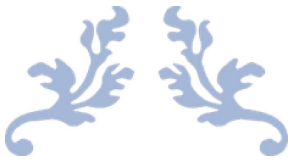

الخطة الدراسية

KINGDOM OF SAUDI ARABIA
Ministry Of Education
Najran University

المملكة العربية السعودية
وزارة التعليم
جامعة نجران

كلية علوم الحاسب ونظم المعلومات – نظم المعلومات

برنامج ماجستير تقنية المعلومات المؤسسية المهني
Professional MSc in Enterprise Information Technology

برنامج مدفوع الرسوم
Tuition-Based Program

الخطة الدراسية
Study plan

Total Credit Hours	عدد وحدات البرنامج
42	٤٢

السنة الاولى - المستوى الأول Year 1 – level 1			
Course Code	**Course Title**	**Credit hours (Theory)**	**Prerequisites**
رمز المقرر	**اسم المقرر**	**عدد الوحدات (نظري)**	**المتطلب السابق**
501 MEIT-3 ٥٠١ متقن ـ٣	Advanced Information Systems نظم المعلومات المتقدمة	٣	
502 MEIT-3 ٥٠٢ متقن ـ٣	Project Management إدارة المشاريع	٣	
503 MEIT-3 ٥٠٣ متقن ـ٣	Enterprise Applications Architecture معمارية التطبيقات المؤسسية	٣	
504 MEIT-3 ٥٠٤ متقن ـ٣	Advanced Databases قواعد البيانات المتقدمة	٣	
	Total Credits **مجموع الوحدات**	١٢	

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كلية علوم الحاسب ونظم المعلومات – نظم المعلومات

السنة الأولى – المستوى الثاني Year 1 – level 2			
Corse Code	**Course title**	**Credit hours (Theory)**	**Prerequisites**
رمز المقرر	**اسم المقرر**	**عدد الوحدات (نظري)**	**المتطلب السابق**
505 MEIT-3 ٥٠٥ متقن ـ٣	AI in Business الذكاء الإصطناعي في الأعمال	٣	
506 MEIT-3 ٥٠٦ متقن ـ٣	Data Science and Visualization علم البيانات وتصورها	٣	
597 PMIS-3 ٥٩٧ منال ـ٣	Research Methodology طرق البحث	٣	
507 MEIT-3 ٥٠٧ متقن ـ٣	Systems Administration إدارة النظم	٣	
	Total Credits **مجموع الوحدات**	١٢	

السنة الثانية – المستوى الثالث Year 2 – level 3			
Course Code	**Course Title**	**Credit Hours (Theory, Lab, Tut)**	**Prerequisites**
رمز المقرر	**اسم المقرر**	**عدد الوحدات (نظري)**	**المتطلب السابق**
511 MEIT-3 ٥١١ متقن ـ٣	Emerging Technologies التقنيات المتقدمة	٣	
598 PMIS-2 ٥٩٨ منال ـ٢	Research Seminar ندوة بحثية	٢	
512 MEIT-3 ٥١٢ متقن ـ٣	Enterprise Models النماذج المؤسساتية	٣	
513 MEIT-3 ٥١٣ متقن ـ٣	IT governance, risk and compliance الحوكمة والمخاطر في تقنية المعلومات	٣	
	Total Credits **مجموع الوحدات**	١١	

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كلية علوم الحاسب ونظم المعلومات – نظم المعلومات

السنة الثانية – المستوى الرابع Year 2 – level 4			
Course Code	**Course Title**	**Credit hours (Theory)**	**Prerequisites**
رمز المقرر	**اسم المقرر**	**عدد الوحدات (نظري)**	**المتطلب السابق**
599 PMIS-4 ٥٩٩ منال -٤	Research Project مشروع بحثي	٤	597 PMIS-3 Research Methodology ٥٩٧ منال -٣ طرق البحث
514 MEIT-3 ٥١٤ متقن -٣	ERP System Design تصميم أنظمة التخطيط المؤسسية	٣	
	Total Credits **مجموع الوحدات**	٧	

Courses Descriptions
Advanced Information Systems At a conceptual level, this course is designed to make the students knowledgeable of the design, implementation, control, evaluation and strategic use of modern information systems. Topics discussed include strategic uses of information systems, information systems in business functions, understanding enterprise systems, data management, basics of data warehousing and knowledge management, managers and their information needs, understanding corporate governance, E-commerce, the internet, intranets & extranets, supply chain management, trustworthy computing, IT security & cryptography, modern IT architectures including utility/service oriented model, web services, B2B and outsourcing, planning & acquisition of IT.
Project Management This course discusses managing projects within an organizational context, including the processes related to initiating, planning, executing, controlling, reporting, and closing a project. Project integration, scope, time, cost, quality control, and risk management. Software size and cost estimation. Assigning work to programmer and other teams. Monitoring progress. Version control. Managing the organizational change process. Identifying project champions, working with user teams, training, and documentation. The change management role of the IS specialist. The use of sourcing and external procurement; contracts and managing partner relationships.
Enterprise Applications Architecture This course presents the basics concepts and methodologies in enterprise architecture. Students will be guided through framework and methodologies that allow them to translate business vision and strategy into effective enterprise change. By studying the main components of enterprise including people, process, information and technology, this course will provide comprehensive solutions to address challenges in strategic planning, business planning, and information planning. Key topics such as business requirements, models, and principles will be discussed on real-world scenarios.
Advanced Databases The goal of this course is to introduce the students to the following fundamental data management issues: database file organization, indexing, query processing and optimization, transaction, concurrency control, recovery system as well as other advanced topics. Advanced topics in database systems; database modelling concept; the relational model and algebra; Structured Query Language; physical database design; modern database systems; advanced database systems; functional dependencies and normalization; and, database functionality and

services.

ERP Systems Design

This course will introduce you to enterprise systems and show how organizations use enterprise systems to run their operations more efficiently and effectively. You will learn about the critical success factors and implementation strategies that lead to enterprise system success, and about the informational, knowledge, and decision-making opportunities afforded by enterprise systems. The course will examine typical Enterprise Systems modules: materials management (MM), supply chain management (SCM), customer relationship management (CRM), financials, projects and human resource management (HRM). Enterprise systems use a single database to integrate business transactions along and between processes, leading to benefits such as efficient and error-free workflows plus accounting, management reporting and improved decision-making. The course will incorporate a laboratory component using SAP software.

Data Science and Visualization

This course explores the processing and visually representing data sets. In addition to discussing the relationship between traditional scientific visualization and information visualization, the course also discusses the dated techniques using new generations of software tools and packages. Topics covered includes: graphics and visualization, visualization applications, the value and price of visualization, discrete data representation, scalar visualization techniques, vector visualization techniques, domain modelling techniques, and information visualization techniques.

Research Methodology

This course focuses on the methodology of doing scientific research. Topics covered include: the research problem, review of literature, conceptual modelling and research design, case study research, questionnaire design for survey, collection of data, analysis methods including: qualitative, quantitative and mixed data analysis, research ethics, reporting the results and publishing.

Research Seminar

This course emphasizes on the theoretical concepts and applications of topics in information systems and prepares the student for the project implementation phase. The student works with a faculty advisor to deepen the understanding of some aspect of Information Systems. The student is directed to read current journal articles and

magazines related to a special area in information systems that interests the student. The student will submit, at the end of this course, a written report for the research project.

Research Project

After the project proposal is approved, the student will work on implementing proposed research project and finishing the research. The students will review the design specification and make any necessary enhancements. The students will identify and use programming techniques and tools to implement user interface and complete functionality of the proposed project. The students will develop the necessary test cases of the critical components of the system and perform complete testing to the project. At the end of their research project, the students will present their complete projects to their supervisor(s) and their peers.

ERP System Design

This course provides you with an understanding of what Enterprise Systems (also commonly termed as Enterprise Resource Planning Systems, ERPs) are. After learning about what these systems are, we would touch upon why these systems are useful to companies, through which you would get to see the various jobs and positions that are associated with the use and deployment of ERPs. In this course, you would also develop an appreciation of the managerial aspects related to the selection and implementation of ERPs. Specifically, we would touch on the important points to consider when shortlisting and purchasing an ERP, the approaches taken in ERP implementation, and change management techniques to utilize when an organization is undergoing ERP implementation. At the end of this class, you will be endowed with practical knowledge that would help you to address real world business problems associated with ERP usage and implementation.

System Administration

To learn the core skills and best practices required to manage modern day computer systems with a focus on managing unix-like operating systems and the unix philosophy. This course also serves as a practical look at operating systems and their role in today's data driven world. Lastly, we will also be examining the role that systems administration plays in managing the infrastructure required in today's world of agile development and continuous software delivery.

IT governance, risk and compliance

This course provides students with IT GRC concepts that support reliable structures and measures to ensure success and minimize failure. Throughout the course, Students will develop a framework for the leadership, organization, and operation of

the enterprise's IT areas to ensure that all those areas support and enable the centerpiece's strategic objectives. Students will learn how GRC strategies align firms' activities with the larger firms' goals (i.e., governance) and allow the identification of challenges and opportunities (i.e., risk). This effort will lead to systematic approaches in dealing with IT compliance internally and externally. The internal compliance functions revolve around the policies, goals, and organizational structure of the business. External considerations include satisfying the customer/end user while protecting the company and end user from harm.
Emerging Technologies This course addresses emerging technologies, how they evolve, how to identify them and the effect of international, political, social, economic and cultural factors on them. Topics covered in the course include accuracy of past technology forecasts, how to improve them, international perspectives on emerging technologies, future organizational and customer trends, and forecasting methodologies including monitoring, expert opinion, trend analysis and scenario construction.
Enterprise Models The motivation behind this course is to provide business and data innovation understudies with the chance to explore a variety of business, specialized, legitimate and moral issues that impact computerized undertakings. Students will identify the opportunities and challenges provided by e-commerce and social media in a business context; and will be able to develop practical hands-on skills in the use of digital technologies. Students will also be able to understand and critically analyze the complexities and significance of the digital enterprise environment. This will involve a consideration of markets, firms, consumer behavior, social media and current, and emerging technologies. Students will apply their knowledge gained in this course through practical work using enterprise content management tools, business models and research report writing.
AI in Business The course provides essential knowledge of doing AI and data science that is necessary to run a modern business. It lays out the best practices and principles that come from statistics, machine learning, and economics.