Building a technicians’ network

Our tips on setting up a successful network
Welcome to the second edition of the HEaTED magazine.

Autumn is a time when young people across the country are starting new lives and making new connections. As they head out to begin university, college or apprenticeships for the first time, they are also becoming part of a new community. This academic or professional network will nurture and inspire them, and help them to grow and learn. Many of our members are welcoming students or apprentices into their organisations - and it is inspiring to see them take this great leap.

Reaching out and building connections is not just for students and apprentices – here at HEaTED we have also seen our community grow. New institutions have become HEaTED members, bringing support and training to their staff. Our free networking events, which take place across the country, are welcoming new technicians all the time – why not make it your mission to come along to one this year? These inspiring events have started technicians on journeys towards professional registration and other qualifications, as well as giving them the opportunity to meet colleagues across their region or specialism.

So this academic year, why not reach out into your community, whether it’s within your institution, your local network of technicians or with HEaTED, and make a new connection? You never know where it might take you.

DR KATHERINE FORSEY AND SUE CHURM, MEMBERSHIP AND NETWORKS MANAGERS, HEATED
**Professional registration: what is it, and how can it benefit you?**

*by Sue Churm, Membership and Networks Manager, HEaTED*

So, what is professional registration? Professional registration can be an important milestone for technicians. It’s an accreditation, based on your knowledge, competence and commitment to professionalism.

*Why should you do it?*

Professional registration can provide recognition of your skills and knowledge, and could unlock new opportunities – as well as providing a huge confidence boost in your own abilities.

*Who awards professional registration?*

Licensed bodies, who represent the Science Council or Engineering Council, award registration. You can use existing skills and knowledge you’ve acquired on the job throughout your career as evidence towards your accreditation. You can also use existing qualifications as evidence.

*What register should you go for?*

Where do your skills and experience lie? Are you from a science, IT or engineering background? Do you have a degree, or lots of practical experience? There are a range of registers to choose from, including:

- RSciTech – Registered Science Technician
- RSci – Registered Scientist
- CSci – Chartered Scientist
- EngTech – Engineering Technician
- IEng – Incorporated Engineer
- ICTTech – ICT Technician

*What’s the next step?*

A good place to start is at one of our free networking events – come and chat to other technicians about their experiences of professional registration and hear from representatives of the awarding bodies. We’ve also got lots of useful information and links on our website to get you started on your journey towards professional registration.

Find out more about professional registration and how it could benefit you: [www.stem.org.uk/mh/professional-registration](http://www.stem.org.uk/mh/professional-registration)

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**Technicians make it happen**

@technicians_mih

The demand for technicians is growing across the UK economy. If a product has been manufactured, if an app has been coded, or if a research process has been optimised, you can guarantee a team of technicians will have helped to make it happen.

However, despite the importance of technicians, their role is often overlooked or poorly understood. Technicians make it happen aims to raise awareness of the role technicians play and encourage and inspire young people with a talent for STEM subjects. To address this, the Gatsby Charitable Foundation launched Technicians make it happen in April 2016. The campaign aims to raise awareness and perceptions of the role technicians play in driving the UK economy, and encourage and inspire young people with a talent for STEM subjects, their teachers and parents, to consider the benefits of a career as a technician.

The campaign can’t succeed in its aims without the backing and support of employers. Higher education institutions have a vital role to play in highlighting the importance of their technicians. So here’s our challenge to you: engage with Technicians make it happen on social media; share your technicians’ stories online; partner with us at upcoming events.

The UK desperately needs more highly skilled technicians now – help us to make it happen.

“Despite the importance of technicians, their role is often overlooked or poorly understood. Technicians make it happen aims to raise awareness of the role technicians play and encourage and inspire young people with a talent for STEM subjects.”

Find out more about the Technicians make it happen campaign: [www.technicians.org.uk](http://www.technicians.org.uk)
Behind the scenes with...

My name is Andrew Hallam and I’m the Aerospace Technical Project Manager in the Faculty of Engineering at the University of Nottingham. I’ve been in post for one month, after transferring from a similar technical role at Loughborough University’s Design School. Here at Nottingham I’m setting up a facility to deliver new degree programmes in aerospace engineering.

What’s the main focus of your work?

The focus of my role is to provide a safe working environment for students to participate in engineering and project work disciplines, giving them an opportunity to learn key practical skills and to express themselves. My team and I deliver technical information and practical demonstrations, steering students in a direction that encourages them to recall past learning and use their problem solving skills to achieve their outcomes.

Lastly, but by no means least, we make the engineering environment a place that students are confident to enter and give them the skills to use the equipment to turn visualised ideas on paper into working prototypes.

Talk us through an average workday...

My current working day consists of the preparation for two new aerospace engineering teaching areas which will include a modelling workshop for the first year students to produce a hand built glider made from laser-cut balsa wood. I’m procuring the equipment, which will be housed in the new laboratories, and managing the associated health and safety requirements.

I’m developing the timetables for the project laboratory spaces and design suite, liaising with academic colleagues to understand their requirements for their own teaching and I’m involved in the recruitment processes for the new technical staff roles required; I’m also designing teaching materials and practical projects for students when they begin the time in the workshops in September.

Is there anything you’d like to change?

The rising numbers of students coming through higher education present challenges when teaching practical skills. I’m keen to ensure that all students coming through our new degree programmes will have an excellent experience and it’s important they see the value in the practical expertise they’ll acquire during their time with us. Technical skills can be seen as ‘inferior’ to theoretical expertise but the two go hand in hand and we’re working hard to bridge the gap. I’d also like to see an increased technical apprenticeships. Here in the Faculty of Engineering at Nottingham we’ve been running a four-year trainee programme for eight years and it’s recently been accredited by the Institution of Mechanical Engineers. In the past, when technicians have retired, valuable skills have gone with them and I’m pleased we’re addressing succession planning here in my new organisation. An additional step is to ensure there are clear career pathways for technical staff in higher education.

Are you professionally registered? If so, how important has this been to your career?

I think it’s fantastic that technical skills are being formally recognised through professional registration. I’m not professionally registered as yet, but this is something the University of Nottingham have been supporting staff with and I’m currently exploring the options available to me. Formal recognition of technical expertise is essential to raising the profile of technicians in higher education. I achieved Associate Fellowship of the Higher Education Academy through a course at Loughborough University to ensure my teaching practice was the best it could be. I think my role and career benefited in so many positive ways through the course as did the students’ experience. My teaching activities led me to be awarded the Higher Education Academy’s Engineering Technician of the Year Award in 2013.

Would you like to enhance your teaching skills, so you can deliver sessions like Andrew? Book your place on our Teaching and learning skills for technical staff CPD: www.stem.org.uk/hc001

INTERVIEW
Building a technicians’ network

by Dr Katherine Forsey and Sue Churm

Have you ever thought how useful it would be to share expertise, skills and knowledge with other technicians? Setting up a technicians’ network provides a wonderful opportunity to work collaboratively and share good practice with a whole community of technicians. It can help raise the profile of your own institution as well as give you a place to discuss current issues and explore solutions.

TAKING THE FIRST STEP

First things first – in order to get leaders in your institution on board you will have to ensure that there is enough support within your technical teams to justify the need for the network. Speak with your colleagues, establish what the key benefits of the network will bring to individuals, teams and the whole organisation. Your head of department and senior leadership team can become champions of your cause if you get them involved.

FINDING THE TIME

A network meeting is often difficult to set up, it can be daunting to speak to your colleagues and line manager to establish how to take this idea forward into reality. Working as a team to establish a network means that there is shared responsibility and a good range of skills and expertise on offer to support you in setting this up.

KEEP IT GOING

Once you’ve created a network and have had your first few meetings it’s important to keep it going. Think about what communications are needed between the meetings and delegate responsibilities to ensure smooth running. It’s a good idea to plan in some CPD – whether this is through sharing best practice between the members of the group or bringing in an external provider to deliver some bespoke CPD.

How to create a network and how to get the most of it.

Join a professional association or network

Membership and Networks Managers, HEaTED

@DrBiol and @HEaTEDsue

HEaTED network events take place across the UK every term. Look online for the next free event coming up in your area!

www.he-show.co.uk

www.sdf.ac.uk/announcements/1158/sdf-conference-future-fit-9th-10th-november-2016

www.stem.org.uk/mh/stem-inspiration

www.christmasjumperday.org

www.york.ac.uk/admin/hr/professional@york

www.healedtechs.com

www.profeet.co.uk

www.healedtechs.com

@HEaTEDtechs

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HEaTED magazine

Our top picks for you to put in the calendar...

OCTOBER 2016

HIGHER EDUCATION SHOW, LONDON OLYMPIA
11 OCTOBER 2016

The UK’s largest free-to-attend higher education business show, bringing together all key stakeholders to discuss issues that matter.

www.he-show.co.uk

NOVEMBER 2016

SDF CONFERENCE, SHEFFIELD UNIVERSITY
9-10 NOVEMBER 2016

This year’s SDF conference will explore the question: Are we as staff/organisation development practitioners and providers fit for the future?

www.sdf.ac.uk/announcements/1158/sdf-conference-future-fit-9th-10th-november-2016

DECEMBER 2016

CHRISTMAS JUMPER DAY
16 DECEMBER 2016

Save the Children’s awareness day is a great opportunity to get your department into the Christmas spirit - and make a difference at the same time.

www.christmasjumperday.org

AND DON’T MISS...

HEaTED network events take place across the UK every term. Look online for the next free event coming up in your area!

www.stem.org.uk/mh/stem-inspiration

Follow us @HEaTEDtechs and let us know what STEM related things you’re up to!
Our support is available across the UK

Our CPD is designed to fit around your needs - for every stage of your career, and every skill set, HEaTED are here for you.

We've got something for you, whether it's through one of our innovative online CPD activities, our range of hand-picked CPD for technicians or our bespoke packages (where we design CPD to fit your department or institution).

So browse our CPD listing - both in this magazine and online - and start your learning journey with HEaTED today.

Find out more by visiting: www.stem.org.uk/heated/cpd

CREATIVE ARTS AND MEDIA

3DS MAX JUMPSTART: ZERO TO HERO
Learn the technical aspects of this useful program, so that you can work confidently on your creative designs.
- Activity fee: £897 ex VAT
- Member fee: £807.30 ex VAT
- Look for dates and venues online
  www.stem.org.uk/hc326

AFTER EFFECTS JUMPSTART: ZERO TO HERO
Go from learning the basics of Adobe After Effects, such as creating basic animations and title sequences, to combining CG elements with real-life footage.
- Activity fee: £897 ex VAT
- Member fee: £807.30 ex VAT
- Look for dates and venues online
  www.stem.org.uk/hc807

CAPTIVATE JUMPSTART: ZERO TO HERO
Become an expert in five days, and learn to develop and build software demonstrations and interactive simulations with Captivate.
- Activity fee: £897 ex VAT
- Member fee: £807.30 ex VAT
- Look for dates and venues online
  www.stem.org.uk/hc327

CINEMA 4D JUMPSTART: ZERO TO HERO
Learn to control and create more complex animations using Cinema 4D’s advanced features, producing time-effective workflows and impressive results.
- Activity fee: £897 ex VAT
- Member fee: £807.30 ex VAT
- Look for dates and venues online
  www.stem.org.uk/hc328

HTML5 JUMPSTART: ZERO TO HERO
New to web design? This CPD is for you - gain a deep understanding of HTML and learn how it can be used to design and create web applications.
- Activity fee: £897 ex VAT
- Member fee: £807.30 ex VAT
- Look for dates and venues online
  www.stem.org.uk/hc537

ILLUSTRATOR (ACA) JUMPSTART: ZERO TO HERO
Take the fast track to understanding and using this design software, and come away ready to use it in your workplace.
- Activity fee: £897 ex VAT
- Member fee: £807.30 ex VAT
- Look for dates and venues online
  www.stem.org.uk/hc062

INDESIGN JUMPSTART: ZERO TO HERO
Imagine being able to create documents of many types, from single page advertisements and flyers, to complex multi-page designs - attend this activity for all this and more.
- Activity fee: £897 ex VAT
- Member fee: £807.30 ex VAT
- Look for dates and venues online
  www.stem.org.uk/hc066

JAVASCRIPT JUMPSTART: ZERO TO HERO
This hands-on CPD provides an intensive introduction to the features provided by JavaScript and Dynamic HTML.
- Activity fee: £897 ex VAT
- Member fee: £807.30 ex VAT
- Look for dates and venues online
  www.stem.org.uk/hc807

MAYA JUMPSTART: ZERO TO HERO
Learn about 3D modeling and rendering using Maya and come away ready to make your own animations.
- Activity fee: £897 ex VAT
- Member fee: £807.30 ex VAT
- Look for dates and venues online
  www.stem.org.uk/hc069

PHOTOGRAPHY IN THE WORKPLACE
Ever needed photos for marketing or wanted to capture events at your place of work but the results just didn’t meet your expectations?
- Activity fee: £52.80 ex VAT
- Member fee: £52.80 ex VAT
- Look for dates and venues online
  www.stem.org.uk/hc477

PHOTOSHOP ACA JUMPSTART: ZERO TO HERO
Explore the concepts and skills to use Adobe Photoshop effectively. You will learn layer basics, photo retouching and image editing.
- Activity fee: £897 ex VAT
- Member fee: £807.30 ex VAT
- Look for dates and venues online
  www.stem.org.uk/hc073

PREMIERE PRO ACA JUMPSTART: ZERO TO HERO
Understand and work with advanced concepts and features of Adobe Premiere Pro. You will run through a typical series of steps for creating, editing and fine-tuning a series of video pieces.
- Activity fee: £897 ex VAT
- Member fee: £807.30 ex VAT
- Look for dates and venues online
  www.stem.org.uk/hc76

“Excellent course, all information was useful and relevant and course tutor was very good.”
HEATED CPD LISTING • FOR OUR FULL SELECTION OF CPD VISIT WWW.STEM.ORG.UK/HEATED/CPD

HEALTH AND SAFETY

INTRODUCTION TO RISK ASSESSMENT
For those unfamiliar with the process of risk assessment this CPD will give you all you need to confidently approach the process.

• Activity fee: £59 ex VAT
• Member fee: £55 ex VAT
www.stem.org.uk/hc357

IOSH MANAGING SAFELY
Introducing the essentials of health and safety to provide an understanding safe working practices.

• Activity fee: £560 ex VAT
• Member fee: £500 ex VAT
• Look for dates and venues online
www.stem.org.uk/hc506

PAT TRAINING COURSE
All at the end of the CPD you will be able to carry out in-service inspection and testing of electrical equipment.

• Activity fee: £175 ex VAT
• Member fee: £157.50 ex VAT
• Look for dates and venues online
www.stem.org.uk/hc473

SERVICING AND MAINTAINING ROUTINE OPTICAL MICROSCOPES
Get an in-depth insight into how to get the best results from your equipment by properly maintaining your microscopes.

• Fees and member discounts on request
• Look for dates and venues online
www.stem.org.uk/hc440

LEADERSHIP

COACHING AND MENTORING SKILLS FOR TECHNICIANS
Develop coaching and mentoring skills to support workplace development and contribute to the CPD cycle within your organisation.

• Activity fee: £250 ex VAT
• Date: 06 Oct 2016 - London
This CPD is also offered as a bespoke activity
www.stem.org.uk/hc008

LEADERSHIP AND MANAGEMENT SKILLS FOR TECHNICAL STAFF
Explore theories of leadership and management alongside workplace experiences in this holistic and tailored learning experience.

• Activity fee: £350 ex VAT
• Member fee: £300 ex VAT
• Look for dates and venues online
www.stem.org.uk/hc002

LOOKING FOR SOMETHING SPECIFIC?
Many of our CPD activities can be brought to your institution, and we can even create packages designed to fit your department’s individual needs, as well as offering significant discounts.

If you have something in mind, why not contact us and see how HEaTED can help you?

Email us today: admin@heated.ac.uk

Bespoke CPD tailored to your needs

Get connected.
Our vibrant network connects technicians across the UK

Come out of one of our inspiring free networking events or join one of online groups and share knowledge, experience and best practice.

Find out more about how to get involved with our networks
www.stem.org.uk/nlnetwork

Book onto your nearest free networking event:
www.stem.org.uk/hc001

PERSONAL DEVELOPMENT

FACILITATION SKILLS FOR TECHNICIANS
Learn effective skills in facilitating learning and use classroom management techniques and effective questioning to create a student-centred learning environment.

• Activity fee: £250 ex VAT
• Member fee: £200 ex VAT
• Look for dates and venues online
This CPD is also offered as a bespoke activity
www.stem.org.uk/hc009

SCOPE PLANNING ESSENTIALS FOR TECHNICAL STAFF
Get a practical insight into project planning, and go from project initiation to building a project schedule.

• Activity fee: £250 ex VAT
• Member fee: £200 ex VAT
• Dates: 17 Oct 2016 - York
This CPD is also offered as a bespoke activity
www.stem.org.uk/hc014

TEACHING AND LEARNING SKILLS FOR TECHNICAL STAFF
Become equipped with the tools you need to teach and demote and contribute effectively to the student experience

• Activity fee: £450 ex VAT
• Member fee: £400 ex VAT
• Date: 17 Oct 2016 - Edinburgh
This CPD is also offered as a bespoke activity
www.stem.org.uk/hc001

PERSONAL DEVELOPMENT

FACILITATION SKILLS FOR TECHNICIANS
Learn effective skills in facilitating learning and use classroom management techniques and effective questioning to create a student-centred learning environment.

• Activity fee: £250 ex VAT
• Member fee: £200 ex VAT
• Look for dates and venues online
This CPD is also offered as a bespoke activity
www.stem.org.uk/hc009

PROJECT PLANNING ESSENTIALS FOR TECHNICAL STAFF
Get a practical insight into project planning, and go from project initiation to building a project schedule.

• Activity fee: £250 ex VAT
• Member fee: £200 ex VAT
• Dates: 17 Oct 2016 - York
This CPD is also offered as a bespoke activity
www.stem.org.uk/hc014

TEACHING AND LEARNING SKILLS FOR TECHNICAL STAFF
Become equipped with the tools you need to teach and demonstrate and contribute effectively to the student experience.

• Activity fee: £450 ex VAT
• Member fee: £400 ex VAT
• Date: 17 Oct 2016 - Edinburgh
This CPD is also offered as a bespoke activity
www.stem.org.uk/hc001

Personal Development

FACILITATION SKILLS FOR TECHNICIANS
Learn effective skills in facilitating learning and use classroom management techniques and effective questioning to create a student-centred learning environment.

• Activity fee: £250 ex VAT
• Member fee: £200 ex VAT
• Look for dates and venues online
This CPD is also offered as a bespoke activity
www.stem.org.uk/hc009

PROJECT PLANNING ESSENTIALS FOR TECHNICAL STAFF
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TEACHING AND LEARNING SKILLS FOR TECHNICAL STAFF
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• Member fee: £400 ex VAT
• Date: 17 Oct 2016 - Edinburgh
This CPD is also offered as a bespoke activity
www.stem.org.uk/hc001

SCIENCES

BIOSCIENCE TECHNOLOGY INSIGHTS
A unique overview of key techniques and technologies in biology, providing a refresher or first introduction to the latest approaches.

• Activity fee: £194 ex VAT
• Member fee: £178 ex VAT
• Look for dates and venues online
www.stem.org.uk/hc291

FUNDAMENTAL GC
Cover all basics of gas chromatography, including tips on troubleshooting and maintenance of hardware.

• Activity fee: £194 ex VAT
• Member fee: £178 ex VAT
• Look for dates and venues online
www.stem.org.uk/hc283

GC TROUBLESHOOTING AND MAINTENANCE
Explore a logical approach to gas chromatography troubleshooting and maintenance as well as commonly encountered problems and best practices.

• Activity fee: £194 ex VAT
• Member fee: £178 ex VAT
• Look for dates and venues online
www.stem.org.uk/hc286

GC-MS SPECTRAL INTERPRETATION
Starting from the first principles, this CPD introduces the fundamental chemistry of gas chromatography mass spectrometry and builds up to an examination of the most frequently encountered fragmentation patterns.

• Activity fee: £194 ex VAT
• Member fee: £178 ex VAT
• Look for dates and venues online
www.stem.org.uk/hc288

INTRODUCTION TO PYTHON PROGRAMMING
Learn to use Python programming to analyse scientific data on this two-day CPD activity.

• Activity fee: £294 ex VAT
• Member fee: £269 ex VAT
• Look for dates and venues online
www.stem.org.uk/hc423

It was an extremely useful two days. Booking onto the course was easy and the provider was helpful in answering questions and providing pre-course information.

LC-MS SPECTRAL INTERPRETATION
Introducing the fundamental chemistry of liquid chromatography mass spectrometry, this CPD builds up to an examination of the most frequently encountered fragmentation patterns.

• Activity fee: £194 ex VAT
• Member fee: £178 ex VAT
• Look for dates and venues online
www.stem.org.uk/hc291

PRACTICAL GC METHOD DEVELOPMENT
This step-by-step, two-day CPD activity will give you a thorough and logical grounding in method development for GC.

• Activity fee: £744 ex VAT
• Member fee: £680 ex VAT
• Look for dates and venues online
www.stem.org.uk/hc293

STATISTICS FOR SCIENTISTS
Learn how to use analysis of variance, randomisation and manipulation of controllable variables to reduce variability, time and cost of design and development.

• Activity fee: £294 ex VAT
• Member fee: £269 ex VAT
• Look for dates and venues online
www.stem.org.uk/hc423

“Really great day full of useful tips, great discussion and great to hear from other people’s views and experiences.”

“I have found the session informative and challenging. It was a good opportunity to learn from other experiences and reflect on my own.”

HEATED magazine 12

HEATED magazine 13
Members of HEaTED are part of a growing community working to support and promote the skills and roles of technicians across the UK.

Our influential list of members includes universities across the UK, including these fantastic organisations that joined in the last year:

- Brunel University
- University of East Anglia
- Oxford Brookes

Membership benefits include:
- discounts on CPD activities, including our bespoke activities
- access to career development resources
- exclusive events for members

Interested in finding out more? Discover how becoming a HEaTED member could benefit your organisation: www.stem.org.uk/mh/membership

Tell us what you think...

We’d love to know what you think of the HEaTED magazine – do you have ideas for things we could do differently? Is there a topic you’d like to see an article about? Would you like to contribute to the magazine?

Tell us! feedback@stem.org.uk

Join our club
What are you looking for?

PROFESSIONAL DEVELOPMENT
We offer high-impact professional development across the UK, and online, tailored to meet technicians’ needs at every stage of their career. We can also tailor professional development to your institutions specific needs with our bespoke CPD.

COMMUNITY
Share your ideas and challenges with technicians across the UK, through our online groups and at our free networking events. And join us on Twitter!

MEMBERSHIP
Our network is made up of inspiring and influential institutions across the UK. Join as a member of HEaTED and you will receive exclusive support, opportunities and discounts.

PROFESSIONAL REGISTRATION
Share your ideas and challenges with teachers and technicians through our online groups and at our networking events. And join us on Twitter - we have over 700 like-minded educators following us.

www.stem.org.uk/heated
FOLLOW US ON TWITTER: @HEaTEDtechs