**Course :Data Privacy Fundamentals**  **COURSE CODE:**DS0301EN

Summary :

This course uses a case study approach to deliver Data Privacy concepts in an accessible way to a wide data science audience of practitioners, business owners and consumers.

In this course, you will get an outline of data privacy laws, you will be exposed to some high profile data privacy cases and you will walk away with some guiding principles for how to stay out of trouble.

There are 5 modules in the course.

**Module 1:**

* An overview of privacy laws in Canada
* Case Study: Student loans data breach (Canada) -A breach involving the personal information of about more than half a million clients of Human Resources and Skills Development Canada (HRSDC) and 250 departmental employees

**Module 2:**

* An overview of the Personal Information Protection and Electronic Documents Act (PIPEDA)
* Case Study: Target Corp. (USA) - A data breach involving information on 40 million payment cards (i.e., credit, debit, and ATM cards) and personally identifiable information (PII) on 70 million customers

**Module 3**

* Dr. Ann Cavoukian's 7 Foundational Principles of 'Privacy by Design'
* Case Study: Think W3 (UK) - A data breach involving 1.2 million credit and debit card details
* Case Study: Doritex Corp. (USA) - A data breach exposed the social security numbers of over 500 job applicants

**Module 4**

* Data breaches and passwords
* Case Study: Home Depot (USA) - A data breach estimated to have put payment card information at risk for approximately 56 million unique payment cards
* Class Participation Questionnaire

**Module 5**

* Password hacking in R - Hands on exercise
* 10 privacy tips for companies

#### TIME TO COMPLETE:5 Hours

#### LEARNING PATH:[Data Science for Business](https://cognitiveclass.ai/learn/data-science-business)

#### BADGE:[Data Science for Business - Level 1](https://cognitiveclass.ai/badges/data-privacy-explorer)

#### Course: Digital Analytics and Regression COURSE CODE:ML0103EN

#### This course uses a case study approach to take you through the end to end process of identifying a business objective, designing the model to address it, sourcing the data and ultimately arriving at the insights. When you complete this course, you can apply these methods and principles in a variety of contexts, with big, medium or small data.

#### There are 5 modules.

* **Module 1 - A Case Study Approach to Analytics**
  1. Understand the business context
  2. Formulate the business objective
  3. State the hypothesis
  4. Assess available data
  5. Assign data for use
* **Module 2 - RStudio IDE on CC Labs (formerly known as Data Scientist Workbench)**
  1. Using CC Labs (Data Scientist Workbench)
  2. What is R?
  3. Loading data into R with Data Scientist Workbench
  4. Upload a CSV data file into Data Scientist Workbench and RStudio
* **Module 3 - Google Trends Data in R**
  1. Access Google Trends data in R
* **Module 4 - Simple Linear Regression in R**
  1. Regression and Google Trends Data in R
  2. Box Plots and Histograms in R
  3. Scatter Plots & Lines of best fit in R
  4. Simple Linear Regression in R
* **Module 5 - Presenting Data Analytics in Business**
  1. Using data to answer a business question
  2. Summarizing the data analytics process
  3. Presenting data insights

#### TIME TO COMPLETE:5 hours

#### LEARNING PATH:[Data Science for Business](https://cognitiveclass.ai/learn/data-science-business)

#### Course: Predictive Modelling Fundamentals I COURSE CODE:PA0101EN

#### Summary:

#### Predictive analytics is one of the most important tools used in making smarter and informed decisions in the business world. In this Predictive Modeling Fundamentals I course, you will learn valuable skills to discover actionable insights using IBM SPSS Modeler.

* In this course , you will pssess the modeling skills needed by companies all over the world to go beyond storing big data to understanding big data and learn how to use these skills to make decisions such as cancer detection, fraud detection, customer segmentation and predicting machine downtime.
* You will learn how to build models on trained data, test the model with historical data, and use qualifying models on live data or other historical untested data.

There are 5 modules

* **Module 1 - Introduction to Data Mining**
  1. CRISP-DM Methodology
  2. Introduction to SPSS Modeler - predictive data mining workbench
  3. SPSS Modeler Interface
* **Module 2 - The Data Mining Process**
  1. Business Understanding
  2. Data Understanding
  3. Data Preparation
* **Module 3 - Modeling Techniques**
  1. Introduction to Common Modeling Techniques
  2. Cluster Analysis (Unsupervised Learning)
  3. Classification & Prediction (Supervised Learning)
  4. Classification - Training & Testing
  5. Sampling Data in Classification
  6. Predictive Modeling Algorithms in SPSS Modeler
  7. Automated Selection of Algorithms
* **Module 4 - Model Evaluation**
  1. Metrics for Performance Evaluation
  2. Accuracy as Performance Evaluation tool
  3. Overcoming Limitations of Accuracy Measure
  4. ROC Curves
* **Module 5 - Deployment on IBM Bluemix**
  1. Scoring new data
  2. Deployment of the Predictive Model
  3. What is IBM Bluemix?
  4. Predictive Modeling service: Deployment in the Cloud
  5. SPSS Collaboration and Deployment Services

**TIME TO COMPLETE:**5 Hours

**LEARNING PATH:**[Data Science for Business](https://cognitiveclass.ai/learn/data-science-business)

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