



# Technical & Vocational Education & Training

TECHNICAL TRAINING SOLUTIONS

**TTE**  
International

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# Who are we?

**TTE International Ltd, is a wholly owned subsidiary of Middlesbrough College Group who currently have in excess of 13,000 learners across a range of vocational and academic programmes including Energy, Petrochemicals, Construction and Engineering.**

Middlesbrough College Group is the largest of its kind operating in the Tees Valley and is unique to the region, delivering courses in every occupational sector area, from entry level all the way through to Level 7 post graduate qualifications. The programmes delivered by the College include GCSEs, A Levels, T Levels, study programmes, Traineeships, Apprenticeships, Access to HE, Higher Education and Degrees courses, community learning courses, distance learning courses and commercial training.

Subjects offered include Creative Arts, Health & Social Care, Childcare, Catering & Hospitality, Construction, Security Training, Warehouse and Logistics, Customer Service, Business Administration, Hair & Beauty, Personal & Professional Development, Employability, IT & Digital, Motor Vehicle, Engineering, Sport & Recreation, Teaching & Education, Travel & Tourism.

Our focus is to equip learners with the skills and training to progress into their chosen career. That's why 96% of all full-time students that studied with the College last year secured employment, an apprenticeship or went on to access further study at a College or University. The College's most recent results show achievement of 98% A Level pass rate with more than 72% of learners studying BTEC vocational qualifications achieving high grades.

Northern Skills, the College's apprenticeship and training arm works with over 2,000 employers in the North East and Yorkshire delivering over 100 types of programmes including apprenticeships and commercial adult training.

The College's strategic aim is growth based on quality and reputation, which improves educational achievement, employment prospects, economic prosperity, and wellbeing for all. The vision is to be a leading provider of education and training, which improves educational outcomes, employment prospects and lifetime opportunities for our students; and our mission is to provide education and skills that enhance the region's economic and social prosperity.



# TTE International

**TTE is an internationally renowned provider of technical training and consultancy services.**

From our industry standard training facilities in Middlesbrough, TTE delivers skill development programmes for Technicians and Graduates in the Engineering, Energy, Process, Chemical, Mining and Manufacturing sectors.

**In addition to its training centre in the UK, TTE has also established and operated several international training facilities supporting nationalisation and local workforce development in countries including:**

- Oman (BP)
- Azerbaijan (BP)
- Indonesia
- Ghana

In the last 30 years, TTE has trained more than 10,000 UK and International technicians through its commercial business. We are proud to work in other countries and develop the training systems and equipment with a Nationalisation strategy running in parallel. Success for TTE is when we have trained the learners and the local trainers and management.

**TTE regularly welcomes technicians to its training centre from regions such as the Middle East and Africa, as well as through international facilities.**



# Facilities

**The £120m Middlesbrough College campus is one of the best College campuses in the UK, with an award-winning restaurant, The Waterside Brasserie, new digital centre and construction centre, a simulated aircraft cabin and a £20m dedicated STEM training centre where learners receive high quality teaching in industry standard facilities.**

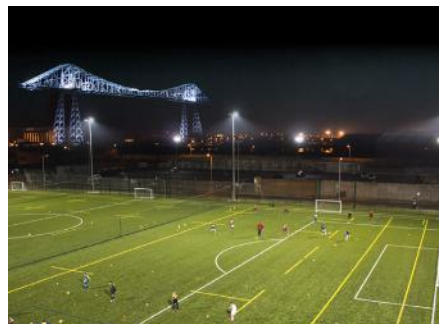
The STEM Training Centre embeds industrial competencies and behaviours within the training. The specialist industry centre and state of the art facilities ensure that learners are taught in a real work environment with high specification equipment that matches that of an industrial setting. Operating as a simulated industrial site, learners develop key skills required by employers including an emphasis on health and safety.

Facilities within the STEM Centre include bench and machine workshops, process operations and maintenance plant with DCS control, a CAD/CAM Suite, an Advanced Manufacturing Centre including CNC and injection moulding manufacturing cell capability as well as a logistics area.

In addition to the engineering facilities the College also has several recreational and wellbeing facilities including:

- **Gymworld incorporating a pulse fitness studio and purpose-built gymnastics training centre**
- **Indoor and outdoor sports facilities comprising of a six court sports hall and astro-turf pitches**
- **Seven canteens and restaurants including the award-winning Waterside Brasserie and an internet cafe**
- **Hairdressers and barbering services**
- **Beauty salon incorporating a spa suite which includes a jacuzzi pool, a sauna with light therapy, a steam room, a monsoon shower, and a dry flotation bed**
- **Learning Resources Centre set over two floors with over 30,000 books and over 170 open access computers**

**Visit [www.mbro.ac.uk](http://www.mbro.ac.uk) and take a virtual walk through our campus**



# TTE Technical training facilities

**TTE has been at its current site on Teesside since its formation in 1990. The site is capable of supporting production and engineering training to in excess of 400 technicians at a time. The centre is well equipped and comprises 30 classrooms, a 2968m<sup>2</sup> Engineering Workshop, a 309m<sup>2</sup> Fabrication Workshop and a 337m<sup>2</sup> CompEx Workshop which holds 10 CompEx EX 1-4 bays, 6 CompEx dust bays and 4 Mechanical CompEx bays. In addition, we have 3 dedicated IT suites for use by learners.**

TTE has invested heavily in equipment having spent more than £3.5million in recent years. In addition to investment in equipment, the centre has undergone several substantial refurbishments with the most recent costing in excess of £250,000, and a huge further investment is planned that involves a new build at Middlehaven to be closer to the main College campus in 2024.

Facilities within our engineering workshops include dedicated electrical, mechanical and instrumentation areas plus process plants, laboratories, and a process simulator.

## **TTE innovative pilot plants – reality without risk**

TTE has two fully functional process pilot plants. The plants can be operated on a 24-hour shift system with technicians starting, running and shutting down the plant. Technicians undertake online sampling followed by laboratory analysis to ensure product quality. Each plant has NVQ Level 2 Accreditation for Process Industry Operations.

The facility comprises of a batch process, analytical laboratory and distributed control system situated remotely from the plant. Communication between this remote control-room is via fibre optic link, CCTV camera and DAC communications interface.

The facility provides an ideal opportunity for existing and potential control room operators to gain real ‘hands-on’ practical experience of operating, and maintaining an industrial plant in a controlled, safe environment. These superb facilities are used as an integral part of the training of all engineering and production technicians.

Furthermore, TTE has a dedicated instrument workshop with calibration facilities and simulated process plant. A flow rig is used to demonstrate the operation of different types of flow meter.

## **‘Three-phase’ separator plant (oil, gas & water separation)**

This facility comprises of two three-phase separators and associated equipment (constructed in clear perspex to visually enhance the separation process) and a distributed control system situated within the main engineering workshop. Communication between the remote-control room is via hardwire link.

The separation training skid consists of a variable speed air blower (to provide “gas” at varying flow rates), oil and water storage tanks, variable speed oil and water pumps (to provide oil and water at varying flow rates), in-line mixers to enable the creation of the “reservoir fluid” to be separated, two three-phase separators which can be run as stand-alone units or in series and a secondary knock-out vessel.

The plant is governed by industrial standard safety systems (fire, gas and emergency shutdown systems), operating procedures, shift logs and a permit to work system. The skid is designed to be operated manually or remotely via a DCS supported control room.

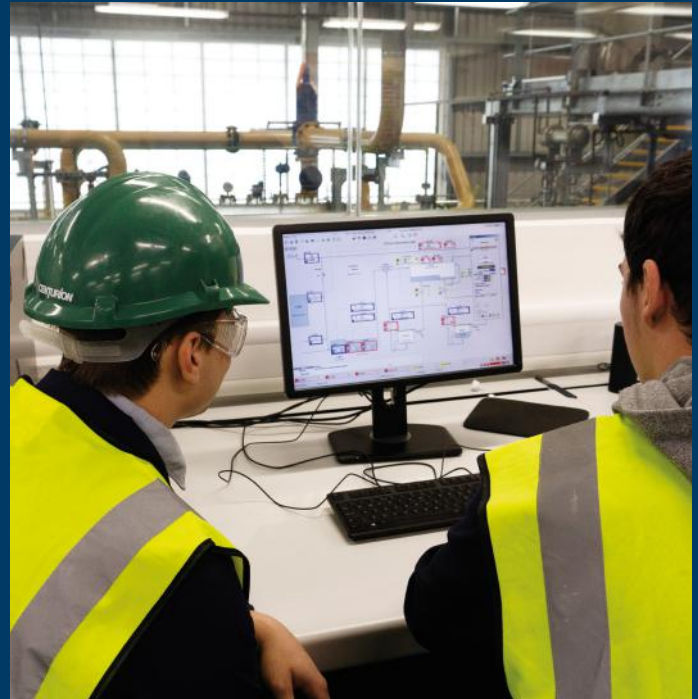
The facility provides an ideal opportunity for technicians of all trades to gain hands-on practical experience of operating and maintaining an oil and gas process system and is accredited for assessment of competence in Process Operations Hydrocarbons (POH) up to Level 1.



# Range of activities

TTE has established links and approvals from an extensive range of accrediting and professional bodies to enable it to offer the highest level of training available in a training centre. TTE specialises in the delivery, assessment, and verification of vocational qualifications for both 'on and off-the-job' scenarios. Our range of activities can be summarised in the following headings:

- Training consultancy services including competency assessment
- Design & operation of Technical Training Centres
- Apprentice, Technician & Graduate skills development
- Operations, maintenance & safety short courses



# Training consultancy services

**TTE has developed an international reputation for providing technical training consultancy services. We work with a range of companies, both large and small, on short-term one-off contracts and long-term strategic consultancy projects. TTE has strong local and global links with over 200 companies in the Energy, Oil & Gas, Manufacturing, Engineering, Mining and Petrochemical industries.**

TTE's expertise is in demand both in the UK and world-wide to deliver cost effective solutions and project management in all areas of training consultancy. TTE can assist with organisational development through the provision of interim outsourced training management. Our technical consultants have a vast amount of industrial and educational experience in the following areas:

- **Skills gap analysis**
- **Training needs analysis**
- **Competency systems design, development, and implementation**
- **Competency assessment to national and/or company standards**
- **Training administration**
- **Vendor training management**
- **Curriculum development**
- **NVQ implementation**
- **Centre approval and accreditation management**



# Technical Training Centre – Design & Operation

**TTE has proven experience in providing customers with their own tailor-made competence based practical training facilities.**

Training and education is a very important facet of local content delivery in many countries. However, delivery is reliant upon the availability of high quality in-country technical training facilities. TTE can provide fast track solutions based on established competence in this field using consultants, who can advise on existing in-country provision, develop implementation plans for establishing new facilities and provide advice and support in the refurbishment of existing facilities. We provide the knowledge and understanding on how to design and operate large scale training facilities giving local people the autonomy to provide and run sustainable operations.

TTE can provide a range of services from the conceptual design of large-scale operations and maintenance training centres, through to bespoke process simulators and training plants as shown in the images opposite from the Jubilee Technical Training Centre in Ghana. Other services we can provide include:

- **Engineering workshop design**
- **Curriculum and course note design to meet recognised/agreed standards**
- **Development of assessment and competency systems to match existing client systems (BP – ‘CMAS’)**
- **Specifications for training equipment**
- **Blended learning solutions**
- **Recruitment of technical trainers**
- **Management and operation ensuring fast-track sustainable transfer of knowledge and know how.**

The benefits of such specialist facilities are that individuals learn from the interactive experiences, under controlled conditions in safe, realistic environment.





# Apprentice, Technician & Graduate development

**TTE delivers a large range of competence-based operations and maintenance training programmes tailored to UK and International customers' requirements. Programmes vary in length from several weeks up to four years, from foundation to advanced level.**

TTE adopts a structured 'hands-on' approach using 'in house' process and engineering training plants to provide 'reality without risk'. We have considerable experience in helping international organisations achieve their nationalisation requirements to reduce dependency on expatriate staff.

Our facilities allow learners to undertake practical training in a safe industrial environment achieving the correct balance between academic and vocational activities. Accreditation is provided alongside personal development as part of a 'total training solution'. Residential programmes are provided with integrated welfare support.

Examples of the training and development offered include:

- **Nationalisation / Apprenticeship / Foundation programmes**
- **New hires / entrants to industry**
- **Electrical, Instrumentation & Mechanical Engineering**
- **Up-skilling and re-skilling**
- **Chemical Process, Production Operations, Oil & Gas**
- **Meeting localisation and nationalisation targets**
- **Science, Laboratory & Biotechnology**
- **Graduate development**
- **Mature technician development**
- **Practical skills development**
- **Leadership, management and team working**
- **Continuous professional development**

TTE has an unrivalled reputation for the delivery of NVQ Level 2 diploma competency qualifications to international students. These specialised programmes offer international students the opportunity to develop and gain practical hands-on skills in a 'simulated industrial environment' within TTE's training facility. The following organisations have recently benefitted from their technicians undertaking competency programmes with TTE in the UK:

- **Modec Ghana**
- **HKN – Kurdistan**





# Operations, Maintenance & Safety short courses

**The TTE portfolio of technical short courses reflects the needs of its diverse customer base. TTE can adapt and tailor training courses according to specific customer needs. Flexible modes of delivery consider content, duration, date and location, shift patterns and weekend working are combined to meet the requirements and objectives of both the individual and organisation. TTE's short course portfolio reflects its in-depth experience of delivering quality training to respected clients from a range of industries around the world.**

A comprehensive list of scheduled courses is available throughout the year on our website ([www.tte.co.uk/accredited](http://www.tte.co.uk/accredited)) the following shows examples of the curriculum areas covered by TTE:

- Health & Safety
- Engineering including Electrical, Mechanical & Instrumentation
- Process Operations
- Professional Development Including Leadership & Management)
- NVQ Diploma's
- Online courses



# Our global clients





**TTE International Limited | TTE Apprenticeships Limited | TTE Technical (UK) Ltd**  
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