# Associate infrastructure engineer

**Proficiency level**

| X | New Gen AI skills | X | Transferrable skills at the same proficiency level |
| X | New skills | X | Transferrable skills at a higher proficiency level[1] |

| **Skills Framework track** | Infrastructure | **Job function** | Engineering and tech. | **Job family** | Infrastructure engineer |

| **Sub-sectors** | Retail banking, corporate banking, investment banking, private banking and wealth management, asset management, insurance | **Expected augmentation by Gen AI** | **Do more:** Gen AI can automate the collation and analysis of performance statistics to assist in capacity planning, enhance the monitoring of infrastructure traffic, and streamline the documentation of operations and maintenance procedures. Gen AI tools can also synthesize research on emerging cloud technologies to identify gaps and propose improvements to the FI's existing infrastructure |

**DO MORE**

## Key tasks that can benefit from Gen AI

| Critical work functions | Key tasks |
| --- | --- |
| Optimize infrastructure performance and systems | Collate performance and data performance statistics for capacity planning and reporting of existing infrastructure |
| | Monitor infrastructure traffic and performance in accordance with defined operational metrics |
| | Maintain documentation of infrastructure operations activities, maintenance procedures and tests, and infrastructure optimization |
| Resolve infrastructure-related incidents | Monitor compliance to procedures and policies for infrastructure-related incidents |
| | Simulate user problems to resolve operating difficulties |
| Manage infrastructure upgrades | Document infrastructure change requests and maintenance routines |
| Oversee infrastructure deployment | Research emerging cloud and infrastructure technologies |

## New Gen AI skills

| Skill | Level |
| --- | --- |
| Prompt design | 3 |
| Gen AI principles and applications | 3 |
| Gen AI model selection | 2 |
| Gen AI model evaluation | 2 |
| Gen AI application development and deployment | 2 |
| Gen AI model development and fine tuning | 2 |
| Responsible AI and Gen AI practices | 2 |
| Gen AI models technical aspects of security and ethics | 2 |
| Prompt engineering | 2 |

## Potential next-seniority level (Infrastructure Engineer) skills to acquire

| Skill | Level | Skill | Level | Skill | Level |
| --- | --- | --- | --- | --- | --- |
| Business needs analysis | 4 | Vendor management | 5 | Business risk management | 4 |
| Project management | 5 | Manpower planning | 3 | Networking | 4 |
| Stakeholder management | 5 | Strategy implementation | 3 | Business requirements mapping | 4 |
| Emerging technology synthesis | 5 | Audit and compliance | 3 | Project feasibility assessment | 4 |
| Cloud computing | 5 | People and performance management | 3 | Change management | 4 |
| Cyber and data breach incident management | 5 | Budgeting | 4 | Disaster recovery management | 4 |
| Infrastructure deployment | 4 | Partnership management | 4 | Sustainability management | 4 |
| Infrastructure design | 5 | Organizational analysis | 4 | IT standards | 4 |
| IT asset management | 4 | IT strategy | 4 | Contract management | 4 |
| Network administration and maintenance | 4 | Security administration | 4 | Quality engineering | 5 |
| Problem management | 4 | Infrastructure strategy | 4 | Business innovation | 5 |
| Test planning | 4 | IT governance | 4 | Performance management | 5 |

1. Transferrable skills with an increase in one level of proficiency is considered easier to acquire than transferrable skills with multiple levels of increase in proficiency, followed by net new additional skills. Depending on job redesign for the financial institution, the financial institution will have to pick select skills to reskill employees on, via a combination of on-the-job training and existing courses.

Source: SkillsFuture Skills Framework