DESIGN MANAGEMENT (DGGB)

DGGB 0001. MATH METH FOR BUS (PEKING U). (4.5 Credits)

DGGB 0002. STATISTICS (PEKING UNIV). (4.5 Credits)

DGGB 781A. STATISTICAL THEORY I. (3 Credits)
This course provides an Introduction to mathematical Statistics and a foundation for acquiring the skills to apply advanced statistical models to many important areas of decision-making in business. The course focuses on developing an understanding of random variables, their distribution functions, and sampling theory. Prerequisite: DGGB 6820.
Prerequisites: DGGB 6820 or GBA Waiver Statistics with a score of 070.

DGGB 781B. DESIGN OF STAT STUDIES. (3 Credits)
Design of Statistical Studies introduces and explores the different types of analyses that can be used to understand, collect, and interpret data that provide a basis for making decisions about businesses, customers, conditions, products, services, and processes. Letting the purpose of the study determine whether enumerative or analytic techniques are appropriate, we explore the various methods within each category to select the most appropriate ones to meet the aims of our study. Students will design studies that provide a basis for decisions about customers, products, and processes. Prerequisite: DGGB 6820.
Prerequisites: DGGB 6820 or GBA Waiver Statistics with a score of 070.

DGGB 781C. SAMPLING THEORY. (3 Credits)
This course is about the use of samples in research and statistical studies. Many courses teach how to analyze data. But, before you analyze it, you have to get it. Where do you get the data? Sampling is widely used for gathering information about various populations, be they people, animals, products, services or natural phenomenon, for industry, government, education, or service. The need to understand what is going on in the world today and predict what might happen in the future requires information and data on what exists today. Social and economic policies, health care planning, and corporate strategies all depend on statistical information. Scientific experiments, such as in medicine, must be constructed so as to provide valid information on which to base decisions about future availability of drugs, products, and services. This course provides a foundation in sample design and data collection for decision making. We study theoretical principles and applications, starting with definition of the population characteristic of concern, the frame, sampling methods, sample size, and sampling plan. We study also sampling and non-sampling errors and biases, problems of non-response, the half-open interval, and other methods to assure validity and usefulness of our data. Assignments will involve constructive criticism of studies in the press and company reports today. An end-term assignment will require writing a sample design for a study of your own.
Prerequisite: DGGB 6820.
Prerequisite: DGGB 6820.

DGGB 6800. PRE-MBA BASIC STATISTICS. (0 Credits)

DGGB 6810. MATH METHODS FOR BUS. (3 Credits)
(MBA program prerequisite) Studies the fundamental methods of mathematics applied in business statistics and operations research. The course concentrates on linear algebra and differential and integral calculus.
DGGB 8999. INDEPENDENT STUDY. (3 Credits)