

TIME LIMITED OFFER

GUIDE TO

# WEIOT CERTIFICATE OF FUTURE TECHNOLOGIES

This brochure is up to date as of 20.10.21

Some dates and courses may be subject to change.

Please visit [www.weiot.ac.uk/course-bookings/](http://www.weiot.ac.uk/course-bookings/) to view the current offer.

Further and Higher Education have come together to **lead a step-change** in the development and delivery of higher-level STEM education.



gloucestershire college

**UWE  
Bristol** | University  
of the  
West of  
England



LEAD  
PARTNER



To deliver the **technical knowledge** combined with the **practical workplace skills** that employers are demanding, unlocking the potential for workforces of today and of the future.

The West of England Institute of Technology (WEIoT) is industry, education and research collaborating to design and deliver flexible, higher-level technical learning to equip people with the skills to fully participate in, and contribute to, economic growth driven by digital innovation and emerging technologies.

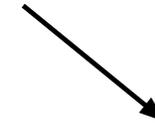
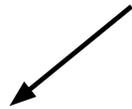
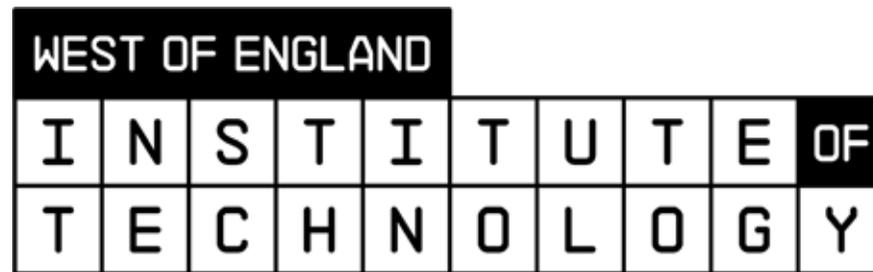
### Anchor Employer Partners



Designed and Led by Employers to Deliver Industry Skills.

## What is the WEIoT - what does it mean for my business?

The world of work is changing fast, driven by new and disruptive technologies. As job roles change and new ones are created, businesses in many sectors increasingly need individuals with higher technical skills to improve their productivity and growth. Over the coming years, these skills will become more important if British business is to seize on the opportunities of technological change.



Institutes of Technology (IoT) are the Government's flagship programme designed to spearhead the delivery of higher technical education in STEM

subjects. Here in the West of England we have brought together employers with FE colleges and the University of the West of England.



We are designed to help you with the skills you need for your workforce. The WEIoT is part of the Government's ambition of levelling up

skills across the country; we offer an accessible route into high wage and high skilled employment.



WEIoT supports our local economies with a skilled workforce that can drive productivity, take advantage of key growth opportunities.

## What is the Certificate of Future Technologies?

### Putting skills at the heart of business and organisational development

Responding to the requests from local businesses for smaller, bite sized learning that can be used to upskill and reskill staff the West of England Institute of Technology has developed the Certificate of Future Technologies.

Designed in 18 modules, participants commit to a minimum of 50 hours of learning, to be completed by 31 March 2022, to address their upskilling needs, or those of their businesses.

These flexible, short, focussed modules of learning have been identified by our Partners as key topics that SMEs and other employers have identified as key skills needs in their businesses.

### Our Partners in the design of the programme:



## Your five simple steps to gaining your certificate

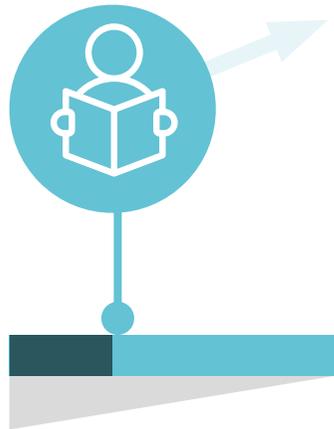
### 1 REVIEW

the brochure or website  
and see which courses  
work for you



### 2 REGISTER

your interest



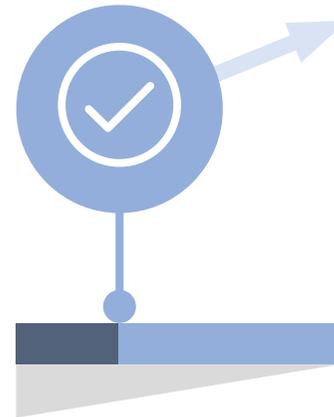
### 3 BOOK

your modules to  
complete your  
50hrs of learning



### 4 ATTEND

your course/s and  
complete your learning



### 5 RECEIVE

your Certificate of  
Future Technologies



## What are the benefits?

### For Businesses

Technology is moving fast – so fast that your next big development for the future might not even exist yet.

Now is the perfect time to regroup, refresh and build stronger higher skilled businesses.

As businesses continue to adjust to ongoing challenges of this new world, 40% of respondents in a recent Open University study expect to rely on their digital capabilities much more.

Upskilling and reskilling your staff to adapt could help you fill future skills gaps and give employees some additional skills that would help move your business forward for the future.

See how the Certificate of Future Technologies can help on Page 6.

### For Staff

Upskilling and reskilling to adapt to new technologies and ways of working are always on the 'to do' list but some courses are too long and require too much time away from the business.

We have designed a series of modules to help you understand the key concepts and knowledge around topics that are relevant to today's business marketplace.

Designed by market leaders we have a series of short modules that can be pick and mixed to help update your personal development and solve your employer's future skills gaps.

See more on the modules on offer with the Certificate of Future Technologies on Page 6.

## How it Works

We are offering a solution to businesses where training and development in key areas of business are delivered as bite size modules that can be added together to meet your short term training needs.

There are 18 modules designed to support businesses and individuals with their future skills and technology needs. The course is being funded by the Department for Education as part of a pilot for modular learning, this type of pick and mix delivery.

Details on the delivery method, location and dates are found later in the brochure to help you make your selection.

## Modules for the programme of study

### Certificate - Future of Technologies Modules



## ACCOUNTING PRINCIPLES

Overview	This module is aimed at non-financial middle managers and aims to introduce the learner to the fundamental concepts of business accounting. This module would suit a non-financial Middle Manager.
Outcomes	At the end of this module you will be able to: <ul style="list-style-type: none"> <li>• Understand the basic concepts of management accounting.</li> <li>• Understand published management accounts.</li> <li>• Related specific accounting principles to business situations, including strategic and operational planning.</li> </ul>
Hours	30 hours
How will the module be taught?	Blended (online and physically delivered in a classroom)
Delivery	5 days - 1 day per week face-to-face and rest of the course will be online with support from a tutor.
Delivery dates	10.01.2022 - 17.02.2022
Delivery location	Bath College City Centre Campus

## INTRO TO AZURE

Overview	Intro to Azure is designed for individuals looking to learn and demonstrate foundational-level knowledge of cloud services and how those services are provided with Microsoft Azure. As part of this course, it is expected that individuals will take the AZ900 Certification Exam. This module would suit someone looking to develop a basic understanding of cloud technology and the Microsoft Azure platform.
Outcomes	At the end of this module you will be able to: <ul style="list-style-type: none"> <li>• Understand cloud concepts</li> <li>• Learn core Azure services</li> <li>• Understand security, privacy, compliance, and trust</li> <li>• Explore Azure pricing and support</li> </ul>
Hours	25 hours
How will the module be taught?	Blended (online and physically delivered in a classroom)
Delivery	5 hrs per week for 5 weeks
Delivery	Options: A W/C 15/11/2021 B W/C 17/01/2022 C W/C 28/02/2022
Delivery location	Knightstone Campus, Weston College
Course Leader	Mark Barnett

## COMPOSITE PRODUCT LIFECYCLE

Overview	The module covers the key aspects from what is a composite material and what are they made from. It also goes through a typical component lifecycle from design through manufacturing and to testing. The module would suit someone with an engineering or technical background looking to understand the process of designing and making composites. Also suitable for advanced technicians, engineers and technical managers.
Outcomes	At the end of this module, you should be able to: <ul style="list-style-type: none"> <li>• Define what a composite is</li> <li>• Name the two key parts of a composite</li> <li>• Name three different materials and manufacturing techniques</li> <li>• Name and explain the activities of the eight key steps to a composite lifecycle</li> <li>• Compare the four different types of engineers used in a composite lifecycle.</li> </ul>
Hours	10 hours
How will the module be taught?	Blended learning (online and physically delivered in a classroom)
Delivery	2 hours self-paced online, can be started from point of registration onwards and must be completed before the onsite session 8-hour session at the National Composite Centre including both theory and practical sessions
Delivery dates	Options: A 18/11/21 B 09/12/21 C 20/01/22 D 10/02/22 E 07/03/22
Delivery location	Online self-paced and at the National Composite Centre
Course Leader	Andy Sutton - Engineering Capability Lead for the technical training department at the NCC. 8 years' experience in composites ranging across marine, naval, motorsport (including F1), aerospace and sporting goods.

## CYBER INCIDENT MANAGEMENT FOR DECISION MAKERS

Overview	Our incident management module is to reduce the harm caused to organisations of cyber incidents, and to use our understanding of these incidents to inform our guidance and help deter future attacks. This module would suit business leaders, middle managers or someone wanting to improve their knowledge in this area.
Outcomes	<p>If your organisation has experienced a severe cyber incident, which poses a risk to your ongoing operation or to your customers or supply chain; you will be able to:</p> <ul style="list-style-type: none"> <li>• Describe the technical and guidance required for Cyber Incident response plan</li> <li>• Exercise and evaluate a Cyber incident response plan</li> <li>• Describe a Cyber Incident teams roles and responsibilities.</li> <li>• Evaluate the Impact of a cyber incident - identifying the attacker, their likely motivations, if there are any other victims and if the compromise is likely to spread</li> <li>• Consider any cross-Stakeholder response, helping you to work with relevant stakeholders such Legal firm, Insurance response and Police and regulatory investigation.</li> </ul>
Hours for Module	20 hours
How will the module be taught?	Blended (online and physically delivered in a classroom)
Delivery Sessions Plan	<p>Pre-read resources (2 hrs)            Opening session (1hr) – delivered over Teams            Online pre-recorded lectures (8 hours)            Online exercises (4 hrs)            Face to face live exercise (5 hours)</p> <p>Sessions are flexible and subject to change as this is a government pilot programme.</p>
Delivery dates	<p>Choose from:</p> <p>A 19/10/21            B 16/11/21            C 14/12/21            D 18/01/22            E 15/02/22            F 15/03/22</p>
Delivery location (s)	Bamboo Technology Group, GC Campus, Princess Elizabeth Way, Cheltenham, GL51 7SJ
Course Leader	Lee Hibbert MSc, BEd Cert Ed, 35-years experience in Crisis and Incident management (Public, Private sector, Planning and delivering Crisis and Incident management – International Governments and NGO's, High-risk environments, such as Libya, Iraq, South Sudan Sub Saharan Africa and Middle East).

## DATA ANALYTICS

Overview	The purpose of this module is to provide introduction to data analysis and interpretation, sources of data, methods of data presentation and description, and how to conduct simple hypothesis tests and make inferences. On completion of the module, there should be an ability to draw on statistics appropriately to support arguments and be able to better understand and critique statistical analysis encountered in academic papers in subsequent courses. This module would suit business leaders, middle managers or someone wanting to improve knowledge in data analysis for business decisions. Or someone looking to develop an awareness of fundamental data analysis skills.
Outcomes	At the end of this module you will be able to: <ul style="list-style-type: none"> <li>• Demonstrate an understanding for different levels of measurement and data types.</li> <li>• Demonstrate an understanding and apply underlying probability principles and distribution examples.</li> <li>• Demonstrate and be able to distinguish between descriptive and inferential statistical quantities in the theory and practice of statistics and in data analytics.</li> <li>• Perform calculations and manipulate data via a suitable package using a range of analytical statistical techniques and interpret outcomes for a range of business scenarios.</li> <li>• Define and calculate basic statistics used to describe distributions for given business scenarios.</li> <li>• Present data in a meaningful way, using graphs and tables.</li> <li>• Demonstrate an ability to use data mining applications and provide business</li> </ul>
Hours	35 hours
How will the module be taught?	Blended (online and physically delivered in a classroom)
Delivery Sessions Plan	7 hrs per week for 5 weeks
Delivery dates	Choose from: A W/C 08/11/2021 B W/C 10/01/2022 C W/C 21/02/2022
Delivery location	Weston College, Knightstone Campus
Course Leader	Mark Barnett

## INTRO TO DIGITAL TWIN

Overview	This introductory course will introduce to the concepts and processes of digital twin and the benefits to an organisation. Through the analysis of case studies from across different industries, the sessions will provide space to reflect and discuss the importance of digital twin and the recent and relevant developments in the area while showcasing relevant technologies. This module would suit business leaders and technical leaders interested in learning more around digital twin technology and benefits.
Outcomes	At the end of this course, you will have: <ul style="list-style-type: none"> <li>• An understanding of the role that Digital Twin can play in the whole lifecycle of a project</li> <li>• How digital twin technology could improve your organisation to become more competitive, collaborative, and efficient</li> <li>• An appreciation of key digital manufacturing concepts &amp; technologies and how these have been used to support digital transformation through case studies</li> </ul>
Hours	15 hours
How will the module be taught?	Blended (online and in a classroom)
Delivery Sessions Plan	This 3-day course will be delivered through one day on our Frenchay Campus with access to our state-of-the-art equipment, complimented by the remaining sessions delivered through online workshops and tutorial support.
Delivery dates	Choose from: A November 2021 B February 2022 C March 2022
Delivery location	Frenchay Campus, UWE Bristol

## FUNDAMENTALS OF INDUSTRY 4.0

Overview	This course provides an insight into how new technologies are creating the emergence of Industry 4.0. Participants will gain an understanding into the technologies and challenges of industry 4.0. In addition, the impact of industry 4.0 on business, security, education, and environment will be explained.					
Outcomes	At the end of this course, you will be able to: <ul style="list-style-type: none"> <li>• Identify the requirements to move from the third to the fourth industrial revolution</li> <li>• Understand the technologies of industry 4.0</li> <li>• Understand the requirements to implement industry 4.0 in real work environment</li> <li>• Understand the principles of the smart factory</li> <li>• Understand the basic steps to implement the smart factory</li> </ul>					
Hours	15 hours					
How will the module be taught?	Blended (online and in the classroom)					
Delivery Sessions Plan	This 2-day course will be delivered through one day on our Frenchay Campus with access to our state-of-the-art equipment, complimented by the remaining session delivered through online workshops and tutorial support.					
Delivery dates	<p>Choose from:</p> <table border="0"> <tr> <td> <p>Group 1: December 2021</p> <p>Tuesday 07/12/2021 - Teaching Day</p> <p>Wednesday 08/12/2021 - Demonstration in the Digital Engineering Lab</p> <p>Thursday 09/12/2021 - Self-study with optional online meetings</p> </td> <td> <p>Group 2: January 2022</p> <p>Tuesday 18/01/2022 - Teaching Day</p> <p>Wednesday 19/01/2022 - Demonstration in the Digital Engineering Lab</p> <p>Thursday 20/01/ - Self-study with optional online meetings</p> </td> </tr> <tr> <td> <p>Group 3: February 2022</p> <p>Tuesday 08/02/2022 - Teaching Day</p> <p>Wednesday 09/02/2022 - Demonstration in the Digital Engineering Lab</p> <p>Thursday 10/02/2022 - Self-study with optional online meetings</p> </td> <td></td> </tr> </table>		<p>Group 1: December 2021</p> <p>Tuesday 07/12/2021 - Teaching Day</p> <p>Wednesday 08/12/2021 - Demonstration in the Digital Engineering Lab</p> <p>Thursday 09/12/2021 - Self-study with optional online meetings</p>	<p>Group 2: January 2022</p> <p>Tuesday 18/01/2022 - Teaching Day</p> <p>Wednesday 19/01/2022 - Demonstration in the Digital Engineering Lab</p> <p>Thursday 20/01/ - Self-study with optional online meetings</p>	<p>Group 3: February 2022</p> <p>Tuesday 08/02/2022 - Teaching Day</p> <p>Wednesday 09/02/2022 - Demonstration in the Digital Engineering Lab</p> <p>Thursday 10/02/2022 - Self-study with optional online meetings</p>	
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Delivery location	Frenchay Campus UWE Bristol					
Course Leader	Dr Zayed Yousif Al-Shibaany					

## FUNDAMENTALS OF PROJECT MANAGEMENT

Overview	<p>A two-day programme structured as follows:</p> <p>Day 1: One-day project management overview course that will provide candidates with an understanding of the processes, tools and techniques used in project management.</p> <p>The course will include topics such as:</p> <ul style="list-style-type: none"> <li>• Identifying projects in a world of business-as-usual.</li> <li>• Creating a life cycle structure for a project.</li> <li>• Laying solid foundations for a project (business case and requirements).</li> <li>• Planning a project.</li> <li>• Getting buy-in for a project.</li> <li>• Allocating work effectively to a team.</li> <li>• Monitoring and controlling a project.</li> <li>• Managing unplanned events (risks, issues and changes).</li> </ul>	<p>Day 2:</p> <ul style="list-style-type: none"> <li>• A one-day workshop for candidates to be able to apply project management skills to a simulated project scenario.</li> <li>• It will be facilitated by an experienced project manager who will guide candidates through a series of project- related tasks, enabling candidates to gain experience and help embed the learning.</li> </ul>
Outcomes	<p>At the end of this module candidates will be able to:</p> <ul style="list-style-type: none"> <li>• Describe the key elements of a project lifecycle and how to structure a project</li> <li>• Understand the purpose and contents of a business case</li> <li>• Apply planning techniques to a project scenario</li> </ul>	<ul style="list-style-type: none"> <li>• Understand how to get buy-in to a project</li> <li>• Create a work package</li> <li>• Understand how to monitor and control project progress</li> <li>• Manage risks, issues and changes</li> </ul>
Hours	20 hours: 14 hours classroom and 6 hours pre-course study through Provek provided resources	
How will the module be taught?	A blended delivery model comprising of tutor-led workshop training and simulated workplace application. 6 hours pre-course study must be completed ahead of the course module with guidance and materials provided by Provek. The module is delivered virtually (however later courses may be delivered as face-to-face workshops).	
Delivery Sessions Plan	2 days consecutive tutor-led classroom, as shown in contents of 'Content of Module' section above	
Delivery dates	Options: Nov - 1st-2nd Mon-Tues Virtual                      Jan - 17th-18th Mon-Tues Virtual Nov - 18th-19th Thu-Fri Virtual                      Feb - 1st-2nd Tues-Wed Virtual Dec -2nd-3rd Thu-Fri Virtual                          Feb - 24th-25th Thur-Fri Virtual Jan - 10th-11th Mon-Tues Virtual	
Delivery location	Virtual tutor-led classroom delivery. Later courses may be delivered face-to-face at a West of England location (to be confirmed).	
Course Leader and experience	Mike Warren, Training Delivery Director Experience: Mike is a professionally qualified project manager with over 20 years' experience in the manufacturing, nuclear, offshore and defence sectors. Recently, Mike was also the lead question developer for the chartered professional body Association for Project Management (APM) Project Management Qualification (PMQ) BoK7 exam.	

## HEALTHCARE TECHNOLOGY MANAGEMENT OF DIGITAL DEVICES

Overview	Medical devices are essential to the delivery of safe and effective patient care and need to be proactively managed to ensure risks associated with their acquisition and use are minimised. Increasingly such equipment may be networked, contain software and data that need to be proactively managed as healthcare technology systems. The course aims to introduce the concepts associated with healthcare technology management, with a specific focus on digital devices. A systems engineering approach will be introduced to provide a framework to support developers and users of healthcare technologies to gain a practical approach to introducing innovative technology and managing devices in clinical settings.
Outcomes	At the end of this module you will be able to: <ul style="list-style-type: none"> <li>• Describe key regulations and standards that underpin medical device safety in the NHS</li> <li>• Understand healthcare technology management processes and outline the key elements in the equipment management life cycle</li> <li>• Identify key digital technology risks, e.g. data protection, data management and cyber security</li> <li>• Apply risk management techniques to support safe and effective digital healthcare technology utilisation</li> <li>• Apply the learning to case studies involving digital medical devices in your organisation</li> <li>• Develop digital technology support plans</li> <li>• Gain an insight into roles and responsibilities within organisations</li> <li>• Appreciate governance issues associated with the selection, application and use of medical apps, software as a medical device</li> </ul>
Hours	7 x 3 hour sessions, totalling 21 hours contact time with course facilitators, plus self study - 35 hours in total
How will the module be taught?	Blended (online and in a classroom)
Delivery	2 half day face to face cohort meeting, one at the beginning and one at the end of the course, interspersed with 5 weekly 3 hour virtual classroom/breakout sessions.
Delivery dates	All sessions will be held on consecutive weeks on a Thursday afternoon, (13:00-16:00), with commencement dates: A 28th October 2021 B 16th December 2021 (recommences 6/1/22) C 17th February 2022
Delivery location	Bristol
Course Leader	Professor Richard Scott - Director of Medical Physics and Bio Engineering, University Hospital Bristol and Weston NHS Foundation Trust

## FUNDAMENTALS OF HTML5 AND CSS3

Overview	Current techniques employing HTML5, CSS3, along with frameworks such as Bootstrap and React. This module would suit people creating or maintaining websites for themselves or for others. It will also help business owners to get more control and insight into their website. It is designed for complete beginners of web design or those looking to build on existing experience.
Outcomes	<p>At the end of this module you will be able to:</p> <ul style="list-style-type: none"> <li>• Create any website layout you can imagine</li> <li>• Support any device size with Responsive (mobile-friendly) Design</li> <li>• Add tasteful animations and effects with CSS3</li> <li>• Use common vocabulary from the design</li> </ul> <p>• The complete course is hands-on based. A practical web design project at the end of the course will ensure that you go through website creation process by planning, creating structure, coding, using different web design software, buying you website a domain name, hosting and uploading website to a live server industry</p>
Hours for Module	20 hours
How will the module be taught?	Blended (online and in the classroom)
Delivery	2 hrs per week for 10 weeks or 4hrs per week for 5 weeks
Delivery dates	Choose from: A October 2021 B December 2021 C January 2021
Delivery location (s)	Cheltenham Campus Princess Elizabeth Way, Cheltenham, GL51 7SJ

## INTRODUCTION TO AGILE

Overview	This course is designed to help attendees understand and apply an agile framework for project management – Scrum. Attendees will gain an appreciation of the Scrum framework and how to apply it using a mix of both theory and practical exercises. This course is aimed at all members of a delivery team, and will introduce the roles and responsibilities within a Scrum team including product owner, Scrum Master, stakeholders and developers. This module would suit business leaders, middle managers, anyone new to working in an Agile environment and Software developers/technical teams.
Outcomes	At the end of this module you will be able to: <ul style="list-style-type: none"> <li>• Understand what Agile/Scrum is and why it is used for software project delivery</li> <li>• Understand the different roles and responsibilities within the Scrum framework</li> <li>• Begin to implement an Agile working methodology into your company</li> </ul>
Hours	10 hours
How will the module be taught?	Face to Face (Can be delivered online depending on demand)
Delivery	1 day delivered face to face
Delivery dates	Options include: A 11/11/21 B 14/12/21 C 27/01/22 D 10/03/22
Delivery location	iO Academy, 1 Widcombe Crescent, Bath BA2 6AH. Potential to deliver on site at company office if required
Course Leader	Mike Oram - Software developer for over 10 years, software development trainer for over 6 years. TechSparks mentor of the year 2018.

## INTRODUCTION TO PYTHON

Overview	This course is designed to get people started with Python. Ideal for both programming beginners and programmers looking to learn a new skill, we will explore the fundamentals of Python, how to use it and why it is the most popularly used language for data science. In this 3 day course we will learn the theory behind Python along with best practices, and through hands-on exercises we will learn to build data analysis applications. This module would suit software developers not working in Python, QA testers, Dev-ops and Data Analysts.
Outcomes	At the end of this module you will be able to: <ul style="list-style-type: none"> <li>• Understand the fundamentals of Python</li> <li>• Build basic Python applications</li> <li>• Begin working in enterprise Python applications</li> <li>• Write industry best practice Python</li> </ul>
Hours	25 hours
How will the module be taught?	Online
Delivery	3 days of continuous delivery online
Delivery dates	Choose from: A 2/11/21 - 4/11/21 B 7/2/22 - 9/2/22
Delivery location	Online - Zoom
Course Leader	Mike Oram - Software developer for over 10 years, software development trainer for over 6 years. TechSparks mentor of the year 2018.

## INTRODUCTION TO DIGITAL IN COMPOSITES

Overview	This module is to introduce people to what a composite material is and what some of the key pillars of digital technologies are. The module will show how digital techniques can be practically applied to a composite manufacturing environment.
Outcomes	At the end of this module you will be able to: <ul style="list-style-type: none"> <li>• Define what a composite is</li> <li>• Name the 2 key parts of a composite</li> <li>• Name 3 different materials and manufacturing techniques</li> <li>• Explain the different between concurrent engineering, design intelligence and manufacturing intelligence</li> <li>• Name 3 ways in which the above can be applied</li> </ul>
Hours	10 hours
How will the module be taught?	Blended learning (online and in a classroom)
Delivery	2 hours self-paced online, can be done from point of registration onwards, must be done before the on site session 8-hour session at the National Composite Centre including both theory and practical sessions
Delivery dates	Choose from: A 02/12/21 B 27/01/22 C 10/03/22
Delivery location	National Composite Centre
Course Leader	Andy Sutton - Engineering Capability Lead for the technical training department at the NCC. 8 years' experience in composites ranging across marine, naval, motorsport (including F1), aerospace and sporting goods.

## INTRODUCTION TO ROBOTICS

Overview	This practical workshop will allow participants to learn through a hands-on approach to gain an insight into different hardware options and operating systems for industrial robotics. Based in our Bristol Robotics Laboratory, will get an overview of the robotics sector, through using three industrial robotic arms, with experienced technicians on site to answer questions and provide demonstrations.
Outcomes	At the end of this module, you will: <ul style="list-style-type: none"> <li>• Have an understanding of robots and robotics</li> <li>• Have developed simple programs for a number of robots</li> </ul>
Hours	8 hours
How will the module be taught?	Face to Face
Delivery	2 consecutive days delivered at Frenchay Campus
Delivery dates	Choose from; A 18 November 2021 B 10 February 2022 C 16 March 2022
Delivery location (s)	Frenchay Campus, UWE Bristol
Course Leader	Farid Dailami, with over twenty years of experience in robotics, automation and manufacturing.

## SYSTEMS THINKING

Overview	Systems thinking in practice is an exciting and emerging management discipline, providing tools to think strategically and challenge your approach to complex situations. This workshop is particularly relevant to anybody who is looking for new approaches to managing complexity in projects, organisations or businesses.
Outcomes	At the end of this module you will be able to: <ul style="list-style-type: none"> <li>• understand and discuss the properties of systems</li> <li>• classify systems against a range of criteria</li> <li>• understand and discuss the principles of systems thinking</li> <li>• apply a number of techniques to understand systems in a holistic way</li> <li>• a practice-focused qualification that equips you to find out “what to do when you don’t know what to do”.</li> </ul>
Hours	15 hours
How will the module be taught?	Blended (online and in a classroom)
Delivery	3 hrs per week for 5 weeks
Delivery dates	A W/C 15/11/2021 B W/C 17/01/2022 C W/C 21/02/2022
Delivery location (s)	Weston College, Knightstone Campus
Course Leader	Mark Barnett

## WORKING WITH DEVELOPERS

Overview	This workshop will demystify some of the technical terms used by developers, shedding light on what coding is, basic programming concepts, and how different developer tools and techniques work. There will be practical exercises and plenty of opportunities throughout the day for delegates to ask questions about the things development teams talk about and work on. Our goal is to ensure that your staff come back to the office with an enriched understanding that will improve communication and increase productivity across your company.
Outcomes	At the end of this module you will be able to: <ul style="list-style-type: none"> <li>• Understand what developers do</li> <li>• Have a basic understanding of the technologies your company uses and what they do</li> <li>• Use effective communication methods when working with technical staff</li> <li>• Improve internal processes to improve collaboration between technical and nontechnical roles within your company</li> </ul>
Hours	10 hours
How will the module be taught?	Face to Face (Can be delivered online depending on demand)
Delivery	1 day delivered face to face
Delivery dates	Choose from: A 19/10/21 B 16/11/21 C 9/12/21 D 18/01/22 E 17/02/22 F 02/03/22 G 22/03/22
Delivery location	iO Academy, 1 Widcombe Crescent, Bath BA2 6AH. Potential to deliver on site at company office if required
Course Leader	Mike Oram - Software developer for over 10 years, software development trainer for over 6 years. TechSparks mentor of the year 2018.

## EFFECTIVE USE OF RESOURCES (KAIZEN)

Overview	The programme will include many recognised and highly productive problem-solving solutions, including team working and Lean methods with a toolbox approach – providing vital knowledge to enable you to select the appropriate method to suit you and your employer, providing flexibility and adaptability across the various tasks you undertake throughout your working day.
Outcomes	The programme will cover, Route Cause Analysis and Continuous Improvements Methods. We will set projects to benefit you and your company over the programme and bring forth ideas which will benefit all. The programme will also provide you with the skills of reporting and methods of how to clearly explain the process and practices required to fulfil the required goal(s) with clarity and focus.
Hours	35 hours
How will the module be taught?	Online - MS Teams
Delivery	6 weeks blended
Delivery dates	Choose from: A W/C 04/11/2021 B W/C 13/01/2021
Delivery location	Delivered online via MS Teams.
Course Leader	Delivered by Richie Scammells, Assessor with 25+ years industry experience and knowledge. There will also be guest speakers from industry providing key Q&A sessions and insight into their business experiences.

## SUSTAINABILITY AND SOCIAL VALUE

Overview	This course is designed to help organisations develop the capability and knowledge needed to create a vision and build sustainability and social value into their strategy.
Outcomes	The workshop will consider such areas as: <ul style="list-style-type: none"> <li>• Sustainable leadership</li> <li>• Creating sustainable behavioural change</li> <li>• Clean governance and reputation</li> <li>• Zero carbon logistics and supply chains</li> <li>• Compliance to competitive advantage</li> </ul>
Hours	15 hours
How will the module be taught?	Face to Face
Delivery	2 days delivered face to face
Delivery dates	2 cohorts: November 2021 - TBC February 2022 - TBC
Delivery location	UWE Bristol, Frenchay Campus
Course Leader	Delivered by Bristol Business School staff with research and industry engagement expertise in leadership development.

## The (not so) small print

### Important terms and conditions

The following terms and conditions apply to the certificate and can be amended at any time.

- ✓ The certificate is available to those aged 19 or over, resident in the South West and working for a company based within the West of England IoT region.
- ✓ All participants on making a booking are committing to attending and completing at least 50 hours of learning by 31 March 2022.
- ✓ As this is a pilot, spaces are limited and are restricted to a maximum of 15 from one organisation,
- ✓ Course fees are funded by the Department for Education as part of the pilot, however cancellations made, will be charged at the prevailing rate at the time of booking for any module not attended or completed.
- ✓ All learning and relating assignments, tests, projects must be completed and marked for assessment purposes by 31 March 2022 in line with the grant conditions.

**For any further queries please contact [info@weiot.ac.uk](mailto:info@weiot.ac.uk)**

## Your next steps

*Thank you for reading this brochure.*

### Want to book some course modules?

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To receive your voucher code and book your modules and start your learning with us.



### Can't find what you wanted?

Please let us know, all feedback on what is missing is great evidence as part of the pilot, to help us secure additional funding in future years.



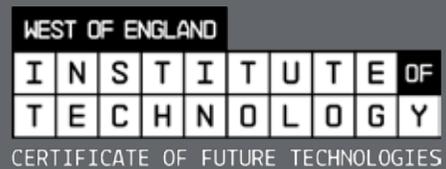
### Not for you?

Please share this electronic brochure with your peers and others, we would like to meet our targets for engagement – with your help.



**Anything else:** Contact us at **[info@weiot.ac.uk](mailto:info@weiot.ac.uk)**





Contact:

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Registered office:

Weston College,  
Knightstone Road,  
Weston-super-Mare, BS23 2AL



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