

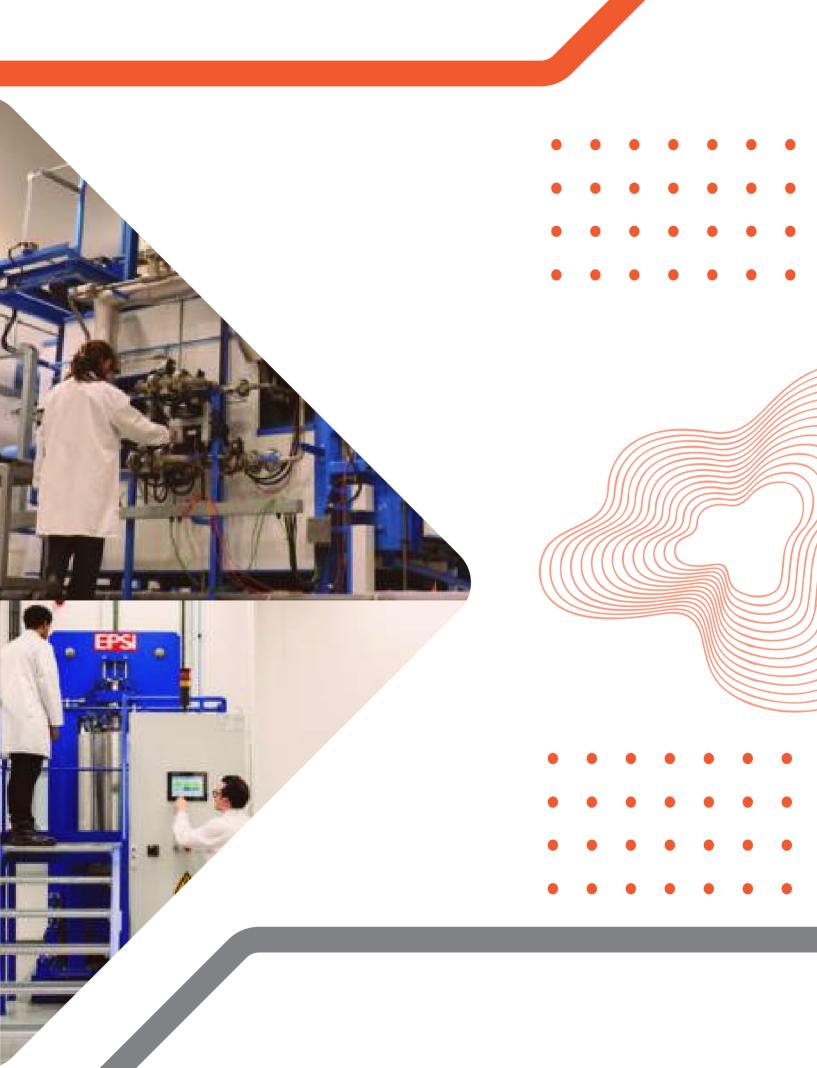


AMRICC Academy Course Catalogue

The hub for all your ceramic industry training needs







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About the AMRICC Academy

Our history

Across the ceramics sector, it has long been established that there is a challenge with skills development and training, leading to companies of all sizes struggling to fill their vacancies and retain their talent. In 2021 the Midlands Advanced Ceramics for Industry 4.0, Strength In Places Funding programme (SIPF Wave 2 82148) was launched which, through the establishment of AMRICC and The AMRICC Centre, aimed in part to address the challenges faced with skills development.

From this, the idea of The AMRICC Academy was born. Utilising the many years of expertise within the sector, The AMRICC Academy has developed courses which aim to directly address the skills needs of the sector and provide easy access to a wide array of courses developed both in house and by valued training partners.



Our expertise

The AMRICC Academy's courses are created in consultation with foremost industry experts, aimed at tackling both emerging industry trends and sector-specific onboarding training to ease recruits into new fields of work. Our team has extensive experience in real-world applications, offering access to valuable insight that guarantees course applicability from theory into practice.

The AMRICC Centre is hosted and managed by Lucideon, who have also contributed to relevant course content as a partner using their years as a materials science consultancy that works in materials development, process optimisation, and characterisation.



Our facilities

Training at The AMRICC Academy makes full use of first-class facilities, from our digital hub at academy.amricc.com to our physical site at The AMRICC Centre in Stone Staffordshire. We prioritise accessibility and safety, providing an environment optimised for learning both online and in-person. Training facilities are available on-site, within touching distance of a world-class Centre of Excellence for Advanced Ceramics that brings the course content to life.

About the AMRICC Academy

Our offering

With courses curated by industry experts and partner organisations, we take the guesswork out of training selection. The AMRICC Academy connects you with learning pathways and training that meet the sector's evolving demands.

We work with you to establish your training needs and learning goals and help enable you to reach these through dedicated learning pathways, customised training suggestions and the ability to adapt our training to suit you.

Whether you prefer in-person training, online interactive training or something completely different, our dedicated team will work with you to ensure you get the training you need in the right format for you.

All training we offer can be delivered in a variety of formats and customised to your needs so if you see something you like but would like this delivered in a different way, let us know and we would be happy to arrange this for you.

Whether you are looking for training for your team or for your own personal development we are here to support you. Individuals can benefit from becoming an AMRICC Academy subscriber to further their personal development outside of their workplace.

Subscribers to the AMRICC Academy get:

- Access to guided learning pathways designed to provide the learner with a series of courses that are aligned to a set learning goal with guidance on what benefits each course will bring to the learning journey
- Free 30-minute signposting support session, worth a value of £200, where you can discuss your personal learning goals and gain advise on what courses will help you achieve these
- Access to learning support guides designed to help you assess what learner level is suitable for your current needs as well
 as explaining what additional benefits you gain as you move through these learner levels to support your overall success
- Benefit from additional resources to help cement your learning such as bitesize videos with educational content and webinars designed to support your understanding of the topics covered in our vast array of courses
- Access to book our expert-led training courses designed by experts with industry experience to ensure their relevance for industry professionals

Check out the courses we have available in this booklet or get in touch to discuss your personal training requirements. We are regularly adding to our training provision so be sure to check out our website to stay up to date with the new content being added.

For more information on our Training Partners and their courses, please visit our website academy.amricc.com











Introduction to Ceramics and Advanced Ceramics

This introductory course will cover the key details of traditional ceramics, forming a foundation to build on to develop your understanding of advanced ceramics, material properties and applications. You will explore the manufacturing route options that form and develop advanced ceramics products, understanding why items are produced using certain processes and materials.

You will explore the varied applications of advanced ceramics from household items to aerospace. Through this course you will also gain an understanding of material properties and how these are used to determine the best material for an application.

Who will benefit: If you are working in ceramics/material science or a different field and you have an interest in learning more about ceramics and advanced ceramics then this course is of benefit to you. There are no pre-requisites to this course meaning even if you are not familiar with ceramics you will still be able to benefit from this course and increase your understanding. Regardless of your background, this course will give you the benefit of upskilling through gaining an increased understanding of a growing market.

Course details: Duration: 3 hours, Delivery Method: Online, Learner Level: Beginner, Price: £350+VAT



Understanding Ceramics

This introductory course will provide an understanding of what ceramics are, their unique features and applications in various industries. You will begin by learning the fundamental properties of ceramics, including their durability, heat resistance and versatility. The course will cover the materials commonly used in ceramic production, such as clay, silica and alumina, and delve into how these materials contribute to the performance and quality of ceramic products. You will explore the ceramic manufacturing process, from raw material processing to forming, to drying and firing. The course will introduce you to the range of applications where ceramics are utilised from traditional tableware to advanced ceramics.

Who will benefit: If you are working in ceramics, material science or a different field and you have an interest in learning more about ceramics, then this course is of benefit to you. There are no pre-requisites to this course meaning even if you are not familiar with ceramics you will still be able to benefit from this course and increase your understanding.

Course details: Duration: 1-2 hours, Delivery Method: Online,

Learner Level: Beginner, Price: £350+VAT



Testing of Ceramic Materials & Products

This beginner level course provides a comprehensive understanding of the testing processes involved in ensuring the quality, durability, and compliance of ceramic materials and products. It explores the critical need for testing in the ceramics industry, highlighting the various stages and types of tests required to ensure consistency, safety, and performance. Through this course, you will cover the essential principles and practices involved in selecting a representative sample for testing to obtain accurate and reliable results. You will gain knowledge of the standard factory quality control tests used to monitor the production process and ensure the consistency of products during manufacturing. Additionally, this course addresses the regulatory tests necessary to ensure that ceramic products meet industry standards and safety regulations. You will learn about performance testing that evaluates how well ceramic materials perform in real-world applications, which is critical for customer satisfaction and compliance with industry requirements.

Who will benefit: If you are working in ceramics, material science or a different field and you have an interest in learning more about the testing of ceramics materials and products, then this course is of benefit to you. There are no pre-requisites to this course meaning even if you are not familiar with ceramics or testing, you will still be able to benefit from this course and increase your understanding.



Course details: Duration: 3 hours, Delivery Method: Online, Learner Level: Beginner, Price: £350+VAT

Slip Casting & Rheology

Understanding the effect of fluid control in ceramics is vital in understanding the interactions between materials, water and chemicals used in the body and glaze preparation processes. By understanding rheology and these relationships, manufacturers and suppliers of ceramic materials and products can change the characteristics of their ceramic bodies and glazes to optimise performance and production yields. This intermediate level course also explains how casting slip and cast properties can be controlled with the use of simple viscometers and slip density measurement to produce high quality and consistent large complex shaped items.

Who will benefit: If you are working in ceramics, material science or a different field and you have an interest in learning more about ceramics, then this course is of benefit to you. To make the most of this course, a basic understanding of clay body and glaze materials and applications is advised before beginning this course.

Course details: Duration: 4 hours, Delivery Method: Online, Learner Level: Intermediate, Price: £350+VAT



Introduction to Ceramic Tableware & Giftware for the Retail Sector

This beginner level course provides a foundational understanding of ceramic tableware and giftware production, focusing on key processes, materials, and products commonly used in the retail sector. The course begins with an overview of the basic processes involved in a typical tableware factory, including an introduction to the essential stages of production from raw materials to finished products. You will explore the different types of ceramic products, such as china, stoneware, and earthenware, understanding how each is produced, their defining features, and how they are used in both tableware and giftware settings. Additionally, this course addresses common manufacturing faults in ceramic products, offering practical solutions for eliminating or minimising these issues. It also covers the regulatory requirements and service performance standards relevant to the industry, alongside the test methods used to ensure compliance and quality.

Who will benefit: This course is a great overview course for retailers or those who are working in ceramics or material science and have an interest in learning more about ceramic tableware and giftware in the retail sector. There are no pre-requisites to this course meaning even if you are not familiar with ceramic tableware and giftware or retail, you will still be able to benefit from this course and increase your understanding



Course details: Duration: 4 hours, Delivery Method: Online, Learner Level: Beginner, Price: £350+VAT.

Spray Drying

Spray drying is a widely used processing technique in many manufacturing sectors, including the ceramics sector, for transforming liquid suspensions into free-flowing powders. The course covers the fundamental principles of spray drying and the key factors to consider when selecting equipment for specific applications. You will learn how to properly prepare a ceramic suspension for spray drying, including the selection of binders and plasticisers, to ensure the production of high-quality granulate. The course also covers the operation of spray dryers, including the steps involved in achieving consistent, uniform granulate for further processing, such as pressing. By the end of the course, you will have a comprehensive understanding of the spray drying process, how to control and characterise the properties of the granulate produced, and the benefits of spray drying compared to alternative granulation methods.

Who will benefit: If you are working in ceramics, material science or a different field and you have an interest in learning more about the spray drying process in ceramics, then this course is of benefit to you. To make the most of this course, a basic understanding of ceramics or materials is advised. However, there are no specific pre-requisites to this course meaning even

Course details: Duration: 3 hours, Delivery Method: Online, Learner Level: Intermediate. Price: £350+VAT

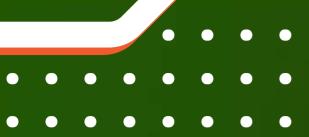


Drying

Course details: Duration: 1-2 hours, Delivery Method: Online. Learner Level: Intermediate. Price: £350+VAT

This intermediate level course details the purpose and significance of the drying process in ceramic manufacturing and the factors that influence the safe and effective drying of ceramic items. You will explore the fundamental principles behind the drying mechanism, including how moisture evaporates from ceramic materials and the physical changes that occur during this critical stage in production. You will learn how to determine the safe rate of drying and the importance of controlling moisture loss to prevent cracking, warping, and other defects. Additionally, you will gain knowledge of how to identify and manage issues, such as shrinkage, moisture distribution, surface effects, drying time and handling. The course will introduce the principles of humidity drying, including how relative humidity, temperature and air circulation affect the drying process. The course also includes specific requirements of drying plaster moulds, discussing the unique considerations and methods needed to dry these moulds effectively without causing damage.

Who will benefit - If you are working in ceramics, material science or a different field and you have an interest in learning more about drying methods in ceramics, then this course is of benefit to you. To make the most of this course, a basic understanding of ceramics or materials is advised. However, there are no specific pre-requisites to this course meaning even if you are not familiar with ceramics, you will still be able to benefit from this course and increase your understanding.



Refractories Courses

Refractories Technology Training

This comprehensive course is designed for professionals working with high-temperature industrial processes who want to deepen their understanding of refractory materials. Covering all critical aspects, from material selection and performance to installation quality and failure analysis, the course equips with the knowledge to make informed decisions and improve refractory system reliability.

The course provides in-depth coverage of:

- · Refractory material properties, chemistry, and global market trends
- · Manufacturing processes for shaped and unshaped products
- · Application environments and performance challenges
- Refractory testing methods and their purpose
- Design principles, including thermal and structural considerations
- Inspection techniques and root cause analysis for refractory failures
- Best practices for installation, quality control, and start-up procedures

Through theory and real-world case studies, participants will develop the skills needed to select the right materials, troubleshoot problems and ensure high-performance refractory systems across various industries. Whether you're

planning a refractory installation, troubleshooting system issues, or aiming to optimise performance, this course provides practical tools and industry insights to help ensure efficiency, longevity and safety in your processes.

The content is split across two days:



Day 1

Section 1 - Refractory fundamentals

- Introduction to refractories

Section 2 - Refractory production

Overview of refractory raw materials

Section 3 - Refractory installation:

- Overview of refractory installation methods
- Overview of drying and firing

Section 4 - Lucideon site tour

Day 2

Section 5 - Refractory failure modes:

- Overview of chemical corrosion
- Overview of mechanical failure
- Investigating onsite failures

Section 6 – Refractories test procedures:

Connecting properties to performance

Section 7 - Refractories test procedure:

- Designing a vessel
- Refractories for various industries

Section 8 - Refractory testing lab demonstrations

Who will benefit: This course is ideal for engineers, material scientists, plant operators, maintenance personnel and technical professionals involved in the selection, design, testing, installation and performance of refractory materials. Whether you work in ceramics, material science, industrial engineering, operations or maintenance, you'll gain essential knowledge and practical tools to optimise refractory performance, prevent failures and enhance the quality and efficiency of high-temperature industrial processes.

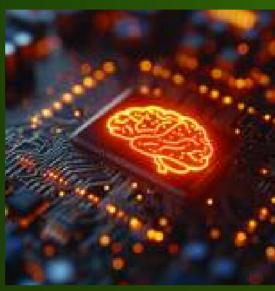
Course details: Duration: 2 days, Delivery Method: In-person, Learner Level: Intermediate, Location: Stone, Staffordshire UK, Price: £1000+VAT



Please contact academy@amricc.com for available dates for our in-person courses

Data Science and Modelling Courses







Introduction to Data Science and Machine Learning for Industry 4.0

This beginner level course will introduce you to the principles of Artificial Intelligence (AI), Machine Learning, Deep Learning and Data Science, providing an overview of how they are used in the ceramics industry and materials science. You will learn about the different types of data and how they can be stored, processed and analysed. Through this course you will also gain an understanding of what makes good quality data and why it is important to balance quality and quantity within your data sets. This course will also introduce you to data modelling, providing an overview of the different types of model, the key steps in model development and why model training is important.

Who will benefit: If you are working in ceramics or materials science and have an interest in learning more about Data Science and Machine Learning and their uses in these fields then this course is of benefit to you. There are no pre-requisites to this course meaning whether or n ot you have heard of Data Science and Machine Learning you will still be able to benefit from this course and increase your understanding of this and how it applies to the field of ceramics. Regardless of your background, this course with give you the benefit of upskilling through gaining an increased understanding of emerging technologies.

Course details : Duration: 1-2 hours, Delivery Method: Online, Learner Level: Beginner, Price: £350+VAT









Values That Bond: Defining Your Leadership Core

In this half day interactive course, you will assess your own values and be introduced to the core values in leadership, increasing your awareness and understanding of how these values can be effectively demonstrated through your actions and behaviours. You will also gain an understanding of how to align people you lead to the values of your organisation and how your leadership style can have commercial benefit when you are embracing the key values of leadership.

Prior to this course, you will be sent some worksheets to complete and return to ascertain your current understanding of leadership values so we can ensure you get the most rewarding experience from this course.

Who will benefit: There are no pre-requisites to this course meaning that anyone with an interest in leadership will benefit from attending, you do not need to already be leading a team or in a leadership position. Whether you have some knowledge of leadership values, or this is your first experience with these, this course will enable you to develop your understanding of these and how to live the leadership values.

Course details: Duration: 1/2-day, Delivery Method: In-person, Learner Level: Beginner, Location: Stone, Staffordshire UK, Price: £350+VAT



Adaptive Leadership: Styles and Their Impact

This full day course will be split into 2 sections where you will first learn about the different leadership styles and the art of delegation. In the second half of the day, you will then apply this learning to different scenarios to enhance your ability to adapt your leadership skills. Throughout this course, you will learn how effective communication is a key skill to become an inspirational leader. You will gain knowledge of different leadership styles and how to develop these and adapt to differing circumstances which occur over the life cycle of an employee. You will examine some of the most powerful leadership moments in organisations and science and identify the underpinning leadership theory and models. The course will bring you up to date with the latest in leadership theory and models and help you select the right ones for application in the context of your leadership.

Prior to this course, you will be provided with a video and questionnaire to complete which will aid in the active participation required for this course. We ask that you bring a copy of your own company values and leadership structure (with job roles rather than names) to the session.

Who will benefit: There are no pre-requisites to this course meaning that anyone with an interest in leadership will benefit from attending, you do not need to already be leading a team or in a leadership position.

Course details: Duration: 1-day, Delivery Method: In-person, Learner Level: Beginner, Location: Stone, Staffordshire UK, Price: £350+VAT





Course details: Duration: 1-day, Delivery Method: In-person, Learner Level: Intermediate, Location: Stone, Staffordshire UK, Price: £350+VAT

Strength in Structure: Managing High Performing Teams

Throughout this course, we will be developing your analysis and diagnostic skills through practical application of tools you can take away into your team environments. Strengths based leadership is a core feature of these tools. Through peer learning you will explore the challenges of managing high performing teams and brainstorm how to overcome these, supplemented with tools you can take away and apply in your own leadership context.

Who will benefit: This course is aimed at leaders with direct line reports or with a responsibility for leading collaborative teams e.g. projects. This full day course will provide you with an understanding of how a team operates, how to assess their performance and drive high performance.

Solid Foundations For Hiring Talent: Next Generation Scientists

This 2-day course will take you through key considerations for recruitment in the science market. Over the course we will evaluate recruitment processes, including balancing vacancy need with commercial priorities, candidate experiences, interviewing skills and onboarding processes.

Prior to attending these courses, you will be asked to read and analyse short relevant recruitment documents. Further information will be sent to you prior to the start of the course.

Who will benefit: There are no pre-requisites to this course meaning that anyone with an interest in leadership or recruitment will benefit from attending, you do not need to already be leading a team or in a leadership position. Whether you have some experience in recruitment, or this is your first experience, this course is designed for professionals looking to enhance their recruitment strategies in the science industry.

Course details: Duration: 2-days, Delivery Method: In-person, Learner Level: Beginner, Location: Stone, Staffordshire UK, Price: £350+VAT



Course details: Duration: 1-day, Delivery Method: In-person, Learner Level: Beginner, Location: Stone, Staffordshire UK,

Price: £350+VAT

Catalyst Coaching: Inspiring Growth and Innovation

This full day course will provide you with an overview of different coaching models and an understanding of when and how to use coaching to maximise impact. You will learn how to integrate coaching with commercial awareness and how this can aid in performance management.

Prior to completing this course, you will be provided with some reading material and videos to provide a baseline understanding of coaching principle. The key content of this material will be built on throughout the course with hands-on activities and sessions enhanced with group discussion.

Who will benefit: There are no pre-requisites to this course meaning that anyone with an interest in leadership will benefit from attending, you do not need to already be leading a team or in a leadership position. Whether you have some experience with coaching, or this is your first experience, this course will enable you to develop your ability to support others learn, grow and perform.

Collaborative Fusion: Leading Strong Research Teams

This full day course will provide you with an overview of what collaboration is and the benefits of these approaches. Throughout this course, you will be actively engaging with materials to gain the skills needed to collaborate effectively including using different analysis techniques to assess the progress of your collaborative project and how to delegate tasks efficiently.

Prior to this course, you will be provided with an example scenario of a SWOT analysis of a team so that you can familiarise yourself with this approach prior to the session. In the session, we will be providing you with further examples of collaboration groups and projects for you to put your learning into practice. You will also be encouraged to think about collaboration groups you may already be a part of and how you can make these more effective using the skills and knowledge obtained from this course.

Who will benefit: This course is aimed at leaders with direct line reports or with a responsibility for leading collaborative teams in science, e.g. projects. This course will enable you to develop your understanding of how to collaborate effectively to gain the best outcomes.

Course details: Duration: 1-day, Delivery Method: In-person, Learner Level: Beginner, Location: Stone, Staffordshire UK, Price: £350+VAT





Polished Presentations: Communicating For Influence

This two-day course will equip you with the understanding and skills to develop relevant and engaging presentations in a style to suit the audience. You will explore how to deliver presentations for live and virtual audiences, and how you adapt these to meet audiences' needs and to encourage audience participation.

Who will benefit: There are no pre-requisites to this course meaning that anyone with an interest in developing effective presentation and communication skills will benefit from attending, you do not need to already be leading a team or in a leadership position. This course offers practical skills for any professional looking to enhance their presentation techniques, whether you're speaking in front of a room or presenting virtually.

Course details: Duration: 2-days, Delivery Method: In-person, Learner Level: Beginner, Location: Stone, Staffordshire UK, Price: £350+VAT

Optimised Meetings for Projects, Innovation and Problem Solving

This half-day course will take you through the principles of holding effective meetings while giving you the skills to plan and structure your meetings to maximise engagement. You will also gain the insight needed to interpret the behaviours of those within the meeting to assess the effectiveness and the level of engagement.

Prior to attending this course, you will be provided with a questionnaire to complete which will explore your knowledge and opinions on meeting effectiveness. During the course, you will evaluate a meeting you have recently attended to enhance the skills you have obtained through practical application.

Who will benefit: There are no pre-requisites to this course meaning that anyone with an interest in leadership or holding effective meetings will benefit from attending, you do not need to already be leading a team or in a leadership position. Whether you have some experience with running effective meetings, or this is your first experience, this course will enable you to develop your understanding of how to structure your meetings to ensure they are effective while also being inclusive.

Course details: Duration: 1/2-day, Delivery Method: In-person, Learner Level: Beginner, Location: Stone, Staffordshire UK, Price: £350+VAT





Course details: Duration: 1/2-day, Delivery Method: In-person, Learner Level: Beginner, Location: Stone, Staffordshire UK.

Price: £350+VAT

Energy Optimisation: Managing Time and Focus Effectively

This half-day course will take you through the principles of making efficient use of time and energy management. You will gain the skills to manage priorities and encourage collaboration to help achieve time critical goals.

Prior to attending this course, you will be asked to write a 'to do' list for your workload for the following 4 weeks. This will be used to apply your learning from the course to a relevant and personal application.

Following the course, you will be encouraged to try out the 'tools' shared on the workshop and give feedback via a post workshop evaluation.

Who will benefit: There are no pre-requisites to this course meaning that anyone with an interest in leadership or holding effective meetings will benefit from attending, you do not need to already be leading a team or in a leadership position. This course equips you with advanced time management strategies to manage your responsibilities, optimise energy and achieve your goals with greater efficiency.

Optimising Talent: Enhancing Individual Performance

In this one day course, we'll explore the common perception gaps that can arise when evaluating the performance of those we manage, particularly in scientific environments. While technical expertise is vital, excelling in science doesn't always equate to optimal performance or alignment with the organisation's broader goals. This misalignment can be addressed through open, constructive conversations that diagnose underlying issues and find productive solutions.

A key focus of this session is to strengthen the working relationship between leaders and their teams, especially when leaders transition into new roles or inherit teams they did not personally recruit. Managing individual performance can often be a challenging aspect of leadership, but this workshop will provide the tools and confidence needed for leaders in this sector to navigate these challenges effectively and optimise the talent within their teams.

Prior to this course, you will be provided with a scenario-based task which the course will then build upon. This will include discussing different ways to develop skills, assessing and addressing barriers and creating clear action plans.

Who will benefit: This course will build upon the principles and learning obtained from the Strength in Structure: Managing High Performing Teams course, therefore we recommend that you first complete that course.

This is aimed at those with direct line management responsibilities or those with responsibility for individual performance e.g. project work. This full day course will provide you with an overview of the employee journey through performance management and the legal requirements associated with this. You will learn how to recognise barriers to performance and how to overcome these through effective communication, goal setting and planning for performance



Course details: Duration: 1-day, Delivery Method: In-person, Learner Level: Intermediate, Location: Stone, Staffordshire UK. Price: £350+VAT

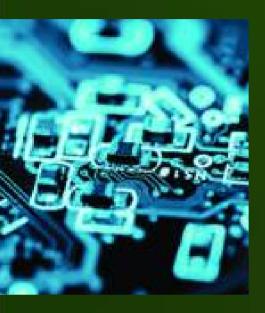


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Coming soon...







We are regularly adding to our repertoire of courses while also updating our current offering to ensure we offer the best quality training possible. Here is a sneak peak of some of the upcoming course titles and topics:

Ceramics Courses

- Advanced Ceramics for Nuclear Applications
- Kiln Firing
- Tableware Manufacture
- Pressure Casting
- Forming
- Materials Selection
- Introduction to Sanitaryware
- Intro to Grinding & Milling
- Plaster Moulds
- Glaze & glaze applications
- Decoration & decoration processes for ceramics

Data Science and Modelling Courses

 Introduction to Computational Modelling for Industry 4.0

Professional Skills Courses

- Commerciality and Financial Thinking
- Challenging Others and Receiving Challenge
- Big Picture Management

To stay up to date with our upcoming training offers, events and webinars register your interest here

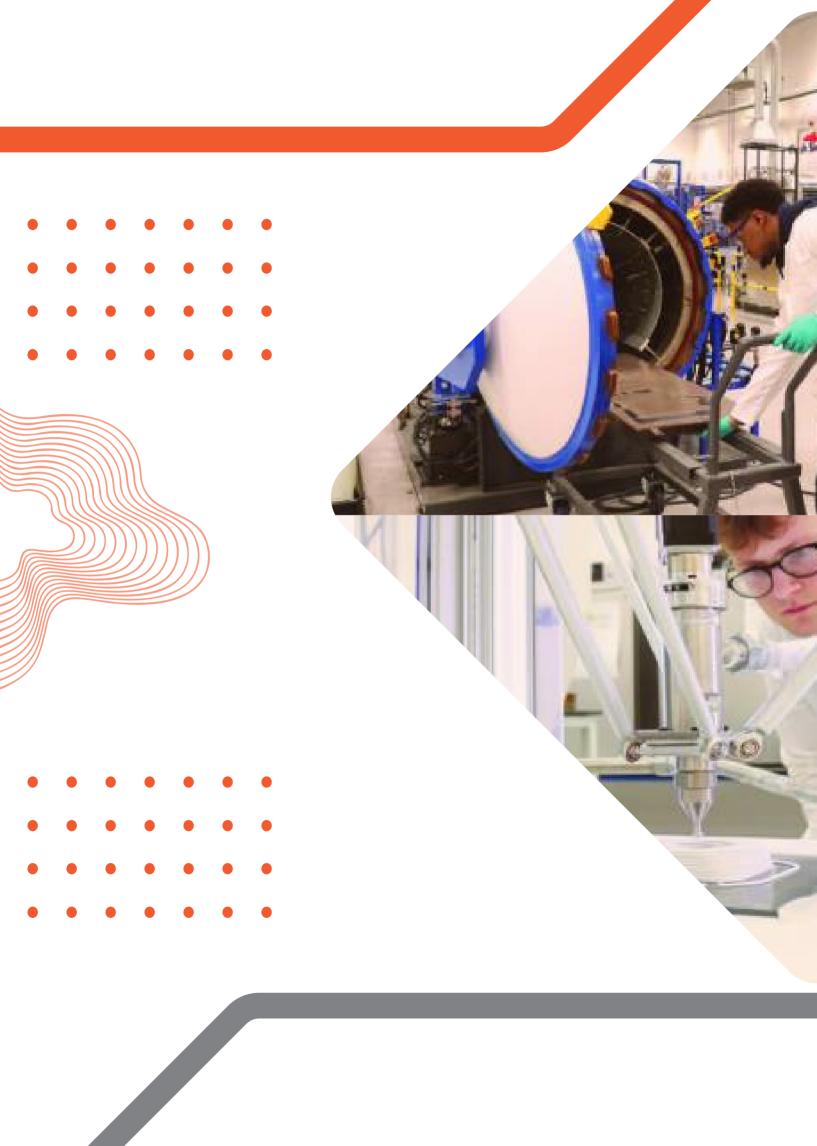




Need something specific?

The AMRICC Academy can create customised courses to meet your needs!
Contact us to discuss your requirements







academy@amricc.com

