

MODERN APPRENTICESHIP

MULTI SKILLED MAINTENANCE TECHNICIAN-Mechanical and Electrical focus

.Estates Department





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THE MODERN APPRENTICESHIP PROGRAMME

The current vacancies for the Multi Skilled Maintenance Technician (Mechanical and Electrical focus) apprenticeships are only open to those applicants aged 16t to 24 years (or 16 to 29 years for Disabled Applicants) in line with NHS Greater Glasgow and Clyde Youth Employment Plan and in support of our Workforce Demographics and projections.

In order to apply you must already have a minimum of

• Five National 5's at Grade A to C, three of which must be Maths, English and a Science or Technical Subject (or Standard Grades 1 and 2 OR Intermediate 2 A to C)

Or

an NC in an appropriate technical discipline at SCQF level 6 (or equivalent)

This apprenticeship is completed over four years. During this time you will work towards the SEMTA Engineering Apprenticeship Framework covering the following 5 areas:

- SVQ Level 2 in Performing Engineering Operations
- National Certificate in Engineering Systems (SCQF Level 6)
- Core Skills at SCQF Level 5
- SVQ Level 3 in Engineered Systems Maintenance
- HNC in Engineering Systems

For more detail on the training and education components of this apprenticeship click here

If you already hold these qualifications you should consider applying for other NHS GGC Estates Vacancies – click here

- Applications are considered on a competitive basis which means not all candidates who submit an application will be guaranteed an interview. Shortlisting will include meeting the minimum educational qualifications for application along with evaluation of the Supporting Statement within your application form.
- Please ensure that you read the guidance carefully on completing the application form and your supporting statement BEFORE you submit your application.
- You should complete and submit your application via the NHS Scotland Jobs Website www.jobs.scot.nhs.uk. In the event you are unable to complete an electronic application then please refer to Page 11 of this Information Pack for guidance

THE MODERN APPRENTICESHIP PROGRAMME

What is a Modern Apprenticeship?

Modern Apprenticeships offer the opportunity of gaining skills and qualifications that will help to start your career. A modern apprentice has the chance to be in paid employment and work towards a recognised vocational qualification at the same time¹.

How long will it last?

This is Fixed Term four year contract and on successful completion of all elements of the NHS Greater Glasgow and Clyde Modern Apprenticeship Programme you will move into permanent employment. During your apprenticeship you are expected to attend regular reviews to discuss your progress and development needs, and are expected to stick to the agreed training plan. This includes attending internal and external training and taking responsibility, with support, to collect the evidence required that proves competence in the job role

Will I be working to a Job Description?

Yes. You will work to the Technician Engineer job description with the expectation that you will be supported and trained to carry out all of the duties and responsibilities outlined. You would not be expected to perform at the Technician level on appointment.

You will also receive an outline of the apprenticeship programme which highlights the key areas which you are expected to complete before your apprenticeship will end.

What will I be doing?

Maintenance technicians are part of a multi-skilled team which is responsible for providing plumbing, electrical and mechanical services within the Estates Department. While you will have either an electrical or mechanical focus in your role you will be trained to be able to respond to tasks across all three areas of work.

Your duties will include, but are not limited to some or all of the following.

- a) Repair and maintenance of a range of domestic electrical & mechanical equipment.
- b) Repair and maintenance of kitchen / catering equipment.
- c) Repair and maintenance of commercial heating / ventilation systems / controls, including motor circuits (single and 3 phase).
- d) Repair and maintenance of fixed ward equipment.
- e) Repair and maintenance of site lighting (internal and external).
- f) Repair and maintenance of steam boilers and associated plant and controls.

¹ http://www.skillsdevelopmentscotland.co.uk/our-services/services-for-individuals.aspx

- g) Repair and maintenance of sterilising equipment and associated machines.
- h) Minor electrical & mechanical installation works.
- i) Safe servicing and maintenance of steam, condense, hot water systems, valves and controls.

A comprehensive list of all duties and responsibilities is given in the full job description.

Where will I be working?

These posts will predominantly be based with the Estates Department in one of the following Acute Hospitals within NHS Greater Glasgow & Clyde:

- Glasgow Royal Infirmary (GRI)
- Gartnavel General Hospital (GGH)
- Queen Elizabeth University Hospital (QEUH)
- Royal Alexandra Hospital (RAH)
- Inverclyde Royal Hospital (IRH)
- NHSGG&C HSCP/Partnership hospital(s).

Please note that the post holder will be required to work at other NHS GGC locations throughout the training period.

All staff are entitled to apply for the following benefits on appointment:

- Interest free loan to purchase Zonecard's a flexible season ticket for unlimited travel by rail, subway, most buses and even some ferries (details on public transport routes to NHS Greater Glasgow and Clyde's sites can be found by visiting www.nhsggc.org.uk and select Transport and Parking on the home page or visit www.spt.co.uk/travelinfo
- Cycle to Work Scheme, for staff to purchase a bicycle and any equipment needed and then repay those costs through their salary.

Click on the links above to access maps of the sites or visit www.nhsggc.org.uk.

Please note that staff parking is limited on NHS Sites. To view travel and other useful information or visit www.nhsggc.org.uk and click on the link for Hospitals & Visiting Times

Who else works in within the team?

There are over 350 employees within the estates department and you will work with qualified Tradesman / Craftsmen to carry out repairs and maintenance on the plant, services and equipment, as instructed by the appropriate Supervisor relevant to the core skills.

What type of person are you hoping to recruit?

This role is suitable for someone who has an interest in working with their hands, has an enquiring mind with an aptitude for problem solving and an interest in understanding how mechanical and/or electrical components work

You should have good manual dexterity and hand-eye co-ordination with excellent attention to detail, good communication and a strong team work ethic. As you will be working with electrical wiring, colour coded plans and components and systems tests and alerts which are colour coded good colour perception is required.

THE MODERN APPRENTICESHIP PROGRAMME

A modern apprenticeship isn't just about working; you need to be committed to learning too. During this period you would be expected to work as a member of our staff but also work towards SVQ qualifications and an HNC in Engineering Systems. As well as working you will be required to agree to a training / development plan and attend meetings with trainers, assessors and verifiers as required.

In addition whilst undertaking year one of the programme you will be required to attend Glasgow Clyde College on a full time basis and on a day release basis in years two and three. Engagement with the workplace SVQ process, college attendance and satisfactory course progression is mandatory. Please refer to page 18 for more detail.

You will be an employee of NHS Greater Glasgow and Clyde and therefore also expected to observe the same Terms and Conditions of employment that all our staff do and be subject to the same policies and procedures.

Does working in the Estates Department mean I will be dealing with patients?

Although much of the work takes place in plant rooms and other restricted areas you may also be working in patient areas. This is mainly because some equipment is fixed in location. This could include heating, lighting or air conditioning units with Ward areas.

Will I be paid?

Yes. This Modern Apprenticeship will pay you a minimum of 60% of the maximum annual salary for the role in your first year. This calculation is based on an NHS Payscale called Annex U designed specifically for trainee programmes. To find out more about NHS Payscales and Annex U visit www.paymodernisation.scot.nhs.uk or click the link.

Based on 2016/2017* Band 5 pay scale your salary over the four year period will be:

Year 1: Agenda for Change Band 5 (60%) Annex U £17,247.60 Year 2: Agenda for Change Band 5 (65%) Annex U £18,684.90 Year 3: Agenda for Change Band 5 (70%) Annex U £20,122.20 Year 4: Agenda for Change Band 5 (75%) Annex U £21,559.50

^{*}The NHS Pay scale changes annually, figures quoted above are based on the 2016/2017 pay scale.

THE MODERN APPRENTICESHIP FRAMEWORK

What is a Modern Apprenticeship Framework and where does an SVQ fit in?

A Modern Apprenticeship Framework is a document that describes the minimum standard of competence defined by employers for a given role. Frameworks identify relevant SVQ (or alternative competency based qualifications), core skills e.g. communication, numeracy and any industry specific training that might be required.

More than 70 different Modern Apprenticeship Frameworks have been developed in Scotland².

A Scottish Vocational Qualification (SVQ) is a qualification that shows that you are able to perform a job to nationally recognised standards. SVQs are made up of Units, each one of which describes an aspect of the job. You are expected to work your way through all of the Units attached to your job role. There are no exams involved in an SVQ, staff are assessed at their workplace using observation, professional discussion and work related evidence. You will be assessed on the skills you use every day in your job.

What qualifications will I hold when I complete the Modern Apprenticeship?

This post reflects the following Modern Apprenticeship Framework:

Level 3 MA in Engineering

Successful completion of the program results in an HNC in Engineering Systems, an SVQ 2 in Performing Engineering Operations and an SVQ 3 in Engineering Maintenance

What happens at the end of the Modern Apprenticeship?

On successful completion of **all** elements of the NHS Greater Glasgow and Clyde Modern Apprenticeship Programme we will support your transition into permanent employment within the organisation.

² http://www.skillsdevelopmentscotland.co.uk/our-services/modern-apprenticeships/ma-frameworks.aspx

Selection Timetable

<u>Please note this time table is indicative and may change.</u> Any variation in dates will be notified to candidates.

Recruitment Stage	Date
Information Sessions –your opportunity to find out more about Medical Equipment Management and the MA Program, meet the teams and to tour one of our departments. Places are limited – please email modern.apprentice@ggc.scot.nhs.uk no later than Noon on 7th March including details of your qualifications to reserve your slot	Evening of 8 th March at Royal Alexandra Hospital Paisley and evening of 9 th March at the Queen Elizabeth University Hospital.
Closing date for application submission	12 Noon Friday 17 th March
Applications Assessed and selected candidates identified for further assessment at Glasgow Clyde College.	Process completed by 31 st March
Selected candidates attend assessment with successful candidates selected for interview	12 th and 13 th April
Interviews	Interviews will be scheduled to take place during week commencing 24 th April
Anticipated start date for Successful candidates to commence employment	Early July 2017

THE MODERN APPRENTICESHIP SELECTION PROCESS

I've never worked in this area before so how do you know I have the skills you are looking for?

As well as the educational qualifications, skills, knowledge/experience you must have to be able to do the job we will also ask you to provide supporting information in your application form that will help us assess your suitability.

The Supporting Statement of the application form plays a significant part in our decision to select your application for shortlisting. **Please ensure you read the guidance on completing the Supporting Statement carefully** and ensure you address all the questions ask of you. *See Page 11*

You should also consider booking a space at our information event which will provide the opportunity to learn more about the role and speak with departmental staff.

How do you decide who to interview?

We base our decision on who to interview by assessing the information you have provided and your responses to the questions you have been asked to address in your supporting statement.

How should I complete my application form?

To give you the best possible chance of selection please ensure please ensure you read and follow the detailed guidance on page 42 and that before submitting ensure you have provided responses to the questions you have been asked to address in your supporting statement.

Draft your supporting statement before you type it into the text box in the application form and check your spelling and grammar. And keep a copy of this draft as if you are selected for interview you may wish to refer back to your submission.

Make sure your supporting statement does not exceed 50 lines of text including paragraph breaks.

Please do not send any other inclusions e.g. copies of qualification certificates, other award letters or CVs etc. If you are selected for interview we will let you know what evidence we need you to provide regarding your educational qualifications.

THE MODERN APPRENTICESHIP SELECTION PROCESS

Can I get help to complete the application form?

If you feel that you need some help to decide what would be useful to include in your application you should make contact with your local Skills Development Scotland office. One of the advisers there will be able to support you through the application process. You can find out more at https://www.skillsdevelopmentscotland.co.uk/

You can also find information on the My World of Work website https://www.myworldofwork.co.uk/getting-job/application-forms

Who should I ask to be a referee?

We know it might be hard for applicants to provide us with two referees if they have not worked before so that is why we will accept educational references from teachers at your school/college. However, if you do have a current part-time job or have volunteered or worked before please also give us details of someone who can provide a reference for this.

It is important that you give us full contact details including an email address for this person AND that you ask the person for permission to use them as a referee before you submit the application form.

We will only contact your referees if we decide to make a conditional offer of employment. All our offers of employment are conditional and subject to you satisfactory completing pre employment checks which include reference and an occupational health assessment.

When is the closing date for applications?

Your application must be submitted on or before **12 Noon Friday 17th March 2017** at the latest.

We will **NOT** accept late applications.

Who will assess my application?

Your application will firstly be assessed by recruitment professionals who will ensure that you meet the minimum selection criteria (a minimum of five National 5 qualifications at Grade A to C, three of which must be in English, Maths and a Science or Technical Subject OR an NC in appropriate technical or electronics discipline at SCQF level 6, or equivalent). Applications that meet the minimum criteria are then passed to a shortlisting panel.

THE MODERN APPRENTICESHIP SELECTION PROCESS

This panel will include at least two managers from the department hiring staff. They will be judging how well your application matches the selection criteria for the post. They will review the information you provide in relation to the educational qualifications, knowledge, skills and experience required for the post. The shortlisting panel will be looking for well presented, clear, concise information and any additional information that is interesting and highlights any additional skills and qualities you have over and above your educational qualifications.

Candidates who are shortlisted will be invited to attend for assessment at Glasgow Clyde College on the 12th and 13th April.

The testing is split into 4 sections:

- Maths
- Mechanical Reasoning
- Electrical Reasoning
- Practical Dexterity

Please note that the testing is appropriate to education to National 5 level.

Candidates who pass the assessment to a satisfactory level will be invited to attend for interview.

When will interviews be held?

We anticipate that the interviews will take place week commencing 24th April 2017. If you have been selected for interview you will be notified by letter, email or text of the date, time and venue for interviews.

Disability

The Equality Act defines Disability as follows "any physical or mental impairment which has a substantial adverse effect on a person's ability to carry out normal day to day activities". NHS Scotland is "Positive about Disabled People" as part of our continued commitment to extend job opportunities for people who are disabled. All candidates who are aged between 16 and 29 who indicate they have a disability **and meet the minimum criteria for selection** will be guaranteed an interview.

THE MODERN APPRENTICESHIP APPLICATION FORM

What should I put in my application?

You should take time reading the guidance on completing the application form and ensure you do not leave it to the last minute. One standard application form means that everyone who applies is considered on the same basis.

It's a good idea to gather all the necessary information e.g. your educational qualifications before you start to complete the application form.

Plan what information to include in each section of the application form and take note of the space provided which will give you an indication of how much information is required.

Completing the Statement in Support of Application.

To stand the best chance of getting an interview you need to ensure that you carefully address each of the following areas in your complete your Statement in Support of Application.

- Why are you interested in an Apprenticeship with NHS Greater Glasgow and Clyde?
 Please describe briefly why you think you would be good applicant to the Estates
 Department. eg Tell us about your interest in engineering or electronics or craft or
 working with your hands and why you think this is the career path for you. What is it
 about a hands on job that appeals to you?
- On page 4 we have told you what skills and personal qualities we are looking for. Tell us which of these skills you have and how you have developed them e.g. through work, volunteering, school/college practical subject based tasks (mechanical, technical or design based activities including graphic design), any pass times, hobbies or interests that require good hand eye co ordination or problem solving skills, any clubs or after school/college groups/other interests that demonstrate the skills and personal qualities we are seeking. Do you build or repair things? Do you fix things around the home? Have you helped someone who does?
- Please tell us a bit more about you. How do your family, friends, teachers/employers describe you? Tell us about your achievements (e.g. Duke of Edinburgh or other awards, hobbies and interests), any talents or aspirations or anything else you think might be relevant to your application.

The Equal Opportunities Monitoring form is required for monitoring purposes only and will not be made available to the interview panel during any part of the recruitment process.

THE MODERN APPRENTICESHIP APPLICATION FORM

Final Check

- Make sure you have included details of all your qualifications (including dates awarded)
- Make sure you include contact details for your Educational Reference(s) and Work/Character Reference, including email address for them. Don't forget to ask their permission to use their details on your application form
- Make sure you check that your responses are checked for spelling and grammar and provide detail. It might be useful to get someone else to look over your application form for a second opinion in case you have made any mistakes.
- It is always useful to make a few drafts before you submit one you are happy with and keep a copy of the Keep a copy of your final draft. Remember if you are selected for interview it will be important to review the application you submitted as part of your interview preparation.
- And finally before you submit it check it one last time

How to submit your Application Form:

Applications should be completed electronically submitted via the NHS Scotland Jobs website. You will receive an automatic confirmation of submission from the NHS Scotland Website. When your application is forward to NHS Greater Glasgow and Clyde you will receive an email confirming receipt. If you have any problems submitting your application form please call NHS Greater Glasgow and Clyde Recruitment Service on 0845 3000 831

Applications should be returned by the closing date of 12 Noon Friday 17th March 2017.

Late applications cannot be considered.

THE MODERN APPRENTICESHIP TERMS AND CONDITIONS

Starting Salary

Based on 2016/2017 pay Scale salary over the four year period will be:

Year 1: Agenda for Change Band 5 (60%) Annex U £17,247.60
Year 2: Agenda for Change Band 5 (65%) Annex U £18,684.90
Year 3: Agenda for Change Band 5 (70%) Annex U £20,122.20
Year 4: Agenda for Change Band 5 (75%) Annex U £21,559.50

Fixed Term Contract Duration

The duration of the post is fixed term for 4 years

Hours of Duty

37.50 Hours per week

Annual Leave

The annual leave entitlement in a full year commencing 1st April to 31st March is:

➤ 27 days (202.5 hours), rising to 29 days (217.5 hours) after 5 years' service and 33 (247.5 hours) days after 10 years' service. There are 8 (60 hours) Statutory and Public Holidays in each leave year (pro rata where applicable).

Please note that whilst attending college it is expected that apprentices take their annual leave allocation during the college Easter and Christmas break and be available to work during the college summer holidays.

Superannuation Pension Scheme

If appointed you will be automatically enrolled in the NHS Superannuation Scheme however on appointment you can chose to opt out of the scheme. Employee's contributions to the NHS Scheme are tiered based on your earnings and the employer's contribution equates to 13.5 % of salary. Employees in the NHS Scheme are "Contracted-out" of the State Earnings Related Pension Scheme and pay a lower rate of National Insurance contributions. You can find out more at www.sppa.gov.uk

Right to Work in the UK

We are required to check the entitlement to work in the UK of all prospective employees, regardless of nationality or job category. Candidates appointed to a post will be required provide appropriate documentation verifying right to work in the UK prior to any commencing employment

Healthcare Support Workers

You will be expected to comply with and complete the NHS Scotland Mandatory Induction Standards and Code of Conduct for Healthcare Support Workers in the first few months of starting in post.

THE MODERN APPRENTICESHIP TERMS AND CONDITIONS

As part of the Induction Process, you will be required to achieve Mandatory Induction Standards and Code of Conduct for Health Care Support Workers and these standards will be met through on the job induction programmes within NHS Greater Glasgow and Clyde that are core in supporting new staff.

Smoke Free Policy

NHS Greater Glasgow and Clyde operates a NO SMOKING Policy on all premises and grounds for staff and visitors.

Pre employment Checks

All offers of employment will be subject to the receipt of satisfactory References, Occupational Health Screening, Criminal Records Check (Disclosure Scotland) where applicable, Eligibility to Work in the United Kingdom and Verification of Qualifications.

Car parking and travel to NHSGGC Sites

Like other NHS Boards across the country, demand for car parking on our hospital sites far outweighs availability. As a result, access to on-site parking is extremely limited and you will therefore need to find alternative ways of travelling to work if you are selected for the post.

All staff are entitled to apply for the following benefits on appointment:

- Interest free loan to purchase Zonecard's a flexible season ticket for unlimited travel by rail, subway, most buses and even some ferries (details on public transport routes to NHS Greater Glasgow and Clyde's sites can be found by visiting www.nhsggc.org.uk and select Transport and Parking on the home page or visit www.spt.co.uk/travelinfo
- Cycle to Work Scheme, for staff to purchase a bicycle and any equipment needed and then repay those costs through their salary.

Learning and education

NHSGGC has an on-going commitment to learning and development through competency based training and individual personal development plans informed by the Knowledge and Skills Framework (summary guidance can be accessed via www.nhsggc.org.uk go to Career and Jobs, click Agenda for Change and select Knowledge and Skills Framework).

For more information about the benefits and discounts available to NHS Greater Glasgow and Clyde staff, visit www.nhsstaffbenefits.co.uk and www.nhsdiscounts.com

THE MODERN APPRENTICESHIP TRAINING OUTLINE

Introduction

You should note that this apprenticeship will train you to be a maintenance technician with mechanical/electrical engineering as your core trade. However, the maintenance technicians are part of a multi-skilled team which is responsible for providing plumbing, electrical and mechanical services within the Estates Department.

You should note that the following is an outline, is not exhaustive and course outline and SQ programmed activity may be subject to change or amendment.

Our Expectations

You will be required to develop knowledge and skills to enable you to work across this range of duties and responsibilities. While you will have either an electrical or mechanical focus in your role you will be trained to be able to respond to tasks across all three areas of work.

Throughout the duration of the apprenticeship, you will be required to collect and collate supporting evidence for a skills portfolio on a regular basis. This will demonstrate competence with both practical skills and knowledge which will be specific to each particular SVQ unit which will be used towards the Level 3 award. Successful completion of all component parts of the apprenticeship programme is required for issue of the Modern Apprentice Certificate. This will include progressing from an NC in Engineering Systems and an SVQ 2 (Year 1) to the HNC in Engineering Systems and the SVQ3 in Engineering Maintenance.

When not attending college you will be expected to work on-site. You will be expected to engage in a rotational programme of training and development throughout Years 2-4 and attend additional external training if required. This may involve working at other NHS GGC sites.

During this period you are expected to work towards an agreed Training Plan. This is subject to review and alteration. Please also note that changes to the college based activity may be subject to change.

It is important to note that progression through each year of training is not automatic. Apprentices are required to meet the requirements for academic progression and vocational skills acquisition at each stage before moving onto the next year

Requirements for successful completion of all elements of the NHS GGC Apprenticeship Programme

This apprenticeship post will last for four years. By the end of the apprenticeship you will be expected to:

- Complete NHS GGC organisational induction and Mandatory Healthcare Support Worker Induction Standards & Code of Conduct (within 3 months)
- Complete role specific induction
- Maintain required levels of attendance at Glasgow Clyde College for continued progress
- Evidence the knowledge and skills required for the job role via the Knowledge & Skills Framework Review & Personal Development Planning Process
- Complete the requirements for the Engineering Framework i.e. (click here for details)
- Completion of HNC in Engineering Systems
- Successful completion of any final year training programmes identified by NHS GGC Estates Service management. This may involve additional college attendance or at other off-site training facilities.
- Adhere to NHS GGC Policies & Procedures.

What is involved in the Technician Engineer Programme?

During the period of your apprenticeship you will work towards the SEMTA Engineering Apprenticeship Framework covering the following 5 areas:

- SVQ Level 2 in Performing Engineering Operations
- National Certificate in Engineering Systems (SCQF Level 6)
- Core Skills at SCQF Level 5
- SVQ Level 3 in Engineered Systems Maintenance
- HNC in Engineering Systems

Year 1

August 2017 – June 2018. Full-time attendance at Glasgow Clyde College (Anniesland Campus) to complete the following:

NC in Engineering Systems (SCQF Level 6)

- Mathematics, Communications & ICT (Information Communication Technology)
- Engineering Systems
- Engineering Materials

- Graphical Communications & CAD for Engineers
- Electrical Principles
- Mechanical Principles
- Electrical Test & Measurement
- Engineering Project

SVQ 2 in Performing Engineering Operations:

- Health & Safety
- Bench Fitting
- Electrical Wiring
- Electrical Enclosures
- Maintenance & Assembly

At the end of the academic year apprentices will come into the NHS workplace.

Year 2

Year 1 of the HNC starts. This will involve weekly day release at Glasgow Clyde College during the academic year. The HNC in Engineering Systems is delivered over 2 years covering the following:

- Mathematics and Communications
- Principles of Engineering Systems
- Mechatronic System Elements
- Engineering Measurement & Systems Modelling
- Materials Selection
- Engineering Drawing and CAD For Engineers
- Pneumatics and Hydraulics
- DC and AC Principles

Remainder of time is spent developing knowledge and skills in the hospital base. The SVQ 3 in Engineered Systems Maintenance (assessed in workplace) will also start. An SVQ Assessor will be on-site every 6-8 weeks to meet with you and review progress.

Year 3

Year 2 of the HNC programme on a day release basis at Glasgow Clyde College. SVQ 3 activity continues along with on the job learning.

Hospital Engineers Apprentice Summer School

Between years 3 and 4, you will attend the Hospital engineers apprentice summer school. The training received will link general engineering practices to the requirements of the Health

Technical Manuals (HTMs). During this 5 day residential course at Eastwood Park, England, you will cover the following topics:

- Electrical installations in medical locations an overview, including electrical safety (section 710 BS7671)
- Medical gas safety including permits to work (HTM 02)
- HVAC explaining the purpose of ventilation in healthcare (HTM 03)
- Water hygiene fundamental knowledge of Legionella (HTM 04)
- Medical equipment safety and testing of biomedical electrical equipment
- Decontamination & sterilisation equipment an overview of engineering service
- A stimulating mix of theory and practical learning

Year 4

HNC completed. SVQ 3 activity continues along with on the job learning. Additional college modules on the following topics will be completed in year 4:

- Maintaining heating and ventilation systems
- Maintaining medical gas pipeline systems and equipment.

Year 4 will also cover consolidation of knowledge and skills in the workplace and attendance at any healthcare and role-specific training courses required. This may include college sessions and/or other off-site training facilities.

MODERN APPRENTICESHIP MULTI SKILLED ENGINEERING TECHNICIAN Summary Information Full Job Description on Page 23

Where will the apprentice be working?

Each apprentice will be allocated a 'base site' and will start at this site for a number of weeks to gain familiarity with the people, managers and the site itself prior to commencing their studies at Glasgow Clyde College.

The Estates management will allocate a base site for each apprentice giving consideration to a number of factors including the home address of the apprentice.

What are the working hours and shift pattern?

During the programme you are expected work core hours of the site you are working on. This can be from 8am and 4pm or 8:30 to 4:30 pm Monday to Friday. There may also be a requirement to be on site to gain experience during weekend shut downs.

What does the Estates department do within NHS GGC?

The Estates Department provides a safe comfortable & statutory compliant environment for the effective provision of state of the art clinical care for our patients which is achieved by maintaining and delivering an effective Planned Preventive Maintenance programme and reactive repair service as well as executing installation and commissioning works of critical plant and equipment to support the delivery of all clinical services.

The estates department provides an integral contribution to the continual management & control of Health Associated Infection with respect to the built environment, in compliance with national Health Environment Inspectorate (HEI) & Healthcare Associated Infections Teams and Domestic Monitoring Tools (DMT).

Technology is at the forefront of a modern estates department. One site, the Queen Elizabeth University Hospital has the largest 'energy centre' of any NHS hospital in the UK and generates 60% of the electricity needed to run it. The estates department also manages facilities where Biomass Boilers, Combined Heat & Plant (CHP), Photovoltaics (Pv) and additional renewable energy schemes are in place.

What are the common duties of this role?

- Complete Planned Preventative Maintenance in accordance with organisational and manufacturers recommendation, using appropriate tools, test equipment and recording details of work carried out, to prevent breakdowns and maintain optimal operational ability.
- Respond to breakdowns, evaluate situation and take corrective action to ensure minimal disruption and damage.
- Work on and maintain safety of pressurised systems such as steam, compressed air and hydraulic systems etc in compliance with statutory Pressure Systems Regulation 1998.
- Verify integrity and monitor heating and ventilation systems utilising calibrated test equipment to maintain a safe working environment within hospital sites.
- Carry out Electrical maintenance within healthcare facilities in statutory compliance of the Electricity at Work regulations (1989) and the Current BS7671, 17th Edition IEE wiring regulations, while working to the operational procedures set out in the NHS Scotland Electrical Safety Code of Practice Low Voltage Systems, Scottish Health Technical Memorandum (SHTM) 06-02, to ensure a safe environment and to maintain good quality and safe electrical systems for patient treatment.
- Fault finding and analysis within complex control systems and equipment in a safe, effective manner using fine tools and calibrated measuring equipment as required in order to minimise future breakdowns and keep hospital running efficiently.
- Inspection, testing and verification of fixed wiring systems contained within healthcare facilities, in statutory compliance of the Electricity at Work Regulations (1989) and compliance of the current Guidance note 3-BS 7671 17th Edition Wiring Regulations", utilising calibrated test equipment to maintain safe working environment within hospital sites
- Participate in the development and delivery of water management regime to maintain, control, monitor & record that all plant, distribution system and stored product are within safe operating limits to ensure a high quality of potable water for use within a clinical environment.
- Carry our routine mandatory water quality monitoring and inspection duties.

Who else works in the team?

Each main hospital site has a management structure in place however the apprentice will work with a supervisor, a number of technician engineers and plumbers, maintenance assistants, fellow apprentices and other trainees.

What are the most important skills required for this post?

- Good manual dexterity
- Hand-eye co-ordination
- Attention to detail
- Good problem solving skills
- Good IT skills
- An aptitude for understanding mechanical and/or electrical components and how they work

What are the most important personal qualities required for the role?

- Able to work as part of a team
- Good communication skills
- An inquisitive mind
- An interest in mechanical mechanisms and/or electrical systems
- Commitment to see a job through to completion.

What is the most challenging part of this role?

Staff are given a varied workload so you will need to be able to prioritise effectively. and efficiently under pressure, particularly when service demand is high.

This role can vary on a daily basis. At times you could be on your feet most of the day in a plant room and other times you could be visiting departments at other hospital sites throughout Greater Glasgow & Clyde. It may involve working in areas with adult or child patients.

What is the most satisfying part of this job?

Technicians experience great job satisfaction in solving a problem and repairing equipment.

The role can be very satisfying, especially when you see a project through from beginning to end. A safe, comfortable environment directly benefits patients, staff and visitors.

You can be involved in tasks of varying levels of technical complexity from replacing a screw or light fitting to stripping down a rebuilding a pressurised boiler unit.

Longer term, how could this apprenticeship support career progress/ a career in the NHS?

The skills and qualifications earned can be used to develop a career in Estates progressing from Technician to Supervisor and to an Estates Manager within Operational Estates.

THE MODERN APPRENTICESHIP PROGRAMME

Job Description

You will work to the standard Estates Maintenance Technician Job Description with the expectation that you will be supported and trained to carry out all the duties and responsibilities outlined. You would not be expected to perform at Estates Maintenance Technician level on appointment.

1. JOB IDENTIFICATION

This post is part of the NHS GGC Modern Apprenticeship Programme. Postholders will undertake a formal programme of education and development to support the development of the knowledge and skills required for the post.

Job Title: Estates Maintenance Technician

Responsible to: Estates Supervisor

Department(s): Estates
Directorate: Facilities
Operating Division: Acute

2. JOB PURPOSE

This post is part of the NHS GGC Modern Apprenticeship Programme. Postholders will undertake a formal programme of education and development to support the development of the knowledge and skills required for the post.

To provide Electrical/Electronic/Mechanical & Plumbing Services to meet the needs of NHS GG&C Health Board, by operating an efficient and effective Estates Service within the Boards healthcare facilities to ensure the safe delivery of patient care; by.

- Delivering a planned maintenance, repair & installations service which represents quality and value for money at all times.
- Providing a safe maintenance service to all plant and equipment and service infrastructure within the Health Care Environment
- Assisting in the development of the Estates function into a customer focused range of services.
- Adopting a flexible, integrated working approach to the delivery of Estates Service

3. DIMENSIONS

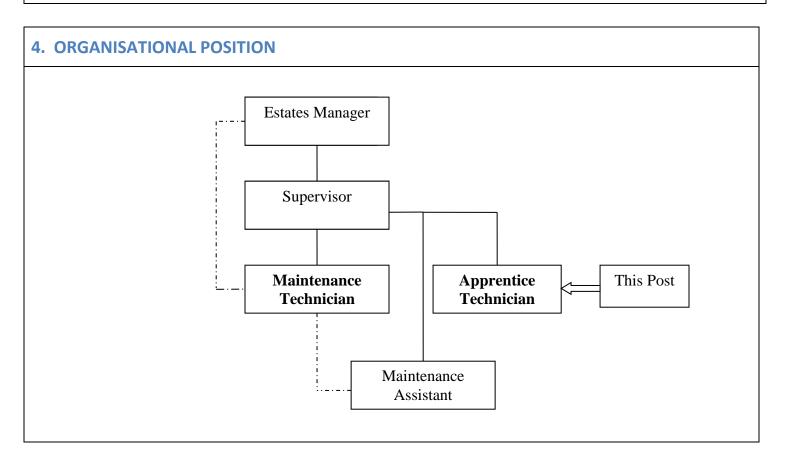
Estates Maintenance Technician (Specialist) hereafter "The post holder" is one of a number of Multi-skilled Technicians (specialists) employed by NHS GG&C, comprising five sectors as detailed below, The post holder is based within one of these named sectors.

- 1. Clyde Sector
- 2. North & East Sector
- 3. West Sector
- 4. South Glasgow
- 5. NHSGG&C Central Laundry & Communications Centre

The post holder is part of a multi-skilled team interacting across Electrical, Mechanical and Plumbing skills.

They are responsible to the Supervisor on operational matters and accountable to the Estates line Manager.

There are no budgetary responsibilities although the post holder(s) duties will impact on the departmental **budget**.



5. ROLE OF DEPARTMENT

To provide a safe comfortable & statutory compliant environment for the effective provision of state of the art clinical care for our patients.

This is achieved by maintaining and delivering an effective Planned Preventive Maintenance programme and reactive repair service as well as executing installation and commissioning works of critical plant and equipment to support the delivery of all clinical services.

Provide an integral contribution to the continual management & control of Health Associated Infection with respect to the built environment, in compliance with national Health Environment Inspectorate (HEI) & Healthcare Associated Infections Teams and Domestic Monitoring Tools (DMT).

Provide technical support & expert guidance in the design and implementation of service developments.

6. KEY RESULT AREAS

General Duties

- > Provide a safe and comfortable environment for the provision of clinical care
- Ascertain desired action using acquired skills and abilities to expedite best solution for desired outcome and assist putting solutions into practice
- ➤ In depth knowledge of Building Services infrastructure including the following services:
 - Electrical distribution Systems
 - Steam & Condensate distribution systems
 - Domestic Hot & Cold water services.
 - Heating service (Wet systems)
 - Heating, Ventilation & Air Conditioning (HVAC)
 - Air Tube Transport System
 - o Fire Alarm Systems
 - Nurse Call Systems
- ➤ In depth knowledge of Production services:
 - o Laundry

- Steam Boilers
- Industrial Tunnel Washer
- Hydro washer extractors
- Gas Dryers
- Callander rolling press
- Folding plant
- Conveyor systems
- Programmable Logic Controllers (PLC)

o Decontamination

- Steam boilers
- Clean steam generators
- Steriliser process operation
- Validation & Verification (Weekly, Quarterly)
- Preparation for annual Validation & Verification
- Programmable Logic Controllers (PLC)
- Packing equipment

Catering

- Catering Production Unit (CPU)
- Steam pans
- Brat pans
- Combi ovens (Steam/electric cooking)
- Cold storage
- Blast freezer (Cook/freeze)
- Industrial washing plant
- Conveyor belts
- Slicing equipment
- Food preparation equipment.
- Install and commission machinery using installation manuals to ensure safety and in compliance with health and safety, and statuary regulations that benefits and provides a safe environment for the user and patient care
- ➤ Interpret detailed manufacturers installation manuals and specification, technical data and wiring diagrams and schematic drawings for building services, systems, plant and equipment.
- Complete Planned Preventative Maintenance in accordance with organisational and manufacturers recommendation, using appropriate tools, test equipment and recording details of work carried out, to prevent breakdowns and maintain optimal operational ability.

- Respond to breakdowns, evaluate situation and take corrective action to ensure minimal disruption and damage.
- ➤ In depth effective use of BMS (Building Management System) computer to set parameters and record data on a wide range of building services to provide correct environmental conditions throughout the hospital and provide an early warning of service faults (Medical gas, heating, water, power etc.)
- ➤ Maintain repair & commission patient related equipment & services such as sterilisers, washer disinfectors, Operating lights and Tables, Dental Chairs, Medical gas, plant etc. to maintain and ensure there is a safe environment for staff and patients in these areas
- ➤ Carry out checks, repair, test and maintain specialised multi-faceted hospital equipment e.g. sterilisers, washer-disinfectors to the required standards as per Hospital Technical Memorandum 2010 and 2030 for patient care and infection control
- Measure up jobs for new installations and alterations, check plan drawings & on site plans, work out best route to run supplies and services, measure up & advise Supervisor of materials required to complete work.
- ➤ Provide emergency response service for the safe release of trapped passengers from vertical transportation lifts (requires formal Training for the safe release of trapped passengers (annual refresher training).
- Member of Fire Response Team, trained to operate as a member of a Fire Team to evacuate staff, patients and visitors in conjunction with Fire Officer and Fire Brigade in the event of a fire alert. (annual fire response team training)

Mechanical Duties

- Survey plant and equipment for, safety, soundness and establish maintenance to be undertaken
- ➤ Work on and maintain safety of pressurised systems such as steam, compressed air and hydraulic systems etc in compliance with statutory Pressure Systems Regulation 1998.
- Verify integrity and monitor heating and ventilation systems utilising calibrated test equipment to maintain a safe working environment within hospital sites
- ➤ Working with external competent inspection agency to prepare for and support the statutory inspection and re-validation of:-
 - Pressure Equipment Regulations 1999 & Pressure Systems Safety Regulation 2000: covering Steam/MTHW boiler & sterilisation plant, compressed air plant, pressurised storage vessels & safety valves i.e. Boilers, Calorifiers, heat exchangers for the provision of heating, hot water and

- compressed gas services to hospital properties.
- o **Lifting Operations & Lifting Equipment Regulations 1998 (LOLER):** Passenger lifts, Patient lifting equipment & Industrial lifting equipment.
- ➤ Work as a highly skilled competent person to maintain Medical Gas Piped Systems & associated gas supply plant & equipment in compliance with Scottish Health Technical Memoranda (SHTM 02-01) Pt B: Operational Management to ensure a safe supply for patient use. Following completion of one week's formal training and certification and appointed in writing by the MGPS authorised person (One week Refresher Training and revalidation required every three years)
- ➤ Carry out checks of medical gas plant including main liquid oxygen tanks, nitrous oxide and medical air manifolds, vacuum and medical air compressors and obtain the necessary formal qualifications named above to provide safe delivery of medical gases to all patients
- ➤ Carry out checks and repairs of oxygen and vacuum wall points and regulators in all wards including intensive care and high dependency units, theatres etc. Liaise with ward sisters & ward staff and re-assure patients as work carried out at bed-head units. Understand permit to work systems & interact with authorised persons & ward sister to make sure there is minimum disruption to patients & staff. Make sure all work is carried out to the standards required in hospital technical memorandums & pharmacy quality control.
- ➤ Check and maintain laminar flow and safety cabinets in TB and HIV labs using specialised measuring equipment to ensure safety of operators

Electrical Duties

- ➤ Carry out Electrical maintenance within healthcare facilities in statutory compliance of the Electricity at Work regulations (1989) and the Current BS7671, 17th Edition IEE wiring regulations, while working to the operational procedures set out in the NHS Scotland Electrical Safety Code of Practice Low Voltage Systems, Scottish Health Technical Memorandum (SHTM) 06-02, to ensure a safe environment and to maintain good quality and safe electrical systems for patient treatment. (Revalidation training required every three years).
- Fault finding and analysis within complex control systems and equipment in a safe, effective manner using fine tools and calibrated measuring equipment as required in

order to minimise future breakdowns and keep hospital running efficiently

- Inspection, testing and verification of fixed wiring systems contained within healthcare facilities, in statutory compliance of the Electricity at Work Regulations (1989) and compliance of the current Guidance note 3-BS 7671 17th Edition Wiring Regulations", utilising calibrated test equipment to maintain safe working environment within hospital sites
- ➤ Run, test and maintain emergency back-up generators to ensure continuity of clinical services for patients and staff in event of an electrical mains failure both Off- Load and On-Load and be competent in all aspects of emergency procedures in the event of loss of Electrical Mains
- Mandatory first Aid duties for working with electricity; to level of competence and training to meet requirements of safe code of practice for working with electricity

Plumbing Duties

➤ Participate in the development and delivery of water management regime to maintain, control, monitor & record that all plant, distribution system and stored product are within safe operating limits to ensure a high quality of potable water for use within a clinical environment.

In compliance with

- HSE Approved Code of Practice (ACOP) L8, mandatory guidance;
 "The control of Legionella Bacteria in Water Systems" and
- "Scottish Health Technical Memorandum (SHTM) 04-01: Water safety for healthcare premises; Pt B: "Operational Management"
- ➤ Carry our routine mandatory water quality monitoring and inspection duties as detailed in the above guidance documents.
- Ensure that only approved water fittings and materials are installed in NHS GG&C potable water systems; as approved by the Water Regulations Advisory Scheme (WRAS) under the "Water Fittings and Materials Directory"

- Monitor & record water meter readings to identify usage patterns, which will enable proactive identification and repair of leaks or resolution of high consumption
- > Provide service as competent person for natural gas installations, Gas Safe 2 week's full time training, certification and 1 year on the job consolidation training & development required. (refresher training every 5 years)

Health & Safety Duties

- > Training in & continual development of Health and Safety requirements relating to the provision of Estates services, to ensure personal safety and maintain a safe environment for staff and patients
 - Asbestos awareness (GG&C safe system of work Policy & Procedures)
 - Confined spaces (GG&C safe system of work Policy & Procedures)
 - o First aid training required for all staff working with electricity (Mandatory SHTM 06-02)
 - Working at heights (GG&C safe system of work Policy & Procedures)
- Work to all Board H&S policies & procedures
- > Carry out risk assessments to ensure own safety and safety of others

/a. EQ	UIPMEN	I AND MACHINER	Y

7d. EQUITMENT AND MACHINERT		
Please describe any machinery and/or equipment used in the job:	Give brief description of use of each item used:	
 a) A complete range of hand tools, including fine calibration & commissioning tools. 	a) Screwdrivers, micrometers, vernier gauges, pliers, Spanners.	
b) Test Electrical test equipment	b) Multi-meter, Insulation resistance tester, earth loop impedance tester, Residual Current Circuit Breaker (RCCD) tester	
c) Industrial Battery Maintenance	c) Test & service Battery systems for tractions & UPS systems. Discharge test. Specific Gravity test.	

Please describe any machinery and/or equipment used in the job:	Give brief description of use of each item used:
d) Power Tools	d) Drilling machine, grinders etc
e) Welding and metal burning equipment.	e) Joining and separating metal sections.
f) Gauges, callipers, rule, laser markers etc	f) Disassembling, measuring, marking out, assembling and calibrating plant & equipment.
g) Workbench and engineer's vice.	g) Holding stabilising work pieces.
h) Mechanical hacksaw.	h) Cutting materials.
i) Pedestal Drill.	i) Drilling, reaming and threading jobs.
j) Bench Grinder.	j) Sharpening drills and tools.
k) Block and Tackle units.	k) Industrial moving & handling: - Lifting, lowering and positioning plant & equipment.
I) Engine hoist.	I) Industrial moving & handling: - Lifting, lowering and positioning large plant & equipment.
m) Pallet Lifters.	m) Industrial moving & handling:- Transporting & large plant/equipment & stores
n) Communication devices (Radio Pager, Telephones, two way radio & portable electronic devices)	n) Effective communication, Emergency job response, data and record management

Please describe any machinery and/or equipment used in the job:	Give brief description of use of each item used:
o) Steam & High Pressure Hot Water (HPHW) & Low temperature Hot Water (LTHW) Boilers & Associated Plant	o) Maintain service, test, calibrate & prepare for statutory inspection.
p) Domestic Hot Water Generation, Storage & Distribution Plant.	p) Maintain service, test, calibrate & prepare for statutory inspection.
q) Cold Water Distribution Plant.	q) Maintain service, test, calibrate & prepare for statutory inspection.
r) Supply & Extract Ventilation Plant & Distribution Systems	r) Maintain service, test, calibrate & prepare for Mandatory inspection
s) Air Compressors, Air Receivers & Distribution Systems.	s) Maintain service, test, calibrate & prepare for statutory inspection.
t) Standby Diesel Electricity Generators.	t) Operate, test & monitor to ensure operating parameters are in line with manufacturer's specification.
u) Internal Transport Vehicles	u) Service & Maintain to Manufacturers specification
v) Lifts & Hoists	v) Undertake trapped passenger evacuation from lifts.
w) Medical Gases	w) Maintain service, test, calibrate & prepare for statutory inspection to ensure safe delivery at point of use for patient connection.
x) Plant	x) Maintain, service, repair, test & calibrate

Please describe any machinery and/or equipment used in the job:	Give brief description of use of each item used:
y) BMS Controls to component level, actuators, sensors controllers etc.	y) Maintain service, repair, test, programme & calibrate.
z) Laundry Equipment	z) Maintain, service, repair, test & calibrate
aa)Catering Equipment	aa)Maintain, service, repair, and test. Maintain, service, repair, test & calibrate
bb) Beds & Other Wheeled Furniture	bb) Patient trolleys, wheelchairs etc – Maintenance
cc) Operating Theatre Tables & Equipment	cc) Repair, test to manufacturer's specification.
dd) Patient lifting Equipment	dd) Repair, test to manufacturer's specification.
ee) Housing stock	ee) General repairs and maintenance
ff) Fire Alarm system	ff) Carry out routine functional testing, monitoring and recording of alarm activity and works operations carried out.

7b. SYSTEMS

The post holder is required to use:

Please describe any systems used in the job:

- a) Building Management System
- b) Computer aided facilities management (Cafm) system
- c) Statutory records system

d) Permit to work Systems

Give brief description of use of each item used:

- a) Monitor site services and plant conditions and adjust controls to maintain continuity of service.
- Record and report on planned maintenance tasks/repair actions taken & materials used via hand held electronic interface devices (tablets etc)
- c) Record statutory works and inspections to access, input and update of compliance registers.
 - Fire Alarm Systems
 - Generator Equipment.
 - Boiler/ pressure vessels.
 - Sterilisers/washer disinfectors.
 - Building Maintenance Systems.
 - Water Treatment
 - Water Temperature (i.e. Legionella).
 - Electrical Distribution Systems for critical and non-critical areas for patients and non-patient care
 - Medical Gas systems
 - Portable Appliance Testing
- d) Follow formal Safety policy & procedure while working on higher risk systems, by application of defined safe systems of work and associated safety documentation.

- e) Fire Alarm System Network Graphical user interface, and local sub panel user interface.
- e) To manage the fire detection system during fire alert conditions (emergency) and to manage the system operation on a daily bases with respect to system statutory testing & potential site operations/works impacting on the integrity of the system. Maintain system log of all activations and operations on the system.
- f) Emergency generators Programmable Logic Controller (PLC)
- f) Operate menu driven PLC to monitor generator operating conditions during both test and emergency loss of power conditions. Maintain system log of all activations and operations on the system.
- g) Medical Gas Pipeline Systems (MGPS)
- g) Maintain system log of all works carried out on life critical MGPS generating plant.

8. ASSIGNMENT AND REVIEW OF WORK

Work is generated in several ways:

- 1. Routine Planned Preventive Maintenance schedule, planned and issued by the supervisor.
- 2. Reactive repair maintenance reported by the customer via the Help desk operator programmed and issued by the supervisor.
- 3. Emergency response: reported via by the customer via the Help desk operator and automatically allocated to the technician responsible for the associated area to investigate and assess and resolve the emergency or where this is not possible provide a situation report to the Supervisor/Estates Manager .
- 4. Technician self-identified risk/failure, report via help desk an action timeously

On completion of any of the above tasks the Technician prepares and submits a written job report to the supervisor detailing the status of the associated service, plant or equipment concerned as per the operating procedure set out within the Computer Aided Facilities Management (Cafm).

The post holder also undertakes technical survey and assessment works as specified by the Estates Manager, with formal written report returned in predefined proforma's, e.g. Electrical load profiling.

Planning and organising complex activities including installations and maintenance of engineering plant/equip and co-ordinate with suppliers, contractors and hospital staff and adapt the above to suit the service requirements in the event of unforeseen circumstances such as interruptions or emergencies

Co-ordinate with clinical staff to ensure that patient care is uncompromised in the event of an interruption to services due to planned shutdowns for installation or maintenance.

The post holder will be supported during the apprenticeship to develop the skills required for above and to ultimately work unsupervised and to plans/organise own workload.

9. DECISIONS AND JUDGEMENTS

The Post holder will be trained, developed and supported during the apprenticeship with a view to developing the ability to:

- Work unsupervised and be responsible for daily decision making on priority of workload, and during emergencies Co-ordinates with clinical staff to ensure that patient care is uncompromised in the event of a loss of electrical, mechanical or plumbing services during essential fault finding and analysis.
- Work without supervision and during emergencies to be able to make critical decisions on technical solutions which impact on clinical services by carrying out assessment and condition appraisal of utility services, plant and equipment and makes decisions whether equipment is safe for use by patients and staff. Implements defined contingency plans/arrangements to ensure continuity of clinical service in such circumstances. Effectively communicates technical and safety issues resulting from such decisions with nursing and medical staff to support effective continuity of clinical service.
- Regularly make technical and safety decisions on methods of repairing and maintaining plant and equipment.
- To work both independently and as part of an effective team.
- Test, maintain, diagnose faults and repair a variety of complex, multi-faceted equipment such as: Building Management Systems, Sterilizers, nurse call, medical gas, laminar flow/safety cabinets and operating theatre equipment.
- Responsible for undertaking Periodic Inspection and Testing, compiling and issuing reports and certificates.
- Typical judgements, technical option appraisal and feasibility.
- Make decisions on economic value of repair or replace at components level.
- Undertake self-risk assessments, identifies risks and plans work safely around these.
- Technical reference to Estates Officer on specialist topics as required to deliver an
 effective service

- Liaise with Theatres, Wards and Departmental Staff for access to clinically sensitive areas review and agree working arrangements.
- Propose changes to working practices through consultation with management and implements agreed changes.
- Examine and inspects faults in plant and machinery, establishes and recommends how faults may be repaired and discusses with managers /heads of departments if it is financially viable or if new equipment is needed and if any other considerations are required e.g. effect on wards/theatres/patient etc.

10. MOST CHALLENGING/DIFFICULT PARTS OF THE JOB

- a) Keeping up to date with all legislation, policies and procedures and ensuring these are complied with in the execution of the job.
- b) Concentration required during investigation of complex faults problem solving/and prioritising tasks in stressful situations working under pressure from other staff where the problem is impaction of service continuity.
- a) Participation on the on-call rota out with normal working hours where work is unmanaged and responsibility for actions increased.
- b) Daily working in highly unpleasant conditions i.e.: noise, smell, cramped and confined spaces and high ambient temperatures

11. COMMUNICATIONS AND RELATIONSHIPS

The post holder will be trained, developed and supported to be able to:

Ability to interpret and communicate complex information to technical and non-technical staff. To provide training, technical advice & support to trainee's, maintenance assistants, fellow colleagues & specialised contractors, clinical staff and managers.

- a) Communicates and relates with all levels of staff and patients, relating to investigation of reported failures & planned maintenance tasks and the direct impact these may have on service continuity
 - Overcome barriers to understanding when explaining the technical tasks that are to take place and how they impact on the ward/patients.
- b) Consult with clinical staff to establish working restrictions in relation to the control of risk of infection.
- c) Communicates with internal Estates management, peers & external specialist contractors:
 - To support a wider team approach to resolving complex estates service issues to minimise adverse impact on clinical service provision.
- d) Delivery drivers, and suppliers: To ensure that the materials and equipment are directed to the correct destination for installation and commissioning in a timely manner to minimise adverse impact on clinical service delivery.

12. PHYSICAL, MENTAL, EMOTIONAL AND ENVIRONMENTAL DEMANDS OF THE JOB

Physical skills:

 Use of fine hand tools and test equipment, manual dexterity, workshop machinery skills, keyboard skills

Physical effort:

- Manual handling for periods greater than 20 minutes on a frequent basis.
- Occasional movement of Heavy Plant & Equipment, with or without the aid of lifting equipment for long periods within awkward locations.
- Ongoing requirement to exert moderate physical effort, i.e.: carrying heavy tool bags for periods greater than 20 minutes.
- Climbing stairs and ladders.
- Crawling, stooping and lifting objects.
- Driving Estates transport between various sites.

Mental demands:

- Immediate technical assessment required.
- Frequent Concentration required in stressful situations and can be occasionally prolonged.

- Stress of being on call and being randomly disturbed during these periods where frequent concentration is needed and work pattern is unpredictable due to the range of plant and possible breakdowns which can occur.
- Working under pressure during Emergency Response to critical service failures.

Emotional demands:

• Frequently working in Wards, Theatres & Intensive care with very ill and distressed patients.

Working conditions:

- Daily freezing conditions from both outside and internal chiller plant to very high ambient temperatures in the boiler house and other heating plant located within confined spaces.
- Frequent exposure to Hazardous materials and body fluids during routine maintenance & repairs.
- Daily working in highly unpleasant conditions i.e.: noise, smell, noxious fumes, body fluids, cramped and confined spaces.
- Some exposure to hazards i.e. Accident and Emergency Dept., Mental Health Wards.
- Working in confined spaces for long periods of time.

13. KNOWLEDGE, TRAINING AND EXPERIENCE REQUIRED TO DO THE JOB

See attached person specification

Modern Apprenticeship Person Specification

Estates Modern Apprenticeship Program

Job Titles: Multi-skilled Technician (Plumbing/Electrical Engineering/Mechanical

Engineering)

Department: Acute Hospitals sites across NHS GGC

Service: Estates

Criteria	Essential	Desirable
Qualifications & Training		
- 5 x National 5 (or equivalent) at grades A to C in the	Yes	
following subjects:		
English, Maths, Science/Technical Subject and 2 other		
subjects		
Knowledge, Skills & Abilities		
- Literacy and numeracy skills	Yes	
- Good keyboard and IT skills	Yes	
- Experience of using Office packages (MS Excel, MS Word, MS		
Access)		Yes
- Demonstrates Good communication and Interpersonal skills	Yes	
- Demonstrates the Ability to understand and follow	Yes	
procedures and policies	Yes	
- Demonstrates the ability to be an Effective team worker		
- Ability to work accurately, paying attention to detail while	Yes	
working to deadlines	Yes	
- Manual dexterity (relevant to duties)	Yes	
- Awareness of importance of confidentiality		
Personal Qualities		
- Demonstrate a caring outlook	Yes	
- Commitment to training & development	Yes	
- Enthusiasm – replace with Demonstrates a genuine interest	Yes	
in or enthusiasm for engineering	Yes	
- Willingness to have a 'hands-on' approach to work allocated	Yes	
- Demonstrates the ability to carry out duties in a safe manner	Yes	
as instructed / trained	Yes	

- Demonstrates the ability to use initiative	Yes	
- Demonstrates the Potential to communicate well with	Vaa	
colleagues and other service users within a healthcare environment	Yes	
 Demonstrates understanding of the service need to be flexible and to undertake mechanical and electrical work when required Smart appearance and ability to promote departmental reputation 	Yes	

The post holder is expected at all times to practice competencies that demonstrate insight, understanding and mutual respect of patients, their families, carers and work colleagues.

Whether in a clinical or non clinical role the post holder is expected at all times to be an exemplar of person centred care, embracing their Code of Conduct to a high standard as part of an integrated health professional team.

HOW TO CREATE AND SUBMIT AN ON LINE APPLICATION

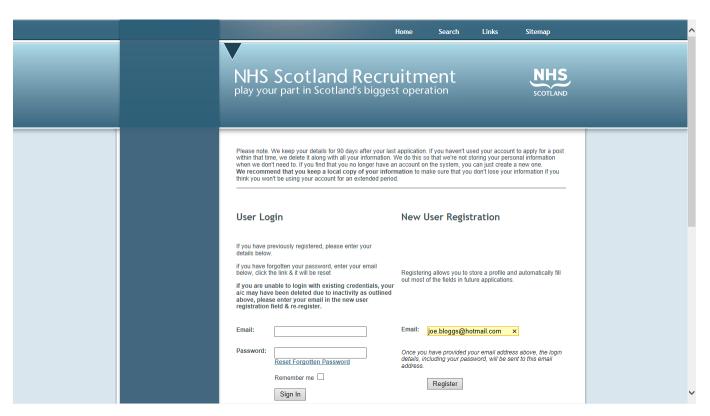
USING THE NHS ONLINE JOB APPLICATION SYSTEM - www.jobs.scot.nhs.uk

Once you have located the vacancy on the job site select the "How to apply: You can apply online, click here to start the process" option

Step 1 - Create your account

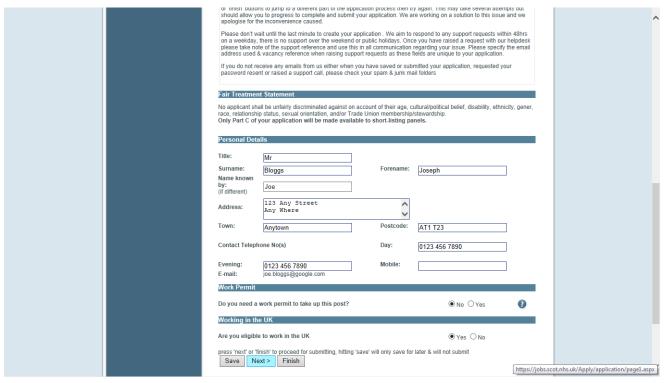
To create your user account type your email address into the email box under New User Registration. This will allow you to immediately proceed to completing an application form. You will also be issued a password by email which you can use when next accessing the system. Your user name will be your email address.

This email address will be your user name for future applications and the address that all emails from the NHS Scotland Webteam will be sent - including a notification of your password – so make sure its correct before pressing register.



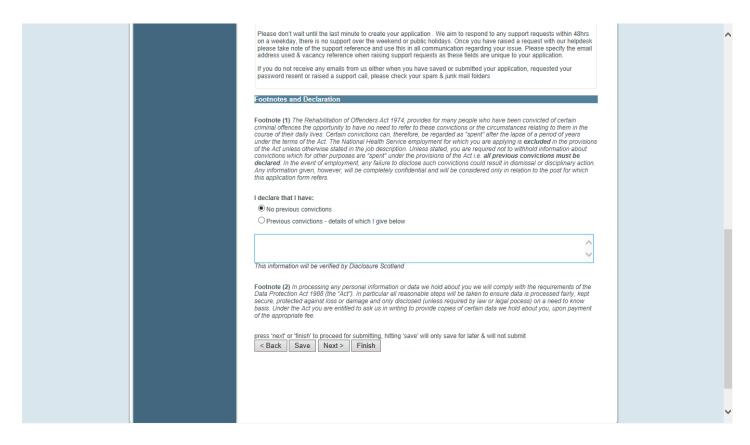
Step 2 – Personal Details

- Please read the instructions at the start of this section and complete as many sections as you can.
- Name known by if different is if you are called something other than your birth name eg Catherine known as Cathy or Joseph known as Joe.
- All applicant born in the UK or European Union are eligible to work in the UK and do not require a work permit – if this applies to you answer No for work permit and Yes for eligible to work in the UK. Non UK or EU nationals should view appendix 1 at the end of this document.



Step 3 – Criminal Convictions Declaration

If the position you have applied for states that PVG Scheme Membership/Disclosure Scotland Clearance is required you must declare any unspent convictions and spent conviction that appears on either the "Offences that must always be Disclosed" or that appear on the "Offences to be disclosed subject to rules" lists. For futher information visit https://www.disclosurescotland.co.uk/news/UKSCFAQs.htm



Step 4 - Qualifications and Memberships (Part C) – School , College, University and other Education History.

- For each subject you list you must include the type of qualification, the grade achieved and must include a date. If you are unsure of the exact qualification date please estimate using the last day of the month your qualification was issued eg 31/08/2015.
- For qualifications you are currently studying and have not received a result estimate the result you expect to receive and the date you estimate the results will be issued.
- All dates should be entered in number format. On submission they will revert to text and number eg 31/08/2015 will become 31 Aug 2015. This is not an error.

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	Medical Council, 8 Name of o	rganisation(s)	Registration Number	Renewal Date (ddimovyyyy)	
	Name of o	rganisation(s)	Registration Number	Renewal Date (dditron/yyyy)	
	Name of c	rganisation(s)	Registration Number	Renewal Date (ddinnniyyyy)	
	Name of 6	eganisation(s)	Registration Number	Renewal Date (ddfmm/yyyy)	
	Name of a	eganisation(s)	Registration Number	Renewal Date (ddironi)yyyy)	
	Name of a	erganisation(s)	Registration Number	Renewal Date (ddfmm/yyyy)	
	press head or fine	sh' to proceed for submetting, hits	Registration Number		
	press head or fine				
	press head or fine	sh' to proceed for submetting, hits			
	press head or fine	sh' to proceed for submetting, hits			
https://jobs.scot.nhs.uk/Apply/application/page3.aspx	press head or fine	sh' to proceed for submetting, hits			

Step 5 - Employment History (Part C)

If you have recently left School or College and/or have <u>no</u> previous employment please list the details of your school/college – see example below - and ensure the detail you type in the Role Purpose/Summary of Responsibilities section fits inside the box **without** scrolling.

P	Present Post o	r Most Recent		
	ob Title:	Full time Student	0	
		Full time Student	0	
	Grade: Date of starting		•	
	Grade:			
E	imployer:	Any Highschool, Anytown	•	
D	ates of Employ	yment		(if you are still employed in this role enter a date in the future e.g. 21/12/2112)
F	rom:	31/08/2010		To: 24/06/2015
L	Reason for eaving: if applicable)	Finished School		Ŷ
N	lotice Period:		•	-
c	Current Salary:		0	
	-		•	
y.	ommunication d our text is larg	o you use, how often? (1000 charac er then it will be truncated)	cter lim	imit, about size of box without scrolling, including spaces. If
e P	experience participati	placement or extra activ	rities	f account of any project work or work es you undertook at school or any lays, drama societies etc. Make sure
_	Employment H	liston		
	• •	•	nd wo	vorking down the page. (please enter the dates in dd/mm/yyyy
				loes please leave these in place to proceed)
	Job Title	Grade Employer		Dates From (dd/mm/yyyy) Date To (dd/mm/yyyy)
				Bates From (daminaryyyy)

For those with a current or recent employment history – paid or voluntary - please see next section.

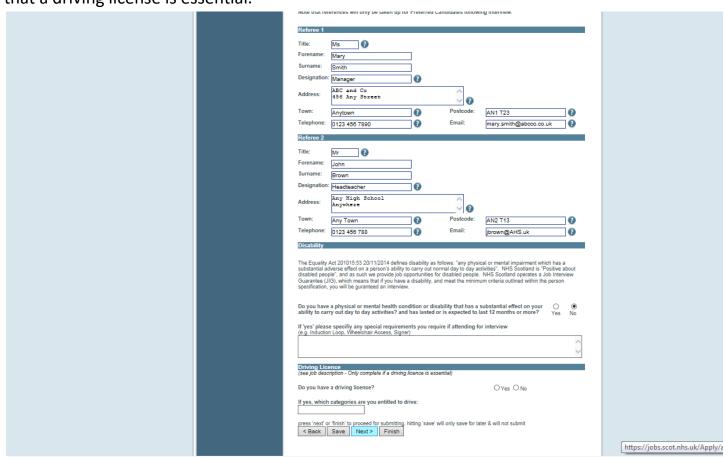
Step 5 - Employment History (Part C)

- If you are now employed or have recently been employed in either paid or voluntary employment provide those employment details here. If you are still working in the job the "to date" should be 21/21/2112. If this is a job you have now left and you are not currently employed on a paid or voluntary basis please ensure you include your last working day as day, month and year.
- Other jobs if any can be listed in the Previous Employment Section. If you can't be precise about dates please include an estimate date day, month and year.
- Make sure that you do not repeat the detail on the Present or Most Recent post in the employment history. If space allows you can also include any school or college work experience or work placements and any voluntary work.

	resent Post or	r Most Recent		
Jo	ob Title:	Office Junior	•	
G	rade:	Office Julion	0	
Di	ate of starting	31/10/2015		
E	mployer:	ABC and Co	•	
D	ates of Employ	ment		(if you are still employed in this role enter a date in the future e.g. 21/12/2112)
Fr	rom:	31/10/2015		To: 21/21/2121
Le Le	eason for eaving: f applicable)	To apply for NHS Apprenticeship programm	ie	0
N-	otice Period:	1 week	•	
C	urrent Salary:	£12.000	0	
		Summary of Responsibilities		
		rthen it will be truncated)	line	of the main tasks you are responsible
<u>f</u>	or and any		ssist	t with. Make sure you don't exceed the
				V
	mployment Hi			~
si	tarting with you	ır most recent employment first a	nd woi	wrking down the page. (please enter the dates in dd/mm/yyyy es please leave these in place to proceed)
si	tarting with you	ir most recent employment first a n may adjust the format of the date,	nd wor	rking down the page. (please enter the dates in dd/mm/yyyy
si	tarting with you ormat, the system	ir most recent employment first a n may adjust the format of the date,	nd woi	rking down the page. (please enter the dates in dd/mm/yyyy es please leave these in place to proceed)

Step 6 – Other information

- In this section please ensure that your application includes full referee details one of whom must be your current or most recent employer (paid or voluntary employment).
 If you have previous employment – paid or voluntary - you can provide a character references (not friends or family members) and a reference from your school and college.
- If you have a disability you are not required to disclose it however we do operate a
 guaranteed interview scheme for disabled applicants who meet the minimum selection
 criteria. If you have declared a disability and require special requirements for interview
 please let us know.
- Only include details if your driving licence if the post you are applying for has specified that a driving license is essential.



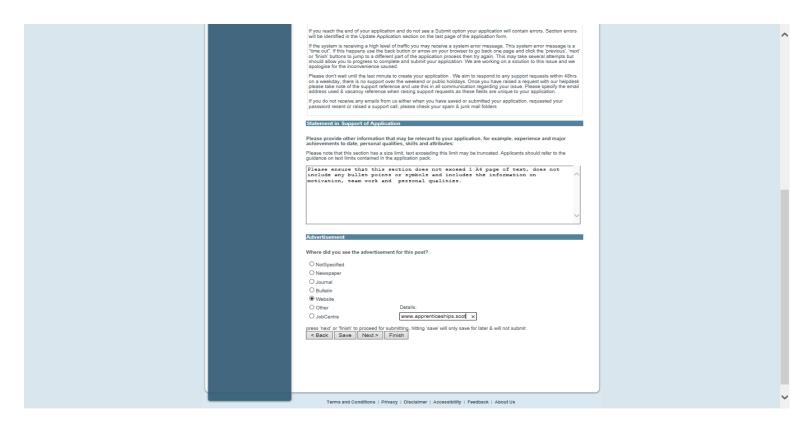
Step 7 – The Statement in Support of Application

Your supporting statement is your opportunity to tell us why, aside from meeting the minimum requirements for the Modern Apprenticeship Programme you want take part.

Make sure your statement isn't longer than 50 lines (aprox 1 A4 page including paragraph spaces) doesn't include any bullet points or symbols and includes all the detail requested in the information pack. You might find it helpful to draft your statement in MS Word or a similar programme to ensure that you have checked the length, spelling and grammar.

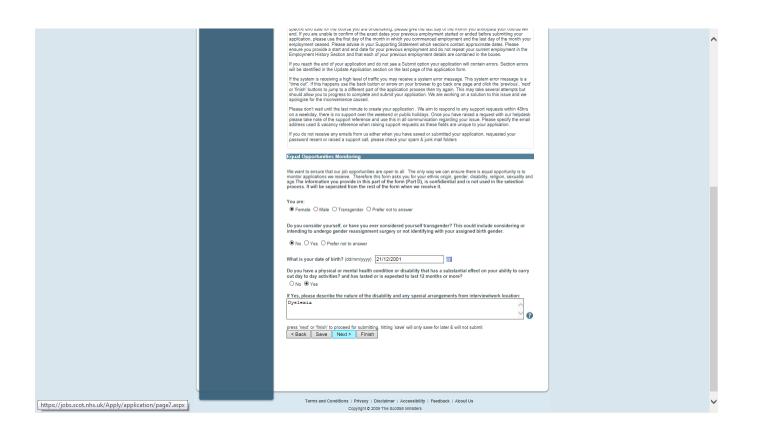
Once you have pasted it into the box if you are not certain of length check the number of lines including paragraph spaces before you submit.

Please do not exceed the 50 line limit as although you may be able to view on screen, your additional text may not be visible to the shortlising panel.



Step 8 – Equal Opportunities information

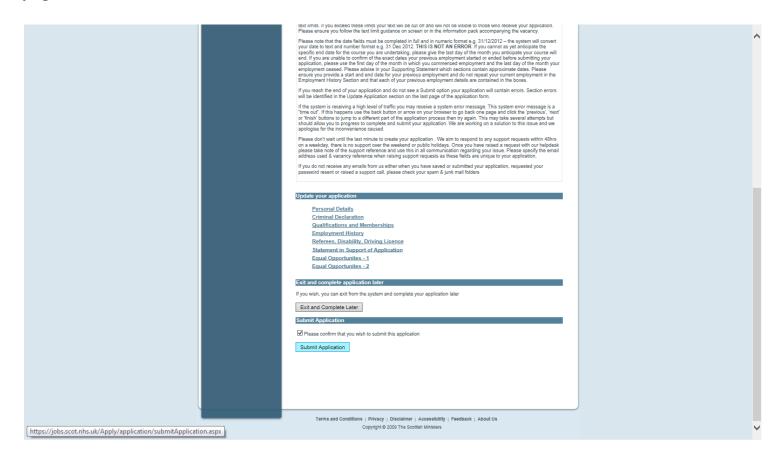
We are an equal opportunities employer but the only way we can ensure this is by recording certain information about the people who apply for or jobs. This data is confidential and is not part of the selection process, is not retained with your application and is used for monitoring purposes only. If you do not wish to provide any data please select "prefer not to answer" but please note that as the funding for modern apprenticeships is linked to your Age you must provide your date of birth.



If you do not wish to provide any data please select "prefer not to answer" but please note that as the funding for modern apprenticeships is linked to your Age you <u>must provide</u> your date of birth.

apologise for the inconvenience caused.	
Please don't walt until the last minute to create your application. We aim to respond to any support requests within 48 hrs on a weekday, there is no support over the weekend or public holidays. Once you have raised a request with our helpdesk please take note of the support reference and use this in all communication regarding your issue. Please specify the email address used & vacenary reference when raising support requests as these felicles are unique to your papication.	
If you do not receive any emails from us either when you have saved or submitted your application, requested your password resent or raised a support call, please check your spam & junk mall folders	
What is your ethnic group?	
O White : Scottish	
O White: Irish	
O White: Other British	
O White : Any other White background	
O Mixed : Any Mixed background	
O Asian, Asian Scottish, Asian British : Pakistani	
O Asian, Asian Scottish, Asian British : Indian	
O Asian, Asian Scottish, Asian British ; Chinese	
O Asian, Asian Scottish, Asian British : Bangladeshi	
O Asian, Asian Scottish, Asian British: Any other Asian Background	
O Black, Black Scottish, Black British: Caribbean	
O Black, Black Scottish, Black British : African	
O Black, Black Scottish, Black British: Any other Black background	
O Other ethnic background: Any other Background	
Prefer not to answer	
To which religion, religious denomination or body do you actively belong?	
○ None ○ Buddhism ○ Christianity, Other ○ Church of Scotland	
O Hinduism O Islam O Judaism O Other faith/belief	
O Roman Catholic O Sikhism Prefer not to answer	
Which of the following best describes your sexual orientation?	
O Bisexual O Gay man O Heterosexual (Straight) O Lesbian / Gay woman	
O Other Prefer not to answer	
press 'next' or 'finish' to proceed for submitting, hitting 'save' will only save for later & will not submit Save Next > Finish	
Save Next Fillian	
Terms and Conditions Privacy Disclaimer Accessibility Feedback About Us	
Copyright © 2009 The Scottish Ministers	

Step 9. Submitting your application. If you have fully completed all the required sections you will see the option below to submit. **If you do not see the submit option please see next page.**

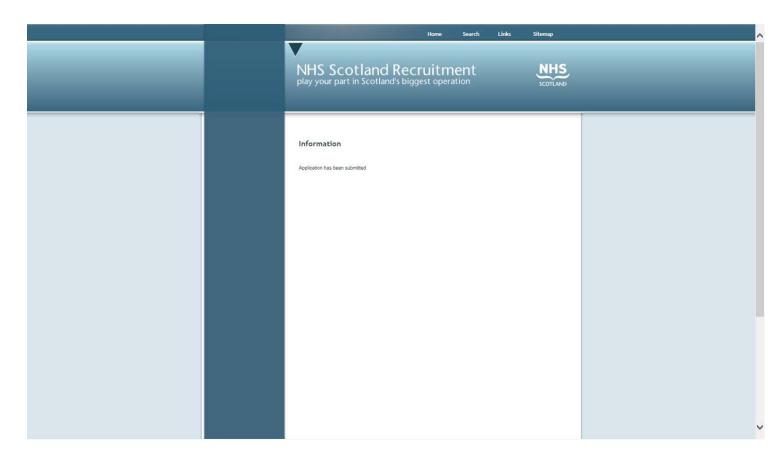


If you have not fully completed your application under the "Update your Application" section you will see what error is preventing your application submission. Once all sections are properly completed you will see the submit application option.



Step 9 - Confirmation that your application has been successfully submitted

You will see an onscreen message confirming successful submission and receive an email to the email address you created your account confirming submission. Please ensure you check your email inbox including junk mail folders for this email and make sure you keep this email as confirmation of submission. You will receive an additional confirmation from NHS Greater Glasgow and Clyde when we receive your application from the NHS Scotland Jobs Website.



Appendix 1

Right to work in the UK

Any **one** of the documents listed below will provide the necessary evidence of the right to work in the UK.

<u>If selected for interview and appointment</u> you will be asked to produce evidence of our right to work the UK.

The document provided must be the *original*.

- A passport showing that the holder is a British citizen, or has the right of abode in the United Kingdom.
- A document showing that the holder is a national of a European Economic Area country*
 or Switzerland. This must be a national passport or national identity card.
- A residence permit issued by the United Kingdom to a national from the European Economic Area country or Switzerland.
- A passport or other document issued by the Home Office which has an endorsement stating that the holder has a current right of residence in the United Kingdom as the family member of a national from a European Economic Area country or Switzerland.
- A passport or other travel document endorsed to show that the holder can stay indefinitely in the United Kingdom, or has no time limit on their stay.
- A passport or other travel document endorsed to show that the holder can stay in the United Kingdom; and that this endorsement allows the holder to do the type of work the employer is offering if they do not have a work permit.
- An Application Registration Card issued by the Home Office to an asylum seeker stating that the holder is permitted to take employment

OR

Two of the documents in the combinations listed below will provide evidence of the right to work in the UK. The documents provided must be the *originals*.

First Combination

• A document giving a person's permanent National Insurance number and name. This could be a: P45, P60, National Insurance card, or a letter from a Government agency

AND one of the following documents

 A full birth certificate issued in the United Kingdom, which includes the names of the holder's parents or

- A birth certificate issued in the Channel Islands, the Isle of Man or Ireland or
- A certificate of registration or naturalisation stating that the holder is a British citizen or
- A letter issued by the Home Office which indicates that the person named in it can stay indefinitely in the United Kingdom or has no time limit on their stay **or**
- An Immigration Status Document issued by the Home Office with an endorsement indicating that the person named in it can stay indefinitely in the United Kingdom or has no time limit on their stay or
- A letter issued by the Home Office which indicates that the person named in it can stay in the United Kingdom; and this allows them to do the type of work that the employer is offering or
- An Immigration Status Document issued by the Home Office with an endorsement indicating that the person named in it can stay in the United Kingdom; and this allows them to do the type of work that the employer is offering.

Second combination

 A work permit or other approval to take employment that has been issued by Work Permits UK

AND one of the following documents

- A passport or other travel document endorsed to show that the holder is able to stay in the United Kingdom and can take the work permit employment in question **or**
- A letter issued by the Home Office confirming that the person named in it is able to stay in the United Kingdom and can take the work permit employment in question.