Courses Description

College: Prince Alhussein Bin Abdullah The Second For Information Technology

Department: Computer Information Systems(Cis)

Couse ID: 1002799	**Description:** Thesis
Full Course Description: a	
Couse ID: 31002799	**Description:** 3
Full Course Description: 222	
Couse ID: 61002799	**Description:** Thises
Full Course Description: ش	
Couse ID: 91002799	**Description:** Thises
Full Course Description: aa	
Couse ID: 121002721	**Description:** Network Systems Management
Full Course Description: اا	
Couse ID: 121002731	**Description:** Creativity and Innovation in Digital Technologies
Full Course Description: كك	
Couse ID: 121002734	**Description:** Innovation in Software Development
Full Course Description: نن	
Couse ID: 121002751	**Description:** Data Mining
Full Course Description: KM	
Couse ID: 121002752	**Description:** Information Retrieval Systems
Full Course Description: لل	
Couse ID: 121002761	**Description:** e-Commerce and Marketing
Full Course Description: اا	
Couse ID: 121002771	**Description:** Information Security
Full Course Description: fj	
Couse ID: 121002790	**Description:** Comprehensive Exam
Full Course Description: اا	
Couse ID: 121002791	**Description:** Scientific Research Methodology
Full Course Description: لل	
Couse ID: 121002795	**Description:** Selective Topics
Full Course Description: بب	
Couse ID: 121002798	**Description:** Research Project
Full Course Description: فف	
Couse ID: 121002799	**Description:** Thesis
Full Course Description: فا	

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Couse ID: 2010021711	**Description:** Information security

Full Course Description: Information Security is a comprehensive study of the principles and practices of computer system
security including operating system security, network security, software security and web security.
Topics include common attacking techniques such as virus, trojan, worms and memory exploits;
the formalisms of information security such as the access control and information flow theory; the
common security policies such as BLP and Biba model; the basic cryptography, RSA,
cryptographic hash function, and password system. The real system implementations, with case
study of UNIX, SE-Linux, and Windows; network intrusion detection; software security theory;
web security; legal and ethical issues in computer security.

Couse ID: 2010021712	**Description:** Wireless Network and Mobile Systems Security

Full Course Description: The course is an advanced course of security in mobile communication systems, including
mobile/cellular telephony, wireless Internet, mobile ad hoc, IoT systems and sensor networks. The
course covers protocols and configurations for realizing authentication, key distribution, integrity,
confidentiality and anonymity in wireless networks. The course introduces an overview of security
principles in several generations of mobile networks, from GSM (2G), UMTS (3G) up until LTE
(4G). Security models of popular mobile device platforms are also introduced including IOS,
 Android and the Windows Phone. Security in mobile services, such as VoIP, text messaging, WAP
and mobile HTML are also introduced.

Couse ID: 2010021730	**Description:** Digital Forensics

Full Course Description: This course presents an overview of the principles and practices of digital investigation. The objective of this class is to emphasize the fundamentals and importance of digital forensics. Students will learn different techniques and procedures that enable them to perform a digital
investigation. This course focuses mainly on the analysis of physical storage media and volume
analysis. It covers the major phases of digital investigation such as preservation, analysis. This
course will provide theoretical and practical knowledge, as well as current research on Digital
Forensics. Upon completion of the course, students can apply open-source forensics tools to
perform digital investigation and understand the underlying theory behind these tools.

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Couse ID: 2010021731	**Description:** Ethical Hacking

Full Course Description: Introduction to the principles and techniques associated with the cybersecurity practice known as □
ethical hacking. The course covers planning, reconnaissance, scanning, exploitation, postexploitation, and result reporting. The student discovers how system vulnerabilities can be □
exploited and learns to avoid such problems. The course will provide the fundamental information □
associated with each of the methods employed and insecurities identified. In all cases, remedial □
techniques will be explored. Students will develop an excellent understanding of current □
cybersecurity issues and ways that user, administrator, and programmer errors can lead to exploitable insecurities.

Couse ID: 2010021732	**Description:** Hacking Techniques

Full Course Description: This course helps students understand malicious, black hat attackers' tactics and strategies in detail. □
The course also teaches students how to use the same hacking techniques to perform a white-hat, □
ethical hack, on their organization. It teaches students how hackers undermine systems and how □
to prepare, detect, and respond to computer incidents. The course covers fundamentals of hacking, □
the latest information and strategies in penetration testing, footprinting, vulnerability scanning and □
exploits, and network traffic analysis.

Couse ID: 2010021733	**Description:** Penetrating Testing

Full Course Description: This course enhances the business skills needed to identify protection opportunities and optimize □
security controls in an organization. In this course, students will learn how to use ethical hacking □
to discover weakness in their organization and how to gather intelligence by employing □
reconnaissance, published data, and scanning tools. In this course, students will go through a □
complete penetration test and create assessment reports using latest tools such as Saint, Metasploit □
through Kali Linux and Microsoft PowerShell.

Couse ID: 2010021734	**Description:** Cryptography

Full Course Description: This course will cover the cryptography and crypto-analysis techniques. It will introduce the symmetric and asymmetric encryption, private and public key encryption, key distribution, □
cryptographic hash functions stream ciphers, zero-knowledge proof systems, cryptanalytic □
attacks and brute-force attacks.

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Couse ID: 2010021741 **Description:** Big Data Analytic and Management

Full Course Description: This course is an introduction to the concepts of "Big Data" and "data analysis". It provides an □
introduction to one of the most common frameworks, Hadoop, that has made big data analysis □
easier and more accessible. At the end of this course, students are expected to first, describe the □
Big Data landscape including examples of real-world big data problems including the three key □
sources of Big Data: people, organizations, and sensors. Second, explain the V's of Big Data □
(volume, velocity, variety, veracity, valence, and value) and why each impacts data collection, □
monitoring, storage, analysis, and reporting. Third, to have some Practical experience with some □
commonly used tools and techniques for (big) data processing. Forth, know the basics of □
distributed file systems, databases, and computing. Fifth, to have gained practical data processing □
skills with the MapReduce framework / Apache Hadoop.

Couse ID: 2010021742 **Description:** Cyber Defense Monitoring

Full Course Description: This course concentrates on a number of important Cyber Defense Monitoring techniques and □
solutions. The course focuses on event logging and collection with syslog protocol, regular
expression language and its applications to system/network monitoring, event correlation, and □
finally network intrusion detection and prevention. The course also discusses a number of
opensource monitoring solutions, including UNIX rsyslog package, Simple Event Correlator, and Snort □
IDS/IPS.

Couse ID: 2010021743 **Description:** Cyber Security Risk Management

Full Course Description: As organizations are vulnerable to different types of cyberattacks, and due to the limitations in □
organizational resources, the ability to perform risk management has become crucial for □
organizations to defend their system. This course will help students identify and analyze □
information security vulnerabilities and threats in their organizations. Students also will be able to □
develop risk mitigation strategies to respond to different types of cyberattacks including the
appropriate legal and compliance steps that need to be undertaken.

Couse ID: 2010021744 **Description:** Disaster and Crises Management

Full Course Description: This course covers topics related to disaster recovery and emergency planning and management □
as applied to the information-systems function in corporations. Topics include security risk □
evaluation and management, creation of threat profiles, continuity of operations planning, □
contingency planning, and incident reporting. A self-directed approach/tool for the conduct of □
information security risk evaluation is introduced. Projects include developing a security □
protection strategy and plan.

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Couse ID: 2010021761   **Description:** e-Commerce and e-Marketing

Full Course Description: e-Commerce and e-Marketing :This course examines the advanced concepts, technology, and ▢
applications of electronic commerce, or e-commerce. Since users can engage in e-commerce ▢
from a fixed device (e.g., PC) or from a mobile device (e.g., mobile phone) we will examine both ▢
traditional fixed e-commerce and mobile e-commerce or m-commerce. The course begins by ▢
setting the context for ecommerce within the domain of information systems. It examines ▢
security and payment in e-commerce. It explains the technological infrastructure needed to support an e-commerce system and describes how e-commerce systems are built. Next the course ▢
examines m-commerce in detail. It presents m-commerce concepts and discusses the technology ▢
needed for m-commerce. It examines the range of commerce applications and discusses mobile ▢
security and payment. The course concludes with a presentation on the future of e-commerce. ▢
The focus is on analytical skills during electronic businesses applications.

Couse ID: 2010021782   **Description:** Web technology

Full Course Description: Web Technology: this course introduces World Wide Web Consortium (W3C) standard markup ▢
language and services of the Internet. It introduces the creation of web graphics using web graphics file types, optimization, RGB color, web typography, elementary special effects, ▢
transparency, animation, slicing, basic photo manipulation, and other related topics. In addition, ▢
it introduces W3C standard client-side Internet programming using developed programming languages. Finally, it includes the creation of web sites and applets using web development software. This course also gives an introduction to web intelligence (WI). WI is a combination of ▢
digital analytics, which examines how website visitors view and interact with a site's pages and ▢
features, and business intelligence, which allows a corporation's management to use data on ▢
customer purchasing patterns, demographics, and demand trends to make effective strategic ▢
decisions.

Couse ID: 2010021792   **Description:** Research Methodology

Full Course Description: This course has a vocational focus. It assists students to develop skills in research and scientific ▢
communication in the relevant discipline. Topics addressed include design and performance of ▢
experiments or action research, analysis and presentation of research data, and preparation of oral ▢
and written scientific reports that use these skills. The aim of the course is to prepare students to ▢
apply research focused on one of the following: ▢
? Hacking techniques. ▢
? Digital forensics. ▢
? Security protocols. ▢
? Monitoring the cyberspace.

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Couse ID: 2010021794	**Description:** Special topics in Cyber Security

Full Course Description: Topics will be assigned by the department on evolving techniques and related topics to support the
study plan and to encourage further research by students.

Couse ID: 2010021799	**Description:** Thesis

Full Course Description: Each student must complete, document, present and defend a thesis under the supervision of a
faculty member in the fields of Information Systems Security and cyber security. Every candidate
must complete a thesis (equivalent to 9 credit hours) describing research work of publishable
quality. The thesis must be defended before a committee consisting of the supervisor and at least
three other faculty members, one from outside the university, in the relevant fields. The thesis
defense is open to all interested faculty and students. Upon the completion of 15 credits, a student
is eligible to register for thesis.

Couse ID: 2010023799	**Description:** Thesis

Full Course Description:

Couse ID: 2010026799	**Description:** Thesis

Full Course Description:

Couse ID: 2010029799	**Description:** Thesis

Full Course Description: