<table>
<thead>
<tr>
<th>TSC Category</th>
<th>Business Management</th>
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<tbody>
<tr>
<td>TSC</td>
<td>Data Mining and Modelling</td>
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<tr>
<td>TSC Description</td>
<td>Establish and deploy data modelling techniques to support narrative and predictive analytics efforts and identify trends and patterns for simulation and forecasting purposes</td>
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<thead>
<tr>
<th>TSC Proficiency Description</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
<th>Level 5</th>
<th>Level 6</th>
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<tbody>
<tr>
<td>TOU-DAT-2003-1.1</td>
<td>TOU-DAT-3003-1.1</td>
<td>TOU-DAT-4003-1.1</td>
<td>Build leading practices in safeguarding data accuracy, cleanliness and integrity, review and propose appropriate analytics models</td>
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<tr>
<td>Prepare data sets for analyses and conduct data explorations and correlation analyses</td>
<td>Address potential data quality issues, conduct narrative analytics and deep-dive analyses to identify patterns and trends</td>
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### Knowledge

- Objectives of data mining and modelling
- Data mining and modelling processes and systems
- Methods of data mining and modelling
- Statistical software and data modelling methodologies
- Various uses of data mining
- Data modelling tools and techniques
- Data collection methodologies and approaches
- Data confidentiality issues associated with presenting statistical results
- Business objectives
- Methods to validate data and information
- Types of statistical methodologies to make inferences
- Key metrics to drive desired outcomes
- Statistical software suitable for data mining requirements
- Organisations’ business problems

### Abilities

- Enforce procedures to safeguard data accuracy, cleanliness and integrity
- Develop data sets from raw data
- Prepare data sets for analyses, simulation and forecasting
- Perform data exploration and correlation analyses
- Identify first level patterns and trends in datasets
- Prepare reports detailing insights generated from data explorations and correlation analyses
- Develop guidelines to safeguard data accuracy, cleanliness and integrity
- Identify data quality issues
- Perform narrative analytics based on data sets
- Conduct deep-dive analyses to identify patterns and trends in data sets
- Propose or construct appropriate analytics models based on train and test analyses
- Establish leading practices in safeguarding data accuracy, cleanliness and integrity
- Provide guidance on resolution of data quality issues
- Review appropriate analytics models based on relationships between variables
- Propose appropriate business scenarios for the conduct of preliminary simulation and forecasting analytics