

Technical training courses

Forthcoming short technical training courses at Swinden House

October

Sustainability, Energy & Environment (MSc module) – 8th to 10th

This three day workshop will enable students to understand the need for sustainable development in an industrial context. Current environmental legislation and management systems are explored and practical techniques including environmental monitoring and measurement, environmental audit and waste management.

Carbon and Alloy Steel Metallurgy and Processing – 9th & 10th

This two day workshop is targeted at employees in technical and engineering backgrounds to help them gain an understanding of the metallurgy and processing of Carbon and Alloy Steels. The second day will study the processing and mechanical properties of the various steel product forms; rod and wire, plates, strip, sections, line pipe and engineering steels.

Introduction to Heat Treatment – 11th

This one-day workshop will provide a basic understanding of heat treatment processes, why they are necessary, what they involve and what goes wrong. It will encompass the heat treatment of the most common engineering metals, i.e. ferrous metals, including stainless steels, nickel based alloys and the light alloys titanium and aluminium. Surface treatments will be mentioned but the emphasis will be on bulk heat treatment.

Heat Treatment for Heat Treatment Professionals – 24th & 25th

This is a two-day workshop targeted at people who are already involved in using or operating heat treatment operations and need a fuller understanding of heat treatment principles in their job.

The course aims to be practical in nature but heat treatment is a process of micro-structural engineering and the fundamentals will be addressed. However, no prior metallurgical knowledge is required.

Common engineering steels, stainless steels, nickel based alloy systems and titanium and aluminium alloy systems will be covered. The course will consider bulk heat treatments but not surface heat treatments.

November

High-Strength Aerospace Metallic Materials (MSc module) – 5th to 7th

This three day workshop is designed for graduates working in the metals manufacturing sector, with particular need to understand the specialised market, wishing to expand their theoretical and practical knowledge of the issues involved in the design and production of high strength materials for demanding aerospace applications.

Metallurgy for Absolute Beginners – 8th (½ day)

Half a day programme aimed at those who require an introduction to Metallurgy from the beginning. Answers to frequently asked questions: What are metals? What is grain size? What is the structure of metals?

What are the properties of metals? How do we know if this material is good enough to build a fridge or a bridge? And a few more. Designed to serve as an introduction to the world of metallurgy. Attendees could include professionals from all walks of life with no previous background in metallurgy.

Metallurgy for Non-Metallurgists – 13th & 14th

This two-day course is designed to give attendees a basic understanding of metallurgy and an appreciation of the issues involved in the production of metals and alloys. The Course Manager, Ian Martin, specialises in structure/property relationships and the effect of processing on mechanical properties in a variety of steels.

Stainless Steel Manufacture, Metallurgy & Applications – 20th

This one-day workshop will allow delegates to increase their understanding of the processing, properties and uses of stainless steels. It will be of interest to personnel involved in the production, processing, fabrication, utilisation and selling of stainless steels.

Titanium Metallurgy – 22nd

This workshop will allow delegates to gain a better understanding of titanium alloys, their properties and their uses. The course is aimed at those with some metallurgical background, but no in-depth knowledge of titanium. It will be of particular interest to personnel working within the aerospace, defence, offshore, chemical, oil or gas industries.

Nickel Metallurgy – 28th

This one day workshop will allow delegates to gain a better understanding of nickel alloys, their properties and their uses. The course is aimed at those with some metallurgical background, but no in-depth knowledge of nickel. This workshop will be of interest to recent graduates, designers, engineers, senior supervisors and technicians and sales personnel working in, or supplying to the aerospace, defence, offshore, chemical, oil or gas industries.

December

Mechanical Testing of Metals – 11th & 12th

This course is designed to provide basic knowledge of different mechanical properties, together with descriptions and demonstrations of the methods used to measure them. It is aimed at those with little or no metallurgical background, but could also be used as a refresher course.

For a full course directory and to find out more about our bespoke and corporate training programmes, please visit the “Training & Development” area of our website www.namtec.co.uk or contact Anita Sunderland on 01709 724990 or by e-mail: anita.sunderland@namtec.co.uk

The MasMicro “Engineering for Girls” Event makes all the right connections



Like other industries such as construction, engineering has traditionally been a male-dominated world. The MasMicro “Engineering for Girls” event aimed to re-dress the gender balance and promote Engineering as a positive career choice for girls.

The one day event, organised by Sheffield Hallam University in association with NAMTEC was attended by an audience of over 70 young female students aged between 12 and 14 from six South Yorkshire secondary schools.

The girls who took part were specially selected after showing an interest in science and engineering subjects. The challenge they were set was to design and produce a bubble blower, which the pupils manufactured on the day from Perspex. This involved practical engineering techniques, such as soldering, shaping and moulding the product as well as testing their IT, design and marketing skills.

Helen King, NAMTEC’s Project Manager was delighted with the results of the day “We had some fantastic feedback from the students and their teachers about the event, with a number of these pupils now considering taking design and technology-related subjects through to GCSE level.”

MasMicro is a four year project, funded by the European Commission under Framework Programme (FP6), which is designed to facilitate the mass manufacture of miniature/micro products across Europe. This includes access to a series of methods for the design and analysis of micro-forming processes, materials, tools and machinery.

Rapid Manufacturing Programme (RAMP) joins Technology Transfer network

A further South Yorkshire Capacity Building Centre (CBC) has joined the Technology Transfer network. The Rapid Manufacturing Programme (RAMP) is at the forefront of the development of new technologies, including revolutionary layer manufacturing, laser based rapid prototyping, sand and ceramic moulding and air and vacuum melting.

RAMP is led by TWI with support from Castings Technology International (Cti). Technical research is provided by Advanced Manufacturing Research Centre (AMRC), the University of Sheffield IMPPETUS Centre, the Keyworth Institute at the University of Leeds, Materialise and NAMTEC.

The Rapid Manufacturing Programme will introduce manufacturers in the region to ground-breaking engineering methods that offer opportunities to deliver cost competitive, specialised products with reduced production times, reduced wastage and minimal technical and financial risk, enabling those businesses to compete amongst the most challenging markets. In partnership with the other Capacity Building Centres, which include the Surface Engineering Group (SEG), the Design, Modelling and Simulation Centre (DMS) and the Innovative Metals Processing Centre (IMPC), RAMP offers an integrated support network, providing direct access to highly skilled staff and resources with unrivalled technical knowledge and experience.

For more information on the Technology Transfer Programme see www.namtec.co.uk/tt

NAMTEC, Swinden House,
Moorgate Road,
Rotherham, S60 3AR.

(01709) 724990.
Email marketing@namtec.co.uk
www.namtec.co.uk

Supported by



This project is part-financed
by the European Union
European Regional
Development Fund



Funded by:



Leading learning and skills

MSc Programme – an update from the students

Sheffield Hallam University, in partnership with NAMTEC are offering new vocational courses at postgraduate level in Manufacturing, Materials and Management. The launch event was held at Swinden House on 5th June, attended by regional companies and representatives from learning and development organisations.

The new qualification is an MSc in Advanced Engineering Metals, and an updated course, MSc Materials and Manufacturing Management. Both have been developed following extensive consultation with leading employers in the engineering, metal and manufacturing sectors supported by internationally recognised research.

Employers in the sector are promoting this course to their employees for on-going professional development at Masters Level. Students should have qualifications or experience in an area directly relevant to the course and be employed within a Materials, Metals and/or Manufacturing Management area.

Matt Darby from Corus Engineering Steels, attending the Continuous Improvement module workshop at Swinden House sees the course as offering an effective mix of technical knowledge and business skills modules that provide a good basis for career development. "The technical modules fill knowledge gaps and provide learning that cannot be gained on the job or by in-house training and the Management skills training is valuable".

Students choose from two pools of modules for each MSc course. One pool of Materials and Manufacturing related modules and one



David Clegg Course Leader, Anita Sunderland NAMTEC, Matthew Howe Course Administrator and Becky Strachan Head of Post Graduate Studies

pool of either Management or Engineering Metals modules, dependent upon the course.

Particular favourites from the Management pool of modules amongst the attendees of the workshop include Change Management, Finance & Marketing and Sustainability, Energy & Environmental Management.

Choosing modules is something that should be given a lot of thought, says James Kay of Corus Engineering Steels. "The course will take you three to four years to complete on a part-time basis, so it's important to select modules that you're interested in and to combine modules that fit your current role with those that fit your future personal and career development plans. It'll make it easier to keep you motivated and help you commit to finding the time for completing course work alongside your job and ultimately finish the course".

Damon Tweedie, from Corus Engineering Steels is new to the course and explains "The Management Skills modules are what attracted

me to the course, however you also gain a much broader view of the technical knowledge, skills and experience out there in the wider Manufacturing industry". Damon's colleague on the course, Will Cook echoes this and adds "The course gives you exposure to areas that you may want to work in one day".

How do students find that the course-work fits with their jobs? Another student, Mark Birkett, has found no problems balancing his job managing the plasterboard production line for Saint Gobain UK Ltd (formerly British Plaster Products) and studying for his MSc. Mark now has only 2 modules left to complete before starting the Dissertation.

If you would like more information on the MSc Materials, Metals and Management Postgraduate Programme, please contact Anita Sunderland, tel: 01709 724990 e-mail: anita.sunderland@namtec.co.uk website: www.namtec.co.uk

BAT 4 Project – Grant supported assistance for driving business improvement



Metals related companies based in South Yorkshire can now benefit from valuable support in areas of Safety, Energy, Environmental & Business Improvement, including development of software solutions and accreditation

to ISO9001, ISO14001 and OHSAS18001. The BAT4 project (Best Available Techniques) is run by NAMTEC with industrial consultancy expertise, products and services provided by E9 Ltd.

Local companies can join the BAT4 programme at different levels dependent upon the needs of the business. Members will receive support ranging from access to seminar programmes through to a tailored package of business support for identified projects.

An example of a company recently helped via the BAT4 programme is PMS Diecasting, who accessed a range of expertise to assist in planning to increase capacity through investment and growth. The work undertaken included benchmarking, energy surveying, the calculation of demand forecasts under different scenarios, selection of equipment, factory layout as well as environmental management. Gordon Panter, MD of PMS Diecasting was very pleased with the results of the project stating "Manufacturing companies require expertise in certain specialist areas and E9 were able to understand our business processes and provide real benefits for our future development."

To find out how BAT4 can help your business, please contact Barrie Gostelow on 01709 724990 or by email: barrie.gostelow@namtec.co.uk. Further case studies of businesses helped by the programme can be found on www.namtec.co.uk

smf Special Metals Forum – Website launch

The dedicated website for the Special Metals Forum (SMF) is now live. You can visit at www.namtec.co.uk/smf

The official launch of the Special Metals Forum is planned for later this year, however 30 companies have already joined. Through membership, your business will become part of the SMF network of companies that represent all parts of the special metals supply chain, enabling you to contribute your ideas. The SMF will develop and publish a sector strategy which you can help create. An annual global market report will be published on a relevant market sector. You will be able to participate in a range of activities including workshops, training courses, trade shows and the SMF's own annual conference.

Membership is by annual subscription with further details available from Richard Cinderey, manager of the Special Metals Forum.

Further information is available from Richard Cinderey, manager of the Special Metals Forum. You can contact Richard via email: Richard.cinderey@namtec.co.uk or by phone 01709 723950.

SMEA Annual Dinner

Friday 9th November 2007, The Cutlers' Hall, Sheffield

Tickets are now available for this year's Sheffield Metallurgical and Engineering Association Annual Dinner. The association welcomes Jon Stewart, Director, Siemens VAI, Sheffield as Principal Guest.

The after-dinner speaker is Mike Cowan, who played for Yorkshire County Cricket Club for 9 years, opening the attack with Fred Trueman. Mike has recently retired from Penguin Books, where he was responsible for sales in the North of England.

Tickets are £50.00 plus VAT per place. Round tables for 10 or 12 people are available and arrangements can be made for parties of smaller or larger numbers. Guests and their partners will be most welcome. Accommodation for the Friday night is also available at the The Cutlers Hotel, George Street with discounted parking.

For tickets, accommodation booking and any queries, please contact the organiser: Dr Kenneth A Ridal, SMEA Events Limited, 48 Stone Delf, Sheffield S10 3QX. Tel: 0114 230 5650, fax: 0114 263 0204, e-mail: kenridal@stonedelf.fsnet.co.uk



2007 Titanium Symposium

The inaugural Titanium Symposium is being held at the Innovation Technology Centre, Advanced Manufacturing Park, South Yorkshire on the 20th November 2007. The event is being hosted by the Advanced Manufacturing Park, in association with NAMTEC and the Titanium Information Group.

The symposium will feature high profile speakers from titanium producers and end users and will present an opportunity to learn about the titanium industry from the perspective of various industry stakeholders.

This prestigious event presents a unique opportunity to share information, and network with senior commercial, operational and technical decision-makers from within the titanium sector, and to capitalise on a remarkable insight into the latest industry trends and developments.

The programme will cover both the current status of the titanium market, the factors that

will influence the future growth and development of the market and the drivers for the wider introduction of titanium. The later sessions will present the technical developments that have taken place in the titanium industry and the implications of these technologies on market sectors.

There will also be a Pre-Conference Dinner at the prestigious Cutlers Hall, Sheffield on the evening of the 19th November.

The fee for attending the full day conference is £75 per person including VAT.

The cost of the pre-conference dinner at Cutlers Hall is £25 per person including VAT.

To register, please contact Nicola Radford of NAMTEC on 01709 722477 or e-mail: Nicola.radford@namtec.co.uk

For further information about this event visit: www.namtec.co.uk or www.attheamp.com



Raising Awareness of Wire Drawing Technologies for Optimising Operations

The NAMTEC and UK Steel Wire Drawing event went ahead on 12th September at Swinden House.

The day was a great success, starting with a Keynote Presentation given by David Lee of Bridon on the subject of "the importance of wire drawing in the design of high strength rope applications and their development."

The presentations were well received and included:

- "Reducing operational costs using new drive systems" – David Taylor & Peter Voice of Control Techniques
- "Business Process Modelling" – Dr Steve Thornton of Corus RD&T
- "New Challenges of Waste Management" – Kevin Linsley of Corus RD&T
- "PVD Coatings for forming tools" – Rhod Turner, TECVAC
- "The Metallurgy of High Carbon Rod and Wire" – Andy Bell, Corus RD&T
- "Business Opportunities arising from Waste Streams" – Malcolm Bailey, National Industrial Symbiosis Programme (NISP).

Further information about forthcoming events can be found at www.namtec.co.uk