

## Boot-camps

### **Business Communication Boot-camp**

## Required courses

### **Introduction to Accounting (3 credits equivalent, no credits towards program requirements)**

Course description and syllabus to be developed

### **Introduction to Finance (3 credits equivalent, no credits towards program requirements)**

Course description and syllabus to be developed

### **Introduction to Marketing (3 credits equivalent, no credits towards program requirements)**

Course description and syllabus to be developed

### **Quantitative Tools for Management (4 credits)**

This course introduces core concepts in mathematics and statistics, and the main tools that necessary for quantitative analysis in decision-making process. Topics include optimization, financial mathematics, probability theory, data analysis and linear programming. Materials are of depth and coverage necessary for efficient progress in subsequent courses of business analytics, finance, operations management and others. Second half of the course includes intensive introduction to MS Excel and Python data analysis tools. This intensive course will be a combination of instructor led lectures and computer-lab sessions.

*Pre-requisites: None*

### **Accounting for Decision Making (3 credits)**

This course examines managerial decision making using information for internal efficiency and application of evidence-based approach in the relationships with external environment. Students will analyze the complex relationships between accounting techniques and other organizational activities including incremental costs and benefits of an undertaking, optimal resource allocation, efficiency measurement and improvements, pricing strategy, working capital management, profitability management, costing techniques, etc. Instructor-led discussions are accompanied by extensive use of problem sets and complex cases.

*Pre-requisites: Introduction to Accounting*

### **Managerial Finance (3 credits)**

This course studies the effects of time and uncertainty on decision-making. Topics include discounted cash flow valuation, stock and bond valuation, the term structure of interest rates, capital budgeting, risk and return, dividend policy decisions, portfolio theory, asset pricing models and efficient markets. Instructor-led lectures and discussions with case studies.

*Pre-requisites: Introduction to Finance*

### **Organization Behavior (3 credits)**

This course provides a thorough overview of the major concepts in organizational behavior and issues that (private) organizations face nowadays. The course approaches organizational behavior as human behavior in the workplace and studies aspects of human motivation, organizational culture and structure, teamwork and decision-making, power and leadership, and communication. It also explores how individuals influence organizations and how organizations influence individual behavior at work. A combination of conceptual and experiential approaches, including case analyses, videos, diagnostic self-assessments, peer and group discussions are utilized throughout course.

*Pre-requisites: None*

### **Business Analytics (3 credits)**

Business analytics focuses on data-driven decision making in business. Applications of business analytics can be utilized in operations, marketing, finance, human resource management among other functional areas of business. In this course, students will examine selected cases to learn how to make reliable forecasting (predictive analytics), evaluate impact of certain decisions (prescriptive analytics), as well as solve optimization problems while exploring the challenges that can arise in implementing analytical approaches within an organization. Instructor-led discussion and lab time based on designated cases, as well as applied home assignments.

*Pre-requisites: MS-Excel and Python boot-camp and Quantitative Tools for management, or MS-Excel and Python boot-camp and Econometrics, or Business Analytics (BAB)*

### **Behavioral Economics for Management (3 credits)**

This course is an introduction to the field of behavioral economics. It emphasizes and highlights concepts and applications that are mostly relevant to managerial decision making in private and public organizations. Topics include the analysis of choice process and judgement under certainty and uncertainty, importance of timing in decision making as well implication of strategic interactions. The course is designed in a way to require minimum formal modeling and draws more on review and discussion of the experimental behavioral evidence from the literature

regarding human decision-making processes. Students are expected to attend lectures, participate in classroom experiments and design behavioral intervention projects.

### **Operations Management (3 credits)**

This course examines strategic and practical applications of operations management. Topics include product and service design, capacity planning, process and location strategies, quality management, management resource planning (MRP) and enterprise resource planning (ERP) systems, supply chain management, and project management. Students will analyze business operations across a range of industries and develop effective business solutions. Instructor-led discussion and problem sets, case study analysis, and group project.

### **Marketing Management (3 credits)**

This course is an in-depth exploration of marketing processes and tools. Students will learn how to design and implement effective marketing to carry out a firm's strategy. Through case studies, presentations, and an integrated marketing plan students will apply analytical concepts and techniques developed in psychology, economics, quantitative analysis, accounting, and finance to marketing problems. Topics include customer analysis and buyer behavior, market segmentation, market research, distribution channels, product strategy, pricing, advertising, and sales force management. Quantitative methods and behavioral theories will be utilized. Instructor-led class time.

*Pre-requisites: Introduction to Marketing*

### **Research Methods (1 credit)**

This course introduces students to fundamental research methods including the theory of empirical research and major quantitative and qualitative data collection methodologies and statistical analyses used. The course emphasizes the difference between research paper and a technical report.

*Pre-requisites: None*

### **Capstone (3 credits)**

In this course, students will apply knowledge in finance, accounting, operations, marketing, and organizational behavior courses in practical application in real-life projects. Students will have a choice to either 1) develop a management-consulting project posed by real companies, or 2) engage in independent research. Students may work in close collaboration with AUA's Entrepreneurship and Product Innovation Center (EPIC). Students will be expected to demonstrate advanced analytical skills and the ability to synthesize knowledge and methodologies. Students will meet throughout the course with a faculty supervisor as well as external mentors (company representative or consultants) who will guide them through the process and ensure that milestones are achieved and deliverables are met. Prerequisite: Research Methods.

*Pre-requisites: MGMT 391 Research Methods and Program Chair approval in case the student has less than 29 credits from required courses*

## **Elective courses**

### **Project Management (2 credits)**

In this course students learn project management skills that are essential for current or future managers regardless of their career concentration. Some of the topics covered include life cycle models; project selection; project monitoring and control; planning with uncertainty; managing scope, risk, quality, time and costs; procurement; human resources and communications; the critical chain method; and managing multiple projects. It also discusses commercial project management software and how to overcome its limited functionality to address the requirements of managing risky, complex projects in practice.

### **Business Strategy (3 credits)**

In this course, students will develop the ability to think strategically about business problems by analyzing challenges in various industries with a focus on the roles of key players and the fundamentals of analytical and strategic reasoning. Through case studies, students will examine the different stages involved in making and implementing strategic decisions: defining the problem(s), establishing the criteria (both quantitative and qualitative), designing alternative solutions, and making a decision based on objective criteria. Examples of applied competitive and industry analysis are emphasized. Instructor-led discussions with extensive use of case studies.

### **Advanced Topics in Data Analysis (2 credits)**

In this course, we study methods, algorithms and computational paradigms that allow computers to find patterns and regularities in data, perform prediction and forecasting, and generally improve their performance through interaction with data. It is currently regarded as the key element of a more general process called Knowledge Discovery in Databases (KDD) that deals with extracting useful knowledge from raw data. The course will cover advanced topics in KDD and data analysis and will illustrate the whole process by examples. Special emphasis will be given to the Data Mining methods as they provide the real knowledge discovery tools. Students will use different tools to deal with data, such as Excel, Power BI and SQL, but the main tool to run many of the commonly used data analysis methods will be Python.

*Pre-requisites: Business Analytics*