

## Course Descriptions

**COMMUNICATION** This module blends research, theory and practice in the art of effective team communication, presentation and facilitation skills, team dynamics, and written skills to create a dynamic contribution to the overall effectiveness of any organization. Each student comes to this course with expertise and experience; this module will reinforce individual strengths, identify areas of growth and set goals for development in the cohort as well as the workplace.

**PROFESSIONAL BUSINESS WRITING** This course focuses on effective writing techniques for professionals. Assignments include a business proposal, an employment letter, a memo, a performance evaluation, and interoffice correspondence. Since writing is a cumulative skill, an emphasis is placed on the revision process through online postings and in class peer feedback. Students learn to communicate professionally and succinctly using a variety of business formats.

**LEADERSHIP & TEAM DEVELOPMENT** This course in Leadership and Team Development is designed to equip students with the essential skills, knowledge, and strategies to lead effectively and cultivate high-performing teams. Students will examine the fundamental principles of leadership, exploring various leadership styles, traits, and practices. Students will learn to leverage diversity within teams, turning differences into strengths and promoting an inclusive team culture. Upon course completion, students will have gained an understanding of effective leadership and team dynamics.

**FOUNDATIONS OF INFORMATION SYSTEMS** This module is designed to introduce students to contemporary information systems and demonstrate how these systems are used throughout global organizations. The focus of this module will be on the key components of information systems: people, processes and technologies, and how these components can be integrated and managed to create competitive advantage. This module also provides an introduction to systems and development concepts, technologies and their acquisition, and various types of application software and architectures currently in use. In addition, the ethical and social implications of these components will be considered.

**IT INFRASTRUCTURE** This module provides an introduction to IT infrastructure. It covers topics related to both computer and systems architecture and communication networks, with an overall focus on the services and capabilities that IT infrastructure solutions enable in an organizational context. It gives students the knowledge and skills that they need for communicating effectively with professionals whose special focus is on hardware and systems software technology and for designing organizational processes and software solutions that require in-depth understanding of the IT infrastructure capabilities and limitations. It also prepares students for organizational roles that require interaction with external vendors of IT infrastructure components and solutions. The course focuses strongly on Internet-based solutions, computer and network security, business continuity, and the role of infrastructure in regulatory compliance.

**IT SECURITY & RISK MANAGEMENT** This module provides an introduction to the fundamental principles and topics of Information Technology Security and Risk Management at the organizational level. Students will learn critical security principles that enable them to plan, develop, and perform security tasks. This module will introduce the student to understanding, managing, and controlling organizational risks associated with the implementation and use of IT solutions including protection of data and IT infrastructure from various security threats. The course will address hardware, software, processes, communications, applications, and policies and procedures with respect to organizational IT Security and Risk Management.

**IS PROJECT MANAGEMENT** This module is an applied study of modern techniques and approaches to the management of IT projects: project planning, outsourcing versus in-house development, team formation and building, phases of project development, including roll-out, support, and retiring of projects. The role of the project manager and project management functions will be discussed in detail: business case development, cost justification, return on investment; management of IT projects through a geographically dispersed workforce, and the unique challenges to systems development. This module will give students exposure to the Project Management Institute (PMI) Knowledge Areas and lay a foundation for students to consider taking the Project Management Professional (PMP) exam.

**INFORMATION SYSTEMS ANALYSIS & DESIGN** This module is an applied study of information systems analysis. The course covers a systematic methodology for analyzing a business problem or opportunity, determining what role, if any, computer-based technologies can play in addressing the business need, articulating business requirements for the technology solution, specifying alternative approaches to acquiring the technology capabilities needed to address the business requirements, and specifying the requirements for the information systems solution. Topics covered will include traditional and contemporary systems development lifecycles, including waterfall, object-oriented, and rapid methodologies. The role of the business analyst in scope definition, requirements analysis, and functional requirements documentation creation will be discussed. Students will learn about completing a system design using CASE tools.

**DATA & INFORMATION MANAGEMENT** This module provides the students with an introduction to the core concepts in data and information management. It is centered around the core skills of identifying organizational information requirements, modeling them using conceptual data modeling techniques, converting the conceptual data models into relational data models and verifying its structural characteristics with normalization techniques, and implementing and utilizing a relational database using an industrial-strength database management system. The course will also include coverage of basic database administration tasks and key concepts of data quality and data security. In addition to developing database applications, the course helps students understand how large-scale packaged systems are highly dependent on the use of DBMSs.

**BUSINESS PROCESS MANAGEMENT** This course explores the concepts, methodologies, and tools essential for the design, implementation, management, and improvement of business processes. Students will learn how to align processes with organizational goals, enhance efficiency, and drive continuous improvement through BPM practices.

**PROGRAMMING CONCEPTS I** This course provides an introduction to fundamental programming concepts and techniques using Python. It covers basic programming constructs, problem-solving strategies, and the syntax and semantics of Python. Students will learn to design, write, and debug simple programs.

**PROGRAMMING CONCEPTS II** Building upon the foundational concepts introduced in Programming Concepts I, this course delves deeper into intermediate programming concepts and techniques using Python. Students will explore advanced data structures, algorithmic problem-solving, object-oriented programming principles, and software development methodologies, further enhancing their programming skills and preparing them for more complex programming challenges.

**DATA ANALYTICS & BUSINESS INTELLIGENCE** Building on the transactional database understanding, the course provides an introduction to data and information management technologies that provide decision support capabilities under the broad business intelligence umbrella. Students will study how data drives business and strategic planning.

**ETHICAL IMPLICATIONS OF INFORMATION SYSTEMS** This course explores the ethical, legal, and social implications of information systems in contemporary society. It provides a framework for understanding the moral responsibilities of individuals and organizations in the development and use of information technology.

**INFORMATION SYSTEMS STRATEGY & FINANCE** This course provides an overview of the intersection between information systems strategy and finance within organizations. Students will explore how strategic decisions about information systems can impact financial performance and vice versa. Topics covered include aligning IT strategy with business objectives, evaluating IT investments, managing IT costs, and leveraging financial analysis techniques for IT decision-making.

**MULTIDISCIPLINARY PROJECT (CAPSTONE)** Utilizing their knowledge from the previous modules, students will create a case study from a selected organization. This case must uncover one main problem for the organization and provide viable and supported solutions to help create a better situation for the organization. The main part of this capstone is that each team presents a rich enough case that the reader will, with a fair amount of certainty, be provided with enough information to allow them the opportunity to solve the case using methods and techniques gained from business knowledge and experience.