# **Operations and Project Management Courses Description**

# BAN 350 Predictive Analytics and Data Mining (3 credits) (BEC)

Predictive analytics involves the art of data exploration, visualization, and communication as well as the science of analysing large quantities of data in order to discover meaningful patterns and generate insights to support decision-making. The primary objective of this course is to introduce various techniques available to extract useful information from the large volume of data an organization can use. Through this course, students will become more competent in extracting the business value from the rich data. This course will cover the concepts, principles, methodologies, and emerging trends in data mining and predictive analytics. Prerequisites. OPM 211 & OPM 230.

# BAN 370 Business Big Data Intelligence (3 credits) (BEC)

This course uses Microsoft's new Power Tools (Power Pivot, Power Query and Power BI Desktop) to convert real world large data sets into useful information for business decision making. Students will learn how to transform data, load data, and convert the loaded data into useful information for reporting, visualizing, analytics and dashboarding. Prerequisites. BAN 310

# BAN 380 People Analytics and strategy (3 credits) (BEC)

This course will provide the students with an understanding of how organizations can leverage data science and analytics to gain competitive advantage and how to use the data to align with a company's mission and goals. Students will learn how organizations derive business value/impact, and return on investment, and the importance of interpreting and communicating the business case. Prerequisites, MGT 230.

## BAN 410 Applied Business Analytics Project (? Credits)

The course provides an opportunity for students to develop a project that draws on their skills in the areas of business problem formulation, design, and statistical analysis to support data-driven decision-making processes. The project also serves to further students' skills in terms of developing business insights from quantitative analysis and knowledge of functional areas of business and/or specific industries. Projects will be based on a real business problem faced by organizations in the business community. Prerequisites. BAN 310.

## **OPM 101 Introduction to Computing (3 credits) (GER)**

This course introduces the concepts of computer applications and their roles in managing business operations. It introduces students to the understanding of computer hardware, software, essential computer and Internet-based systems, and the latest MS Office applications. A substantial portion of the course will be dedicated to hands-on and excel based exercises.

## OPM 211 Business Statistics (3 credits) (GER)

This introductory course provides the student with an advanced overview of descriptive and inferential statistical methods. This course's topics include descriptive statistics, probability, probability distributions, sampling and sampling distributions, interval estimation, hypothesis testing, simple linear regression and correlation, and multiple regression analysis. In addition to relevant statistical theories, the course focuses on exercises and applications. Prerequisites: OPM 101, MAT 111.

# OPM 230 Management Information Systems (3 credits) (BCC)

This course covers the use of ICT in managing activities and how MIS can be best integrated into the dayto-day operations of organizations. It will provide knowledge of primary methodologies and approaches that can be used to deal with business and operational needs in alignment with corporate business objectives. Some key topics covered in this course are the roles of MIS in organizations, management and the networked enterprise, and advanced excel features. Prerequisite: OPM 101, ECO 102.

# **OPM 310 Introduction to Project Management and Tools (3 credits) (MCC)**

The course introduces the concepts and methodology of the project management and their usage by project manager to successfully complete the projects. A key aspect of the course is to manage project stakeholders and environment within the business context with due consideration to balancing the scope, cost, and time and quality constraints. The course explores and applies various tools and techniques such as Microsoft Project 2016 to effectively manage the projects. Prerequisite: OPM 211.

# OPM 315 E-Commerce (BE) (3 credits) (BEC)

The course provides an overview of the basic elements of the technology infrastructure used to conduct Electronic Commerce. It examines the processes for business strategies that incorporate various forms of Electronic Commerce including business-to-business, business-to-consumer, and the business processes that support selling/purchasing activities. It reviews the designing and managing of online storefronts, Payment Systems, Security, and Privacy. Prerequisite: FIN 201 and OPM 230.

# OPM 330 Quantitative Methods for Business (3 credits) (BCC)

This course covers deterministic models and techniques to optimally solve complex managerial problems. Topics include linear programming, networks, integer programming, decision trees, and sensitivity analysis. It also shows how to practically apply these techniques in different areas of an organization, such as marketing, production scheduling, financial planning, and make-or-buy decision. Prerequisites: OPM 211.

# **OPM 340 Operations Management (3 credits) (MCC)**

The course studies the fundamental process for the production of goods and services in organizations with emphasis on understanding its relationship to other business areas. The course uses quantitative tools in production/operations for effective decision-making. It covers concepts such as operations strategy, process design, forecasting, capacity planning, scheduling, inventory management, and resource management. **Filed trips are used to enhance the learning experience.** Prerequisite: OPM 330.

### **OPM 360 Principles of Logistics and Supply Chain Management (3 credits) (MCC)**

This course covers principles of supply chain management and provides techniques used to analyze various aspects of logistics systems. Key concepts such as procurement, sourcing, supply chain management, communication, warehousing, packaging, materials handling, demand management, distribution, and facility location are examined as an integral part of modern business. **Field trips and business simulations are used to enhance the learning experience.** Prerequisite: ACC 202, OPM 230.

## **OPM 370 Quality Management (3 credits) (MCC)**

The course introduces analytical concepts and tools to accomplish business performance excellence. It exposes students to quality knowledge and quality improvement methods. It addresses the key issues of quality standards, principles, and practices. It also covers techniques of total quality including benchmarking, statistical process control, and continuous improvement. Prerequisite: OPM 330.

## **OPM 380 Advanced Project Management (3 credits) (MCC)**

The course builds on OPM310 with a focus on understanding and managing the business changes through the adoption and implementation of effective project management approaches to successfully achieve targeted business and project objectives. Additional contemporary project management concepts such as project management office and agile project management are taught. The course provides an advanced foundation on studying and maintaining the alignment between business strategic objectives and various operational and project management knowledge areas. Prerequisite: OPM 310.

# OPM 425 Special Topis in Operations Management (3 credits) (MCC)

A survey course of selected topics in operations management in order to supplement available offerings. In this course, important concepts and the state-of-the-art analytical techniques essential for managing the operations of any organization are covered. In particular, topics such as MRP and ERP, scheduling, management of waiting lines, location planning, and analysis. Prerequisite: OPM 340.

## **OPM 450 Management of Innovation (3 credits) (MCC)**

The course empowers students to deliver breakthrough innovations successfully into the world of business. The students explore techniques that seek major growth through innovations in products, services, and business models and develop the skills and gain the knowledge required to bring these innovations successfully to market. Business cases and projects are used to enhance the learning experience. Prerequisite: OPM 330.

## BAN 310 Business Analytics and Visualization (3 credits) (BCC)

This course aims to help students apply different data analysis software-based tools to improve their results evaluation and decision-making skills. It starts with the conceptualization of empirical research and concludes with a visual display of research findings to target audiences. It provides students with a good conceptual understanding of the research process as well as practical skills in analytics and visualization necessary to model data and predict solutions to business problems. Prerequisites: OPM 230, OPM 211, OPM 330.

## **OPM 485 Project Risk Management (3 credits) (MCC)**

This course introduces essential analytical techniques to manage business management issues with focus on project risk management. The concepts and the theories of risks management are discussed together with management models and their adoption. The course will present the full life cycle of risk management including risks planning, identification, analysis (qualitative and quantitative), response strategies, monitor and control, and overall risk governance approach. Business cases and tailored exorcises are used for hands-on exercises to enhance students' learning and experience. Prerequisite: OPM 310

# OPM 498 Operations and Project Management Internship (12 credit hours) (MCC)

This course requires students to complete a four-month placement as an internee in either a private or government organization. This is an important part of the BBA degree requirements which bridges the gap between theory and practice. Students have the opportunity to get hands-on experience in Operations and Project Management related areas, including planning, tracking, reporting, managing projects, and operations; overseeing supply chain management and logistics functions; assessing processes quality and risk. Prerequisites: MGT 490.