



HARROW INDEPENDENT COLLEGE

School of Mathematics, Science & Economics

Healthcare Analytics - 3 day workshop

The data driven decision making approach for Healthcare professional

The increasing availability of data creates an incredible opportunity to apply large-scale, analytics to improve productivity, manage risks and improve business decisions. On the other hand, health care services generate large data every day, which becoming the raw material for improving clinical decisions, managing risks and provide better services. The healthcare analytics course gives you the knowledge and practical skills to become a leader in this high-demand niche of the healthcare industry. The course is designed to for working clinicians and IT professionals who work in the healthcare industries.

The course aims to deliver in 3 days workshop and provides theoretical, practical knowledge and hands-on experience in healthcare analytics for heightening learners' decision-making skills. The course catered for clinicians, health care managers, and IT professionals who are working in the healthcare industries.

Prerequisites:

- Good experience in healthcare practices.
- Basic knowledge in Math and Statistics.
- Basic working knowledge of Excel.

Day 1:

09:30 - 10:00 Registration and Networking Breakfast

10:00 - 11:30 Introduction to Healthcare Analytics

This session provides learners with the fundamental background of healthcare analytics including theoretical background, techniques and the necessity for the sector.

11:30 – 11.45 Coffee Break

11:45 - 01:15 Workshop 1: Understanding Graphs and Figures

The workshop session guides the learners to interpret the charts and data to understand the situation and environment.

01:15 02:15 Lunch

02:15 - 03:45 Healthcare Data Acquisition and Management

This session provides learners with the theoretical background of healthcare data, the data formats, data structure and data governing methods and techniques.

03:45 - 04:00 Coffee Break

04:00 - 05:30 Workshop 2: Applied Healthcare Statistic

The workshop session introduces Behavioural Risk Factor Surveillance Survey (BRFS) and guides the learners with the basic understanding of applied statistics for the healthcare data.

Day 2:

09:30 - 10:00 Registration and Networking Breakfast

10:00 - 11:30 Introduction to Descriptive Healthcare Analytics

The session will introduce the descriptive analytics for healthcare data and help the learner to understand the situation and environment of the sector.

11:30 – 11.45 Coffee Break

11:45 - 01:15 Workshop 3: Designing and developing Metadata

The session will provide detail explanation of metadata and how the metadata summarizes basic information about data, which can make finding and work with particular instances of data easier.

01:15 02:15 Lunch

02:15 - 03:45 Lab Session 1: A brief introduction to Excel

This lab session will provide a quick overview of loading, viewing and manipulating data with Microsoft Excel.

03:45 - 04:00 Coffee Break

04:00 - 05:30 Lab Session 2: Healthcare descriptive analytics using Excel

This session provides the learner to enhance their skill of finding insight of the situation with healthcare data.

Day 3:

09:30 - 10:00 Registration and Networking Breakfast

10:00 - 11:30 Introduction to Regression Analysis

The session provides learners the theoretical background of forecasting and prediction with healthcare data.

11:30 – 11.45 Coffee Break

11:45 - 01:15 Lab Session 3: Linear regression analysis with healthcare data using Excel

The lab session will provide skill and hands-on experience of forecasting and prediction with healthcare data using Excel.

01:15 02:15 Lunch

02:15 - 03:45 Introduction to logistic regression analysis

The session provides learners the theoretical background of forecasting and prediction in the odds situation. The odds defined as the probability.

03:45 - 04:00 Coffee Break

04:00 - 05:30 Lab Session 5: Logistic regression analysis with healthcare data using Excel

The lab session will provide skill and hands-on experience of forecasting and prediction in odds situations with healthcare data using Excel.