

COURSE DETAIL

STUDY DESIGN & DATA ANALYSIS FOR SCIENTISTS

Country

South Africa

Host Institution

University of Cape Town

Program(s)

University of Cape Town

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Statistics

UCEAP Course Number

120

UCEAP Course Suffix**UCEAP Official Title**

STUDY DESIGN & DATA ANALYSIS FOR SCIENTISTS

UCEAP Transcript Title

STUDY DESIGN & DATA

UCEAP Quarter Units

8.00

UCEAP Semester Units

5.30

Course Description

The course equips practical experience and skills in analyzing data, using statistical techniques frequently used in the sciences. The skills include designing experiments, choosing appropriate statistical methods for visual display and statistical modelling of data, model checking, interpretation and reporting of statistical results, and understanding of limitations of statistical methods and data. Topics covered include Introduction to statistical notation, linear regression, design and analysis of experiments, generalized linear models. Strong emphasis on the practical application of the above methods, using open-source statistical software such as R. Course entry requirements: A pass in STA1000F/S or STA1006S or STA1007S or STA1106H or STA1100S or STA1008F/S) and (MAM1000W or MAM1031F or MAM1033F or MAM1004F/S or MAM1005H or MAM1010F/S or MAM1020F/S or MAM1110F/H).

Language(s) of Instruction

English

Host Institution Course Number

STA2007S,STA2007F

Host Institution Course Title

STUDY DESIGN & DATA ANALYSIS FOR SCIENTISTS

Host Institution Course Details

<https://www.uct.ac.za/sites/default/files/media/documents/uct-handbook-11-2025-...>

Host Institution Campus

University of Cape Town

Host Institution Faculty

Science

Host Institution Degree

Host Institution Department

Statistical Science

Course Last Reviewed

2025-2026

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