MAST90009 Business Forecasting

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	This subject is not offered in 2013.
Time Commitment:	Contact Hours: 36 hours comprising one 2-hour lecture per week and one 1-hour computer lab/ practical class per week. Total Time Commitment: 120 hours
Prerequisites:	One of the following subjects, or equivalent:

Subject	Study Period Commencement:	Credit Points:
MAST20004 Probability	Not offered 2013	12.50
MAST20006 Probability for Statistics	Not offered 2013	12.50

Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	It is University policy to take all reasonable steps to minimise the impact of disability upon academic study and reasonable steps will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact upon their active and safe participation in a subject are encouraged to discuss this with the relevant subject coordinator and the Disability Liaison Unit.
Contact:	Email: **aihuaxia@unimelb.edu.au (mailto:aihuaxia@unimelb.edu.au)**
Subject Overview:	Forecasting is an indispensable part of decision making in business management and government planning. This subject discusses the concept of forecasting and deals with standard forecasting tools. Topics covered include autoregressive, autoregressive moving average and autoregressive integrated moving average time series models, elements of spectral analysis and linear predictors.
Objectives:	After completing this subject, students should: # understand the basic principles of the construction of time series models; # be able to analyse the properties of the models and produce predictions based on them; # be familiar with the most commonly used models and be able to apply the models in various situations; # gain the ability to pursue further studies in this and related areas.
Assessment:	Up to 40 pages of written assignments (30%: three assignments worth 10% each, due early, mid and late in semester), a 3-hour written examination (70%, in the examination period).
Prescribed Texts:	TBA
Recommended Texts:	P. J. Brockwell and R. A. Davis, Introduction to Time Series and Forecasting, Springer-Verlag, New York, 2002.
Breadth Options:	This subject is not available as a breadth subject.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees

Generic Skills:	In addition to learning specific skills that will assist students in their future careers in science, they will have the opportunity to develop generic skills that will assist them in any future career path. These include: # problem-solving skills: the ability to engage with unfamiliar problems and identify relevant solution strategies; # analytical skills: the ability to construct and express logical arguments and to work in abstract or general terms to increase the clarity and efficiency of analysis; # collaborative skills: the ability to work in a team; # time-management skills: the ability to meet regular deadlines while balancing competing commitments.
Notes:	Students will be expected to regularly access a computer running standard statistical software.
Related Course(s):	Master of Operations Research and Management Science Master of Philosophy - Engineering Master of Science (Mathematics and Statistics) Ph.D.- Engineering
Related Majors/Minors/ Specialisations:	Mathematics and Statistics