

Intermediate Payroll Analytics

Course Outline

Module 1: Analytics Best Practices

- **Lesson 1: Governance**
 - Payroll analytics governance
 - Four steps to ensuring the payroll analytics governance
 - Key players in data governance
 - Governance approaches
 - Active governance
 - Benefits of data governance
 - Ethical governance
- **Lesson 2: Integrated Data**
 - Data
 - Integrated Data
- **Lesson 3: Data Warehouse and Data Lakes**
 - Data warehouses
 - Data lakes
 - Data lakes or data warehouses?
- **Lesson 4: Benefits of a Data Warehouse**
 - Benefits of a data warehouse
- **Lesson 5: Data Warehouse Organization**
 - Approaches for storage of data
 - Data warehouse characteristics
- **Lesson 6: Cloud Data Warehouses**
 - Traditional vs. cloud-based data warehouse
 - How data warehouse work in the cloud
- **Lesson 7: Payroll Analytics – Integrated Data or Data Warehouses**
 - Integrated payroll-HR data
 - Benefits of data warehouse
 - Where to perform payroll analytics?
- **Lesson 8: Organizational Readiness**
 - Organizational readiness
 - As analytics data culture
 - Building analytic leadership

- **Lesson 9: BADR Framework**
 - BADIR framework
 - Asking business questions
 - Developing an analysis plan
 - Planning the data collection
 - Gaining insights
 - Making recommendations

Module 2: Data Best Practices

- **Lesson 1: Data Privacy**
 - Data privacy
 - Who can access appropriate data
 - Protecting data
 - Data protection principles
 - Data privacy best practices
 - Data protection trends
 - Mobile data protection
 - Data protection management
- **Lesson 2: Security and Cyberattacks**
 - Data access - security
- **Lesson 3: Data Breaches**
 - Security and cyberattacks
 - Employee data
 - Cyberattack methods
 - Types of security
 - How to avoid attacks
 - Data breaches
 - Zero-trust security
- **Lesson 4: Data Literacy**
 - Data literacy
- **Lesson 5: Data Transfers – API and RPA**
 - Data transfer
 - Application programming interfaces (API)
 - Robotic process automation (RPA)

Module 3: Timekeeping Analytics

- **Lesson 1: Identifying Unapproved Time with Analytics**
 - Time off for exempt employees
 - Time off not approved

- Time off not approved
- Unapproved time
- Trends in timecard approvals by business units
- Historical corrections not approved
- Failure to approve time
- **Lesson 2: Correcting Time with Analytics**
 - Hours reported over a threshold
 - Hours in excess of pay period standard
 - Hours more than scheduled
 - Hours less than scheduled
 - No hours or fewer hours than expected
 - Historical corrections
 - Current pay period hires with no time entered
 - Hours for non-working days
- **Lesson 3: Using Analytics During Time Processing**
 - Hours for individuals not employed
 - Payroll time corrections to prevent paycheck errors
 - Reducing processing delays

Module 4: Payroll Processing Analytics

- **Lesson 1: Using Analytics During Payroll Processing**
 - Active employees without gross pay
 - Terminated employees without pay
 - Terminated employees with pay who should not be paid
 - Variance (plus or minus) of employee's gross to prior payroll
 - Trends in payroll deduction, earning codes and allowances
 - Exceed maximum pension/retirement contribution
 - Negative deductions and earnings

Intermediate Payroll Analytics Course Outline *Cont'd*

- No earnings with deductions
- Current pay period hires with no gross pay

Lesson 2: Using Analytics During Tax Processing

- Exceeding the social insurance, social security wage base
- Negative quarter to date or year to date earnings
- State/provincial/local taxable wages differ from federal taxable wages
- FICA exempt vs. visa exemption
- Difference in state/province income tax withholding, unemployment insurance and residence state/province
- Federal, state/provincial and local taxes withheld with no taxable earnings
- Variance from prior federal, state/provincial, local taxes
- Identify variances of local taxes (wages X rate)

Lesson 3: Using Analytics to Improve Payroll Accounting

- Wage and tax summary trends
- Trends of account reconciliations
- Audit Data Analytics requirements of the AICPA
- Actual to budget (total, business unit, cost center)

Module 5: Payroll Operation Analytics

Lesson 1: Trends in Payroll Costs

- Trends in payroll cost per payment
- Trends in the number of employees per payroll FTE employee

Lesson 2: Trends in Electronic Payments

- Trends in electronic payments (direct deposit and pay card)
- Trends in the use of earned wage access

Lesson 3: Predictive Analysis of Payroll Operation

- Predictive analysis of payroll operations

Lesson 4: Payroll Analytic Trends

- Trends related to merger and acquisition activities
- Trends based on the number of pay cycles
- Off-cycle payment causes

Lesson 5: Other Payroll Analytics

- Excessive overtime as a percentage of wages, provided to managers
- Identify employees with multiple employee IDs

Module 6: Payroll Key Performance Indicators

Lesson 1: Key Performance Indicators

- Standard payroll KPI definitions
- Developing KPIs
- Quantitative and qualitative payroll KPIs

Lesson 2: Payroll KPIs

- Standard payroll KPI definitions
- Payroll accuracy
- Cost of payroll
- Cost per payment
- Cycle times
- Time to process and commit payroll
- On-time delivery

- Anomaly detection – Comparison with historical data
- Issues prior to processing
- Employee attrition rates
- Compliance

Lesson 3: Preparing a Payroll KPI Dashboard

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Module 7: Sharing the Payroll Analytics Story

Lesson 1: Sharing Payroll Metrics with Employees

- Electronic payment metrics
- Earned wage access metrics
- Percentage of Self-Service Usage

Lesson 2: Sharing Payroll Metrics with the Payroll Organization

- Time to process payroll
- Percentage of abandoned calls
- Average payroll inquiry response time

Lesson 3: Identify Payroll Metrics to Share with Management and Upper Management

- Payroll processing accuracy
- Percentage reason for off-cycle payments
- Cost per payment
- Tax penalties paid

Lesson 4: Presenting Metrics to Upper Management

- How to get your ideas accepted
- Making the presentation
- Preparing the presentation