



جامعة اليرموك
Yarmouk University
كلية تكنولوجيا المعلومات و علوم الحاسوب
Faculty of Information Technology and
Computer Sciences



Document Code	Courses Description	Document Approval Date
AP01-PR06		

Department: Information Technology	Program: Business Information Technology	Official Stamp:
The courses description was approved by the decision of the Department's Council no. on		

Course Name: Legal Issues in Information Technology	Course Code and Number: BIT 221	Number of Credit Hours: 3
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Teaching Language: English

Pre-requisite: **CYS 230**

Course Description	The objective of this course is to discuss the legal, social and ethical issues of information technology development and use. It covers recent IT-related controversial issues and concerns to improve students' critical thinking skills and legal awareness. This course covers the following topics: technology-induced changes, ethics, intellectual property issues, information privacy and law, communications and network security, technology in the workplace, professional ethics.
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Course Name: Entrepreneurship in IT	Course Code and Number: BIT 222	Number of Credit Hours: 3
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Teaching Language: English

Pre-requisite: **BA 101 AND CIS 101**

Course Description	The objective of this course is to promote entrepreneurship skills and thinking in creative industries such as the information and communication technologies industry. The course covers the following topics: entrepreneurship fundamentals, entrepreneurial pathways, generating innovative business ideas, transforming ideas into products and services with economic value, globalization, types of business models, the business plan, market research methods, marketing and branding strategies, smart selling and customer service, fundamentals of costs and revenues, incubators and accelerators, fund raising, business legal forms and registration process.
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Course Name: Operations Research	Course Code and Number: BIT 241	Number of Credit Hours: 3
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Teaching Language: English

Pre-requisite: **CS142**



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Course Description	<p>The main objective of this course is to introduce students to the fundamentals of Operations Research Models including linear programming and applications. They will learn how to construct models appropriate to particular applications, develop optimal solutions, understand the theory behind solutions and translate solutions into directives for action. On successful completion of this course students will be able to: define and formulate linear programming problems and appreciate their limitations; solve linear programming problems using appropriate techniques and interpret the results obtained; conduct and interpret post-optimal and sensitivity analysis; and explain the primal-dual relationship.</p>
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Course Name: E-Commerce	Course Code and Number: BIT 250	Number of Credit Hours: 3
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Teaching Language: English

Pre-requisite: BIT221

Course Description	<p>This course aims to study information technology on the foundations of electronic commerce and its applications in a range of sectors and industries. Topics to be covered include: business opportunities, challenges, E-commerce strategies, business and technical implications of e-commerce architectures, competitive advantage, current and emerging technologies, pricing, distribution channels, promotion, and advertising. Students will use the lab to apply some of the concepts covered in the lectures.</p>
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Course Name: Resources Management	Course Code and Number: BIT332	Number of Credit Hours: 3
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Teaching Language: English

Pre-requisite: BIT 222

Course Description	<p>This course introduces students to key concepts of the management of the IT-related and human-related resources a firm can exploit to achieve sustainable competitive advantage. Topics include IT and information resources planning, key issues related to organizational capabilities, competencies, culture, motivation, performance, compensation, appraisal, career planning, diversity, ethics, and training, and governmental regulations that affect employees and employers.</p>
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Course Name: Systems and Projects Management	Course Code and Number: BIT 364	Number of Credit Hours: 3
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Teaching Language: English

Pre-requisite: CIS 260

Course Description	<p>The main objective of this course is to provide students with the main principles and techniques of IT project management. The course provides a basic understanding of the phases and processes of managing IT projects. Topics to be covered include core knowledge areas of project management, facilitating knowledge areas in project management, project integration management, techniques, and tools used in managing IT projects. This course provides students with a practical experience using project management software.</p>
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Course Name: Enterprise Resource Planning	Course Code and Number: BIT 370	Number of Credit Hours: 3
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Teaching Language: English

Pre-requisite: BIT 332

Course Description	<p>The main goal of this course is to provide the students with a thorough understanding of the Enterprise resource planning (ERP) systems and their role in enterprise management. The course introduces the basic concepts related to ERP includes, ERP architecture, setup, configuration, operations and management. The course will cover the following topics: Overview of ERP systems, Fundamentals of business process and business process re-engineering. Business processes selection and mapping, ERP implementation lifecycle, in addition to covering ERP modules structure. The course spots the light on how ERP facilitates business processes in specific departments such as sales, marketing, accounting, production, and supply chain.</p>
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Course Name: Web Application Development (1)	Course Code and Number: BIT 381	Number of Credit Hours: 3
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Teaching Language: English

Pre-requisite: CIS 260

Course Description	<p>This course aims to provide students with an introduction to the client-side Web programming environments; coverage of the browser document object model, dynamic formatting, styling, and browser scripting languages. It aims to provide students with the knowledge and skills necessary for building and evaluating Web sites. This course will cover the following topics: fundamentals of HTML, Cascade style sheet (CSS3), JavaScript, jQuery and bootstrap. These are useful skills to acquire as they give students the ability to express their creativity in dynamic web design. The practical part includes applications using Web design</p>
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tools (e.g., Visual Studio, Eclipse, NetBeans, Notepad++) and other Web content management systems tools (such as, Joomla, WordPress, Drupal, etc.).

Course Name: Knowledge Management	Course Code and Number: BIT 382	Number of Credit Hours: 3
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Teaching Language: English

Pre-requisite: BIT 250 AND BIT 222

Course Description	This course aims to introduce students to the basic concepts of knowledge management and their contributions to organizations. This course focuses on how knowledge is created, retained, represented, stored and reused for the benefit of the organization and its members and to achieve the organization's competitive advantage. Topics covered include: basic concepts of knowledge and knowledge processes, knowledge management fundamentals, knowledge management strategies and techniques, knowledge management system lifecycle, knowledge management tools, knowledge management portals and social networks.
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Course Name: Data Visualization	Course Code and Number: BIT 385	Number of Credit Hours: 3
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Teaching Language: English

Pre-requisite: CS260

Course Description	This course introduces student to the fundamentals of data visualization and exploration; the art and science of turning data into visual representations to explore, make sense of, and communicate data. It covers the data visualization process, beginning with how to work through collecting, preparing, and analyzing data to creating data visualizations, dashboards, and data-driven stories that can be used to share and communicate critical data insights to nonexpert audience. Students will be exposed to a variety of visual representations, including basic statistical graphics; popular representations such as tag clouds, treemaps and parallel coordinates; pixel-, glyph-, graph- and map-based representations. Students will also learn to evaluate the effectiveness of visualization designs, and think critically about each design decision, such as choice of colors and visual encodings. Students will create their own data visualizations, dashboards, and data stories using popular and commercial data visualization platforms, such as Microsoft power BI and Tableau.
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Course Name: Web Technology	Course Code and Number: BIT 386	Number of Credit Hours: 3
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Teaching Language: English

Pre-requisite: **BIT 381**

Course Description	The primary objective of the course is to provide students with a practical experience with “full-stack” web development. Students will explore the architecture of web applications and the technologies that are used in the three main components: client, server and data store. In this course, students are introduced to server-side programming language, (such as PHP, ASP.NET), and how this technology is used for creating server-side scripts. This course will cover the following topics: database-driven Web applications using the programming language, techniques to access and process data, manage state information, upload and download files, security issues, and modern software tools for the server-side web application development.
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Course Name: Quality Management and Control	Course Code and Number: BIT461	Number of Credit Hours: 3
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Teaching Language: English

Pre-requisite: **BIT 382**

Course Description	This course aims to provide students with fundamental understanding of the total quality and modern methods of quality management and control and how to improve the quality of operations in the institutions. Topics covered include: Total Quality Methodology, Global Quality and Competitiveness: Achieving Organizational Excellence, Strategic Management: Planning and Executing to Achieve Competitive Advantage, Quality Culture: Changing Hearts, Minds and Attitudes, Leadership and Change, Using Statistics in Process Control and Continuous Improvement Methods, Application and Management of Total quality and the difficulties faced by institutions in applying quality management systems.
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Course Name: Decision Support Systems	Course Code and Number: BIT 480	Number of Credit Hours: 3
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Teaching Language: English

Pre-requisite: **BIT 241**

Course Description	The main objective of this course is to foster a comprehensive understanding of the decision support systems (DSS), while stressing on the important role these systems play in business today. Topics to be covered include: decision making
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	process, modeling, analyzing and developing DSS, business Intelligence and analytics concepts (including descriptive analytics, predictive analytics, and prescriptive analytics), data mining, and multi-criteria decision-making. This course is supplemented by practical components covered in BIT 480L.
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Course Name: Decision Support Systems Lab	Course Code and Number: BIT 480L	Number of Credit Hours: 1
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Teaching Language: English

Pre-requisite: Concurrent with BIT 480

Course Description	This course is intended to complement MIS480 to have students apply the concepts covered in that course and provide them with a practical understanding of the key technical and managerial issues in the effective design, development, use, and evaluation of the Decision Support Systems (DSS). Laboratory experiments will cover the decision-making process, modeling, analyzing and developing DSS and applications.
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Course Name: Web Application Development (2)	Course Code and Number: BIT 481	Number of Credit Hours: 3
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Teaching Language: English

Pre-requisite: BIT 381

Course Description	This course aims to provide students with practical experience in web development. Students will explore the architecture of web applications and the technologies used in the three main components: client, server and data store. In this course, students are introduced to server-side programming language (such as PHP and ASP.NET), and how to use this technology to create server-side scripts. This course will cover the following topics: Web-based database applications using programming language, data access and processing techniques, management of status information, file upload and download, security issues, and modern software tools for server-side web application development. The course is supplemented with a small web application development project with a focus on key web components.
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Course Name: Business Intelligence	Course Code and Number: BIT 483	Number of Credit Hours: 3
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Teaching Language: English

Pre-requisite: CIS 260

Course Description	The course aims at examining Business Intelligence (BI) as a broad category of applications and technologies for gathering, storing, analyzing, sharing and
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	providing access to data to support a wide variety of management tasks, from performance evaluation to trend spotting and policy making. Students learn analytical components and technologies used to convert data into business insights through creating business reports, dashboards and scorecards, data mining methods for various application areas. Modules are organized around the business intelligence concepts, tools, and applications, and the use of data warehouse for business reporting and online analytical processing, for creating business reports and dashboards, and for business performance management and descriptive analytics. Students will actively participate in this course through class discussions, project preparation and presentation, and BI tools utilization.
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Course Name: Special Topics in BIT	Course Code and Number: BIT 492	Number of Credit Hours: 3
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Teaching Language: English

Pre-requisite: **BIT 483**

Course Description	The main objective of this course which is used on a temporary basis to address specific issues within the field of business information technology that do not currently align with existing approved courses, or to evaluate demand for a new course or area of study in business information technology. Special topics course will not be used to repeatedly offer the same content over multiple terms as a means to avoid proposing a dedicated course.
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Course Name: Training Certificate	Course Code and Number: BIT 497	Number of Credit Hours:3
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Teaching Language: English

Pre-requisite: ---

Course Description	The course is approved if the student obtains an accredited international certificate in one of the areas of specialization approved by the department according to special foundations.
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Course Name: Internship/ Practical Training	Course Code and Number: BIT 498	Number of Credit Hours: 3
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Teaching Language: English

Pre-requisite: **Passing 90 CH at least and departmental approval**

Course Description	This course aims to give students the opportunity to train and obtain the practical experience required from the labor market before graduation, where the student spends 8 weeks in one of the companies approved for training by the Department of Business Information Technology. During the training period,
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	this course requires students to practice and apply what they have studied during their studies, taking into account the requirements of the companies providing training opportunities, in coordination between the faculty member supervising the training and the granting company for the training opportunity and in line with the learning outcomes of the BIT program.
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Course Name: Graduation Project	Course Code and Number: BIT499	Number of Credit Hours: 3
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Teaching Language: English

Pre-requisite: Passing 98 CH

Course Description	This course aims to enable students to practice the skills and knowledge attained from the BIT courses on a project to solve a problem related to an information system. The students will practice how to analyze the various alternatives to the system, evaluate, design and develop a computerized system and clarify its stages and document the project according to the approved standards.
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