

Applicant name:
Date:
Admission requirements – Course pre-requisites

We want to understand your academic and work experience background so that we can best assess your application.

Please tell us about any work experience or studies that relate to the course prerequisites listed below. You may have more than you think you do, so make sure you articulate this in this summary form.

If you are highlighting your work experience in order to meet a course prerequisite, please give us two to three examples where you have used your skills/knowledge. If using previous studies to meet a course prerequisite, please tell us the names of the units and the level at which the studies were completed.

Please note: If you do not meet course requirements in programming, databases or mathematics/statistics, you are required to complete up to a maximum of two related foundation units within the degree, but prior to commencing core Data Science studies.

For more Information on foundation units and course outline, please visit:

<http://www.monash.edu.au/pubs/handbooks/courses/C5003.html>

1. Object-oriented programming - Please tick one:
 Meet programming prerequisite

 Have not met programming

 Meet prerequisite, but would like to complete the Programming foundation unit in the course

List formal studies and/or work experience. While R or Python experience would be preferable, include any other related experience as well.

2. Databases - Please tick one:
 Meet database prerequisite

 Have not met database prerequisite

 Meet prerequisite, but would like to complete the Databases foundation unit in the course

List formal studies and/or work experience. Explain how you have worked with databases in your work.

3. Mathematics - Please tick one:
 Meet mathematics prerequisite

 Have not met mathematics prerequisite

 Meet Mathematics prerequisite, but would like to complete the Math foundation unit in the course

Studies undertaken must be completed at a minimum of university level 1.

If you have not completed Maths at University, but have experience in Statistics, tell us about how you have used statistics in your work place. For example, you may have analysed raw data for your company and provided recommendations to your management team based on the results.

GDDS foundation units

Any pre-reqs being met with professional experience must also provide a CV.

Where an applicant is seeking to meet a pre-req for a unit that does not identify with a similar title, have the applicant provide more information such as a unit outline and to explain how they meet all outcomes for the foundation unit listed below.

Programming

In your previous studies or professional experience, have you completed the following outcomes:

1. design, construct, test and document computer programs using Python;
2. recognise the relationship between a problem description and program design;
3. demonstrate how basic data structures and data types function;
4. investigate different strategies for algorithm development and evaluate these to select an appropriate solution to a given problem.

Please list formal studies and/or work experience

For more information please visit: <http://www.monash.edu/pubs/2018handbooks/units/FIT9133.html>

Database outcomes:

In your previous studies or professional experience, have you completed the following outcomes:

1. explain the motivations behind the development of database management systems;
2. describe the underlying theoretical basis of the relational database model and apply the theories into practice;
3. evaluate several design options and construct a database design;
4. develop a database based on a sound database design;
5. construct queries that meet user requirements;
6. contrast the differences between non-relational database models and the relational database model.

For more information please visit: <http://www.monash.edu/pubs/2018handbooks/units/FIT9132.html>

Maths outcomes:

In your previous studies, have you completed (studies undertaken must be completed at a minimum of university level 1) the following outcomes:

1. use trees and graphs to solve problems in computer science;
2. apply counting principles in combinatorics;
3. describe the principles of elementary probability theory, evaluate conditional probabilities and use Bayes' Theorem;
4. demonstrate basic knowledge and skills of linear algebra, including the manipulation of matrices, solution of linear systems, and evaluate and apply determinants;
5. explain fundamental concepts in calculus including basic differentiation and integration, and composite, inverse and parametric functions;
6. perform key skills in the calculus of functions of several variables including the calculation of partial derivatives, find tangent planes and identify stationary points, root findings and convexity for optimisation.

For more information please visit: <http://www.monash.edu/pubs/2018handbooks/units/MAT9004.html>

Handbook entry for GDDS: <http://www.monash.edu/pubs/handbooks/courses/C5003.html>