Job Description

For ICT Practitioner Positions

This form is used to provide a complete description of the specific job (or role) and defines the skills, knowledge and abilities required to undertake the specific and generic role profile.

Section A: Specific Role Profile

The specific role profile provides key information relating to the salary and working conditions e.g. location of a job, along with the current focus of the job role and a brief description of the main duties.

Role Details

Job Title:	Analyst Programmer (GIS)	JEID	IT005
Salary Grade:	Grade L		
Team:	Data Innovation Team		
Service Area:	Insight Service		
Primary Location:	Shire Hall		
Political Restriction	This position is not politically restricted.		
Responsible to:	Data Innovation Manager		
Responsible for:	Intelligence Support Officer(s) Business Intelligence Apprentice(s)		

Role Purpose

To enable the transformation of Council services through the development of innovative new strategies, systems and data analytics to provide deeper insights into Council data and to provide a more rigorous evidence base.

Role Responsibilities

Build relationships with senior data managers across a range of internal services and external partner organisations to enable the effective acquisition, sharing and utilisation of data to transform and improve Council services.

Develop and manage the corporate PostGIS spatial database and develop new web GIS tools to search, view and interact with spatial data.

Support frontline services in the manipulation and analysis of complex spatial data by helping them to formulate SQL queries and other routines, and provide hands-on support to web GIS and desktop GIS users.

Provide an advisory service to the organisation on the most effective ways to collect, store and utilise data and the creative freedom to determine appropriate data management solutions.

Develop systems to enable on the fly analysis of real-time spatial data to provide new insights into the geography of the region to add value to the organisation.

Support the development of information dashboards to support service managers and senior

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decision-makers in the transformation and delivery of Council services.

Identify how the better use of information, data and leading edge insight and analytics could deliver additional and potentially significant savings for the Council for the longer term.

Using ETL (Extract, Transform, Load) processes to take data in any format from multiple endpoints and convert them to different data types to be used for Council purposes.

Develops and maintain system interfaces (including APIs) as required in the development of new data management systems.

Actively contribute to the development of a Warwickshire Data Innovation Lab to provide a technical facility for services and partners requiring data management and analytics support.

Section B: Generic Role Profile

The generic role profile provides a list of the main tasks that cover the broad range of duties and responsibilities performed at this level for the job role. An employee may not be undertaking all of these at any one time, but they could be expected to do so under their contract of employment.

Generic Role Details

Job Role:	ICT Practitioner – SFIA Level 5

Main Tasks

- Carries out assignments, alone or as part of a team, applying knowledge, skills, and experience. Demonstrates an understanding of the issues of interest to the client organisation and proposes viable solutions within the scope of own expertise, taking into account the needs of those affected (TSCNSL501).
- Develops and maintains knowledge of the technical specialism by, for example, reading relevant literature, attending conferences and seminars, meeting and maintaining contact with others involved in the technical specialism and through taking an active part in appropriate professional and trade bodies (TSTECH501).
- Carries out specific assignments related to the technical specialism, either alone or as part of a team (TSTECH505).
- Takes responsibility for the definition, documentation and safe execution of small to medium-scale projects, (typically lasting 6-12 months, with direct business impact, team of 3-5 and firm deadlines), actively participating in all phases of the project. Identifies, assesses and manages risks to the success of the project (TSPRMG501).
- Takes responsibility for investigative work to determine business opportunities, and specify effective business processes. Specifies their implementation through improvements in information systems, data management, practices, organisation and equipment. Applies and monitors the use of required modelling and analysis tools, methods and standards in an intelligent and effective way (TSBUAN501).
- In a specified area of authority, works with business management to define and initiate systems development projects which support the organisation's objectives and strategic plans. Communicates information about planned projects as appropriate (TSDLMG501).
- Takes responsibility for the design, coding, testing and documentation of particularly large, complex or mission critical programs (TSPROG505).
- Specifies and designs large or complex systems, covering for example: objectives, scope, constraints (such as performance, resources etc.), hardware, network and software environments, main system functions and information flows, data load and implementation strategies, phasing of

- development, requirements not met, and alternatives considered (TSDESN501).
- Leads the assessment and selection of suitable software packages to meet all or parts of specified requirements (TSDESN508).
- Takes responsibility for one or more installation projects, providing effective team leadership (TSHSIN501).
- Manages database resources, including allocation of system storage. Working with the capacity management function, plans for future storage requirements, and prepares cases for additional resources (TSDBAD505).
- Takes responsibility for significant aspects of the installing, upgrading, operation, control, maintenance and effective use of local and wide area networks for the communication of data, voice, text or images (TSNTOP501).
- Investigates and diagnoses complex network problems, working with users, other staff and suppliers as appropriate. Resolves such problems, co-operating with the capacity management function and Network control and operations, to maintain overall network performance (TSNTAS505).
- Assisted by user representatives, technical specialists and legal specialists, assesses tenders on the basis of the pre-defined evaluation criteria and in accordance with relevant procurement processes and tender evaluation models. Presents evaluation results and recommends suppliers to those responsible for authorising the procurements (TSPROC).
- Regularly monitors the incidence, status and speed of resolution of enquiries and problems; is pro-active in devising improvements and recommending changes to systems, products or services. Evaluates potential solutions, and implements agreed field modifications or workarounds (TSUSUP505).
- Ensures that requests for support are properly logged, assigned and responded to in a timely manner and according to agreed standards and procedures. Ensures users and other interested parties are kept informed of progress and that corrective action is taken to avoid or minimise delays (TSASUP503).
- Monitors levels of service performance, ensures detailed metrics and records are kept and analysed, provides adequate, accurate and timely reports, to Customers and providers and initiates appropriate action to resolve issues involving other service management processes as necessary. Monitors the effectiveness of all service level management tools and processes in use. Recommends and justifies the purchase of new or upgraded tools and processes (TSSLMO505).

Section B: Person Specification

The person specification provides a list of essential and desirable criteria (skills and competencies) that a candidate should have in order to perform the job.

Each of the criteria listed below will be measured through; the application form (A), a test / exercise (T), an interview (I), a presentation (P) or documentation (D).

Essential Criteria

	Assessed By:
Either hold a full relevant professional qualification or have significant experience in an ICT environment at a senior level.	D, I
The ability to demonstrate a high degree of complex problem solving skills	A, I
The ability to communicate complicated and contentious information with varied audiences in person and/or writing	A, I
The ability to work within broad practice or guidelines using managerial discretion over a broad area of activity	A, I

The ability to work under a very high degree of pressure, including meeting unpredictable deadlines and dealing with conflicting demands	A, I
Experience of supervising and managing a small team	A, I
Experience of monitoring and managing project budgets	A, I
Experience of contributing to the development of ICT Policies and Procedures	A, I
Excellent IT skills	A, I
The ability to pull together plans/develop solutions through the introduction of new/original thinking	A, I
The ability to persuade others to adopt a course of action which is not necessarily their preferred approach	A, I

Desirable Criteria
Assessed By:

At least two years experience of developing and implementing web GIS and map services, ideally using PostGIS and GeoServer	A, I, D
Experience of using and supporting others in the use of desktop GIS (preferably QGIS, ArcGIS and/or MapInfo)	A, I
Experience of developing complex FME workspaces to combine and manipulate data from a variety of sources	I
A programming language such as Python	I
Experience of designing and creating web content using HTML, CSS and JavaScript	I

Section C: Working Conditions

The working conditions relate to those non-contractual elements of the job that may impact on the holder of the position, as well as those workplace-based responsibilities that are part of this job. These are not contractual but provide a guide to the working conditions and the potential hazards and risks that may be faced.

Health & Safety at Work

To take responsibility for your own health, safety and wellbeing, and undertake health and safety duties and responsibilities for your role as specified within Warwickshire County Councils Health and Safety Policy, and all other relevant health and safety policies, arrangements, procedures, systems of work as specified for the post/ role.

Potential Hazards & Risks

The potential significant hazard(s) and risk(s) for this job are identified below (those ticked). The purpose of recording this information on the job description is so that the health status of the potential and actual post-holders can be assessed with regard to the significant hazards and risks. These hazards and risks should be based on the appropriate activity, process and/or operation risk assessment whereby all of the significant risks are identified, recorded and appropriately controlled. The list below is therefore not an exhaustive list because it is the risk assessment that details all significant risks that could arise out of or in connection with the work activity, but any others will be identified in the 'other' section.

☐ Provision of personal care on a regular basis	☐ Driving HGV or LGV for work

☐ Regular manual handling (which includes assisting, manoeuvring, pushing and pulling) of people (including pupils) or objects	☐ Any other frequent driving or prolonged driving at work activities (e.g. long journeys driving own private vehicle or WCC vehicle for work purposes)
☐ Working at height/ using ladders on a regular/ repetitive basis	☒ Restricted postural change – prolonged sitting
☐ Lone working on a regular basis	☐ Restricted postural change – prolonged standing
☐ Night work	☐ Regular/repetitive bending/ squatting/ kneeling/crouching
☐ Rotating shift work	☐ Manual cleaning/ domestic duties
☐ Working on/ or near a road	☐ Regular work outdoors
☒ Significant use of computers (display screen equipment)	☐ Work with vulnerable children or vulnerable adults
☐ Undertaking repetitive tasks	☐ Working with challenging behaviours
☐ Continual telephone use (call centres)	☐ Regular work with skin irritants/ allergens
☐ Work requiring hearing protection (exposure to noise above action levels)	☐ Regular work with respiratory irritants/ allergens (exposure to dust, fumes, chemicals, fibres)
☐ Work requiring respirators or masks	☐ Work with vibrating tools/ machinery
☐ Work involving food handling	☐ Work with waste, refuse
☐ Potential exposure to blood or bodily fluids	☐ Face-to-face contact with members of the public
☐ Other (please specify):	