نظري3 عملي 0 معتمدة3	نظم المعلومات (1) **Information System (1)**	نال 130د **IS 130D**
-	- Understand how and why information systems are used today. - Explain the technology, people, and organizational components of - information systems. - Understand how businesses are using information systems for competitive - advantage vs. competitive necessity. - Understand the value of information systems investments as well as learn - to formulate a business case for a new information system, including - estimation of both costs and benefits. - Know basics of the major components of an information systems infrastructure. - Identify the major steps of the systems development process.	

نظري3 عملي 0 معتمدة3	نظم المعلومات (2) **Information Systems (2)**	نال 131د **IS 131D**
نال 130د **IS 130D**	- Understand how information systems are enabling new forms of commerce between individuals, organizations, and governments. - Be aware of emerging technologies that enable new forms of communication, collaboration, and partnering. - Briefly understand the basics of how various types of information systems provide the information needed to gain business intelligence to support the decision making for the different levels and functions of the organization. - Understand how enterprise systems foster stronger relationships with customers and suppliers and how these systems are widely used to enforce organizational structures and processes. - Understand how organizations develop and acquire information systems and technologies. - Understand how to secure information systems resources, focusing on both human and technological safeguards	

نال 232د IS 232D	تصميم نظم الأعمال الإلكترونية **e–Business Systems Design**	**نظري3 عملي 1 معتمدة 3**
نال 131د **IS 131D**	• Understand how information systems are enabling new forms of commerce in business. • Understand some of the technologies which support information systems for business. • Understand the principles of electronic payment systems.	

نال 334د IS 334D	تحليل وتصميم نظم المعلومات **Information Systems Analysis and Design**	**نظري3 عملي 1 معتمدة 3**
نال 131د **IS 131D**	Understand different phases of a system life cycle. - Develop correctly interpersonal skills. - Describe how systems analysts interact with users, management, and other information systems professionals.. - Develop data flow diagrams and decision tables. - Perform a feasibility study. - Evaluate systems development alternatives. - Solve realistic systems analysis problems. - Determine methods for evaluating the effectiveness and efficiency of a system.	

نال 333د IS 333D	تطوير التطبيقات متعددة الطبقات **Multi–tier application development**	**نظري3 عملي 1 معتمدة 3**
عال 111د نال 232د+نال220د **CS111D + IS 232D + IS 220D**	• Understand the multi-tier application architecture. • Understand how to interact with a database management system. • Understand the basic mechanisms for accessing relational databases from various types of application development environments. • Implement and deploy a multi-tier software application. • Briefly understand the basics of secure web applications. • Apply information requirements specification processes in the broader system analysis and design context. • Understand the basics of linking data/ information modeling and business process modeling.	

نظري3 عملي 1 معتمدة 3	إدارة قواعد البيانات **Databases Management**	نال 221د **IS 221D**
نال 220د **IS 220D**	• Understand the fundamentals of the basic file organization techniques. • Understand the principles of indexing in order to implement a relational database design using an industrial-strength database management system. • Understand the concept of database transaction and apply it appropriately to an application context. • Understand the concept of database administration and perform simple database administration tasks. • Understand the key principles of data security and identify data security risk and violations in data management system design. • Understand the basic of database recovery techniques.	

نظري3 عملي 0 معتمدة 3	أمن نظم المعلومات **Information Systems Security**	نال 224د **IS 224D**
نال 131د **IS 131D**	• Understand the fundamental principles of information security • Understand the history of information security • Understand the basics of access control, computer security, and network security. • Understands the basics of cryptography and security protocols. • Understands the basics of security risks. • Understand examples of security threats • Configure simple infrastructure security solutions	

نال 435د IS 435D	نظم دعم واتخاذ القرار **Support and decision making systems**	نظري3 عملي 1 معتمدة 3
نال 322د IS 322D	- Discuss today's turbulent business environment and describe how organizations survive and even excel in such an environment - Recognize the difficulties in managerial decision making today - Learn the major frameworks of computerized decision support: decision support systems (DSS) and business intelligence and identify the major tools of computerized decision support - Demonstrate an understanding of the foundations, definitions, characteristics, and capabilities of DSS and business intelligence (BI) - Describe the various types of DSS and explain their use - Discuss the benefits of business analytics and data mining - Explain management support system (MSS) modeling - Discuss the processes involved in designing and building a DSS - Demonstrate and understanding of the fundamental principles and capabilities of groupware and group support systems (GSS), knowledge management (KM), Artificial Intelligence (AI), and Knowledge-based Systems	

نال 223د IS 223D	التصميم الكينوني الموجه **Object Oriented design**	نظري3 عملي 1 معتمدة 3
عال 111د CS 111D	Understand the foundations of object oriented design • Describe Object Oriented Analysis and Design concepts and apply them to solve Problems • Able to differentiate between UML diagrams • Able to apply the modeling tools for object oriented design • Understand how to represent the architecture using UML • Understand formal object-oriented analysis and design processes	

نظري3 عملي 0 معتمدة 3	ادارة واستراتيجية نظم المعلومات **IS management and strategy**	نال 410د **IS 410D**
نال 340د **IS 340 D**	• Understand the various functions and activities within the information systems area, including the role of IT management and the CIO, structuring of IS management within an organization, and managing IS professionals within the firm. • View an organization through the lens of non-IT senior management in deciding how information systems enable core and supportive business processes as well as those that interface with suppliers and customers. • Understand the concepts of information economics at the enterprise level. • Appreciate how IS represents a key source of competitive advantage for firms. • Structure IS-related activities to maximize the business value of IS within and outside the company. • Understand existing and emerging information technologies, the functions of IS and its impact on the organizational operations. • Evaluate the issues and challenges associated with successfully and unsuccessfully incorporating IS into a firm. • Understand how strategic decisions are made concerning acquiring IS resources and capabilities including the ability to evaluate the different sourcing options. • Apply information to the needs of different industries and areas. • Understand the role of IT control and service management frameworks from the perspective of managing the IS function in an organization.	

نظري3 عملي 0 معتمدة 3	معمارية المؤسسات **Enterprise Architecture**	نال 340د **IS 340D**
نال223د نال333د **IS223D**, **IS333D**,	• Understand a variety of frameworks for enterprise architecture analysis and decision making. • Evaluate the total cost of ownership and return on investment for architecture alternatives. • Utilize techniques for assessing and managing risk across the portfolio of the enterprise. • Evaluate and plan for the integration of emerging technologies. • Administer systems, including the use of virtualization and monitoring, power and cooling issues. • Manage proliferating types and volume of content. • Understand the core concepts of data/information architecture and evaluate existing data/information architecture designs. • Plan for business continuity. • Understand the benefits and risks of service oriented architecture. • Understand the role of audit and compliance in enterprise architecture.	

نظري3 عملي 0 معتمدة 3	مستودعات البيانات و التنقيب عن البيانات **Data warehousing and Data mining**	نال 322د **IS 322D**
نال 221د **IS 221D**	• Recognize the fundamentals of data warehousing. • Manipulate the data warehousing. • Use the knowledge discovery in data warehousing. • Discover knowledge in different applications. • Recognize the data mining. • Conduct different methods and algorithms of data minin	

نظري3 عملي 0 معتمدة 3	نظم المعلومات المصرفية **Banking Information Systems**	نال 361د **IS 361D**
نال 131د **IS 131D**	• Deal online with all banking transactions and processes. • Be adaptive with the regulations and restrictions related to employees, Customers, investors. • Deal with mobile banking. • Activate all the ethical issues.	

		نال
نظري3 عملي 0 معتمدة 3	تطبيقات الإدارة الصحية **Health Management Applications**	360د **IS 360D**
نال 131د **IS 131D**	Major topics include: • Healthcare information/data management • Clinical information systems / electronic medical records • Healthcare information technology architecture • IT Governance in healthcare organizations • Health IT software selection • Meaningful Use	

		نال
نظري0 عملي 0 معتمدة 2	مشروع التخرج (I) **Graduation Project I** (**Capstone I**)	451د **ID 451D**
موافقة القسم (يتأكد القسم من انهاء 90 وحدة دراسية على الاقل بنجاح) **IS 350 D+**	This course provides teamwork of students with a thorough guideline for survey and research to design, develop, and implement different fields covering "one or more" the IS Knowledge areas. • Understanding of a software topic survey and research. • Experience in designing and developing a relatively large software project. • Experience in documenting and presenting a major piece of software. • Ability to work in a team.	

		نال
نظري0 عملي 0 معتمدة 2	مشروع التخرج (I) **Graduation Project I** (**Capstone I**)	452د **IS 452D**

نال 451د
IS 451D
	Course Objectives:
	        This course provides teamwork of students to:
	        - Implement and test the proposed project in the Graduation Project Proposal.
	            - Cover "one or more" of the IS knowledge area.	

نال		نظري1
453د	التدريب الميداني	عملي 0
IS 453D	**Internship**	التدريب 6
		معتمدة 4

_	- provide a supervised experience in IS environment with an aim of helping the PNU students to develop an insight into the professional demands of the workplace appreciate real-world opportunities and constraints such that they are better prepared to enter their future careers

نال 414د	إدارة التعافي من الكوارث	نظري3
IS 414D	**Disaster Recovery Management**	عملي 0
		معتمدة 3

نال 324د **IS 324D**	• Understand the concepts of disaster recovery. • Understand the best practices for designing for incidents and crises. • Understand cost-benefit trade-off for the different approaches when managing disaster recovery. • Understand the business continuity planning approach.

نظري3 عملي 0 معتمدة 3	إدارة تكوين الأعمال **Business Process Management**	نال 362د **IS 362D**
نال 334د **IS 334D**	This course looks at ways in which business processes can be analyzed, redesigned, and improved. A business process is a set of activities that jointly realize a business goal in an organizational and technical environment. These processes take place in a single organization but may need to interact with processes in other organizations. Business process management (BPM) is concerned with the concepts, methods, and techniques that support the design, administration, configuration, enactment, and analysis of business processes. BPM is concerned with the explicit representation of processes – once they are defined, processes can be analyzed, improved, and enacted. Software in the form of business process management systems can be used to coordinate business process activities. By taking this course you will be able to understand business process from a general management perspective, and learn tools, analytical frameworks and general principles for managing business processes. The aim of this course is to introduce you to methodologies and techniques of business process modeling. A main objective is to increase your awareness of the concepts and foundations of business process modeling and the potential to improve the efficiency and effectiveness of organizations by using business process modeling	

نظري3 عملي 0 معتمدة 3	تدقيق ورقابة تكنولوجيا المعلومات **IT Auditing and Control**	نال 411د **IS 411D**
نال 410د **IS 410D**	The primary focus of this course is survey standards, practices and research on IT audit and control. Some key objectives of the course include: - To understand the concept of business risks and the management of business risk - To understand IT risk as a component of business risk - To gain an appreciation of the need to manage IT risks - To gain an understanding of the basic type of controls required in a business system in order to control IT risks - Learn concepts and applications of the following types of IT controls: top management, system development, programming - To gain an appreciation for the difficulties in assessing systems effectiveness and efficiency, - To understand the new system control risks created by the use of the internet for business applications and electronic business	

نظري3 عملي 0 معتمدة 3	نظم المؤسسات **Enterprise Systems**	نال 342د **IS 342D**
نال 340د **IS 340D**	This course is designed to provide students with an understanding of the theoretic and practical issues related to the application of enterprise systems within organizations. The main focus of this course is to demonstrate how enterprise systems integrate information and organizational processes across functional areas with a unified system comprised of a single database and shared reporting tools. Enterprise systems, by their multi-dimensional integrative nature, offer the depth of functionality and breadth of integration to demonstrate how global operations of organizations are managed.	

نظري3 عملي 0 معتمدة 3	إدارة و أمن الحوسبة السحابية **Cloud Computing Management and Security**	نال 341د **IS 341D**
نال 340د **IS 340 D**	Understand Cloud definition, services and deployment types Understand the risk associated with the different Cloud services and deployment types Understand Cloud structure and management services Understand Cloud attributes Understand Cloud management services Briefly understand the challenges for establishing trust in the Cloud	

نظري3 عملي 0 معتمدة 3	إدارة تحليل المخاطر **Risk Analysis Management**	نال 413د **IS 413D**
نال 333د **IS 333D**	- Understand the concepts of threat, evaluation of assets, information assets, physical, operational, and information security and how they are related. - Understand the need for the careful design of a secure organizational information infrastructure. - Perform risk analysis and risk management. - Understand both technical and administrative mitigation approaches. - Understand the need for a comprehensive security model and its implications for the security manager or Chief Security Officer (CSO). - Create and maintain a comprehensive security model. - Understand and apply security technologies. - Design and guide the development of an organization's security policy. - Determine appropriate strategies to assure confidentiality, integrity, and availability of information. - Apply risk management techniques to manage risk, reduce vulnerabilities, threats, and apply appropriate safeguards/ control.	

نظري3 عملي 1 معتمدة 3	تخطيط الموارد في المؤسسة **Enterprise Resources Planning**	نال 343د **IS 343D**
نال 342د **IS 342 D**	Enterprise Resource Planning (ERP) has been successful in many companies and yet many others have struggled with their efforts. Time and other resources are in critical short supply. Enterprise Resource Planning (ERP) enhances the productivity of these critical resources. This course will 1. Provides a road map with many real life examples for successful implementation and utilization of ERP 2. Explores conceptual tools and their application for enterprise planning, management, and execution 3. Describes ERP from the perspective of the business manager in a clear step-by-step manner 4. Uses an easy-to-read format to provide a deeper understanding of ERP concepts	

نظري3 عملي 1 معتمدة 3	موضوعات مختارة (1) Selected Topics(1)	نال 363د IS 363D
_	1. Expand topics in this course knowledge area. 2. Learn about the latest schemes, developments, applications of the topics of this course. 3. Explain in depth chosen topics related to the knowledge area which are explained briefly in the plan and the students wish to go into more details. 4. Discuss recent research papers in the topics related to the knowledge area.	

نظري1 عملي 2 معتمدة 2	موضوعات مختارة (2) Selected Topics (2)	نال 336د IS 336D
_	1. Expand topics in this course knowledge area. 2. Learn about the latest schemes, developments, applications of the topics of this course. 3. Explain in depth chosen topics related to the knowledge area which are explained briefly in the plan and the students wish to go into more details. 4. Discuss recent research papers in the topics related to the knowledge area.	

نظري3 عملي 2 معتمدة 4	موضوعات مختارة (3) Selected Topics لا (3)	نال 325د IS 325D
_	1. Expand topics in this course knowledge area. 2. Learn about the latest schemes, developments, applications of the topics of this course. 3. Explain in depth chosen topics related to the knowledge area which are explained briefly in the plan and the students wish to go into more details. 4. Discuss recent research papers in the topics related to the knowledge area.	