



JOB SUMMARY – Engineering Manager / Head of Service (NDS Engineering)

1. NES Digital Service Group (NDS)

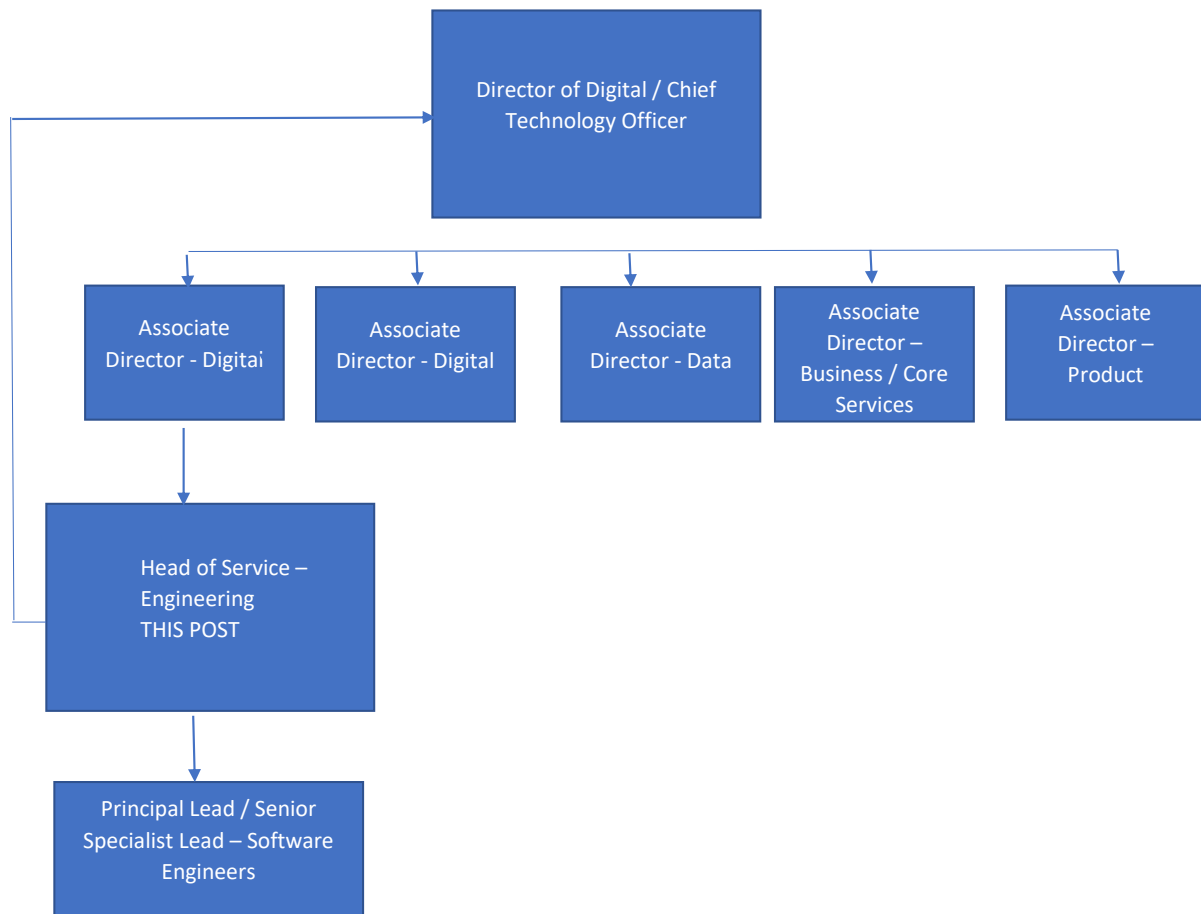
NHS Education for Scotland (NES) is a Special Health Board whose mission is to contribute to the highest quality of healthcare throughout NHS Scotland by promoting best practice in the education and life-long learning of all staff

The function of the NES Digital Service Group (NDS) is to deliver one of the key objectives of the recent Scottish Government's Digital Health and Care Strategy. The Strategy called for a Scottish 'national digital platform' through which relevant real-time data and information from health and care records will be made available to those who need it, when they need it, and wherever they are, in a secure and safe way.

These responsibilities relate to the core functions of NES in the following areas:

- Development of a new, digital by default, technical environment and commensurate digital services to all NHS Scotland stakeholders
- Support and development of fit for purpose, digital platform systems and services to allow delivery of strategic outcomes
- Communication, support and leadership in digital and data science disciplines
- Research and development as appropriate

2. Organisation Chart



3. Job Role

This new post is required to continue to design and lead the delivery of leading edge, digital by default, cloud based, person centric services in support of the NES Digital Service (NDS). It will support the CTO in running the NDS group and associated programme delivery and explicitly in the design and development of the Scottish National Digital Platform, systems and services as part of the Scottish Government Health & Social Care Delivery Plan. They will be responsible for workstreams that will support the key strategic themes of developing educational infrastructure and building workforce capacity and capability for service improvement across NHS Scotland, requiring the postholder to effectively manage change in order to deliver successful outcomes.

4. Key Tasks

These will include but will not be limited to:

- Provide strategic leadership in relation to their field of expertise, applying highly-specialised knowledge to architect and design sector-leading technical solutions for complex, integrated cloud-based services, ensuring security, efficiency, quality, resilience and performance.
- Leadership, line management of the NDS Engineering Service ensuring excellence in all the complex, integrated and diverse services it delivers and supports. Promote a culture of leading-edge practice to build capacity and capability.
- Lead the development of policy and strategy direction positioning the NDS Engineering Service at the interface between NES and the broader NHSScotland (and potentially into other public sector groups).
- To be responsible for the coordination, monitoring and management of information technology & service resources and other resources, including financial, within the Department or Directorate.
- Initiate, create and lead workstreams across a wide range of disciplines at national and regional levels for priority areas relevant to the field of expertise; this includes the design, development and operation of information systems and services used across NHS Scotland such as highly-scalable cloud-based web applications and services including continuous integration and continuous deployment (CICD) pipeline design using technologies such as TeamCity, Azure DevOps or Jenkins.
- Define and constantly test and evaluate technical and delivery standards that all NDS products and services must adhere to, ensure the highest quality and the lowest possible development and support overheads.
- Identifying and leveraging opportunities within NHS Scotland and peer networks which can aid delivery

Engineering Manager

1. JOB IDENTIFICATION

Job Title: Engineering Manager

Department(s):

Directorate: NES Digital Service

Job Reference:

Responsible to: Director / Chief Technology Officer

2. JOB PURPOSE

The purpose of this role is to provide a high quality, proactive and professional digital service, undertaking a portfolio of responsibilities within the Directorate, supporting multi-professional workstreams and contributing to the formulation and delivery of the Scottish Government Health Directorates (SGHD) policy and NES corporate objectives.

The postholder will co-ordinate and connect a range of activities across the interface between NES and services within NHS Scotland within a Digital context to support the delivery of NHS Scotland's Digital Health and Social Care strategy. They will be responsible for workstreams that will support the key strategic themes of developing educational infrastructure and building workforce capacity and capability for service improvement across NHS Scotland, requiring the postholder to effectively manage change in order to deliver successful outcomes.

The postholder will require a highly specialised knowledge within the Digital framework, some of which is at the forefront of knowledge in a field of work, which they use as the basis for original thinking and/or research.

3. DIMENSIONS

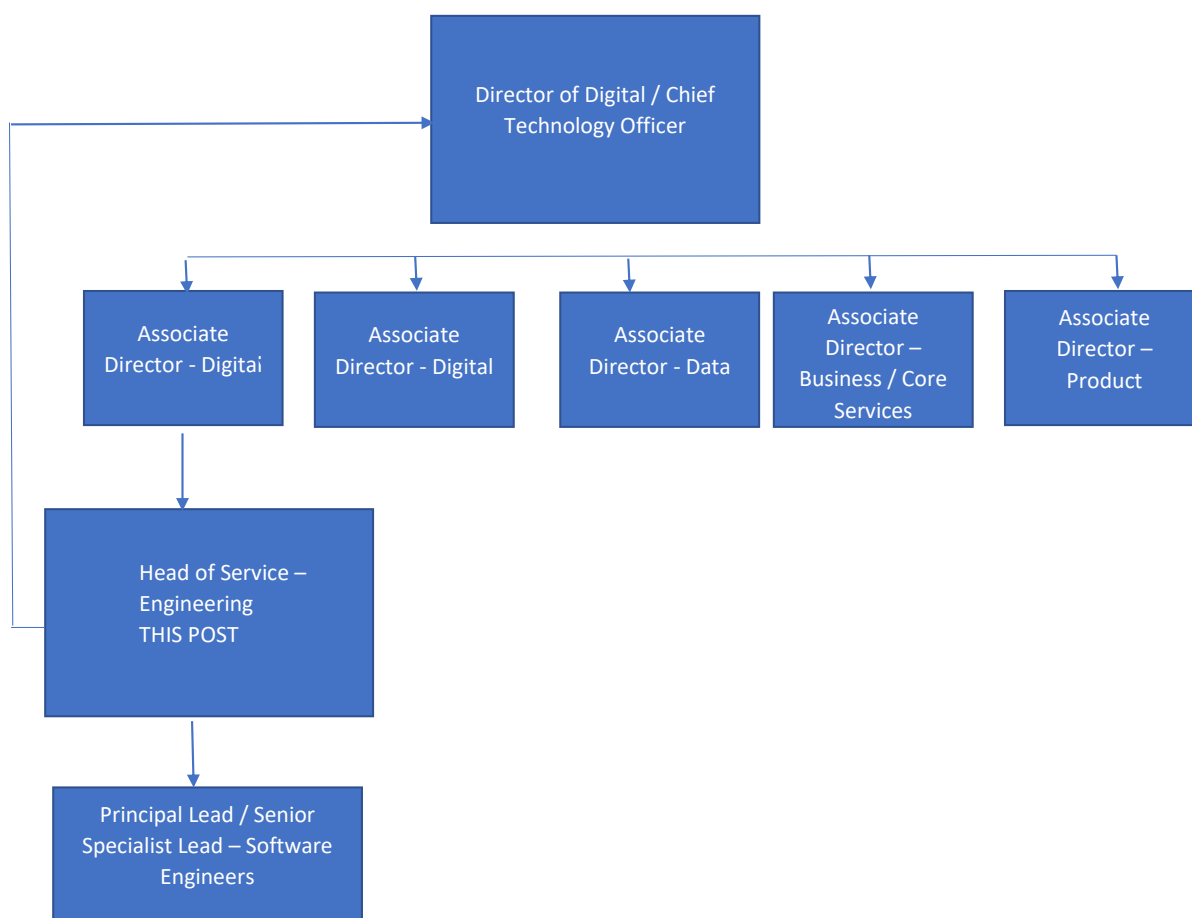
The postholder will provide strategic leadership in relation to their field of expertise.

The post carries a research and development remit, and the holder will be required to provide specialist advice at local, regional and national levels.

The postholder will manage and develop staff as well as having line management responsibilities for the engineering function/department within the Directorate to include appraisals, sickness absence, disciplinary and grievance matters, recruitment and selection, workload allocation and career development

The postholder will be required to assist in any other duties which are deemed reasonable to their role and band.

4. ORGANISATIONAL POSITION



5. ROLE OF DEPARTMENT

NHS Education for Scotland (NES) is a Special Health Board whose mission is to contribute to the highest quality of healthcare throughout NHS Scotland by promoting best practice in the education and life-long learning of all staff

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6. KEY RESULT AREAS (Key Result Areas convey **all potential** aspects of a job role. Key result areas will be further developed within the KSF outline with some being more relevant than others dependent on the current requirements for your role.)

- Provide comprehensive specialist input into the overall Directorate strategy, developing the annual directorate plan in conjunction with Senior Managers.
- Formulate and develop long-term strategic and operational plans to promote and develop appropriate agenda within NES, but which may impact across the NHS in Scotland.
- Interpret national and professional health service policies, in order to develop a long-term strategy and lead on policies for specific projects with set standards and targets in relation to education, training and the workforce.
- Translate strategy into policy and action plans which will have impact throughout the field of expertise. Manage implementation of national policy and development plans.
- Initiate, create and lead workstreams across a wide range of disciplines at national and regional levels for priority areas relevant to the field of expertise; this includes the design, development and operation of information systems and services used across NHS Scotland such as highly-scalable cloud-based web applications and services including continuous integration and continuous deployment (CICD) pipeline design using technologies such as TeamCity, Azure DevOps or Jenkins
- Create innovative digital, organisational, leadership and management development solutions to improve the effectiveness of individuals, teams, organisations, networks and systems.
- Responsible for the line management of colleagues within the engineering department within the Directorate.
- As appropriate, lead the implementation of organisational, leadership and management development priorities at a national level through direct delivery, delivery through sponsorship of host NHS Boards and through commissioning external providers.
- Responsible for developing and implementing policies across a range of disciplines across NES, including ensuring policies and procedures to ensure that all developments supported by NES adhere to common standards of development.
- To lead the development of policy and strategy relevant to the field of digital expertise through research into leading edge theory, best practice and effective stakeholder consultation at a national level, to ensure an ongoing continuous improvement in leadership capacity and capability.
- Promote culture of change, creative and leading-edge practice in organisational, leadership and management development as a means of encouraging the adoption of innovative approaches and the building of capacity and capability.
- To be in a position to provide specialist advice relevant to the role relating to current professional, scientific and practice developments.
- Analysis and interpretation of highly complex facts in particular within a technical context, together with a comparison of a range of options, evaluating new and innovative concepts, models, methods and practices for developments.
- To conduct regular evaluative reviews of programmes and contribute to the development of quality assurance and performance indicators relevant to the role in order that NES, as an

educational provider, as well as other providers continue to deliver programmes of appropriate quality and content.

- Evaluate and reflect on quantitative and qualitative reviews of professional provision in order to advise and plan future developments in relation to the area of expertise.
- Lead the process of embedding quality improvement theory and practice within current and future NES programmes and developments.
- To be responsible for the coordination, monitoring and management of information technology & service resources and other resources, including financial, within the Department or Directorate.
- Monitors and reviews the overseeing financial position for specified nationally-significant services provided by the department to ensure accurate and regular monitoring and reporting on planned and actual spend against the budget allocation.
- Provide supervision and guidance to others within the Department. Required to monitor, supervise and manage staff employed on short-time contracts to meet project deadlines and other pieces of time-limited work.
- Initiate and develop research and development plans for specific initiatives, which may involve making bids and securing monies for projects within NES or on a national basis for the profession.
- To initiate, secure funding, prioritise and manage specific research projects and evaluate new and innovative concepts, models, methods and practices relevant to the role.
- Responsible for implementing governance arrangements to ensure that all business and educational systems are integrated.
- Develop effective relationships with key stakeholders internal and external to NES to promote and ensure understanding of the NHS Scotland context and alignment of provision relevant to the role.
- As appropriate, be responsible for the commissioning, organising and managing the necessary professional prerequisites such as capability/competency frameworks and postgraduate education for healthcare professionals.
- Manage a portfolio of projects, both internally and externally funded.
- Manage the full range of operational functions relevant to the role.

7a. EQUIPMENT AND MACHINERY

- A range of office, audio-visual and IT equipment
- PC for design, development and maintenance of IT solutions.
- Multi-function devices: scanners, copiers, printers, fax
- Telephone
- VC facilities
- Portable equipment, including laptop etc

7b. SYSTEMS

- Utilisation of current data and information systems relevant to role currently in use throughout the NES organisation. Use of highly-scalable cloud-based web applications and services including continuous integration and continuous deployment (CI/CD) pipeline design using technologies such as TeamCity, Azure DevOps or Jenkins
- Service based digital platforms; including information systems and services used across NHS Scotland

8. ASSIGNMENT AND REVIEW OF WORK

- The postholder works autonomously and the work will be largely self-directed in line with NES priorities. The majority of work is generated, organised and affected by the postholder in relation to defined strategic and policy needs.
- This role will be developed with the postholder to inform, reflect and respond to the overall strategy of NHS Education for Scotland and with the freedom to act at the highest levels and within strategic and operational parameters on specific areas of discretion.
- The postholder will be expected to participate in performance development, part of which involves agreeing annual objectives and use of the appraisal and personal development planning process of the organisation.
- The postholder is responsible for identifying, assessing, planning and managing intense, varied, unpredictable and critical services across the whole of NES. There is significant freedom and therefore responsibility in assessing competing work demands and in prioritising projects and activities.
- A significant amount of work is reactive for which no planning is possible.

9. DECISIONS AND JUDGEMENTS

- The postholder will be directly accountable to NES for the conduct and outcome of initiatives undertaken in the development of the role.
- The postholder is accorded a high level of autonomy for the areas within the dimensions identified. The postholder acts as a principal source of advice for NES and is accountable for achieving results within the frameworks set by NES.
- The postholder is the lead specialist and is required to set goals and standards for the Directorate and NES in specialist area of work.
- They will demonstrate innovation, advanced problem solving and mastery of methods and approaches in complex and specialised areas of work.

10. MOST CHALLENGING/DIFFICULT PARTS OF THE JOB

- The postholder is required to use vision, strategic management skills and an innovative, flexible approach to organising, commissioning, delivering and evaluating education on a national basis in line with NES policy and evidence based practice.
- Creating and coordinating the wide range of links across NHS Scotland, and with partner organisations, combined with the complexity and volume of these relationships.
- Leading on cross cutting technology workstreams and maintaining engagements from key stakeholders.
- Maintaining high levels of service whilst being pressured for change and innovation by both internal and external forces.
- Developing an integrated, focused cohesive strategy to help deliver the cultural and strategic change throughout the service.
- Prioritising amongst competing demands, determining priorities, designing effective solutions and delivering within resources.
- Providing effective delivery mechanisms at a national level.
- Interpretation, development and implementation of national policy with minimal guidelines in a fast-changing environment with a variety of service providers in health, social care and voluntary sector arenas.

11. COMMUNICATIONS AND RELATIONSHIPS

- Interpretation of highly complex information is core to this role where the subject matter / materials being communicated are highly technical and will represent not always welcome business process changes and will require technical expertise and clarity in communication to persuade internal and external Partners to review business processes within a technical context.
- Excellent communication, negotiation, motivational, organisational, management and leadership skills, in order to further develop NHS Education for Scotland as an integrated professional organisation within the Digital industry.
- Ability to communicate on an individual basis, in small departments and with large groups across a broad spectrum of stakeholders throughout the NHS. Maintaining good relationships with key people at Director Level within NHS Boards and third sector organisations including negotiating contracts, agreeing priorities for NHS Boards at a corporate level and appropriate use of NES funding. Working relationships have to be based on professional credibility, trust and the ability to build consensus. The post will manage a team engineers, delivering management projects across the organisation.
- Ability for dealing with highly sensitive, sometimes contentious information. This includes difficulties arising in the supervisory relationship as well as in other training relationships.
- Excellent oral and written communication skills in order to address highly difficult and complex issues e.g. when leading and chairing events and meetings. This may involve persuasive, motivational, negotiating and training skills in order to provide, receive and present potentially complex, contentious issues to large groups of staff within a technical context e.g. sprint reviews, discovery workshops etc.
- Planning and negotiating of training opportunities to enable the best possible learning environments to be utilised.
- Ability to operate at an expert level in specialist subjects and is required to be an excellent trainer, presenter and communicator.
- Required to take the lead in effective liaison and communication with senior personnel.

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

Physical skills

- The postholder is required to have excellent keyboard skills.

Physical effort

- There is a frequent requirement for sitting or standing in a restricted position at the computer, for a substantial proportion of the working time.

Mental effort

- There is a frequent requirement for the postholder to engage in prolonged concentration, for example when:
 - Preparing responses to policy and regulation documents.
 - Researching and creating policies and issuing guidelines dependent on legislation.
 - Researching and preparing reports and other documents which will be distributed to internal and external stakeholders.

- Co-ordinating, managing and implementing research and development programmes.
- Facilitating workshops.
- Acting as a chair at national meetings and strategic groups. The postholder must be highly self-disciplined with regard to time-management and have an emotional stability appropriate for the level and demands of this role.
- The postholder will frequently have to deal with priority changes in order to meet deadlines and changing demands.
- Rapid decision making requires assessment of a number of options and judgement on the likely outcome and business impact on NES.
- There is the requirement to respond accurately and timely to external demands which cannot be controlled. These demands are unpredictable and occur regularly.

Emotional effort

- The postholder is required to occasionally deal with emotional or emotive circumstances (during meetings when issues arise which can be controversial or complex) and require excellent influencing skills, when negotiating with a variety of different stakeholders or when managing staff within the engineering department.
- The postholder is required to manage the interface with professional service leads that may not always agree with identified priorities or may have different views on future needs.
- With responsibility for people there are often an occasional exposure of emotive circumstances. There is an occasional requirement to give people unwelcome news, apply an unpopular policy/procedure or reject a proposal/request.

Working Conditions

- Working at VDU for long periods.
- Travel to other locations which can often involve out of hours travelling time and overnight stays.

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

- Masters' qualification or equivalent in relevant discipline.
- Evidence of expert knowledge within the Digital & Information Services speciality in leading technology innovation and improvement
- Proven and demonstrable proponent of best practice and standards in cloud native solutions, working in cross-functional software delivery teams. in cloud based, cross-functional software delivery teams.
- The postholder must have the skills necessary to engage, develop, collaborate, negotiate and utilise an extensive and complex professional network of contacts and relationships with government agencies, funding bodies, professional regulatory bodies, other education providers and the service to deliver large scale and complex technology solutions in order to progress and add value to delivery
- The ability to function politically, analyse information, understand complex arguments, make judgements, reconcile competing demands and negotiate with and influence others are key skills. The postholder must be an excellent communicator and be able to demonstrate clear evidence of career success to date.
- Proven and demonstrable ability to function and support others within the context of a rapidly changing environment e.g. Digital industry.
- Core management skills applied within NHS settings including: Analytical and negotiation skills; project management, facilitation, budget and relevant Digital skills.

- To provide evidence of leadership skills (specifically in Digital architecture and design delivering all aspects of a national/international set of highly scalable web applications and services in the public cloud) and ability to influence at all levels using self-management ability and analytical, prioritisation and judgement skills in order to influence digital education or health and social care services.
- Ability to work in complex environments where the parameters of the job are not necessarily clearly defined.
- Experience in the role to a strategic level.
- Experience of Digital service development/management of change.
- Experience of initiating, conducting and coordinating research.
- Track record in developing, commissioning, managing and evaluating development programmes/activities.
- Understanding and knowledge of government health policy.
- Well-developed facilitation skills.
- A track record in delivering presentation to large audiences on a national basis and with experience and knowledge of developing and delivering management education.
- Ability to meet the travel requirements of the post.



PERSON SPECIFICATION

Essential Criteria – these are attributes without which a candidate would not be able to undertake the full remit of the role. Applicants who do not clearly demonstrate in their application that they possess the essential requirements will normally be eliminated at the short listing stage.

Desirable Criteria – these are attributes which would be useful for the candidate to hold. When short listing, these criteria will be considered when more than one applicant meets the essential criteria.

Means of Assessment – please note that candidates invited for interview will be notified if there will be a requirement to undertake a test or presentation. These additional assessments may be used to judge one or more criteria within the factor.

| Factors | Essential | Desirable | Means of Assessment |
|--|--|-----------|-------------------------------------|
| Key Leadership Behaviours | <ul style="list-style-type: none"> Inspiring Empowering Adaptive Collaborative Engaged and Engaging | | Application & Interview |
| Education and Professional Qualifications | <ul style="list-style-type: none"> Educated to Masters degree level or equivalent relevant experience | | Application & Pre-Employment checks |
| Experience/Training (including research if appropriate) | <ul style="list-style-type: none"> Proven and demonstrable proponent of best practice and standards in cloud native solutions, working in cross-functional software delivery teams. in cloud based, cross-functional software delivery teams. The ability to function politically, analyse information, understand complex arguments, make judgements, reconcile competing demands and negotiate with and influence others are key skills. The postholder must be an excellent communicator and be able to demonstrate clear evidence of career success to date. Proven and demonstrable ability to function and support others within the context of a rapidly changing environment e.g. Digital industry. Experience in the role to a strategic level. Experience of Digital service development/management of change. Track record in developing, commissioning, managing and | | Application & Interview |

| | | | |
|--------------------------------------|--|--|-------------------------|
| | <p>evaluating development programmes/activities.</p> <ul style="list-style-type: none"> • Able to develop and utilise an extensive and complex professional network of contacts and relationships with stakeholders, partners and networks that may add value to NDS delivery . • Experience of initiating, conducting and coordinating research & Innovation. | | |
| Specific Skills and Knowledge | <ul style="list-style-type: none"> • Evidence of expert knowledge within the Digital & Information Services speciality in leading technology innovation and improvement • The postholder must have the skills necessary to engage, develop, collaborate, negotiate and utilise an extensive and complex professional network of contacts and relationships with government agencies, funding bodies, professional regulatory bodies, other education providers and the service to deliver large scale and complex technology solutions in order to progress and add value to delivery • Core management skills applied within NHS settings including: Analytical and negotiation skills; project management, facilitation, budget and relevant Digital skills. • To provide evidence of leadership skills (specifically in Digital architecture and design delivering all aspects of a national/international set of highly scalable web applications and services in the public cloud) and ability to influence at all levels using self-management ability and analytical, prioritisation and judgement skills in order to influence digital education or health and social care services. • Ability to work in complex environments where the parameters of the job are not necessarily clearly defined. • Understanding and knowledge of government health policy. • Well developed facilitation skills. • A track record in delivering presentation to large audiences and with experience and knowledge of developing and delivering management education. • Ability to meet the travel requirements of the post. | | Application & Interview |

| | | | |
|---------------------|--|--|-----------|
| | | | |
| Personal Attributes | <ul style="list-style-type: none">• Strategic thinking• Able to inspire confidence• Able to convey clarity of thinking• Able to work unsupervised | | Interview |

Leadership Behaviours

NHS Education for Scotland (NES) assesses and selects employees based on our leadership behaviours which are expected at all levels in the organisations. These leadership behaviours support the NES ways of working and NHS Scotland values.

These leadership behaviours describe how we work, and what is expected of everyone who works in NES. A number of methods may be used to assess these behaviours as part of our recruitment and selection processes. Our leadership behaviours are:





CONDITIONS OF SERVICE

| | | | |
|--|---|-------------------------|------------------------------------|
| TITLE: | Engineering Manager-NDS | LOCATION: | Flexible Base Location |
| REPORTING TO: | Chief Technology Officer-NDS | | |
| GRADE: | Agenda for Change Band 8C | SALARY SCALE: | £71,365 to £76,914 per annum |
| HOURS AND DAYS OF WORK: | Full time. Based on a normal working week of 37.5 hours. Office opening hours are 0700 to 1900 | | |
| JOB STATUS: | Fixed term opportunity for 36 months | NOTICE PERIOD: | 3 months |
| ANNUAL HOLIDAYS: | 27 days rising to 29 days after 5 years service, rising to 33 days after 10 years service | PUBLIC HOLIDAYS: | 8 local/ Public Holidays per annum |
| REHABILITATION OF OFFENDERS CLASSIFICATION: | The 'exemption' status of posts within NES may change in the future and all successful candidates should be aware that they may be asked to obtain a further Disclosure from Disclosure Scotland at a later date, should a post's status change, or if they are transferred or promoted into a post that is exempt. | | |

SUPERANNUATION:

Please note under changes to workplace pension arrangements introduced by the UK Government, NHS Education for Scotland along with other employers requires to ensure all staff are automatically enrolled in a pension scheme. Consequently, all new starts from 1 October 2013 will be automatically enrolled into the NHS Superannuation Scheme (Scotland). Contributions are based on whole time pensionable earnings as set out in the table below;

| Employee contribution rates 2020/2021 | | |
|---------------------------------------|---|--------------|
| Tier | Annual Pensionable Pay (Full Time Equivalent) | Contribution |
| 1 | Up to £18,936 | 5.2% |
| 2 | £18,937 to £23,228 | 5.8% |
| 3 | £23,229 to £28,891 | 7.3% |
| 4 | £28,892 to £56,266 | 9.5% |
| 5 | £56,267 to £79,801 | 12.7% |
| 6 | £79,802 to £117,960 | 13.7% |
| 7 | £117,961 and above | 14.7% |

Sessional workers who work more than 10 sessions per week under NHS condition may be unable to contribute further to the superannuation scheme.

The conditions above are for information purposes only and may be subject to variation. They do not form the basis of a legal contract.