**Appendix A**

**WORK PROCESS SCHEDULE**

**AND**

**RELATED INSTRUCTION OUTLINE**

**Appendix A**

**WORK PROCESS SCHEDULE**

**Data Analyst**

**O\*NET-SOC CODE: 15-2041.00**  **RAPIDS CODE: 2099CB**

This schedule is attached to and a part of these Standards for the above identified occupation.

# APPRENTICESHIP APPROACH

Competency-Based

# TERM OF APPRENTICESHIP

Apprentices will receive training in the work experience as listed below. The following are the work processes the apprentice will learn and be able to perform on-the-job.  The term of the occupation is based on the apprentice’s completion of 400 hours of Related Instruction and demonstration of the mastery of the competencies as specified and estimated to complete in approximately 1 years.

# RATIO OF APPRENTICES TO JOURNEYWORKERS

The apprentice to journeyworker ratio is: 1 Apprentice(s) to 1 Journeyworker(s).

# APPRENTICE WAGE SCHEDULE

Apprentices shall be paid a progressively increasing schedule of wages based on either a percentage or a dollar amount of the current hourly journeyworker wage rate, which is:
 $44.00.

Name: **Data Analyst**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Period** | **% of Journeyworker wage** | **No****Competencies** | **Wage (Hourly)** | **Description** |
|  |
| 1st | 56.82% | 5 | $25.00 |  |
|  |
| 2nd | 75% | 10 | $33.00 |  |
|  |
| End Wage | 100% | 14 | $44.00 |  |
|  |

# PROBATIONARY PERIOD

Every applicant selected for apprenticeship will serve a probationary period of 160 hours .

# SELECTION PROCEDURES

**SECTION I – APPLICATION PROCEDURES**

* Applicants will be accepted for open apprentice roles based on business conditions. Every person requesting an application will have one made available. Applications are available upon request.
* All applications will be identical in form and requirements.
* Receipt of the properly completed application form will constitute receipt of a completed application.
* Completed applications will be checked for minimum qualifications. No further processing of applicants will occur if deficient in one or more qualifications or requirements or if false statements are made on their applications.
* Applicants meeting the minimum qualifications and submitting the required documents will be notified where and when to appear for an interview.

**SECTION II – SELECTION PROCEDURES**

* The sponsor has adopted the following selection procedures, consistent with the requirements set forth in 29 CFR § 30.10(b):
* The Sponsor will schedule interviews based upon hiring needs. All applicants who have met the minimum qualifications and have submitted the required documents must be notified of the date, time, and place to appear.
* Prior to the interview, each applicant will be required to review the Apprenticeship Standards and will be provided information about the program. If the applicant has any additional questions on the qualifications of needs additional information, it will be provided by the sponsor.
* The interviewer(s) will rate each applicant during the interview utilizing standardized questions taking into account the information on the application and required documents. The questions and responses will be maintained on file.
* After completing the interview and evaluation of the applicants, hiring manager will make a selection based on a best-fit assessment for the job opening.
* As openings for the registration of new apprentices occur, the highest ranked applicant will be notified of selection by telephone or email. It will be the responsibility of the applicant to keep the Sponsor informed of their current mailing address and telephone number.
* Selected applicants must respond to the notice of selection within 72 hours of notice.

**Appendix A**

**WORK PROCESS SCHEDULE**

**Data Analyst**

**O\*NET-SOC CODE: 15-2041.00**  **RAPIDS CODE: 2099CB**

|  |
| --- |
| Data Analyst |
| Job Description: Develop or apply mathematical or statistical theory and methods to collect, organize, interpret, and summarize numerical data to provide usable information. May specialize in fields such as biostatistics, agricultural statistics, business statistics, or economic statistics. Includes mathematical and survey statisticians. |
| RAPIDS Code: 2099 | **O\*NET-SOC Code:** 15-2041.00 |
| Estimated Program Length: One year / 14 Competencies  |
| Apprenticeship Type: |
| ☒ Competency-Based  | ☐ Time-Based  | ☐ Hybrid |

On-the-Job Learning Outline

|  |  |  |  |
| --- | --- | --- | --- |
| Competency Check List | Demonstrates Fundamentals: Apprentice can perform the task with some coaching. | Proficient in Task: Apprentice performs task properly and consistently. | Completion Date: Date apprentice completes final demonstration of competency. |
|  | **Demonstrates Fundamentals** | **Proficient in Task** | **Completion Date/Initials** |
| A. Evaluate technical data to determine effect on designs or plans.* Determine whether statistical methods are appropriate, based on user needs or research questions of interest.
 |  |  |  |
| B. Design research studies to obtain business information.* Design research projects that apply valid scientific techniques.
* Design research projects that use information obtained from baselines or historical data to structure uncompromised and efficient analyses.
* Collect datasets and samples which are suitable for specific projects.
* Design projects that consider the domain context and user needs in the system implementation.
* Design projects that consider the domain context and user needs in the choice of data analysis techniques.
 |  |  |  |
| C. Analyze data to identify trends or relationships among variables.* Analyze statistical data to identify significant differences in relationships among sources of information.
* Identify relationships and trends in data.
* Identify factors in data that could affect the results of research.
 |  |  |  |
| D. Apply mathematical principles or statistical approaches to solve problems in scientific, business or applied fields. * Adapt statistical methods to solve specific problems in fields such as economics, biology, and engineering.
 |  |  |  |
| E. Present research results to others.* Present statistical and nonstatistical results, using data visualizations.
* Report results of statistical analyses in peer-reviewed papers and technical manuals.
 |  |  |  |
| F. Prepare analytical reports* Report results of statistical analyses in the form of tables, charts, and dashboards

  |  |  |  |
| G. Evaluate data quality.* Prepare data for processing by organizing information, checking for inaccuracies, and adjusting and weighting the raw data.
* Evaluate sources of information to determine any

limitations, in terms of reliability or usability. |  |  |  |
| H. Prepare data for analysis.* Process large amounts of data for statistical

modeling and graphic analysis, using computers. |  |  |  |
| I. Work in a team with information technology personnel.* Work with data analysis, developers, users, project managers and other stakeholders to progress towards effective data analyses and systems.
 |  |  |  |
| J. Design software applications.* Design software applications or programming for statistical modeling and graphic analysis.
 |  |  |  |
| K. Design and implement security, compliance and ethical measures for computer or information systems* Structure data warehouses for storing data.
* Implement secure systems that adhere to the relevant legislation and apply appropriate ethical measures
 |  |  |  |
| L. Install computer software.* Configure database systems.
 |  |  |  |
| M. Write computer programming code.* Develop code to implement the system.
* Maintain the system implementation.
 |  |  |  |
| N. Update knowledge about emerging industry or technology trends.* Keep up to date on new technologies, products and services relevant to the data analysis field by subscribing to relevant sources of information.
* Learn about new data analysis methods emerging from industry and academic research by subscribing to relevant sources of information.
* Synthesize information gathered from knowledge management tools.
 |  |  |  |

**Appendix A**

**Related Technical Instruction**

**Data Analyst**

**O\*NET-SOC CODE: 15-2041.00**  **RAPIDS CODE: 2099CB**

|  |
| --- |
| **Data Analyst** |
| **Name** | **Type** | **Hours** |
| **Dive into your Data Analyst Apprenticeship** | **Online project** | **20** |
| Course: Data Literacy | Online course | Incl. in project |
| Soft-skill course: Develop your Soft Skills | Online course | Incl. in project |
| **Analyze requirements and plan a data analysis project** | **Online project** | **60** |
| Course: Data Lifecycle Management | Online course | Incl. in project |
| Course: Perform an Initial Data Analysis | Online course | Incl. in project |
| Course: Use Python Libraries for Data Science | Online course | Incl. in project |
| **Perform an initial data analysis on sales data** | **Online project** | **60** |
| Course: Design Effective Statistical Models to Understand Your Data | Online course | Incl. in project |
| **Produce a dashboard which visualizes data** | **Online project** | **80** |
| Course: Create a dashboard with Tableau or Power BI | Online course | Incl. in project |
| Soft-skills course: Speak in public | Online course | Incl. in project |
| Soft-skills course: Improve the impact of your presentations | Online course | Incl. in project |
| **Assess data quality and prepare it for analysis** | **Online project** | **80** |
| Soft-skills course: Work effectively in a team | Online course | Incl. in project |
| Couse: Extract, Transform and Load your data (ETL) | Online course | Incl. in project |
| **Set up a database and retrieve data** | **Online project** | **80** |
| Course: Design the Logical Model of Your Relational Database | Online course | Incl. in project |
| Course: Implement a Relational Database with SQL | Online course | Incl. in project |
| Course: Retrieve Data Using SQL | Online course | Incl. in project |
| Course: Data Governance | Online course | Incl. in project |
| **Keep track of emerging industry and technology trends in data analysis** | **Online project** | **20** |
| Course: Stay Up to Date With Innovations in Your Field | Online course | Incl. in project |
| Course: Destination AI: Introduction to Artificial Intelligence | Online course | Incl. in project |
| **Weekly online, synchronous mentorship with a domain expert from OpenClassrooms** | **Mentorship** | **Incl. in project** |
| Total Training Hours |  | 400 hours |