

م	اسم المقرر	رمز المقرر	Course Title	الموصف	المراجع	وجود ملف التوصيف		
						DOC	PDF	
							Syllabus	ALL
<b>قسم تقنية المعلومات</b>								
1	IT121	أساسيات تقنية المعلومات	Fundamentals of Information Technology	د. عبد اللطيف غلاب	د. عبد الله الحاشدي	√	√	√
<p>This course gives students the main concepts of Information Technology (IT), and how the new IT is changing the current business environment. It addresses the major principles for preparing the students to understand the role of IT in the digital economy and consider the significance of IT management with highlighting the need to succeed in the emerging digital economy. The course is aimed at Understanding Information Systems that Support Organizational Performance. In addition to explain the utilization of Web, Wireless, and Social Media Strategies. It is designed to cover the Information Systems in the 2010s, IT Infrastructure and Support Systems, IT Security, Crime, Compliance, and Continuity. It covers also the E-Business and E-Commerce, Mobile Computing and Commerce, Web 2.0 and Social Media.</p>								
2	IT221	إدارة تقنية المعلومات	Information Technology Management	د. عبد اللطيف غلاب	د. عبد الله الحاشدي	√	√	√
<p>In information technology management course, students will be introduced to topics dealing with managing ICT resources in organizations. In addition to explain the utilization of the new emerging trends for operational and enterprise systems, it discuss the managing it, business processes, and social/ecology responsibility. This course is designed to cover the operational planning and control systems, enterprise information systems and business intelligence and decision support. It also comprises the issues and challenges of IT strategic planning, business process management and systems development and global ecology, ethics, and social responsibility. The course will prepare students to understand different careers in IT and emphasize the importance of Enterprise Systems for Management which will be taken in the other advanced course such as Advanced IT and ERP.</p>								
3	CS212	الهياكل المنقطعة	Discrete Structures	أ. عبده العامري	د. عبد الحفيظ مدابش	√	√	√
<p>This course will provide students with fundamental concept Discrete Structures This course will cover various topics to provide student with a clear, accessible introduction to Discrete Structures. Topics include Mathematical Logic, sets, relations, Mathematical proofs, Mappings, graphs and their operations. Some methods will be used in the teaching of this course, such as: lectures, problem-solving, Brainstorming, micro- assignments and micro-report.</p>								
5	CS223	مبادئ ترانسل البيانات والشبكات	Principles of Data Communication and Networks	أ. نبيل المخلافي	أ. فهد الوصابي	√	√	√
<p>This course presents an introduction to data transmission , transmission media, basic fundamentals, network topologies (both local area networks and wide area networks) and protocols, the Internet and OSI models, current network operating systems, network analysis, design, and administrative. An emphasis will be placed on current technologies for optimum network design.</p>								
6	IS223	تحليل وتصميم النظم	Systems Analysis and Design	أ. فهد الوصابي		√	X	X
<p>Information system development has traditionally been an art and is undergoing rapid change. Amidst this volatile environment, a few basic ideas and approaches emerging over the past several years have demonstrated considerable staying power and influence. This course will introduce these ideas. Both concepts and techniques will be covered, reinforced by homework assignments and a project. The course material encompasses the concepts, tools, and techniques required to analyze and design business information systems. The course will include structured development approaches and the system development life cycle, as well as rapid application development through alternative approaches such as Agile and prototyping. Emphasis will be given to the role of information systems in organizations and how they relate to organizational objectives and structure. Upon completion, students should be able to analyze a problem and design an appropriate solution using a combination of tools and techniques.</p>								
7	IT311	تطوير تطبيقات الويب	Web Application Development	أ. غادة عادل	أ. عبد الرحمن المرادي	√	√	√
<p>This course reviews basic concepts and techniques for developing applications within computer network environment. Emphasis is placed upon the knowledge and skills to develop web-based applications on both client and server side especially in Internet environment. It also includes the design and creation of interactive web sites that provide access to databases. Other topics including Cascading Style Sheets, XML, AJAX and Web Services are also introduced. This course requires Introduction of Web Design, Introduction of Database as a pre-requisites. The lectures of this course will be taught through lectures, projects, exams, presentations and assignments.</p>								
8	IT312	مواعة الإنسان مع الحاسوب والبرمجة المرئية	Human Computer Interaction and Visual Programming	أ. محمد الشيباني	أ. فهد الوصابي	√	√	√
<p>Visual programming languages are widely used for the rapid development of graphical applications. This course emphasizes on software systems development in a visual environment. Major topics include visual programming concepts, object oriented concepts, database linkages, and graphics. User interface design and code optimization are covered. Different types of will be covered applications that run on in this course a standalone PC, on a network application. An additional aim of this subject is to give students an understanding of the main ideas of Human-Computer Interaction (HCI).</p>								
9	IT313	تقنية المعلومات المتقدمة	Advanced IT	أ. محمد شمس الدين	د. عبد اللطيف غلاب	√	√	√
<p>This Course is designed to cover the global IT infrastructure, security and ethical challenges within global systems. This course focuses in enhancing business intelligence in enterprise and more in-depth exploration of advanced IT controls. Adequate emphasize on decision making, managing projects with respect to the new emerging trends and technologies. The highlight of this course is to expose students to the new emerging global trends &amp; technologies. This course has two prerequisite courses, Fundamentals of IT and System Analysis &amp; Design.</p>								
13	IT324	إدارة قواعد البيانات	Database Administration	أ. محمد شمس الدين	أ. وديع القياطي	√	√	√
<p>This course will cover real time database administration tasks using Oracle 11g. This course provides students with sound knowledge in the following: installation, configure and support databases, managing storage, setting up user accounts, assigning permissions, securing databases, backing up and restoring databases, tuning the performance of database and performing other administrative tasks. This course will cover theory (concepts) and practical (lab sessions). The pre-requisite for this course is Database Systems Design.</p>								
14	CS325	هندسة البرمجيات	Software Engineering	أ. فهد الوصابي	د. أسماء الشرجي	√	√	√

<p>This course is very important to computer science, software engineering, IT and IS students in order to take a look at the Software Engineering concepts that are needed to develop software systems that can meet basic functional and non-functional requirements within a well-defined problem domain. It covers the traditional and most recent practices of different software engineering approaches including the requirements analysis, design, development, verification, and maintenance. A look at some related issues such as SWE projects management and critical systems. An examination of object-oriented software construction focused on the Unified Modeling Language.</p> <p>An introduction to CASE tools. Students will collaboratively define requirements and design of a substantial project. According to the course plan of these programs, this course required the course of system analysis and design as a pre-requisite.</p>								
√	√	√	أ.غادة عادل	د.عبد اللطيف غلاب	Enterprise Resources Planning	تخطيط موارد المؤسسات	IT422	17
<p>Enterprise Resources Planning (ERP) is an advanced IT course dealing with both the theoretical and practical aspects of the enterprise systems. This course is designed to provide students with an understanding of the practical use of ERP systems in modern business. It will introduce students to ERP systems integration and show how they can be used by organizations to run their operations more efficiently and effectively. The course comprises major of the ERP fundamentals such as the architecture, development life cycle, implementation strategies, software and vendor selection, operational and post-implementation. It also covers many of the new trends and challenges of ERP management. Particularly it explains in details the management of program and project, organizational change and business process re-engineering, global, ethics, and security, supply chain, and the customer relationship management. The course will incorporate a laboratory component using SAP software and some business cases as practices for students. It will also help you to refine your communication skills and group work skills, and assist you in the development of your research skills. ERP course is required to complete CS221-Database Systems Design and CIT10-Object Oriented Programming as pre-requisites.</p>								
√	√	√	أ.محمد الدويل	أ.عبد الرحمن المولحي	Advanced Applications Programming	برمجة تطبيقات متقدم	IT431	20
<p>This intensive hands-on course explores advanced Java language features and packages. Java programmers will be able to take the content learned and immediately apply it to the problems encountered on the job. The course begins with a discussion of collections. Database programming using JDBC is covered in depth. Object serialization is covered. Distributed programming in Java is introduced, including use of Remote Method Invocation. Reflection in Java and JAR files are covered. Server-side Web programming is introduced using servlets. Java security is covered in depth, including both the Java security model and details of the java.security package. Native methods are covered. According to the course plan, the prerequisite of this course is Human Computer Interaction and Visual Programming. To achieve the course goals, different teaching strategies will be applied such as direct, indirect and interactive and self-learning.</p>								
√	√	√	أ.وديع القياطي	أ.محمد شمس الدين	Database Security	أمنية قواعد البيانات	ITE02	2
<p>This course introduces basic concepts of data security in database environment, computer network and internet. The topic includes basic requirement of data security control, explain the risk and threats towards integrity, availability and data confidentiality in the organization. Among other issues discussed are technologies on application and data security such as data access control, data confidentiality, user management, virtual standalone database and database auditing. Students will be exposed to techniques of data security implementation in Oracle environment.</p>								
√	√	√	د.عبد الله الحاشدي	أ.غادة عادل	Selected Topics in IT	مواضيع مختارة في تقنية المعلومات	ITE03	3
<p>This course gives the student the opportunity to study unusual, cutting-edge and advanced topics in the technology field in an intensive, immersion-style setting. Emphasis is placed upon the knowledge to Exploring Mobile Application Development with the iPhone, Engineering Studies, Computerized Drafting, IT Professional Studies, Foundations in Technology, and Technology Internship. Each individual section of the course will be specially designed. The department of Technology announces the specific outline, outcomes, texts, materials and performance skills (if any) of each section early in the term preceding it.</p> <p>This course introduces the fundamental principles, technology, and current development of Cloud Computing.</p>								
√	√	√	أ.غادة عادل	أ.بريجيت شماسكي	Ethics in ICT	أخلاقيات تكنولوجيا المعلومات والاتصالات	ITE04	4
<p>This course is structured to assist students in their future role as Information and Communication Technology professionals. The course covers a range of knowledge areas as students are exposed to the social, ethical and professional issues, which relate to the responsibilities of IT employees. Professional Issues in IT gives students the awareness and skills to negotiate a variety of ethical situations in the workplace. They will generate and select from alternative solutions to ethical dilemmas. The course also raises awareness of the various codes of professional conduct that exist in the IT world.</p> <p>Some of the topics that will be discussed include ethical code, computer crime, software piracy, hacking and virus, privacy intrusion, IT and today's working environments, employees' health and security issues, copyright and intellectual property. The course explores the social and organizational impact of IT and provides students with the opportunity to develop a deeper and wider appreciation of the implications of their involvement in that process. Students are made aware of their responsibilities, the implications and impact of their work as a professional within the field of IT, and are encouraged to develop and act upon their own personal and professional values.</p>								
√	√	√	أ.محمد الدويل	أ.غادة عادل	E-business Application Dev	تطوير تطبيقات الأعمال الإلكترونية	ITE05	5
<p>The teaching process in this course will concentrate on theoretical and practical aspect of developing and managing web site for electronic commerce. On theoretical part, the students will be exposed to the several areas of electronic commerce such as management, supply chain, payment, delivery, law and marketing. Meanwhile, in the practical part, the students will be exposed to the development aspect of electronic commerce. Implementation issues such as security, payment, supply, delivery and law will be emphasized. In addition, current issues in the area OF managing electronic commerce and enabling technologies for electronic commerce will also be discussed in this course.</p>								
√	√	√	د.عبد القادر العيادي	د.عبد اللطيف غلاب	Knowledge Base Systems	الأنظمة المعتمدة على المعرفة	ITE08	8
<p>A knowledge-based system (KBS) is a system that uses Artificial Intelligence (AI) techniques in problem-solving processes to support human decision-making, learning, and action. Ideal for advanced-undergraduate and graduate students, as well as business professionals, this course enable students to develop an appreciation of KBS and their architecture and understand a broad variety of knowledge-based techniques for decision support and planning. The course assumes that students have basic computer science skills and a math background that includes set theory, relations, elementary probability, and introductory concepts of Artificial Intelligence. Besides to the central aspects of KBS like knowledge management and KBS fundamentals, architecture, developing, this course covers the Fuzzy Logic, Agent-Based Systems, Connectionist Models, Genetic Algorithms and Soft Computing Systems. It also contains more advanced about E-Learning Solution, Diet Menu Planner, and Question Answering System as real-world KBS applications for Multiagent System Accessing Distributed Database Grid, Knowledge-Intensive Learning, and Natural Language Interface respectively.</p>								
√	√	√	أ.فهد الوصابي	أ.وديع القياطي	Advanced Software Engineering	هندسة البرمجيات المتقدمة	ITE09	9

<p>This Course is designed to cover the different special topics of interest . Topics of interest could be one or several from the followings: Software Reuse, Embedded software, component-based engineering, Distributed software engineering, Aspect-oriented engineering and Service-oriented architecture. and Other topics can be added as needed. The course will include case studies and hands on experiences. students participate during group discussions projects related to the special topics selected.</p>							
√	√	√	أ.نسبية المقطري	أ.وديع القباطي	Software quality Assurance	ضمان جودة البرمجيات	ITE10    10
<p>This Course is designed to cover the concepts, Components, metrics, and models in software quality assurance. It presents a framework for software quality assurance and discuss individual components in the framework such as planning, reviews, testing, configuration management, and so on. It also discusses metrics and models for software quality as a product, in process, and in maintenance. The course will include case studies and hands on experiences. Students will develop an understanding of software quality and approaches to assure software quality . The pre-requisite for this course is Software Engineering.</p>							
√	√	√	أ.وديع القباطي	أ.محمد شمس الدين	Advanced Database Applications	تطبيقات قواعد بيانات متقدم	ITE13    13
<p>The goal of the course is to introduce students to EERD model, modern database, and data management systems. The course will be focused on efficient query processing and indexing techniques for spatial, temporal and multimedia databases. Another topic that will be covered is parallel databases, the analysis of large datasets (data mining). In particular, efficient and scalable algorithms for clustering, association rule discovery and classification of very large datasets will be discussed. Students will have to solve some small written and programming assignments that will help them to understand and digest the covered material. This course has prerequisite Database Systems Design.</p>							