DEPARTMENT OF MANAGEMENT SCIENCE

DOCTOR OF PHILOSOPHY (PHD) IN BUSINESS

COURSE DESCRIPTIONS

BUSINESS COURSE DESCRIPTIONS

BMS 900: STATISTICS FOR BUSINESS I

Data collection and presentation; Probability distributions: discrete and continuous probability distributions; sampling distributions; Statistical inference: hypothesis testing; estimation of population parameters; comparison of means and proportions; Chi-squared tests; Simple regression and correlation; Non-parametric statistics; Computer applications.

BMS 901: BUSINESS RESEARCH METHODS

Philosophical foundations of research; Research and its classifications; Theoretical and practical aspects of research methodology; Research design; Statistical inference: estimation theory and hypothesis testing; Validity and reliability; Data analysis and report writing.

BMS 902: STATISTICS FOR BUSINESS II

Multiple regression; regression problems: autocorrelation, multicollinearity, heteroscedasticity; Use of categorical variables; Canonical Analysis of Variance; Time series analysis; Computer applications.

BMS 903: DECISION MODELS AND ANALYSIS

Forecasting techniques; Risk management models; constructing, validating, and use of stochastic simulation models; Decision making tools and their application; Use of IT in decision making; Decision making models; Global perspectives; Emerging issues.

BMS 904: STOCHASTIC ANALYSIS OF INSURANCE PORTFOLIOS

Brownian Motion Calculus; Stochastic Differential Equations; Diffusion Processes; Martingale; Jump Processes; Change of Probability Measure models; Interest rate models; Global perspectives; Emerging issues.

BMS 905: STRATEGIC INFORMATION SYSTEMS

Strategic role of information systems; Knowledge use, measurement and management; Legal and Ethical Issues in Information Systems; Business process reengineering; Information System Strategies; Decision Support Systems; Topics in e-Business; Technology Change Management; Database Systems; Information Systems Security; Business Data Communications; Global perspectives; Emerging issues.

BMS 906: PROJECT ECONOMIC ANALYSIS

Economic aspects of project management; Resource requirement estimation, including return on investment, cost/benefit analysis, and earned value; Use of appropriate computer tools and algorithms in estimating, tracking, and managing costs; Project resource administration request for proposal (RFP), manage and track changes to scope, schedule; Role and ethics of outsourcing and off shoring; Managing project quality and change; Global perspectives; Emerging issues.

BMS 907: ADVANCED OPERATIONS MANAGEMENT

Nature and role of operations management systems; Systems theory and operations management; Paradigms to operations management; Design of operations systems; Demand forecasting; Capacity planning decisions; Operations scheduling; production planning, materials management, location and layout decisions; Global perspectives; Emerging issues.

BMS 908: SEMINAR IN MANAGEMENT SCIENCE

The seminar provides a broad coverage of various management science issues. Students will be required to make presentations on topical issues. The Seminar will expose students to scholarly research in Management Science through use of journals and other relevant materials.

BMS 909: INDEPENDENT STUDY IN MANAGEMENT SCIENCE

Students will be expected to develop an in-depth study paper in an area of interest in Management Science under the guidance of a supervisor. The paper is expected to be of publishable standard.

BMS 910: ADVANCED ACTUARIAL SCIENCE MODELS

Applications of calculus-based probability; Determination of loss frequency distributions, loss severity distributions, determination of loss sharing parameters; Application of mathematics of finance; Determining equivalent measures of interest; Estimating the rate of return; Discounting; Determining yield rate, length of investment, amounts of investment; Financial derivatives, and use in risk management; Arbitrage construction of empirical models, selection of parametric models; Credibility theory; Simulation; Survival Models; Utility theory; Risk theory, and ruin theory; Global perspectives, Emerging issues.

BMS 911: SEMINAR IN ACTUARIAL SCIENCE AND INSURANCE

The seminar provides a broad coverage of various Actuarial Science and Insurance issues. Students will be required to make presentations on topical issues. The Seminar will expose students to scholarly research in Actuarial Science and Insurance through use of journals and other relevant materials.

BMS 912: INDEPENDENT STUDY IN ACTUARIAL SCIENCE AND INSURANCE

Students will be expected to develop an in-depth study paper in an area of interest in Actuarial Science and Insurance under the guidance of a supervisor. The paper is expected to be of publishable standard.

BMS 913: ADVANCED TOPICS IN INFORMATION SYSTEMS

Spatial database; Data integrity and privacy; Indexing; Information retrieval models, relevance feedback, and multimedia information retrieval; Network security, web security, application security, emerging technologies; Optimized decision making (meta-heuristics search); Cooperative decision making (distributed problem solving, planning and scheduling, auctions); Non-cooperative decision making (game-theoretic approaches, agent negotiation); Emerging issues.

BMS 914: SEMINAR IN MANAGEMENT INFORMATION SYSTEMS

The seminar provides a broad coverage of various Management Information Systems issues. Students will be required to make presentations on topical issues. The Seminar will expose students to scholarly research in Management Information Systems through use of journals and other relevant materials.

BMS 915: INDEPENDENT STUDY IN INFORMATION SYSTEMS

Students will be expected to develop an in-depth study paper in an area of interest in Information Systems under the guidance of a supervisor. The paper is expected to be of publishable standard.

BMS 916: THEORETICAL FOUNDATIONS OF PROJECT MANAGEMENT

Projects as strategic initiatives; Ethical, theoretical, and practical challenges of the project management framework; Project management phases and interactions; Project management and strategic management; Group dynamics and communication; Theories of organizational dynamics; Management of conflict; Project risk management models; Emerging issues.

BMS 917: SEMINAR IN PROJECT MANAGEMENT

The seminar provides a broad coverage of various Project Management issues. Students will be required to make presentations on topical issues. The Seminar will expose students to scholarly research in Project Management through use of journals and other relevant materials.

BMS 918: INDEPENDENT STUDY IN PROJECT MANAGEMENT

Students will be expected to develop an in-depth study paper in an area of interest in Project Management under the guidance of a supervisor. The paper is expected to be of publishable standard.

BSU 900: THESIS

Students will be expected to write a Thesis in an area of interest under the guidance of supervisors. The Thesis shall be written in accordance with the university guidelines.