nd manufacturing. All

Additive Manufacturing and 3D Printing

» 3D Printing

Classroom based, blended and on-line trainings are scheduled through the year. For more information or to register for trainings click on the links provided.





Code	Course Name	Delivery Mode	Duration
AMC21021	3D Certified User Training	Classroom	2 Days
Overview	This course takes individuals from beginner level knowledge through to being competent users of an Ultimaker 3D printer. It provides the learner with a strong grounding in how to configurate and operate a printer on a day-to-day basis.		
Learner Profile	New user / relatively new user / someone wanting to further their knowledge of 3	3D printing.	

AMC21022	3D Application Training	Classroom	1 Day
Overview	This course provides the learner with the practical knowledge which allows them to identify applications that are suitable and provide cost savings with additive manufacturing, and to provide the ability to reverse engineer parts for additive manufacturing.		
Learner Profile	ave a good understanding of FDM 3D printing and wanting to take their knowledge to the next level (3+ months experience). A working nowledge of CAD is desirable.		



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LEARN MORE

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This course is designed to provide learners with the skills and knowledge to sele FDM materials.	e is designed to provide learners with the skills and knowledge to select and work confidently with a wide range of advanced rials.		
file Individuals should possess a good understanding of FDM 3D printing and want to take their knowledge to the next level (3+ months experience). Be an active user of a 3D printer.		ext level (3+ months	
= no	DM materials. dividuals should possess a good understanding of FDM 3D printing and want perience). Be an active user of a 3D printer.	DM materials. dividuals should possess a good understanding of FDM 3D printing and want to take their knowledge to the ne perience). Be an active user of a 3D printer.	



Cyber Security

» Cyber Essentials» CompTIA» Cisco

Classroom based, blended and on-line trainings are scheduled through the year. For more information or to register for trainings click on the links provided.



Code	Course Name	Delivery Mode	Duration
AMC22122	Cyber Awareness	Virtual classroom and self-directed	2 weeks self directed with a 2.5 hour workshop
Overview	This course is an introductory workshop with on-line learning that covers core behaviors and phishing. The purpose of this course is to increase personal awareness and improve behaviors around the main cyber threats and existing regulation.		
Learner Profile	This training is ideal for those who have not been exposed to cyber awareness training before and is an excellent starting point on a training plan for those working in a manufacturing setting working with equipment, software and technology on a networked system.		

AMC22124	Cyber IQ and Bridging Programme	Virtual classroom and self-directed	15 Hours
Overview	Cyber IQ training aims to give learners the knowledge and tools to recognise, avoid and report cyber-attacks and security incidents.		
Learner Profile	Individuals who are considering cyber as a career option and interested in entry roles. Have completed the Cyber Awareness programme and have some experience using computers for work.		

AMC22129	Cybersecurity - Boot Camp	Virtual classroom and self-directed	35 Hours as online delivery and workshop
Overview	This authorised CompTIA Security+ Boot Camp trains information security theory with hands-on exercises to help learning by doing. Its aims are to learn how to configure and operate many different technical security controls and leave prepared to pass the Security+ exam.		
Learner Profile	Individuals who are considering cyber as a career option and interested in entry roles and taking professional exams. Individuals who are considering cyber as a career option and interested in entry roles and taking professional exams.		

Code	Course Name	Delivery Mode	Duration
ECOLLEGE	12756 Cyber Security ICDL	Online/Self-directed	4 Weeks
Overview	The aim of this online training course is to provide learners with the skills, knowledge, and competence in Cyber Security. The Cyber Security module covers the main skills and knowledge needed for the secure use of ICT in everyday settings, at home and at work.		
Understand the key concepts of IT security			
	Recognise good practice in protecting computers, devices, and networks		
	Understand the types of risk that pose a threat to security		
	Know how to use the internet and communication channels securely		
	Recognise good practice in secure data management		
	The Cyber Security module covers the main skills and knowledge needed for the se	cure use of ICT in everyday setti	ings, at home and at work.
Learner Profile	This course is suitable as a basic introduction for learners to gain skills and knowledge needed for the secure use of ICT in everyday settings, to include the workplace.		se of ICT in everyday



ECOLLEGE	12560 CompTIA Computer Fundamentals	Online/Self-directed	18 Weeks	
Overview	This CompTIA Fundamentals (ITF+) course covers all areas of IT foundations, h ideal for non-technical professionals.	mpTIA Fundamentals (ITF+) course covers all areas of IT foundations, helping to creating a broader understanding of IT making it ron-technical professionals.		
Learner Profile	arner Profile This course is intended for candidates who are advanced end users and/or are considering a career in IT. It will assist learner determine if they have competency for information technology and help develop their future career path. The course leads to CompTIA IT Fundamentals.			
	This course is a good starting point for individuals interested in pursuing professional-level certifications, such as A+, Network + and other CompTIA certifications. These certifications lead to a wide range of roles in IT.			



Code	Course Name	Delivery Mode	Duration
ECOLLEGE	12579 CompTIA A+	Online/Self-directed	26 Weeks
Overview	The CompTIA A+ certification is the industry standard for establishing a career in IT and is the preferred certification for many technical support and IT operational roles. This course lays the foundation for learners to branch out into various IT disciplines and provides routes into further study.		
Learner Profile	The CompTIA suite of certifications is widely recognised by employers and the A+ course can lead to roles including - tier 1 support specialist, desktop support specialist, systems support technician, junior systems administrator, field service technician, data support technician, end-user computing technician and help desk technician.		

ECOLLEGE	12406 CompTIA Network+	Online/Self-directed	16 Weeks	
Overview	The CompTIA Network+ is an intermediate certification that validates the technic troubleshoot the essential networks that businesses and home users rely upon. accreditation, this course lays the foundation for learners to branch out into variation of the technic	CompTIA Network+ is an intermediate certification that validates the technical skills needed to securely establish, maintain, and ubleshoot the essential networks that businesses and home users rely upon. As the CompTIA Network+ is an industry standard creditation, this course lays the foundation for learners to branch out into various IT disciplines and provides routes into further study.		
Learner Profile	The CompTIA suite of certifications is widely recognised by employers and the Network+ course can lead to roles including - tier 2 data centre technician, network support specialist, systems support technician, junior systems administrator, network service technician, installation engineer. Learners can also progress to further study including the CompTIA Security+ and Cisco Certified Network Associa accreditation.		es including - tier 2 data k service technician, ærtified Network Associate	



Code	Course Name	Delivery Mode	Duration	
ECOLLEGE	11859 Implementing and Administering Cisco Solutions (CCNA)	Online/Self-directed	26 Weeks	
Overview	The Cisco certification is an internationally recognised industry-standard qualific certification certifies a technician's ability to install, setup, configure, troubleshood computer network. This also includes implementing and verifying connections to This course explores application protocols and delves into their relationship with Internet, Data Link and Physical layers of the network. The course will encompa incorporates the configure multiple networks. With a wide variety of equipment experiment with different topologies and observe network traffic flow.	n is an internationally recognised industry-standard qualification for anyone in an IT and networking role. The CCNA a technician's ability to install, setup, configure, troubleshoot and operate a medium-sized routed and switched nis also includes implementing and verifying connections to a wide area network. application protocols and delves into their relationship with the protocols and services provided by the Transport, nd Physical layers of the network. The course will encompass the basics of Routing – both static and dynamic and inguration and implementation of routing protocols. Simulation-based activities, using Packet Tracer, allow Learners to figure multiple networks. With a wide variety of equipment and features to choose from, Learners are encouraged to		
	Achieving CCNA certification is the first step in preparing for a career in IT techn that covers a broad range of fundamentals for IT careers, based on the latest ne job roles.	tion is the first step in preparing for a career in IT technologies. To earn CCNA certification, you pass one exam a of fundamentals for IT careers, based on the latest networking technologies, software development skills, and		
Learner Profile				



For more information on CompTIA training opportunities contact the training team today by visting www.amtce.ie/register-your-interest

ICT Innovations

- » Cloud Computing and Data Management
- » Programming and Networking
- » Data Visualisation
- » IloT
- » Artificial Intelligence (AI) and Machine Learning

Classroom based, blended and on-line trainings are scheduled through the year. For more information or to register for trainings click on the links provided. 0101



Code	Course Name	Delivery Mode	Duration	
ECOLLEGE	12736 Big Data	Online/Self-directed	4 Weeks	
Overview	This course introduces Big Data, a term which relates to the management and analysis of sets of data that are typically too large for traditional data-processing software. Most businesses and organisations deal with large volumes of data on a day to day basis. It organisations do with the data that matters. Big data can be analysed for insights that lead to better decisions and strategic busine moves.			
	On completion, candidates will be able to:			
	Understand the term big data and its evolution, and recognise drivers behind its expansion			
	Recognise key aspects of big data relating to storage technologies, analysis, and visualisation			
	Recognise examples of big data implementation in a range of sectors			
	Identify considerations for adoption of big data, including investment, practical challenges, business potential, and ethical issues			
	Recognise steps for exploiting big data in a specific scenario or situation			
Learner Profile	This module is suitable for a wide range of candidates; for example, non-technical professionals who wish to build and demonstrate an understanding of Big Data, facilitating engagement with their technical colleagues or their suppliers, or learners who wish to add genera technical knowledge to sector-specific or general studies.			
	1		LEARN MORE	

ECOLLEGE	12737 Cloud Computing	Online/Self-directed	4 Weeks
Overview	At the end of the course learners will be able to:		
	 Understand key concepts relating to cloud computing Recognise the features, benefits, examples, and limitations of Infrastructure as a Service (IaaS) Recognise the features, benefits, limitations and provide examples of Platform as a Service (PaaS) Recognise the features, benefits, limitations and provide examples of Software as a Service (SaaS) Identify features and examples of Function as a Service (FaaS) Know about the different models for implementing cloud computing in organisations Consider appropriate solutions and models for implementing cloud computing in a given scenario or situation 		
Learner Profile	This course is suitable for a wide range of candidates; for example, non-technical professionals who wish to build and demonstrate an understanding of Cloud Computing, facilitating engagement with their technical colleagues or their suppliers, or learners who wish to add general technical knowledge to sector-specific or general studies.		

Code	Course Name	Delivery Mode	Duration
ECOLLEGE	11881 Microsoft Azure Cloud Fundamentals	Online/Self-directed	12 Weeks
Overview	On the completion of this course, learners will:		
	 Have the ability to describe the concepts of cloud computing and what its implications are within the differing levels of ICT Integration Attain a good foundational command with the underlying infrastructure and Processes used within the Microsoft Azure platform and afford learners a solid foundation to pursue further Azure certification exams by familiarisation with the available compute services Become fully versed on how to manage, monitor, maintain the various models of service offered by Microsoft Azure and understand which environments will best suit the varying ICT Sector ensuring best practices and SOPS applied at all levels of systems interactio Gain competency in the approach and execution of the security mechanisms available for Azure management and help mitigate thes issues which arise in a comportment professional manner Have a solid understanding How Azure may need to be configured in Implementation and monitoring to ensure that you meet specific Compliance and Governance produce in erder to apply restrictions on date storage and access including transport of the solid date in 		
Learner Profile	CT Cloud certifications are more relevant now than ever before in an increasingly competitive job market. Microsoft AZ-900 Cloud Fundamentals certification is an excellent way of providing evidence of your foundational level skills, ensuring you stand out in a competitive market place. This course is for IT technicians and those looking to take the first major step towards a career within Cloud Technologies.		
			LEARN MORE

ECOLLEGE	11881 IT Specialist in Database	Online/Self-directed	16 Weeks	
Overview	This online course explains the fundamental concepts and technologies relating	online course explains the fundamental concepts and technologies relating to database development and administration.		
	Topics include relational databases, SQL (Transact SQL, both DDL, DML), how to database, the purpose of tables, queries, data types, normalisation, stored process concepts and backup types. This online course will teach learners topics includin DDL,Data Retrieval,Data Manipulation using DML and Troubleshooting.	to create a database, how to m edures, and administering a dat ng:Database Design,Database	anipulate data in a tabase: database security Object Management using	
Learner Profile	This course will help to prepare learners who want to pursue a career as a Data	base Administrator or Database	e Developer.	



Code	Course Name	Delivery Mode	Duration
ECOLLEGE	12714 Certified Associate in Python Programming	Online/Self-directed	24 Weeks
Overview	This course covers the following topics: Modules, Packages, and PIP, Strings, String and List Methods, and Exceptions, Object-Oriented Programming List Comprehensions, Lambdas, Closures, and I/O Operations.		
Learner Profile	The Certified Associate in Python Programming course is intended for programmers that already have fundamental knowledge of Python but wish to learn some of the more advanced concepts. On completion of this course, the learner will be in an excellent position to apply for job roles that require Python knowledge.		



ECOLLEGE	12389 IT Specialist in Python	Online/Self-directed	18 Weeks	
Overview	This online course is focused on teaching learners the fundamental skills and concepts of Python which one of the world's most popular and versatile cross-platform programming languages.			
	Python's popularity has grown vastly in over the last decade, because it is relatively easy to learn, is highly portable and utilises streamlined code. Some of the world's leading tech companies use Python for their websites' back-end, including Google, Instagram, Spotify, Netflix, Uber and Dropbox.			
	This online course in Python covers the core fundamentals of the Python language. You will learn to recognise and write syntactically correct Python code, recognise data types supported by Python, and be able to recognise and write Python code that will logically solve complex problems.			
Learner Profile	This course will help to prepare learners who want to pursue a career as a Softw Analyst, or Machine Learning Engineer.	vare Developer, Web Develope	r, Data Scientist, Data	



Code	Course Name	Delivery Mode	Duration	
ECOLLEGE	12427 IT Specialist in Networking	Online/Self-directed	16 Weeks	
Overview	The Information Technology Specialist program is a way for students to validate Specialist program is aimed at candidates who are considering or just beginning This course explains the conceptual differences between internet, intranet and e	iformation Technology Specialist program is a way for students to validate entry level IT skills sought after by employers. The IT alist program is aimed at candidates who are considering or just beginning a path to a career in information technology.		
	wide area networks (WANs) and wireless networking. The course also covers net introduced to switches, routers and different media types. The course also cover IPv6, name resolution networking services and TCP/IP.	s (WANs) and wireless networking. The course also covers network topologies and access methods. Learners will thes, routers and different media types. The course also covers the Open Systems Interconnection (OSI) model, IP tion networking services and TCP/IP.		
Learner Profile	This course will help to prepare learners who want to pursue a career as a Netw Analyst and Infrastructure Operations.	ork Engineer/Support, Systems	Administration, Network	
	·		LEARN MORE	

ECOLLEGE	12428 IT Specialist in Network Security	Online/Self-directed	18 Weeks	
Overview	The Information Technology Specialist program is a way for students validate entry level IT skills sought after by employers. The IT Specialist program is aimed at candidates who are considering or just beginning a path to a career in information technology			
	This course covers the fundamental concepts and skills in the broad discipline of computer security. Through this course learners will gain a basic understanding of security layers, operating system security, network security and security software. Learners will also gain basic skills on how to secure operating systems, account management and theory on best practices.			
Learner Profile	This course will help to prepare learners who want to pursue a career as an End Architect, Network Security Consultant, Technology Security Threat and Vulnera	e learners who want to pursue a career as an Endpoint Security Analyst, Network Security Engineer/ onsultant, Technology Security Threat and Vulnerability Specialist.		



-20

AMC21077	Data Visualisation	Virtual Classroom	1 Day	
Overview	Modules covered in this training include an overview, tools and softwares for data visualisation, data representation and design, importance of context and demonstrating data visualisation techniques.			
Learner Profile	This course is ideal for those in working environments that would benefit form learning the language and tools of data capture.			

Code	Course Name	D	elivery Mode	Duration	
AMC22159	Data Capture and Analysis	V	irtual Classroom		
Overview	This course will expose the learner to review key data subjects and processes and attract customers.	This course will expose the learner to review key data subjects and analytics within the industry and how these can be used to improve processes and attract customers.			
	Topic 1: Capturing Datasets				
	Understanding Data Sets needed for Lean				
Gaining permission to capture Data					
	Topic 2: Understanding Data	Topic 2: Understanding Data			
	Knowing what Data to capture and where to find it				
	Capturing specific and relevant information				
	Topic 3: Evaluation and Review				
	Reporting and Analysing				
Learner Profile	This course is suitable for a wide range of candidates; for example, understanding of Cloud Computing, facilitating engagement with the general technical knowledge to sector-specific or general studies.	non-technical p air technical coll	professionals who wish to bu leagues or their suppliers, o	uild and demonstrate an r learners who wish to add	
	·				

AMC21037	Introduction to IIoT (Industrial Internet of Things)	Virtual Classroom/Self- directed	2.5 Days
Overview	 At the end of the course learners will be able to: Explain the meaning of IIoT Describe how the IIoT delivers value to organisations Name a range of available sensors available 		
	 Explain how sensors can be connected to existing IT infrastructure Outline the importance of cryptographic security with respect to IIoT 		
Learner Profile	Manufacturing Process Engineers, Project Managers interested in sensor technology	ology deployment.	



Code	Course Name	Delivery Mode	Duration
ECOLLEGE	12729 Internet of Things	Online/Self-directed	4 Weeks
Overview	The IoT module introduces the Internet of Things, which extends Internet connectivity from computers and related devices to other physical devices or common objects and leverages from technologies such as embedded systems, wireless sensors, and automation. On completion of this course, learners will be able to:		
	 Understand key concepts relating to Internet of Things, including common structure and requirements Recognise examples of consumer, commercial, industrial, and infrastructural applications of IoT Identify current trends in IoT, including the evolution of IoT components and the important role played by governance Understand ethical, security, and interoperability considerations around adoption of IoT, and consider how IoT could be implemented i a given scenario 		
Learner Profile	This module is suitable for a wide range of candidates; for example, non-technical professionals who wish to build and demonstrate an understanding of IoT, facilitating engagement with their technical colleagues or their suppliers, or students who wish to add general technical knowledge to sector-specific or general studies.		



AMC21017	Digital Sensors	Classroom	1 Day
Overview	 Each learner is given a Factory IO license. We present learners with an automated production line animated scene using an extensive range of sensors providing feedback product movement and the completion of actuator movements. After Learners get familiar with the correct operation of the production equipment, they load up faulty versions of the scene with contain instructor injected faults. This provides learners with the essential thinking skills that can be applied in the workplace at the end of the course the learners will be able to: Describe sensing principles including inductive, capacitive, thru beam, fibre optic, diffuse, retro reflective sensors, pressure sensor Explain sensor terminology to include set point LO, DO, NO, NC setup optical sensors Wire and verify NPN, PNP and 2 wire-sensors to PLC input cards Follow a logical procedure for adjusting the sensitivity for robust sensing for the listed sensors Be capable of interpreting the visual indications that inform sensor behaviour Set up a sensor to meet a production demand specification Troubleshoot faulty production line 		
Learner Profile	Learners should be employed Maintenance and Process Technicians.		


Code	Course Name	Delivery Mode	Duration
AMC21038	Introduction to Machine Learning and Artificial Intelligence for Manufacturing	Virtual Classroom	2 Days
Overview	On completion of this training the successful learner will be able to:		
	Explain Machine Learning and Data Science		
	Understand the important Machine Learning methods and tools in the Dat	a Science environment	
	Justify what sort of models would be appropriate for the machine learning	opportunity identified	
	How to evaluate a machine learning project, plus outlining the pitfalls invol	ved	
Learner Profile	Managers who want to learn the language and tools of machine learning.		
			LEARN MORE

ECOLLEGE	12723 Artificial Intelligence	Online/Self-directed	4 Weeks
Overview	 On completion of this course, learners will be able to: Define Artificial Intelligence and recognise the stages and development milest Understand how AI works, including the key principles underpinning AI Define the terms machine learning, neural network and deep learning and the Identify the need for AI and recognise examples of how AI supports data minin Recognise the limits, ethical guidelines, social and economic impact, as well a 	letion of this course, learners will be able to: Artificial Intelligence and recognise the stages and development milestones stand how AI works, including the key principles underpinning AI the terms machine learning, neural network and deep learning and the characteristics of each y the need for AI and recognise examples of how AI supports data mining, natural language processing and decision making uses the limits, ethical quidelines, social and economic impact, as well as the potential and implications of AI	
Learner Profile	This course is suitable for those working within businesses and organisations looking to innovate by automating routine processes and tasks, increasing productivity and operational efficiencies and making faster business decisions based on outputs from cognitive technologies.		



Engineering

- » Electrical and Automation systems
- » Maintenance
- >> Pneumatics
- » Advanced methrology
- » CAD/CAM
- » Welding
- SolidWorks

Classroom based, blended and on-line trainings are scheduled through the year. For more information or to register for trainings click on the links provided.



Code	Course Name	Delivery Mode	Duration
AMC22167	QQI L6 Electrical Principles and Troubleshooting	Blended	6 Days
Overview	The course will develop a knowledge and understanding of general electrical circuit and component theory and then progress to the skills required by industrial maintenance technicians to safely diagnose and repair faults in control and safety circuits.		
Learner Profile	This course is aimed toward employees working with electrically controlled equipment as maintenance, process and facilities technicians, fitters and mechanical craft people looking to cross skill.		



AMC22168	QQI L6 Industrial Electrical Systems	Blended	6 Days
Overview	This course enables industrial maintenance technicians to safely, commission and components and systems including safety relays, induction motors and variable of induction motor and control circuit faults, with the goal of helping technicians in	lustrial maintenance technicians to safely, commission and diagnose faults in specialist AC/DC industrial ns including safety relays, induction motors and variable speed drives. This course tackles the common problems control circuit faults, with the goal of helping technicians identify the root cause.	
Learner Profile	This course is aimed for those who want to upskill and develop electrical knowle environment or industrial maintenance personnel who would like to increase the	for those who want to upskill and develop electrical knowledge in order to pursue a career in a production strial maintenance personnel who would like to increase their electrical troubleshooting skills.	
			LEARN MORE

AMC21020	Systematic Troubleshooting	Classroom	2 Days
Overview	This course provides the learner with a robust set of strategies for effective troub approach for thinking about technical faults, navigating a path to solution and co troubleshooting simulation software and engaging, innovative practical exercises repair, and costly, unnecessary escalations.	rner with a robust set of strategies for effective troubleshooting. This course focuses on a systematic echnical faults, navigating a path to solution and communicating progress within a team. Using sophisticated oftware and engaging, innovative practical exercises this training course will greatly reduce mean time to ary escalations.	
Learner Profile	This course will suit anybody who wants to be able to lead on troubleshooting, we engineers and remote technical support teams.	rorking in the areas of maintena	nce and as field service



Code	Course Name	Delivery Mode	Duration
AMC21010	Introduction to PLC's	Classroom	3 Days
Overview	This foundation course will provide entry level learners with a strong understanding and introduction to how Programmable Logic Controllers (PLC's) act as the hub in an automated process, and prepare learners for the QQI certified PLC course.		
Learner Profile	Maintenance employees with little or no previous PLC experience.		

AMC21009	QQI L6 Programmable Logic Controllers	Classroom	4 Days	
Overview	This course will enable a learner to interrogate a PLC code to determine the cause of machine faults and hang-ups. PLC's are at the center of modern automation systems. If you can understand how PLC's think and how they generate fault messages, then you can use them as a powerful diagnostic tool. This PLC course will enable maintenance staff to interrogate PLC code to determine the cause of machine faults and hang-ups. This course is intended for learners already familiar with PLC's.			
	This course is delivered by industry trainers involving the use of Factory I/O plc training simulation software, revolutionising the way PLC training can be delivered and providing the platform for a deeper gamified learning experience.			
Learner Profile	Maintenance personnel who wish to enhance their skills by using PLC logic as a	enance personnel who wish to enhance their skills by using PLC logic as a means of diagnosing machine faults.		
			LEARN MORE	

Digital Sensors	Classroom	1 Day
Learners working in an automated environment will benefit greatly from an in-de troubleshooting of sensor control loops. This training course will enables learner of digital sensors wired to a PLC through digital input interfaces. With advances monitoring role in predictive maintenance strategies.	pth knowledge of the operating s to install, set up and fault find in Industry 4 technology, senso	principle, setup and a comprehensive range rs perform an enhanced
Employed maintenance and process technicians.		
	Digital Sensors Learners working in an automated environment will benefit greatly from an in-det troubleshooting of sensor control loops. This training course will enables learner of digital sensors wired to a PLC through digital input interfaces. With advances monitoring role in predictive maintenance strategies. Employed maintenance and process technicians.	Digital SensorsClassroomLearners working in an automated environment will benefit greatly from an in-depth knowledge of the operating troubleshooting of sensor control loops. This training course will enables learners to install, set up and fault find of digital sensors wired to a PLC through digital input interfaces. With advances in Industry 4 technology, senso monitoring role in predictive maintenance strategies.Employed maintenance and process technicians.



Code	Course Name	Delivery Mode	Duration
AMC21013	Mechanical Maintenance	Classroom	5 Days
Overview	The purpose of this course is to equip the learner with the knowledge, skills, and competencies to perform fault finding and repair tasks during mechanical maintenance activities and to enable learners to work independently or supervising the work of others.		
Learner Profile	This course is suitable for technicians who work on mechanical systems in the workplace.		
	·		LEARN MORE

AMC21014	Preventive Maintenance	Blended	5 Days
Overview	The purpose of this course is to provide the learner with the knowledge, skills, a maintenance schedule for plant and equipment and to enable the learner to wor	this course is to provide the learner with the knowledge, skills, and competencies to develop a practical preventive chedule for plant and equipment and to enable the learner to work independently or in a supervisory capacity.	
Learner Profile	This course is suitable for technicians and engineers who are setting up or operating a preventive maintenance programme.		
			LEARN MORE

AMC21015	Maintenance Planning	Classroom	1 Day
Overview	This course aims to equip the student with the fundamental theory of maintenance organisation by examining and understanding current maintenance industry metrics. The course will also cover maintenance risk assessments.		
Learner Profile	This course is suitable for technicians and engineers who wish to implement best practices in maintenance planning.		



Code	Course Name	Delivery Mode	Duration
AMC21054	Introduction to Pneumatics	Classroom	2 Days
Overview	This course is designed to introduce learners to the basic principles, properties and components used in pneumatic and electro-pneumatic systems.		
Learner Profile	This course is aimed at engineers and technicians who manage or operate pneumatic systems and pneumatically actuated equipment.		
			LEARN MORE

AMC21053	Pneumatic Technologies	Classroom	2 Days
Overview	On completion of this course learners will be able to carry out maintenance tasks on Electro-pneumatic circuits, understand electro- pneumatic schematics, identify components of an electro-pneumatic circuit and repair system faults.		
Learner Profile	This course is aimed at engineers and technicians who are working on pneumat course.	rse is aimed at engineers and technicians who are working on pneumatic automation systems. There are no prerequisites for the	



AMC21008	Pneumatics Systems Maintenance	Classroom	4 Days
Overview	On completion of this course learners will be able to perform system maintenance and identify key maintenance strategies for pneumatic systems.	completion of this course learners will be able to perform system maintenance tasks, root cause failures, understand system design didentify key maintenance strategies for pneumatic systems.	
Learner Profile	This course is aimed at employed maintenance technicians.		



Code	Course Name	Delivery Mode	Duration
AMC22213	QQI Level 5 Special Purpose Certificate in F-gas Handling in Large RACHPT&T Systems Category (10 ECT Credits)	Classroom	5 Days
Overview	The qualification is aimed at any individual seeking to work with F-gas in stationary refrigeration and heating, air conditioning and ventilation (HVAC) equipment, together with the refrigeration units of refrigerated trucks and trailers QQI level 5.		
Learner Profile	This course is aimed at candidates working in the Commercial and Industrial refrigeration and Air Conditioning sector.		
			LEARN MORE

AMC22214	QQI Lever 5 Special Purpose Certificate in F-gas Handling in Small RACHPT&T Systems Category II (10 Credits)	Classroom	5 Days
Overview	The programme is targeted at learners who are trade qualified technicians dealing with fluorinated greenhouse gases (F-gases) within the refrigeration and heating, ventilation, and air conditioning (HVAC) sectors and heat pump installations.		
Learner Profile	The programme is designed for experienced workers so is not an entry level qualification. Therefore, prospective learners will have an existing qualification or possess significant equivalent experience in the sector and may include: Undertaking Phase 2 of their apprenticeship in Refrigeration and Air Conditioning. Hold a Craft Level 6 Qualification in Refrigeration and Air Conditioning. Hold a suitable advanced trade qualification (or academic equivalent) in a related sector (e.g. refrigeration, HVAC, plumbing or electrical area		re learners will have g Phase 2 of their Conditioning. Hold a nbing or electrical areas).

"This training course has transformed how I create working drawings for the more detailed and critical parts required for different applications, and will remove the current need for operators to ask questions as I will now be able to include more details on the drawings."

Michael Cunningham Biopharma Design Engineer TEG (Specialist Engineering Company)



Code	Course Name	Delivery Mode	Duration
AMC21036A	Geometrical Tolerancing to BS 8888 and ISO Standards – Level 1	Classroom	3 Days
Overview	The course covers the fundamental concepts of geometrical tolerancing and its application and interpretation. This course is based on BS 8888 and ISO standards (a version is also available based on the American ASME Y14.5 standard). Delegates are provided with comprehensive course notes, and a workbook with questions and exercises to accompany the training material.		
Learner Profile	This course is suitable for anyone who is familiar with the conventions of engineering drawing and dimensional (or ±) tolerances and is relevant to anyone who must produce or interpret mechanical engineering specifications.		



Code	Course Name	Delivery Mode	Duration	
AMC222230	QQI Certificate in Industrial Instrumentation Calibration	Classroom	Classroom - 7 Days with Self-directed hours	
Overview	The Certificate in Industrial Instrumentation Calibration (CIIC) is designed to develop learners understanding of the principles of instrument calibration, calibration terminology, calibration system documentation, and relevant procedures, and to develop the skills to calibrate industrial process instruments and control elements, and measure, record and evaluate data.			
	Gain high value practical skills in process instrumentation calibration, backed by	a level 6 certificate.		
Learner Profile	Entry requirements (if under 23 years) are a minimum of grade O6 / H7 in the Le must include mathematics and English, Irish or another language. Mature learne based on work experience and / or life experience by demonstrating that they ha competence. The English language entry requirements for the programme are O levels below CEF B2+ must first reach this minimum standard before enrolling o prior technical experience or knowledge and/or exposure to an industrial enviror	ements (if under 23 years) are a minimum of grade O6 / H7 in the Leaving Certificate, or equivalent, in 5 subjects. The subjects e mathematics and English, Irish or another language. Mature learners, i.e., applicants over the age of 23, may also apply ork experience and / or life experience by demonstrating that they have reached the standards of knowledge, skills, and a. The English language entry requirements for the programme are CEF B2+ or equivalent. Candidates with English language v CEF B2+ must first reach this minimum standard before enrolling on the academic programme. Ideally, applicants have some cal experience or knowledge and/or exposure to an industrial environment.		
amc 21030	SolidWorks Fundamentals	Classroom	5 Days	
Overview	Successful learners on completion of this introductiory course will have competancys with multiple drawing and modification commands in SolidWorks, the ability to create three-dimensional solid model, create three-dimensional assemblies incorporating multiple solid models, apply industry standards in the preparation of technical mechanical drawings and to create simulations of the assemblies incorporating multiple solid incorporating multiple solid set.			
Learner Profile	This course is suitable for learners who wish to upskill and learn engineering design skills to work in the manufacturing industry.			

Code	Course Name	Delivery Mode	Duration	
AMC22050	CNC Milling Course – Controller – Basic 3 Axis (X, Y and Z)	Classroom	3 Days	
Overview	This is a basic Fanuc milling course designed for people with some knowledge controls but who want to acquire the necessary skills to program 3-axis Mills. acquire new and upgrade existing skills and at adult learners with knowledge a the step up to CNC programming. Designed for operators in engineering alread knowledge to understand what the programs are doing and how to do simple existence.	asic Fanuc milling course designed for people with some knowledge and experience of the machining process and CNC ut who want to acquire the necessary skills to program 3-axis Mills. This course is aimed at operators and setters looking to w and upgrade existing skills and at adult learners with knowledge and experience of the machining process looking to make p to CNC programming. Designed for operators in engineering already experienced using the machine but want that extra bit of e to understand what the programs are doing and how to do simple editing and adjustments of offsets etc.		
Learner Profile	nis course is suitable for customers with either Doosan 3-axis or other manufacturers' Fanuc controlled machines with a similar onfiguration.			

AMC22051	CNC Milling Course – Hands on Milling – Operator to Setter	Classroom	3 Days
Overview	This is a basic CNC milling course designed for people with some knowledge and experience of the machining process and CNC controls but who want to fully understand the various aspects of the CNC milling process to better enable them to set up and optimise production jobs.		
Learner Profile	This course is suitable for customers with controlled CNC mills who are using ISO programming. Course content covers 3-axis milling with consideration for 4 and 5 axis machines.		

"The AMTCE training was delivered using highly skilled experts, quality training processes and the latest technologies and equipment."

The

Code	Course Name	Delivery Mode	Duration
AMC22052	CNC Milling Course-Controller - Advanced 4 Axis Milling Course covering the X, Y, Z and additional 4th Axis	Classroom	3 Days
Overview	This is an advanced Fanuc milling course designed for people with some knowledge and experience of the machining process and CNC controls but who want to acquire the necessary skills to program 4-axis mills. Designed for upskilling and use for the facility of the 4th Axis on a Vertical (Horizontal) Milling Machine. At the end of the course the participants will have acquired advanced knowledge for CNC programming and operation of CNC Milling machines which have 4 axis capabilities.		
Learner Profile	This course is designed for operators/programmers already competent in understanding the standard ISO codes for CNC Milling and require upskilling and to use the facility of the 4th Axis on a mill. The ideal candidates are already proficient in CNC late operation and should have a good foundation in ISO G – codes.		
	1		LEARN MORE

AMC22053	CNC Milling Course – Hands on Milling – Setter to Engineer	Classroom	3 Days
Overview	This is an advanced CNC milling course designed for learners with good working knowledge and experience of the machining and CNC control, and are currently setting jobs on a regular basis and are looking to develop the skills required to identify best manufacturing and optimise part manufacturing on CNC mills.		
	Each module of the course will be delivered at the CNC machine with live demonstrations of each step over the course duration. Ideally candidates will provide an example of a typical part they produce.		
	At the end of the course the participants will have acquired the skills to enable them to identify and implement a process to manufacturing required components on CNC Precision mills.		
Learner Profile	is course is designed for setters/programmers already competent in understanding the standard ISO codes for turning and are mpetent in basic machine setting practices, who are looking to acquire new and upgrade existing skills. Training is suitable for those prking with CNC lathes who are using ISO programming. Course content covers 3 axis machines with the consideration of 4 and 5 axis nfiguration machines.		



Code	Course Name	Delivery Mode	Duration	
AMC22054	CNC Turning Course – Controller – Basic 2 Axis, X and Y Turning	Classroom	3 Days	
Overview	This is a basic Fanuc turning course designed for people with some knowledge controls but who want to acquire the necessary skills to program 2-axis lathes.	c Fanuc turning course designed for people with some knowledge and experience of the machining process and CNC /ho want to acquire the necessary skills to program 2-axis lathes.		
Learner Profile	This course is designed for operators currently operating or beginning to operate CNC lathes at an operator level i.e. part loading, bas tool changing, wear adjustments, etc. This course is aimed at operators looking to acquire new and upgrade existing skills, and at adult learners with basic knowledge and experience of the machining process looking to make the step up to CNC Programming.			
	This course is suitable for customers with either Doosan 2-axis lathes or other manufacturers' Fanuc controlled machines with a similar configuration.			





Code	Course Name	Delivery Mode	Duration
AMC22055	CNC Turning Course – Hands on Turning - Operator to Setter	Classroom	3 Days
Overview	This is a basic CNC turning course designed for people with some knowledge and experience of the machining process and CNC controls but who want to fully understand the various aspects of the CNC turning process to better enable them to set up and optimise production jobs.		
Learner Profile	This course is suitable for learners with controlled CNC lathes who are using ISO programming. Course content covers 2-axis turning and the basics of live tooling set up.		
			LEARN MORE

AMC22056	CNC Turning Course – Controller – Advanced 4 Axis turning course covering C and Y on Fanuc control with ISO codes and NC Guide	Classroom	3 Days
Overview	This is an advanced Fanuc milling course designed for people with some knowledge and experience of the machining process and CNC controls but who want to acquire the necessary skills to program multi-axis lathes including C and Y. This course is aimed at operators and setters looking to acquire new and upgrade existing skills, and at adult learners with knowledge and experience of the machining process looking to make the step up to CNC Programming.		
Learner Profile	This course is suitable for learners with either Doosan multi-axis lathes or other manufacturers' Fanuc controlled machines with a similar configuration.		



Code	Course Name	Delivery Mode	Duration
AMC22057	CNC Turning Course – Hands on Turning – Setter to Engineer	Classroom	3 Days
Overview	This is an advanced CNC turning course designed for learners with good existing knowledge and experience of the machining proc and CNC control, who are currently setting jobs regularly and are looking to develop the skills required to identify best methods of manufacturing and optimise part manufacturing on CNC lathes. Each module of the course will be delivered at the CNC machine w demonstrations of each step over the course duration. Ideally candidates will provide an example of a typical part they produce. Course content covers multi axis lathes with bar feed and sub spindle configurations and is also suitable for application with multi-tu configurations.		
Learner Profile	This course is aimed at operators looking to acquire new and upgrade existing skills, and for employees with a knowledge and experience of the machining process looking to produce a component from scratch.		

AMC22086	Fanuc Custom Macro B	Classroom	2 Days
Overview	CNC Programming with the use of Fanuc Custom Macro B, enables ability to design and implement powerful, advanced CNC macro programming techniques that result in unparalleled accuracy, repeatability, and enhanced productivity (ideal for a family of parts). The course begins with step-by-step instructions and then gradually proceeds in complexity.		
At the end of the course the participants will have acquired knowledge for CNC programming and operation through Macro programming and will be able to develop highly efficient programs that exploit the full potential potential states are accurately as the state of the states are accurately as the states a			CNC Precision machines of CNC machines.
Learner Profile	The advanced course is designed for operators in engineering already experienced using the machine at an advanced level and want to leverage CNC machines full capabilities through Macro programming. This course is suitable for learners familiar with Fanuc controlled machines or with a similar configuration.		
			LEARN MORE

"We have just finished a HyperMILL 2-part practical milling course, booked through ease with the great help from the team at AMTCE.

The IMR based trainers were professional with a wealth of knowledge. The course content was clear and concise from the start, so much so, we have written small programs already using their content which will add value to our business going forward as we have eradicated a single point of failure.

This whole experience was trouble free, and we hope to work with the AMTCE again to complete more training to help our business in the future."

Craig Pidgeon Programming & Technical Lead Schivo Medical



Code	Course Name	Delivery Mode	Duration
AMC22058	HyperMILL Training Part 1	Classroom	3 Days
Overview	Advanced skills for 2.5D and 3D machining. Advanced and comprehensive step by step course to gain advanced skills to program 2.5D and 3D parts.		
Learner Profile	This course is suitable for customers with or looking to acquire hyper MILL CAD/CAM software.		

AMC22061	HyperMILL Training Part 2	Classroom	2 Days	
Overview	This course is an advanced CADCAM course aimed at upskilling CADCAM proceed cylindrical parts for manufacture using state of the art CADCAM technology.	s an advanced CADCAM course aimed at upskilling CADCAM programmers in using CADCAM technology to program rts for manufacture using state of the art CADCAM technology.		
Learner Profile	This course is suitable for customers with or looking to acquire hyper MILL CADCAM software AMC22058 Hyper MILL Part 1 Training.			
	·		LEARN MORE	

AMC22060	HyperMILL 5Axis Training	Classroom	2 Days
Overview	This course is an advanced CADCAM course aimed at upskilling CADCAM programmers in 5 Axis simultaneous machining cycles to manufacture complex 3D parts using state of the art CADCAM technology.		
Learner Profile	This course is suitable for customers with or looking to acquire hyper MILL CAD/CAM software.		
			LEARN MORE

Jus

"The AMTCE basic level B-Solid CNC training has given me the fundamental skills needed for success in machining. Small class numbers allowed for more personalised attention from a skilled instructor, creating an atmosphere suitable to questioning. This intimate setting not only promoted greater understanding, but also encouraged collaborative learning among peers. As a result, I have a solid understanding of programming and machining operations, which has greatly increased productivity and accuracy.

This training experience has improved my work quality, laying a solid basis for future development and success in our CNC machining."

Ann Marie Woods Píu Alto, Drogheda, Co.Louth



Code	Course Name	Delivery Mode	Duration
AMC22089	B-Solid Base Programming Course	Classroom	5 Days
Overview	General introduction / Parametric programming / Imports / Surfaces / 5 axis machining operations.		
Learner Profile	The learner profile is for those working as a CNC Machine Programmer.		
	·		

AMC22092	B-Solid Advanced Programming Course	Classroom	5 Days
Overview	On completion of this course learners will know how to use a CAD system, how to Use bSolid to create, modify and manage drawings. They will have knowledge to create and modifying tools and will gain learning 3-axis machining operations, managing multipanel programs. Knowing machine simulation environment.		
Learner Profile	This course is the next step in training as progression from the basic course and is suitable for those working as a CNC Machine Programmer.		s a CNC Machine





The AMTCE MIG and TIG welding trainings have increase efficiencies, reduced error rates, and improved overall productivity, additionally our employees have witnesses personal growth and advancement opportunities within the organisation, further fostering culture of continuous learning and development.

The hands-on approach and small class sizes provided an ideal environment for skills development and mastery."

Garry Donnelly | Production Manager GM Steel, Dundalk, Co.Louth



Code	Course Name	Delivery Mode	Duration	
AMC22046	MMA Welding (EN 9606-1CS01)	Classroom/Workshop	30 Hours	
Overview	The aim of this course is to provide the participant with the skills knowledge and competence, which will enable them to use Manual Metal Arc Welding equipment safely and correctly.			
	On successful completion of the Metal Manual Metal Arc Welding award applica horizontal, vertical, and overhead positions to complete lap fillet, tee fillet and but	cessful completion of the Metal Manual Metal Arc Welding award applicants will be qualified to complete fillet welds in the ntal, vertical, and overhead positions to complete lap fillet, tee fillet and butt joints safely in the workplace.		
Learner Profile				



AMC22047	MIG/MAG Weld (EN9606-1CS10)	Classroom/Workshop	30 Hours
Overview	The aim of the course is to provide the learners with the hands-on skills, knowledge, and competence to enable them to use MIG W equipment in a competent and safe manner.		
	The learner will have necessary skills and knowledge to requiring the welding m	ild steel lap joints, tee joints and	d outside corner joints.
Learner Profile			



Pharma, Med Tech, Bio, Food and Beverage

» Pharma, Medtech, Bio» Food and Beverage

Classroom based, blended and on-line trainings are scheduled through the year. For more information or to register for trainings click on the links provided.



Code	Course Name	Delivery Mode	Duration
AMC21098	Introduction to Technical Writing for the Manufacturing Sector	Virtual Classroom	1 Day
Overview	The aim of this course is to provide learners with the tools to write better technical documents, focusing on the skills required to produce accurate, precise, succinct documentation within a manufacturing setting.		
Learner Profile	The Introduction to Technical Writing programme is designed to meet the growing industry demand for effective technical writing skills which are essential to all industries. This programme is aimed at employees working in a manufacturing setting, or those wishing to upskill and gain essential knowledge to progress in the manufacturing sectors.		





LEARN MOR

AMC21099	Introduction to cGMP for the (Bio) Pharmaceutical Industry	Virtual Classroom	1 Day
Overview	The aim of this course is to provide learners with fundamental knowledge related to the requirements of working in a cGMP (Good Manufacturing Practice), regulated (bio)pharmaceutical manufacturing environment. On completion of the programme learners will be able to demonstrate core knowledge of quality systems, industry regulatory requirements, validation, documentation, and manufacturing technologies.		
Learner Profile	This programme is aimed at employees working in a manufacturing setting, or those wishing to upskill and gain essential knowledge of cGMP in a biopharmaceutical context.		

Code	Course Name	Delivery Mode	Duration
AMC22016	Introduction to QC for (Bio) Pharmaceutical Manufacturing	Virtual Classroom	1 Day
Overview	The aim of this course is to provide learners a solid understanding of the role of quality control within an organisation and how it relates to the manufacture of pharmaceutical products. Participants will gain knowledge in key areas including QC regulatory obligations, cGMP, QC test methods and QC/laboratory information systems and typical QC SOP documentation.		
Learner Profile	This programme is aimed at employees working in a manufacturing setting, or those wishing to upskill and gain essential knowledge of education in a bio-pharmaceutical environment.		

LEARN MORE



AMC22014	Introduction to Clinical Trials in the Pharmaceutical Sector	Virtual Classroom	1 Day
Overview	Diverview The aim of this programme is to equip learners with key knowledge related to field of clinical research co-ordination and the key and regulations related conducting clinical research. Learners are introduced to key topics such as drug development life cycle, phases of clinical trials, primary regulations and direct GCP auditing and pharmacovigilance, clinical safety, and monitoring.		
Learner Profile	This programme is aimed at employees in the pharmaceutical sector wishing to up skill in the area of clinical trials.		als.

Code	Course Name	Delivery Mode	Duration	
AMC22206	Essential Skills for Medical Device Manufacturing	Virtual Classroom	5 Days	
Overview	The aim of this training is to provide participants with a strong foundation in key aspects of Medical Device Manufacturing. Learners will develop key essential knowledge in the areas of product quality, quality management systems, regulatory compliance, design and development of medical devices, assembly and packaging, inspection, validation and review future trends for the sector.			
	Course Content (Modules):			
	Overview of Medical Device Industry and Manufacturing			
	Design and Development of Medical Devices			
	Medical Device Assembly and Packaging			
	Quality Management and Regulatory Compliance			
	Opportunities, and Future Trends in Medical Device Manufacturing			
Learner Profile	Candidates should at minimum have completed the Junior Cert with pass grade and English).	s in at least five ordinary level s	ubjects (including Maths	



AMC22205	Essential Skills for Manufacturing in the Pharma Bio Industry	Virtual Classroom	5 Days
Overview	The aim of this training is to provide participants with essential skills to enable them work successfully in the (Bio)pharmaceutical Manufacturing industry. Learners will develop key essential knowledge to in the areas of product quality, quality management systems, regulatory compliance, pharmaceutical manufacturing process steps, biopharmaceutical manufacturing process steps, risk management QC testing, stability studies, deviation management and review future trends for the sector		
	Course Content (Modules):		
	Introduction to Pharmaceutical and Biopharmaceutical Manufacturing		
	Principles of Pharmaceutical Manufacturing		
	Principles of Biopharmaceutical Manufacturing		
	Quality Assurance, Control, and Risk Management in Manufacturing		
	Opportunities, and Challenges in Pharmaceutical/Biopharmaceutical Manuf	facturing	
Learner Profile			

"Oceanpath have recently taken part in food related training programmes with the AMTCE.

These programmes and trainings have given our team the skills and development needed to increase their knowledge in the food manufacturing industry.

It is a great organisation for personal and professional development, as well as learning and adapting new skills to the business."

Áine Lynch Product Development & Sustainability Manager Dunn's of Dublin / Oceanpath / Carr and Sons



Code	Course Name	Delivery Mode	Duration
AMC22147	Developing Essentials Skills for the Food and Beverage Manufacturing Sector – Introductory Level	Virtual Classroom	1 Day
Overview	This programme is designed to provide learners with the knowledge, skills, and construction, quality control and supporting roles within the food industry. Learners manufacturing concepts at a foundational level, enabling them to work with food provide essential knowledge and skills required to produce a safe high-quality food pre- environment. Learners will gain core foundational knowledge and understanding of will be introduced to key food manufacturing principles and practices including go allergens for the food industry, control of food safety risks and lean manufacturing	igned to provide learners with the knowledge, skills, and competencies necessary for individuals working in rol and supporting roles within the food industry. Learners will have a greater understanding of quality assurance and s at a foundational level, enabling them to work with food products in a safe and hygienic manner. Learners will gain e and skills required to produce a safe high-quality food product, in a fast-moving food and beverage manufacturing will gain core foundational knowledge and understanding of food safety and manufacturing concepts. Participants y food manufacturing principles and practices including good documentation and record keeping, microbiology and ndustry, control of food safety risks and lean manufacturing.	
Learner Profile	This course is suitable for production operators, quality technicians and those set	eeking roles in the food industry	<i>r</i> .
	·		LEARN MORE

AMC22148	Developing Essentials Skills for the Food and Beverage Manufacturing Sector – Intermediate Level	Virtual Classroom	2 Days
Overview	This programme is designed to provide learners with the knowledge, skills, and competencies necessary for individuals working in production, quality control and supporting roles within the food industry. Learners will have a greater understanding of quality assuran and manufacturing concepts at a foundational level, enabling them to work with food products in a safe and hygienic manner. Through participation in this programme, learners will enhance their technical skills and understanding of the food and beverage industry, provide trainees with an upskilling pathway to accelerate their career progression. Participants will acquire knowledge in areas such as food and soft and food subtrained to the continuous improvement concertion thinking, DMAIC and food sustainability.		lividuals working in Jing of quality assurance Jienic manner. Through everage industry, providing n areas such as food safety is improvement concepts of
Learner Profile	This course is designed for supervisors, team leaders and trainee managers in produ	uction and quality roles within the	food and beverage industry.



AMC22149	Developing Essentials Skills for the Food and Beverage Manufacturing Sector – Advanced Level	Virtual Classroom	2 Days
Overview	Learners will have a greater knowledge of the requirements of a food safety and TACCP. Learners will gain the skills necessary to implement continuous improvent thinking concepts. Participants will also advance their knowledge of food safety business. Through participation in this programme learners will gain knowledge their application in a food manufacturing environment. Participants will be introduced evaluation of appropriate food production systems. In addition, learners will evaluate performance and sustainability targets.	od safety and risk management system incorporating VACCP and nuous improvement tools, corrective action methodologies and lean of food safety culture and effective team management for a food n knowledge in the development of VACCP and TACCP systems and will be introduced to the new product development process and the rners will evaluate process improvement strategies and the tools to drive	
Learner Profile	This course is for experienced managers and food business owners and is focused on developing enhanced competencies in key skills areas such as food safety, innovation, sustainability, digitalisation and process improvement.		

Operational Optimisation

- » Micro-credential Programmes
- » Lean
- » Project Management

Classroom based, blended and on-line trainings are scheduled through the year. For more information or to register for trainings click on the links provided.



Code	Course Name	Delivery Mode	Duration		
MICRO-CREDENTIA	MICRO-CREDENTIAL PROGRAMME				
AMC22150	QQI Level 6 Certificate in Operational Excellence (25 ECTS)	Blended	Part-time Blended		
Overview	This Level 6 QQI programme has been designed to meet a growing industry need, to provide learners with competencies and knowl of digitisation, with a particular focus on Operational Excellence and business process improvement. The modules include Operation Excellence – Lean Thinking; Operational Excellence – Six Sigma along with Digital Communication and Technical Reporting. These provide the learner with foundational knowledge of process digitisation and operational excellence which is essential as industries far significant challenges and changes in the coming years. The aim of this programme is to enable participants to explore and appreciate the concepts of business success, quality fundamenta and the principles and tools of lean thinking. It aims to develop the learner's understanding of the principles of six sigma and its application across a range of sectors. In addition, this programme provides learners with an in-depth understanding of the concept or technical and professional communication and information design/delivery.				
Learner Profile	Designed for learners with competencies and knowledge of operational excellence and business process improvement methodologies, with a specific focus on digitisation strategies. Through participation in this programme, learners will gain essential knowledge of the core elements of process digitisation and operational excellence, enabling participants to make a valuable contribution to the implementation of digitalisation strategies within the organisation.				





Code	Course Name	Delivery Mode	Duration			
MICRO-CREDENTI	MICRO-CREDENTIAL PROGRAMME					
AMC22151	QQI Level 6 Certificate in Supply Chain (20 ECTS)	Blended	Part-time Blended			
Overview	This QQI L6 micro-credential programme is designed to meet the growing industry demand for increased knowledge and competence in the key business functions of Supply Chain / Operations Management and Project Management. The programme will provide learners with a foundational knowledge of the core elements of these key business functions, in addition to gaining insights into new emerging trends and the impact of digitisation on supply chains and operations. Through participation in the programme, learners will gain essential skills to support expanding smart manufacturing operations, enabling participants to make a valuable contribution to the implementation of digitalisation strategies within the organisation.					
Learner Profile	Learners looking for a foundational knowledge of the core elements of these key business functions, in addition to gaining insights into new emerging trends and the impact of digitisation on supply chains and operations. Through participation in the programme, learners will gain essential skills to support expanding smart manufacturing operations, enabling participants to make a valuable contribution to the implementation of digitalisation strategies within the organisation.					
			LEARN MORE			



Code	Course Name	Delivery Mode	Duration
MICRO-CREDENTI	AL PROGRAMME		
AMC22170	QQI Level 6 Certificate in Transversal Skills (5 ECTS)	Blended	Part-time Blended
Overview	The aim of this course is to provide learners with the skills to recognise the changing business environment and identify the skills and competencies to act in such an environment. Learners will gain essential knowledge and work-aligned skills that will help prepare them for the challenges posed by the fast pace of change in organisations, enabling them to make informed decisions, effectively problem solve and successfully contribute to the development of digital strategies.		
Learner Profile	Anyone seeking an understanding of diverse transversal skills that are now req digitised environment, across multiple manufacturing and service-related indus	uired to work effectively in an ir tries.	creasingly global and
			LEARN MORE



Code	Course Name	Delivery Mode	Duration
AMC22158	QQI L6 Project Management	Classroom	5 Days
Overview	This project management training programme is designed to provide you with the knowledge, practical skills and understanding required to lead projects to a successful conclusion. It gives the participant the skills to take responsibility for the planning, implementation, and review of a project, working independently or supervising the work of others.		
Learner Profile	This training programme is ideal for those who wish to take the next step in career development and become confident in using project management methodology and tools to deliver successful projects.		

AMC21057	Six Sigma Yellow Belt	Classroom	2 Days	
Overview	This course provides the leaner with an understanding of Lean Yellow Belts and which will result in improved performance and reduced timescales for Lean Six S	the leaner with an understanding of Lean Yellow Belts and will enable them to become effective team members faster proved performance and reduced timescales for Lean Six Sigma projects.		
Learner Profile	Learners will be working in or moving into a Lean Environment and involved in continuous improvement and workplace projects at a junior level.			
	·			

AMC21059	QQI L5 Lean Manufacturing Tools	Classroom	5 Days
Overview	This course provides learners with an understanding of Green Belt, Six Sigma and Lean principles. The course also covers the practical application of these tools and techniques.		
Learner Profile	Learners will be working in, or moving into a Lean Environment ,involved in continuous improvement and workplace projects.		
			LEARN MORE



Apprenticeships

QQI L6 2 year Cyber Security Apprenticeship
 QQI L6 2 year Robotics Automation Apprenticeship



Apprenticeships

What is an Apprenticeship?

An apprenticeship is a training and education programme. It mixes learning in a college or training institution with work-based learning in a company. At least half of apprenticeship learning is done on the job.

As an apprentice, you earn while you learn. You have a formal employment contract, and you are paid a salary during your apprenticeship training. Apprenticeships can last between two and four years.

Apprenticeships also lead to internationally recognised qualifications. These range from level 6 to level 10 on the National Framework of Qualifications.

Apprenticeships At the AMTCE

Apprenticeships at the AMTCE offer an excellent opportunity to establish a rewarding career in a variety of sectors within the economy such as Advanced Manufacturing, ICT, Pharma or Food and beverage manufacturing, and can provide a pathway into Level 7-9 qualifications in Institutes of Technology or University.



Code	Course Name	Delivery Mode	Duration	
QQI L6 Cyber Security Apprenticeship Programme		Blended	2 Years	
Overview	you are a tech enthusiast and enjoy problem solving, this L6 Cybersecurity apprenticeship Programme may be what you are looking for start or to progress your career in this area of work.			
	With this two-year apprenticeship, you will become a fully qualified cybersecurity worker, with an NFQ Level 6 Advanced Certificate in Cybersecurity. You will also receive industry-recognised CompTIA Cybersecurity Certifications as part of the programme.			
	You may then choose to work as a cyber security professional in a wide range of industries including telecoms, technology, government, finance, and education.			
	A cybersecurity professional's job involves applying an understanding of cyber threats, hazards, risks, controls, measures, and mitigations to protect organisations, ICT systems, and people.			
	You may specialise in the technical side of cyber security, working in areas such as security design and architecture; security testing; Investigations; and response, or the risk analysis side, concentrating on areas such as operations; risk; governance and compliance.			
	By the end of your training, you will be able to:			
	Discover through a mix of research and practical exploration vulnerabilities in a system.			
	Analyse and evaluate security threats and hazards to a system, service and process.			
	Carry out a cyber security risk assessment.			
	Research and investigate common attack techniques and recommend how to defend against them.			
	• Understand basic data security theory-concepts such as security, identity, confidentiality, integrity, availability, threat, vulnerability, risk and hazard.			
"I have had an amazing time joining the cyber security apprenticeship and recommend it to anyone who like myself was not able for full time collage. I have worked in retail for 12 years and joining the apprenticeship I was able to change my whole career outlook. Having the mix of study as a class and working in a company was easier for me as you are able to use any skills you have learnt on the job and gain even more experience. After the two years you will have so much knowledge but you also come out with hands on experience setting you up for a full time job."

James OBrien AMTCE Cyber security apprentice

"The FIT cybersecurity apprenticeship has been a huge turning point in my life. I have thoroughly enjoyed my time in the course and on the job. It has been intensive but rewarding, and the opportunity to land in the calibre of company I've got in such a short time is invaluable. I'd recommend choosing an apprenticeship over college for anyone in a position such as myself who didn't have the resources at the time to go to college. The network I've developed and hands-on work I've completed will help me for the rest of my time in this field. I really can't recommend it enough. I recently joined the PenTest team in work"

Walter Dawed AMTCE Cyber apprentice with Deloitte



Traineeships

- » QQI L6 1 Year Advanced Manufacturing Technician Traineeship: Pneumatics
- » QQI L6 1 Year Advanced Manufacturing Technician Traineeship: Electronics



Traineeships

What is a Traineeship?

Traineeships are short, structured training programmes which combine learning in an education and training setting as well as learning in the workplace in partnership with employers. A Traineeship can provide you with an opportunity to develop cutting edge skills and on-thejob knowledge, enhancing your career options and improving your employability.



AMTCE Traineeships

The AMTCE, in partnership with FIT (Fastrack into Technology), and supported by Intel, are currently running two QQI L6 Advanced Manufacturing technician Traineeships. These traineeship programmes position learners to pursue a challenging and rewarding career as a manufacturing technician. On completion, they will have the skills to work on teams across mechanical electrical, electronic, and robotic disciplines.

These programmes are 48 weeks in duration, delivered over 51 weeks to allow for holidays. The programmes are delivered on a full-time basis, Monday-Friday. Both programmes are delivered under the Traineeship model , as 30% of the training being "on-the-job", satisfied within these programmes as 12 week work placement module. Successful learners can become more competitive in the employment market or can confidently progress on to further and higher education.

Code	Course Name	Delivery Mode	Duration	
	QQI L6 1 Year Advanced Manufacturing Technician Traineeship: Pneumatics	Classroom	52 Weeks	
Overview	Electrical Principles			
	Programmable Logic Controllers			
	Preventative Maintenance			
	Communications			
	Work Experience			
	Industrial Pneumatic Systems			
	Industrial Electrical Systems			
	Maths for Information Technology			
Learner Profile	Over 18 years.			
	Have a competent level of spoken and written English.			
	Must have numerate literacy with the capacity to learn new skills and absorb varied product knowledge.			
	A problem solver with the capacity to work as a member of a team and to communicate clearly with others.			
	Good hand-to-eye coordination, mechanical aptitude and visual acuity is important.			
	Demonstrate a level of personal motivation,			
	Have an interest in Electrical, Electronic and/or Mechanical systems			
	A clear desire to work in the field of equipment maintenance.			

Code	Course Name	Delivery Mode	Duration	
	QQI L6 1 Year Advanced Manufacturing Technician Traineeship: Electronics	Classroom	52 Weeks	
Overview	Electrical Principles			
	Programmable Logic Controllers			
	Mechanical Maintenance Skills			
	Communications			
	Work Experience			
	Electronics			
	Industrial Electrical Systems			
	Maths for Information Technology			
Learner Profile	Over 18 years.			
	Have a competent level of spoken and written English.			
	Must have numerate literacy with the capacity to learn new skills and absorb varied product knowledge.			
	A problem solver with the capacity to work as a member of a team and to communicate clearly with others.			
	Good hand-to-eye coordination, mechanical aptitude and visual acuity is important.			
	Demonstrate a level of personal motivation,			
	Have an interest in Electrical, Electronic and/or Mechanical systems			
	A clear desire to work in the field of equipment maintenance.			

AMTCE Location

53°58'34.3"N 6°23'54.9"W





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Manufacturing Training Centre of Excellence