



THE UNIVERSITY OF
MELBOURNE

Melbourne School of
Population & Global Health
Health and Biomedical
Informatics Centre



Introduction to Health Data Analytics for Clinicians

A short course that provides a high-level
introduction to the world of health data research

The course is designed for hospital and primary care physicians, nurses, pharmacists, allied health providers, and other health professionals with an interest in leveraging data to address clinically-relevant questions. On completion of the course, participants will have an understanding of the considerations involved in planning and leading an analytic study and the tools available to support cutting edge analysis.

The course is offered collaboratively by the Melbourne School of Population and Global Health and the Health and Biomedical Informatics Centre at the University of Melbourne. The course will feature expert speakers in informatics, machine learning, and health services research and will provide a forum for interaction, discussion and collaboration with like-minded peers.

Participants will generally be novices in the field of data analytics but will be required to have a strong grasp of general research concepts.

This course will be held at
Graduate House
220 Leicester Street, Carlton

Early bird fees – until 28
February 2019: \$825 (GST
inclusive)

Normal rates (non-early bird):
\$935 (GST inclusive)

(Light working supper provided)

The course will be delivered
over three evenings

6:30pm to 9:30pm on:
Wednesday 17 April 2019
Wednesday 8 May 2019
Wednesday 29 May 2019

🖥️ **Registration:** <http://go.unimelb.edu.au/3xq6>

✉️ **Enquiries:** HDA-enquiries@unimelb.edu.au



Course Outline

The course is delivered over three evenings. The outline for each day is provided below.

Participants will be asked to identify their key objectives in undertaking the short course in order to tailor the content to the group's learning needs. Opportunities for further, formal study at the University will be highlighted at the end of each session. The in-house nature of the course is designed to facilitate relationships with session leaders and peer research collaborators.

Module 1: Planning and Designing a Study

In this module you will be introduced to the key concepts involved in defining an analytic research question and designing an efficient study. We will explore important considerations involved in analytic projects, including ethics and risk management principles.

Module 2: Mapping and Accessing Data

In this module we will provide an overview of the types of data that can be used for health research and how they can be accessed. You will learn how to critically appraise available data resources and scope the data required to answer a question of interest.

Module 3: Analytical Approaches

In this module we will provide an overview of the types of statistical techniques commonly applied in analytic projects. You will be introduced to data-driven analytic techniques such as machine learning and gain an understanding of the tools and resources available to support computationally intensive analysis.

Certificates of attendance will be provided and CME accreditation for major professional colleges (RACP, RACS, ANZCA, ACEM, CICM) is being sought