

# MATH 3007 PREDICTIVE MODELLING

**Credit Points** 10

**Legacy Code** 301034

**Coordinator** Yi Guo ([https://directory.westernsydney.edu.au/search/name/Yi Guo/](https://directory.westernsydney.edu.au/search/name/Yi%20Guo/))

**Description** In this information age, business and science depend on accurate predictions to make informed decisions. Machine learning is the process of allowing a computer to learn from data, which at its heart is used in making these important decisions. This unit provides students with the knowledge and practice required to implement and effectively use these predictive models such as Neural Networks and Support Vector Machines. Students will use the Python programming language throughout this unit.

**School** Computer, Data & Math Sciences

**Discipline** Statistics

**Student Contribution Band** HECS Band 1 10cp

Check your HECS Band contribution amount via the Fees ([https://www.westernsydney.edu.au/currentstudents/current\\_students/fees/](https://www.westernsydney.edu.au/currentstudents/current_students/fees/)) page.

**Level** Undergraduate Level 3 subject

**Pre-requisite(s)** For students not enrolled in 3734 Bachelor of Data Science 3769 Bachelor of Data Science or 3770 Bachelor of Applied Data Science - MATH 1028 Statistical Decision Making or MATH 1003 Biometry or MATH 1030 Statistics for Business

**Co-requisite(s)** Students in Bachelor of Data Science or Bachelor of Applied Data Science must be enrolled in MATH 1033 Thinking About Data

## Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Item	Length	Percent	Threshold	Individual/ Group Task
Online Quizzes	40 minutes (per Quiz)	20	N	Individual
Intra-session Exam	2 hours	30	Y	Individual
Applied Project 1: Computer based Assignment - Data Analysis task	1000 words	10	N	Group

Applied Project 2: Computer based Assignment - Data Analysis task	2000 words	40	N	Group
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Teaching Periods