DESCRIPTION OF COURSES

**MGT600  
Management, Organizational Policy and Practices**
The purpose of the course is to enable the students to understand and analyze the management and organizational processes and strategies. The focus is on scholarly research in the field of management and organizational theory and design. The course emphasizes on the emerging issues of management, management research, leadership styles, organizational design, policy formulation and strategic thinking. The ultimate goal is to evolve the critical thinking among participants so that they can analyze the existing literature on management focused on the indigenous management organizational problems should significantly contribute to the existing body of scientific knowledge of management.

**MGT601  
Statistical Inference**
The main objective of the courses is to provide students with a solid ground in statistical inference allowing them to conduct methodological research in the field. Students will at the end of the course be familiar with different frameworks within inference can be performed, being able to apply classical and modern methods of inference and be able to deduce properties of different types of inference. Following topics will be covered: Properties of estimators: Maximum likelihood and other methods of estimation; Hypothesis testing and interval estimation; Decision theory and Bayesian approach to inference; Non-Parametric and computationally Intensive methods.

**MGT602  
Research Methodology**
This course is appropriate for researchers and practitioners at all levels of mythological sophistication. The goal of this course is to provide students with necessary skills to evaluate existing empirical studies and to select appropriate methods for use in their own research. Students will be exposed to a broad range of quantitative and qualitative research methods in the social sciences. Topics covered include: 1) Hypothesis formulation and theory construction, 2) data collection techniques experimental, survey, and observation, 3) ethical issues in research, and 4) how to prepare a research proposal.

**MGT605  
Quantitative Techniques**
The objectives of the course are to help students to use the tools learnt in their research. At successful completion of the course students are expected to apply analytical techniques to various business situations and problems. The course comprises parametric and non-parametric parts. The former includes review of subject matter and methodology of econometrics, use of econometric soft-wares, types and sources of data, basic ideas of the two variables and multiple variables regression analysis, the method of ordinary least squares (OLS), assumptions, properties estimation and inference. The non-parametric part consists of linear programming, radial measures of efficiency, data envelopment analysis (DEA) under constant and variable returns to scales and scale efficiency.
**PRM700**  
*Advanced Project Management*

This module will give the program participants a comprehensive overview of the subject of project management from both a holistic as well methodological perspective. Topics covered here include the origins and growing popularity of project management in private and public-sector organizations, the relevance of the project stakeholders, project organization paradigms, project portfolios and project selection models, project management methodologies, and the five project process groups which constitute the project life-cycle (project initiation, planning, implementation, closing and monitoring, evaluation and control) as seen from the perspective of the project management institute’s ten defined project knowledge areas.

**PRM701**  
*Project Constraint Management*

Time, cost and scope are the defining parameters of a project. Managing these triple constraints of a project is the key indicator of a project’s success or failure. This course module will give the course participants an insight into various macro and micro time and cost estimation techniques for projects and their respective advantages and disadvantages. Topics covered include the creation of the project schedule on the basis of the information derived from the project’s scope, work breakdown structure, creating and revising Gantt Charts, networking diagramming techniques (arrow on activity and arrow on node, application of PERT/CPM and GERT tools, deriving cost baselines and budget allocations for projects, and the methods for raising capital for complex international projects.

**PRM702**  
*Project Quality and Risk Management*

This module will give the program participants a detailed insight into managing and delivering a high quality project. Techniques will be discussed to identify, prioritize and manage diverse project-specific risks in order to minimize their potentially adverse effects on projects. Emphasis will be placed on quality assurance and quality control techniques which are being applied in complex projects. Participants will be introduced to modern quality management processes and will learn the mandatory components of a quality management plan. Qualitative and quantitative analysis of risk and quality aspects will be discussed to deliver a high quality, international standards’ compliant project.

**PRM703**  
*Project Stakeholder Management*

This module will give the program participants a detailed insight into the relevance of “managing” stakeholders (i.e. primary and secondary) on projects. Proper stakeholder and human resource management in projects is crucial in order to maximize the chances of the project succeeding. All key stakeholders will be identified and their diverse influence, interests and expectations with regard to projects discussed. Topics covered include motivating and managing conflicts of Human Resources, communication theory and methodology, making communication plans, the project management information
system as a tool for communicating with stakeholders, and the tricky issue of skillfully dealing or engaging with a multitude of secondary stakeholders on projects. Staffing and training processes for projects, the qualities desired of the project manager and project team, managing different types of teams, and other social and cultural issues in the context of international projects are also discussed.

**PRM704**  
*Project Controlling and Monitoring*
Empirical research undertaken by various sources proves that a large percentage of projects fail to live up to expectations in some form or the other. Often, mechanisms for project monitoring, evaluation and control are inadequate or lacking. This course module will look at various practical project monitoring, evaluation and controlling techniques, including the earned value method, reporting and audits. Furthermore, it will review the multifarious reasons why so many projects are, inter alia, not achieving the goals set out for them at the onset or are exhibiting cost and schedule overruns.

**PRM705**  
*Software Project Management Applications*
Advances in software have had a considerable impact on the practice of project management, offering opportunities for gathering, analyzing and disseminating raw data and information which previously were not easily or economically available. Two of the numerous project management software programs presently available on the market – MS Project 2007 and Primavera – stand out in terms of user acceptance and functionality, especially with regard to complex projects. This course module, conducted in the classroom and computer laboratory, will give the program participants a hands-on insight into how to apply these programs using a practical project example as a frame of reference.

**PRM706**  
*Development and Management of Complex Projects*
Vast amount of resources are invested in development and management of complex projects across the world. Pakistan, being a developing country and an emerging economy, needs an insight and experts into these types of projects in order to progress and meet its objectives. This course module will acquaint students with all the important infrastructure, poverty alleviation, education, health and sanitation. A large number of “complex” projects are underway in various stages of planning and implementation at any point in time. Complex projects are usually characterized by high levels of investments, risk, and a large number of stakeholders with different objectives and agendas. To handle these - and many other project-specific issues – project managers and staff need to be familiar with a large number of concepts, processes and tools. This module will provide the students with the knowledge they need in order to manage the complexities involved and increase the likelihood of their projects succeeding.
PRM707
Seminar in Project Management
An indispensable component of any advanced postgraduate study program in project management is to acquaint the course participants with project management as it is being applied by different organizations in different contexts. Supplementing the project internship, this course module will give the course participants the valuable opportunity to learn from, and interact with, different project management practitioners, both Pakistani and foreign, how their organizations apply project management concepts, and the processes and tools developed to deliver a project which meets/exceeds the customers’ expectations.

MGT800
Thesis
As is tradition and formal requirement in advanced postgraduate degree programs across the world, course participants must work on and submit a thesis on a specific project management theme towards the end of their course program. The thesis is expected to be an individual and original effort on the part of each course participant and must meet all the specifications laid out by the department of management sciences which will be communicated to each participant prior to undertaking the research.