# Entry-Level Data Roles in the Northern Territory (NT)

## 1) Target Roles & Typical Entry-Level Titles

#### **Data Analyst**

• Graduate Data Analyst, Junior Data Analyst, Reporting/Insights Analyst, Market/Data & Research Analyst.

#### **Data Engineer**

• Graduate/Junior Data Engineer, ETL Developer (Junior), Analytics Engineer, Data Platform Associate.

#### **Data Warehouse Specialist**

• Graduate DWH Developer, BI/DWH Analyst, Junior ETL/ELT Developer.

#### **Database Administrator (DBA)**

• Junior DBA, Database Support Officer, Database/Systems Administrator (Graduate/Associate).

Many NT roles are in **public sector, utilities, higher education, health research, resources/energy**, and local councils. Some roles are titled "AO/PO" in NTG bands; early-career roles often sit around AO4–AO6 or Professional 1–2, and private sector uses "Graduate/Junior/Associate."

## 2) Core Skillsets Required (by role)

#### A. Data Analyst — Entry Level

#### Technical

- SQL (joins, CTEs, window functions), Excel/Sheets (pivoting, lookups, basic modeling).
- BI/Visualization: Power BI (preferred in NT public sector), Tableau; DAX and basic data modeling (star/snowflake).
- Scripting: Python (pandas, numpy), or R (tidyverse) for wrangling and basic stats.
- Data quality & governance awareness (validation, reconciliation, metadata).

#### **Analytical & Domain**

- Descriptive analytics, KPI definition/monitoring, basic hypothesis testing.
- Report writing for non-technical stakeholders; requirements gathering.
- Sector familiarity helps: education/VET (AVETMISS), utilities (demand/consumption), health (basic PHI/privacy), local government data.

#### Nice-to-have

• Power Query/M, basic GIS (ArcGIS/QGIS), basic API/CSV ingestion.

#### B. Data Engineer — Entry Level

#### **Technical**

- SQL proficiency; Python (data pipelines), familiarity with ETL/ELT patterns.
- Cloud & storage: Azure (Data Factory, Synapse, Databricks), or AWS (Glue, Redshift, Lambda, S3);
  CI/CD basics (Git).
- Data modeling (dimensional/star schema), orchestration (Airflow/Azure Data Factory), batch vs. streaming concepts.
- File formats & tooling: Parquet, Delta, Spark fundamentals.

#### **Ops & Quality**

- Version control, environments, testing data pipelines, logging/monitoring.
- Security basics (IAM/roles, networking, PII handling), documentation.

#### Nice-to-have

• Terraform/Bicep basics; dbt (for ELT), container basics (Docker), cost awareness.

#### C. Data Warehouse Specialist — Entry Level

#### Technical

- Star/snowflake schema design, slowly changing dimensions, conformed dimensions.
- ETL tools: Azure Data Factory, SSIS, dbt; SQL Server/Oracle/Redshift/Snowflake basics.
- Performance tuning (indexes/partitions), semantic models for Power BI/Tableau.
- Data governance & cataloguing basics (quality rules, lineage, documentation).

#### Nice-to-have

• Kimball/Inmon methodologies, BI admin (gateways, workspaces), data vault awareness.

#### D. Database Administrator (DBA) — Entry Level

#### **Technical**

- Install/patch/backup/restore for **SQL Server** and/or **Oracle** (common in NT public sector), or PostgreSQL/MySQL.
- User/role management, security hardening; monitoring (jobs, logs), high availability basics.
- Performance tuning: indexing, execution plans; basic SQL development standards.

#### **Ops & Process**

- Change and incident management; documentation; on-call etiquette.
- Disaster recovery basics (RTO/RPO, test restores).

#### Nice-to-have

 Automation (PowerShell/Bash), cloud-managed DBs (Azure SQL, RDS), replication/mirroring basics.

### 3) Cross-Cutting Soft Skills & Selection Criteria (NT style)

- Clear written statements addressing **selection criteria**; evidence of problem-solving, initiative, teamwork, stakeholder engagement.
- Communication with non-technical audiences; requirements to reporting pipeline mapping.
- Ethical data handling and privacy; working with culturally diverse and remote communities.
- Project/time management; ability to work independently in small teams common in NT.

## 4) Current / Recent NT Employers & Hiring Channels (Data-Relevant)

- Northern Territory Government (NTG) agencies: Department of Education (Skills NT),
  Department of Corporate & Digital Development (DCDD), Department of Industry, Tourism & Trade, NT Police/Fire/Emergency Services, Department of Attorney-General & Justice,
  Department of Infrastructure, Planning & Logistics, Department of Health.
- Utilities & Government-Owned Corporations: Power and Water Corporation, Territory Generation.
- Higher Education & Research: Charles Darwin University (CDU), Menzies School of Health Research.
- Resources/Energy: INPEX (Ichthys LNG), Santos and associated contractors/consultancies.
- Local Government & Statutory Bodies: City of Darwin, City of Palmerston, Land Councils.
- **Private/Consulting** (Darwin-based or servicing NT): NEC Australia, Deloitte, EY, KPMG, Jackadder International, FutureIT, True Blue IT Services

#### Where to find NT roles

- NT Government portals: Jobs NT / Join the Territory.
- Seek, Indeed, Jora, Glassdoor (filter by Darwin/NT; keywords: "graduate", "junior", "AO4–AO6", "Professional 1–2").
- Employer sites: Power and Water careers, CDU careers, INPEX careers, Menzies careers, councils.

## 5) Separate List — NT Employers/Companies (Data-Relevant)

**Public Sector & GOCs:** NT Government agencies (Education; Corporate & Digital Development; Industry, Tourism & Trade; Health; Attorney-General & Justice; Infrastructure, Planning & Logistics; NT Police, Fire & Emergency Services), Power and Water Corporation, Territory Generation.\ **Education/** 

**Research:** Charles Darwin University, Menzies School of Health Research.\ **Resources/Energy:** INPEX (Ichthys LNG), Santos.\ **Local Government:** City of Darwin, City of Palmerston.\ **Consulting/Private:** NEC Australia, Deloitte, EY, KPMG, Jackadder International, FutureIT, True Blue IT Services