Code	Name	Cr.	Description	Pre-Requisites
ARAB 201	Academic Arabic	3	The course teaches students the basic elements of the Arabic language including grammar, syntax, morphology, and vocabulary with a focus on oral and communication skills. Emphasis is also placed on the analytical study of a wide variety of Arabic literary texts, with students exposed to major Arabic literary authors.	None
BIOL 202	Multi-Disciplinary Science Foundations	3	BIOL 202 combines chemical and biological principles to investigate the functions of cells, organs, and human systems. The course provides knowledge of the molecular and physiological foundations of human health and disease.	ENGL 200 (co-requisite) or ENGL 201 (co-requisite)
BUSI 201	General Business Principles	3	This course develops students' understanding of business fundamentals with learning structured around practical case studies and examples. It is designed to introduce students to business terminologies, concepts, and current business issues. Key topics include the role of business, principles of management, teamwork and communication, business ethics and corporate social responsibility, basic legal aspects of business, entrepreneurship, marketing, human resources management, and accounting and finance.	None
CHUM 201	Cultures and Humanities Exploration I	3	This course explores historical and cultural perspectives to investigate existential topics, including the basis of ethics and morality, and the origins of socio-political systems. CHUM 201 is interdisciplinary at its core, promotes critical thinking skills through the analysis of primary historical and current texts, and nurtures the ability of students to establish relationships between different information and to formulate new ideas	ENGL 200 (co-requisite) or ENGL 201 (co-requisite)
CHUM 202	Cultures and Humanities Exploration II	3	As a natural extension of CHUM 201, this course 202 explores historical and cultural perspectives to investigate existential topics, including the nature of the mind, the origins of belief, and the purpose of human existence. CHUM 202 is interdisciplinary at its core, promotes critical thinking skills through the analysis of primary historical and current texts, and nurtures the ability of students to establish relationships between different information and to formulate new ideas.	CHUM 201
COMM 344	Communication & Presentation Skills	3	The course helps students in acquiring the range of skills necessary for impactful business interactions with small and large audiences, as well as one-on-one interactions, by tackling areas such as presentation skills, physical presence and body language, voice training, and team building. In parallel, the course will explore argumentation techniques that can be used to optimally convey content to any type of audience in a structured and impactful way, improving persuasion skills and optimally making use of rhetorical techniques.	ARAB 201 ENGL 202
ENGL 201	Academic English I	3	This course develops students' critical thinking and helps them compose academic essays on a wide variety of topics. In addition to improving writing skills, this course develops the abilities of students to express their ideas clearly and confidently during class discussions and presentations while expanding their lexical, analytical, and collaborative skills.	SAT 1 (EBRW): >550Toefl (IBT): ≥80Toefl (PBT): ≥548Toefl (CBT): ≥212IELTS: ≥6.5Duolingo: >105ENGL 000: 'CR' (A/B grade equivalent)
ENGL 202	Academic English II	3	Building on the skills acquired in Preparatory English and Academic English I, this course is designed to expand students' understanding of key linguistic areas, with emphasis on reading comprehension and analysis, synthesis, critiquing, argumentation, and research techniques associated with academic work.	ENGL 201 or ≥ 'C' grade in ENGL 200

Code	Name	Cr.	Description	Pre-Requisites
ITEC 201	Fundamentals of Programming I	4	This course offers a first-level exploration of object-oriented programming with an emphasis on procedural abstraction, providing students with a solid understanding of programming concepts, problem-solving techniques, and algorithm development. Students will write, debug, and execute code in a high-level programming language, focusing on fundamental programming constructs such as variables, data types, arrays, conditionals, loops, methods, and files, Selected cybersecurity and ethical issues relevant to this course will be examined.	None
ITEC 202	Fundamentals of Programming II	4	This course provides a second-level exploration of object-oriented programming. Topics include data structures used to solve programming problems, and the algorithms for manipulating such structures. Selected cybersecurity and ethical issues relevant to this course will be examined.	ITEC 201
ITEC 220	Potential and Implications of Artificial Intelligence	1	The course explores the potential and implications of artificial intelligence (AI) across various fields, providing students with a broad understanding of its impact on society, ethics, and the future of work. Topics covered include machine learning, data analytics, AI applications in science, art, healthcare, finance, and ethical considerations. Through engaging lectures, guest speakers, and discussions, students develop critical thinking skills to analyze the benefits and risks of AI. This course prepares students for responsible and informed participation in an AI-driven world.	None
ITEC 280	Requirements Engineering	4	This course provides essential skills in requirements engineering, covering the entire lifecycle from gathering to managing requirements. Students will learn effective techniques for gathering, analyzing, verifying, validating, and managing requirements, leading to an SRS document. The course also addresses ethical and cybersecurity requirements, providing students with a comprehensive understanding of requirements engineering for successful software development.	None
ITEC 299	IT Liability and risk management	3	This course provides the general foundations of information technology, risk management, ethics and their relation to cybersecurity, its governance, compliance, and laws. Topics include domains of technology risk management, IT risk identification, IT risk assessment, risk mitigation, structure and content of a cybersecurity-related strategy, plans, and planning, key components and methodologies of cybersecurity policies and policy development, and the role of performance measures.	ITEC 201 ITEC 280
ITEC 301	Web Programming	3	This course introduces the languages, tools, and techniques for modern full-stack development of rich internet applications. Topics covered include advanced markup and scripting languages, client- and server-side technologies, web services, web servers, and multi-layered applications that use relational database systems. Selected cybersecurity and ethical issues relevant to this course will be examined.	ITEC 202
ITEC 320	Introduction to Machine Learning	3	This course serves as an introduction to the field of machine learning and its applications. Students will explore the fundamental concepts and techniques used in machine learning, including supervised and unsupervised learning, classification, regression, and clustering. Emphasis will be placed on understanding various algorithms and their practical implementation. Students will also gain hands-on experience through programming assignments and real-world datasets. Selected cybersecurity and ethical issues relevant to this course will be examined.	ITEC 202 MATH 210 MATH 220 STAT 207

Code	Name	Cr.	Description	Pre-Requisites
ITEC 330	Introduction to Networks and Cybersecurity		This course provides an integrated approach to computer networks and cyber security. The network component of this course provides a full overview of computer networking. Topics include fundamentals of modern networking technologies and protocols, overview of cloud storage and services, and network troubleshooting. The security component of this course provides a wide variety of IT security concepts, threats and attacks, tools, and best practices in security architecture. Topics include the basics of encryption algorithms, authentication, authorization, and accounting in information security, and firewalls to Wi-Fi encryption options. Selected ethical issues relevant to this course will be examined.	ITEC 202
ITEC 331	Fundamentals of Network Administration	3	This course introduces network principles, layered models, Ethernet, internet protocol stack, network routing and congestion control, network security, network packet analysis, and network traffic analysis techniques. Popular diagnostic tools are used to monitor protocols in action and to understand how network protocols work. Network programming, error detection and correction, security, and performance evaluation will also be explored. Selected cybersecurity and ethical issues relevant to this course will be examined.	ITEC 330
ITEC 340	Operating Systems and Administration	3	This course introduces the essentials of operating systems design and management, and the basic security issues involved in the design and implementation of such systems. Topics include operating system roles, functions and services, hardware components, virtualization, and the installation, configuration, and administration of a secure operating system. Selected cybersecurity and ethical issues relevant to this course will be examined.	ITEC 330
ITEC 350	Databases Modeling and Practices		This course introduces the basic concepts, fundamental structures, and general techniques to design, develop, and maintain databases. Topics include data modeling and relational data models, normal forms, and the Structured Query Language. Selected cybersecurity and ethical issues relevant to this course will be examined.	ITEC 202 MATH 201
ITEC 380	Systems Analysis and Design		The course introduces students to systems analysis and design as a problem-solving activity within the framework of a selected methodology. Topics include contemporary industry practices, advanced system requirements and documentations, design and implementation activities options, and professional skills required for application development. Students will also learn how to use cloud services to build secure, scalable, and cloud-native applications. Selected cybersecurity and ethical issues relevant to this course will be examined.	ITEC 350
ITEC 401	Enterprise Cloud Systems	3	This course introduces the various types of components and data sources in large, scalable, secure, and distributed enterprise applications. Topics include large- scale enterprise environments, virtualized or cloud- based systems and services, network storage, distributed authentication, configuration and change management, and other contemporary topics. Selected cybersecurity and ethical issues relevant to this course will be examined.	ITEC 380
ITEC 421	Deep Learning	3	Deep learning is a subfield of machine learning that focuses on artificial neural networks and their ability to learn and make predictions. In this course, students will delve into advanced concepts and architectures of deep learning models. Topics covered include convolutional neural networks (CNNs), recurrent neural networks (RNNs), deep reinforcement learning, and generative adversarial networks (GANs). Through practical projects and exercises, students will develop skills in building, training, and evaluating deep learning models. This course will	ITEC 320

Code	Name	Cr.	Description	Pre-Requisites
			equip students with the knowledge and tools to tackle complex problems in image recognition, natural language processing, and other domains. Selected cybersecurity and ethical issues relevant to this course will be examined.	
ITEC 422	Artificial Intelligence	3	This course explores the development of intelligent systems capable of performing tasks that typically require human intelligence. In this course, students will study the foundational principles and algorithms behind AI. Topics covered include knowledge representation, reasoning, search algorithms, expert systems, and natural language processing. Students will also explore current advancements and applications of AI, such as robotics and autonomous systems. Through hands-on projects and case studies, students will apply AI techniques to solve real-world problems. This course will enable students to understand the capabilities and limitations of AI systems and prepare them for further exploration in this rapidly evolving field. Selected cybersecurity and ethical issues relevant to this course will be examined.	ITEC 320
ITEC 451	Design and Programming of Databanks	3	This course introduces students to the design and programming of databanks as a collection of local and/or cloud-based heterogeneous databases. Topics include assembling and analyzing data from multiple operational systems, such as nutrition and health services data, establishing data history, analyzing trends, generating reports and forecasts, and supporting general ad hoc queries. Selected cybersecurity and ethical issues relevant to this course will be examined.	ITEC 401
ITEC 460	Human Computer Interaction	3	This course covers the Human Computer Interface (HCI) discipline and the design of usable interfaces for computer applications. It examines how user requirements are gathered and how the principles of design are incorporated to successfully develop interfaces that meet those requirements. Students will also analyze and evaluate interfaces for usability applying techniques derived from the principles. Topics include needs-finding, rapid prototyping, heuristic evaluation, direct manipulation and representations, visual design and information design, designing experiments, connecting people through technology, challenges and opportunities of online collaboration, crowdsourcing, input, search and navigation, and gestural interfaces. Selected ethical issues relevant to this course will be examined.	ITEC 301 ITEC 380
ITEC 491	IT Project Management	3	This course provides students with the skills required to successfully manage an IT project while preparing for CompTIA Project+ certification. Topics include steps of IT project management processes, critical strategies for on time and within-budget projects, proven methods of project initiation, team members' selection criteria, management approval, communication, realistic timetables, costs tracking, and project closing. Selected ethical issues relevant to this course will be examined.	ITEC 380
ITEC 492	Information Technology Practicum	1	This course provides an opportunity for a professional learning experience in applied information systems and technologies, allowing students to apply the knowledge, skills, and practices of professional attitudes and behavior in real-world experience, solve real-world problems, make the learning experiential, facilitate project-based learning, and integrate scholarship with practice.	ITEC 499 (Co-Requisite)

Code	Name	Cr.	Description	Pre-Requisites
ITEC 499	Information Technology Practicum	3	In this course, students work in teams to complete a significant project in Information Technology under the mentorship of a faculty member. In the first phase of this course, a detailed project proposal is formulated and includes identification of a problem, background research, social, ethical and economic considerations, intellectual property and patents, and proposal writing, including methods of analysis and theoretical modeling. In the second phase of this course, the project is implemented, documented, and presented to a panel.	ITEC 299 ITEC 401 ITEC 460 ITEC 491 ITEC 492 (Co-Requisite)
MATH 201	Discrete Math	3	This course introduces a branch of applied mathematics that deals with arrangements of discrete objects. Topics covered include logical reasoning, sets, relations and functions, propositional logic, and difference equations. The relevance of discrete Mathematics to selected scientific and computing fields will also be explored.	None
MATH 210	Calculus I	3	This course covers topics that include fundamentals of calculus, equations, functions, continuity, and differentiation with addition to integration techniques, improper integrals, and infinite series.	None
MATH 220	Linear Algebra	3	Linear algebra is a branch of mathematics that studies systems of linear equations and the properties of matrices. The concepts of linear algebra are extremely useful in physics, economics and social sciences, natural sciences, and engineering. In this course, all these topics will be expanded and treated to give students the most powerful tools for solving linear algebra related problems.	None
STAT 207	Statistics for IT	3	This course introduces fundamental topics and applications of statistical methods that are critical in information systems. Topics include exploratory data analysis, probability, random variables, probability distributions, statistical modelling and inferences, and the application of statistics in computing.	None