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# Python for Biomedical Data Applications

This course introduces the Python programming language to students and professionals in biomedical and healthcare fields with no prior programming experience. It focuses on using Python to analyze, visualize, and manage biomedical data, with the goal of improving decision-making and healthcare outcomes. The course will cover Python programming fundamentals, key libraries for data analysis (including Pandas and NumPy), data visualization, and basic statistical analysis, all within the context of biomedical applications.

## What You'll Learn

Upon successful completion of this course, students will be able to:

- Understand the fundamentals of Python programming.
- Set up a Python environment using Anaconda.
- Import, export, and manipulate biomedical data using Python.
- Perform descriptive statistical analysis using Python.
- Create effective visualizations of biomedical data.
- Apply Python to solve real-world biomedical data analysis problems.
- Use Jupyter Notebooks to document and present the work clearly and effectively.

Program/Course Manager:

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## Institute of Health & Management Pty Ltd.

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Level  
**Beginner**



Duration  
**10 weeks**



Fees  
**AUD 1,000**



Software  
**Python 3.13.3**  
(PyCharm IDE)

## Who Should Enrol?

Biomedical students, healthcare professionals (doctors, nurses, pharmacists), medical researchers, public health workers, and anyone interested in applying Python to biomedical data.

## Entry Requirements

No prior experience in programming or statistics is necessary. Basic computer literacy is expected.

## Course Structure and Delivery

Online lectures, hands-on coding exercises, practical assignments, and a final project.

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