Subject Code	AF6208
Subject Title	Econometrics Methods
Credit Value	3
Level	6
Normal Duration	One Semester
Pre-requisite / Co-requisite/ Exclusion	None
Role and Purposes	This subject contributes to the achievement of the DBA outcome by sharpening students' ability to conduct original applied research and ethical awareness in business administration (Outcome 3).
Subject Learning Outcomes	Upon completion of the subject, students will be able to: a. Understand the basic concepts, the linear regression models used to conduct empirical research in economics, finance and accounting. b. Understand some advanced econometric theories and models which can be used for advanced empirical research. c. Understand how to transform ideas and hypotheses of a DBA thesis into testable econometric hypotheses.
Subject Synopsis/ Indicative Syllabus	Econometric methods widely used in empirical research are included. • Multiple linear regression models: least squares estimation, omitted variable problem, dummy variables, heteroscedasticity. • Endogeneity problems: Instrumental variables, two stage least squares estimation, Hausman test. • Qualitative and limited dependent variable models: logit/ probit models, self-selection models, Tobit model. • Panel data models: fixed vs random effects models. • Methods for time series data: autocorrelation, ARCH, unit roots, cointegration, vector autoregressive (VAR) models
Teaching/Learning Methodology	This will be based on a series of lectures and seminars. Focusing on the practical use of quantitative research methods, the lectures will introduce econometric models with a minimum level of theoretical discussion. The lectures will also explain how to use computer software to estimate the models and how to interpret and report computer results. Participants are required to conduct empirical research by applying the research methods to contemporary issues.

Assessment Methods in Alignment with Intended Learning Outcomes	Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)					
			a	b	c			
	1. Continuous assessment	**50%**	✓	✓	✓			
	Class participation	20%	✓	✓	✓			
	Individual research report	30%	✓	✓	✓			
	2. Final examination	**50%**	✓	✓	✓			
	Total	**100 %**						

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

Class participation and interaction is a necessary means of assessment as it will provide good feedback to each individual classmate on their research and consultancy ideas. The experience sharing session in the workshop will be assessed by class participation. It will help clarify the concepts, methodology and critical success factors in performing research work and consultancy project.

Individual research report is designed to train students to learn how to conduct practical research work on their own. Each student will take initiative to discuss research ideas with classmates and lecturers, and decide on the design of a specific research topics suitable for further exploration. Each student is required to write a report on his/her research plan. By such assessment, it is expected that their understanding on the concepts of quantitative approaches to research will be enhanced.

The final exam is designed to check the students' understanding of the research methods.

Note: To pass this subject, students are required to obtain Grade D or above in BOTH the Continuous Assessment and Examination components. In addition, the specific requirements on individual assessment components discussed above could be adjusted based on the pedagogical needs of subject lecturers.

Student Study Effort Expected	Class contact:	
	▪ Lectures	30 Hrs.
	Other student study effort:	
	▪ Preparation for lectures and assignment	20 Hrs.
	▪ Review of lectures	60 Hrs.

	Total student study effort	110 Hrs.
Reading List and References	**Textbooks** Wooldridge, J.M., Introductory Econometrics: A Modern Approach (Latest edition), Thompson South-Western, Mason, OH, 2016. Greene, W.H., Econometric Analysis (latest edition), Prentice Hall International, Inc. **Published Papers (selected)** McAlister, L., R. Srinivasan, and M.C. Kim, "Advertising, Research and Development, and Systematic Risk of the Firm," Journal of Marketing, 71, 35-48, 2007.	

Brynjolfsson, E., Y. Hu, and M.D. Smith, "Consumer Surplus in the Digital Economy: Estimating the Value of Increased Product Variety at Online Booksellers," Management Science, 49, 1580-1596, 2003.

Christie, A.A., M.P. Joye, and R.L. Watts, "Decentralization of the Firm: Theory and Evidence," Journal of Corporate Finance, 9, 3-36, 2003.

Mitton, T., "A Cross-firm Analysis of the Impact of Corporate Governance on the East Asian Financial Crisis," Journal of Financial Economics, 64, 215-241, 2002.

Barton, J., "Does the Use of Financial Derivatives Affect Earnings Management Decisions?" The Accounting Review, 76, 1-26, 2001.

Bushee, B.J., "The Influence of Institutional Investors on Myopic R&D Investment Behavior," The Accounting Review, 73, 305-333, 1998.

Basu, S., "The Conservatism Principle and the Asymmetric Timeliness of Earnings," Journal of Accounting and Economics, 24, 3-37, 1997.

Cornwell, C. and W.N. Trumbull, "Estimating the Economic Model of Crime with Panel Data," The Review of Economics and Statistics, 76, 360-366, 1994.

Computer Software

SAS (recommended), STATA or SPSS