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| **SKILLS FRAMEWORK FOR INFOCOMM TECHNOLOGY SKILLS MAP – ASSOCIATE RADIO FREQUENCY ENGINEER** | | | | | | |
| **Sector** | Infocomm Technology | | | | | |
| **Track** | Infrastructure | | | | | |
| **Sub-track** | Build and Maintain | | | | | |
| **Occupation** | Infrastructure Engineer | | | | | |
| **Job Role** | **Associate Radio Frequency Engineer** | | | | | |
| **Job Role Description** | The Associate Radio Frequency Engineer is responsible for supporting the planning, operations and optimisation of wireless networks and systems. He/She configures the network infrastructure necessary for wireless communications, and monitors and troubleshoots issues to maintain the quality and performance of wireless networks. He also ensures that wireless network activities are documented appropriately and in compliance with the required procedures and standards.  He is familiar with wireless networking technologies, and proficient in the use of simulation software, programming languages and database servers.  The Associate Radio Frequency Engineer is detail-oriented and enjoys problem solving or troubleshooting. He works well in teams and is able to prioritise tasks effectively. | | | | | |
| **Critical Work Functions and Key Tasks** | **Critical Work Functions** | **Key Tasks** | | | | |
| **Design wireless network and infrastructure** | Conduct site surveys and gather requirements for the expansion or setup of wireless networks | | | | |
| Draft technical proposals and propose recommendations for deployment of wireless networks | | | | |
| Document wireless network infrastructure and designs | | | | |
| Conduct research on new technologies for wireless networking and radio frequency transmission | | | | |
| **Deploy wireless networks and infrastructure** | Configure and install wireless network equipment | | | | |
| Conduct interference analysis | | | | |
| Identify potential defects in wireless network infrastructure and software | | | | |
| Perform routine backups and administer disaster recovery protocols as required | | | | |
| Prepare technical specifications and documents to procure wireless network equipment | | | | |
| **Optimise wireless network performance** | Support the planning and execution of radio frequency tests and measurements | | | | |
| Prepare reports on radio network drive tests | | | | |
| Conduct performance monitoring for wireless networks and ensure alignment with defined metrics | | | | |
| **Manage wireless network security** | Monitor radio frequency signals and traffic for irregularities | | | | |
| Track and document network security incidents | | | | |
| Coordinate and configure network access and controls | | | | |
| **Troubleshoot wireless communication issues** | Identify and troubleshoot wireless network issues in accordance with standards and procedures | | | | |
| Coordinate with field engineers to rectify wireless network issues | | | | |
| Document wireless network issues and resolution | | | | |
| **Skills and Competencies** | **Technical Skills and Competencies** | | | **Generic Skills and Competencies** | | |
| Business Environment Analysis | | Level 2 | Problem Solving | | Basic |
| Business Needs Analysis | | Level 2 | Communication | | Basic |
| Cyber and Data Breach Incident Management | | Level 3 | Computational Thinking | | Basic |
| Emerging Technology Synthesis | | Level 3 | Sense Making | | Basic |
| Infrastructure Deployment | | Level 1, Level 2 | Teamwork | | Intermediate |
| Infrastructure Support | | Level 1, Level 2 |  | | |
| IT Asset Management | | Level 2 |
| Network Administration and Maintenance | | Level 1, Level 2 |
| Network Configuration | | Level 2 |
| Problem Management | | Level 3 |
| Process Improvement and Optimisation | | Level 3 |
| Procurement | | Level 2 |
| Project Management | | Level 3 |
| Radio Frequency Engineering | | Level 3 |
| Service Level Management | | Level 3 |
| Stakeholder Management | | Level 2 |
| Test Planning | | Level 2 |
| Vendor Management | | Level 3 |
| **Programme Listing** | For a list of Training Programmes available for the ICT sector, please visit: www.skillsfuture.sg/skills-framework/ict | | | | | |
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| The information contained in this document serves as a guide. | | | | | | |