



Course syllabus

Data Analysis

Credit	3 (3.0.6)			Code	IM3049	
Period	Total: 45	Theory: 45	Exercise:	Labs/Practice:	Assignment: x	
Minor Project/Lab practice...						
Assessment: 10-point grading scale	Exercise: 20%	Experiment: 0%	Test: 0%	Assignment: 20%	Final exams: 60%	
Hình thức đánh giá	Final examination	60%	Writing and Multiple choice, 65min			
	Assignment	20%	Data treatment practice			
	Exercise	20%	(in class)			
Prequired courses	None					
Pre-requisites	Statistics For Business					IM2007
Co-requisites	None					
Major	Industrial Management					
Degree	Undergraduate					
Level	3					
Remarks						

1. Course description:

This course presents an introduction to the fundamental methods as well as the key issues when dealing with observational data. We will begin with the basic linear regression model and analyze the theory behind its estimation. From there we will add refinements and discuss how to estimate a relationship when the assumptions necessary for the basic model do not hold. This course also helps students to use statistical softwares such as Excel, SPSS, and EViews for regression analysis and forecasting.

This course studies statistical methods used to estimate and test models. After a review of basic probability and statistics, the method of ordinary least squares regression is examined in detail. Topics include multicollinearity, heteroscedasticity, autocorrelation, model selection, and time-series forecasting. Dummy variables and qualitative dependent variable may also be considered.

2. References

Text book:

[1] Hair, J.F. Jr., Black, W.C., Babin, B.J. & Anderson, R.E. (2018). *Multivariate Data Analysis*, New International Edition. Pearson.

[2] Albers, M.J. (2017). *Introduction to Quantitative Data Analysis in Behavioral and Social Sciences*. John Wiley.

