# Advanced Payroll Analytics COURSE OUTLINE

# **MODULE 1:**

# **Using Artificial Intelligence in Payroll Analytics**

- Lesson 1: Introduction to Artificial Intelligence (AI)
  - Technology change big data
  - Branches of AI
  - What does AI technology mean for payroll?
  - Using Al
- Lesson 2: Using AI to Predict Future Issues
  - What is artificial intelligence?
  - Artificial intelligence, machine learning, natural language processing
  - Payroll's use of AI
  - Payroll/HRIS applications with generative Al
- Lesson 3: Using Robotic Process Automation, Chatbots, and Machine Learning in Payroll
  - The future of AI and RPA
  - How to take the first step
  - Purpose of AI, chatbots, robotics
  - Robotic process automation
  - Identifying the biggest payroll challenges and making the decision
  - What is a bot?
  - Limitations of AI technology
  - New mindset, new results
  - Business use cases for AI and RPA
  - Identifying a task for RPA
  - Benefits of RPA
  - The future of RPA
  - Generative Al
  - Getting started using AI
  - Barriers to adopting AI
- Lesson 4: Effective Uses of Generative AI in Payroll
  - What is generative Al?
  - What is ChatGPT?
  - How can ChatGPT or another generative AI be used in payroll?
  - How can payroll use ChatGPT?
- Lesson 5: Using ChatGPT or AI to Develop Job Aids and Documentation
  - Job aids
  - Documentation

# **MODULE 2:**

## Service Level Agreements

- Lesson 1: Using Metrics and Analytics to Manage Service Level Agreements
  - What is an SLA?
  - Service level agreement metrics
  - Common payroll SLA metrics
- Lesson 2: Issue Resolution Metrics
  - Critical business issues to address
  - Compliance issues
  - Reporting tools to measure standards
  - Develop metrics for SLA performance
- Lesson 3: Customer Service Availability and Metrics – SLA customer service metrics
- Lesson 4: Tax Filing Metrics
  - Tax filling metrics found in an SLA

# **MODULE 3:**

### **Business Trends Analytics**

- Lesson 1: Overtime Hours and Payments by Business Units
  - Trends in time worked
  - Data needed by managers
  - Business unit data
- Lesson 2: Project Management Status and Trends
  - Project management
- Lesson 3: System Access
  - Access and cycle time for onboarding
  - Access and cycle time for offboarding
- Lesson 4: Using Analytics for Predictions, Forecasting, and Modeling
  - Turnover
  - Leave of absence trends
  - Use of part-time, full-time, contingent workers, and contractors by business units
  - Vacation usage analysis (budget, when vacation hours are used, unlimited vacation)
  - Sick leave hours on Mondays and Fridays
  - Predictive payroll analytics
  - Projecting the organization's payroll expense

# Advanced Payroll Analytics Course Outline Cont'd

- Preparing payroll expense budgets
- Recruiting payroll staff
- Payroll staff utilization
- Payroll staff scheduling
- Lesson 5: Identifying Payroll Fraud
  - Overpayment of benefits

#### **MODULE 4:**

#### **Using Analytics to Improve Payroll Operations**

- Lesson 1: Tax Notices
  - Trends in tax notices
  - Trends in resolved tax notices
  - Trends in tax penalties paid
  - Trends in tax notices by types
  - Trends in tax returns filed
  - Trends in tax returns filed by type
  - Trends in federal and state/provincial/local tax deposits
  - Time spent in resolving notices
  - Trends in corrections (amendments) federal and state/ provincial/local

#### Lesson 2: Customer Service

- Number of help desk calls per month
- Average payroll help desk calls per day
- Trends in help calls/emails
- Abandoned help calls/emails
- Percentage of abandoned help calls/emails
- Trends in response time to help calls/emails
- Days to produce a payroll payment resolving a paycheck error
- Top five help desk call/email drivers
- Help desk call volume by business unit
- Top five off-cycle payments reasons
- Off-cycle payments issued by business unit
- Trends in self-service usage

#### Lesson 3: Root Cause Analysis

- Benefits and goals of payroll root cause analysis
- Root cause analysis basic process steps
- Why does the issue or gap exist?
- Potential gaps
- Root cause analysis and gap analysis tools

#### Lesson 4: Payroll Training

- Training utilization (training hours per payroll employee)
- Training utilization trends

#### **MODULE 5:**

#### **Presenting Payroll Analytics to Senior Management**

- Lesson 1: Sharing Analytics Using Visualizations
  - Importance of data visualization
  - Data visualization best practices
  - Visualizations that work
  - Visualization tools
- Lesson 2: Making the Presentation to Senior Management
  - Keys to presenting to senior management
  - Preparing the presentation
  - Being a persuasive presenter
  - Connecting with the audience
  - Ensuring good ideas are accepted