Courses Description

College: Prince Alhussein Bin Abdullah The Second For Information Technology

Department: Software Engineering(Swe)

Couse ID: 1003301	**Description:** Introduction to Human - Computer Interaction
Full Course Description: Paradigms and principles of design practice, the design process, model of user in design, task analysis, dialog notations and design, models of the system, Implementation support, evaluation techniques, and help documentation.	
Couse ID: 1003302	**Description:** Introduction To Human - Computer Interaction
Full Course Description: hh	
Couse ID: 1003330	**Description:** Software Engineering
Full Course Description:	
Couse ID: 1003331	**Description:** Software Design
Full Course Description: The course introduces software production as a manufacturing process, principles, theories, techniques, mechanisms, and tools supporting the software industrial processing and activities.	
Couse ID: 1003332	**Description:** Software Design
Full Course Description: Concepts and methods for the architectural design of large-scale software systems, Fundamental design concepts and design notations, Several design methods are presented and compared with examples of their use.	
Couse ID: 1003341	**Description:** Formal Methods
Full Course Description: Formal mechanisms for specifying, validating and verifying software systems, Program verification, Formal specifications via algebraic specifications, Abstract specifications, Integration of formal methods with existing Languages, Object-oriented approaches.	
Couse ID: 1003411	**Description:** User Interface Design and Implementation
Full Course Description: Principles of user interface design, development and programming, User psychology, Adaptive user interfaces, icon and window design, User guidance systems	
Couse ID: 1003412	**Description:** User Interface Design & Implementation
Full Course Description: jkk	
Couse ID: 1003431	**Description:** Software Engineering (1)
Full Course Description:	
Couse ID: 1003432	**Description:** Software Engineering (2)
Full Course Description: This course is an advance course of software engineering (1). Its main concerns are to prepare students to be familiar with project quality and risk managements. Also the course provides them with skills to use software automated tools for planning and tracking software production activities.	
Couse ID: 1003433	**Description:** Project Planning and Management
Full Course Description: concepts of project planning and management, the process of organizing and managing a software project, software metrics, project planning and controlling, network analysis and models, resources allocation and management, project scheduling, risk management, quality management , cost control.	
Couse ID: 1003434	**Description:** Software Development and CASE Tools
Full Course Description: The course aimed mainly to provide students with knowledge and skills to use the notation language UML to support the software development stages and documentation.	

Courses Description

College: Prince Alhussein Bin Abdullah The Second For Information Technology

Department: Software Engineering(Swe)

Couse ID:	Description:
Couse ID: 1003435	**Description:** Object - Oriented Software Development

Full Course Description: The course provides students with knowledge and practice in object oriented thinking approach in software development process. The course aimed to familiarize student with object oriented analysis and design, testing, implementing the design and using UML.

Couse ID: 1003436   **Description:** Software Project Managment

Full Course Description:

Couse ID: 1003437   **Description:** Software Development

Full Course Description: kk

Couse ID: 1003438   **Description:** Object - Orinted Software Development

Full Course Description: jj

Couse ID: 1003439   **Description:** Software Engineering

Full Course Description: jj

Couse ID: 1003480   **Description:** Information System Security

Full Course Description:

Couse ID: 1003481   **Description:** Information Systems Security

Full Course Description: A study of security policies, models, and mechanisms for secrecy, integrity, and availability. Topics include operating system models and mechanisms for mandatory and discretionary controls, data models, concepts, and mechanisms for database security, basic cryptography and its applications, security in computer networks and distributed systems, control and prevention of viruses and other rogue programs.

Couse ID: 1003495   **Description:** Selected Topics in Software Engineering

Full Course Description: This course allows the department to cover one of the recent topics in the field of software engineering.

Couse ID: 1003498   **Description:** Practical Training

Full Course Description: The Bsc degree in (CS / CIS / SWE) requires 8 weeks of continuous training inside Jordan or 6 weeks continuous training outside Jordan.The training must be conducted within private or public sectors working in the IT field,wich requires the approval of the department.

A final report is also required,training can be replaced by a recognized certificate in the IT field.

Couse ID: 1003499   **Description:** Software Engineering Project

Full Course Description: Students, divided in groups, design and develop a software system using methods and skills acquired throughout their study.

Couse ID: 111003221   **Description:** Object Oriented Software Development

Full Course Description: f

Couse ID: 111003260   **Description:** Fundamentals of Software Engineering

Full Course Description: gg

Couse ID: 111003320   **Description:** Software Documentation

Full Course Description: f

Couse ID: 111003323   **Description:** Software Requirements Engineering

Full Course Description: g

Couse ID: 111003332   **Description:** Software Design

Full Course Description: f

Courses Description

College: Prince Alhussein Bin Abdullah The Second For Information Technology

Department: Software Engineering(Swe)

Couse ID: 111003341	**Description:** Formal Methods
Full Course Description: d	
Couse ID: 111003351	**Description:** Web Applications Engineering
Full Course Description: fr	
Couse ID: 111003410	**Description:** Software Testing
Full Course Description: g	
Couse ID: 111003436	**Description:** Software Project Management
Full Course Description: f	
Couse ID: 111003437	**Description:** User Interface Design & Implementation
Full Course Description: f	
Couse ID: 111003438	**Description:** Advanced Software Engineering
Full Course Description: d	
Couse ID: 111003440	**Description:** Software Quality Assurance
Full Course Description: g	
Couse ID: 111003495	**Description:** Special Topics In Software Engineering
Full Course Description: f	
Couse ID: 111003496	**Description:** Graduation Project (1)
Full Course Description: f	
Couse ID: 111003498	**Description:** Practical Training
Full Course Description: fr	
Couse ID: 111003499	**Description:** Graduation Project (2)
Full Course Description: f	
Couse ID: 151003221	**Description:** Object Oriented Software Development
Full Course Description: f	
Couse ID: 151003260	**Description:** Fundamentals of Software Engineering
Full Course Description: v	
Couse ID: 151003320	**Description:** Software Documentation
Full Course Description: j	
Couse ID: 151003323	**Description:** Software Requirements Engineering
Full Course Description: f	
Couse ID: 151003332	**Description:** Software Design
Full Course Description: s	
Couse ID: 151003334	**Description:** Cloud Computing Applications
Full Course Description: f	
Couse ID: 151003351	**Description:** Web Applications Engineering
Full Course Description: s	
Couse ID: 151003410	**Description:** Software Testing
Full Course Description: ;	

Courses Description

College: Prince Alhussein Bin Abdullah The Second For Information Technology

Department: Software Engineering(Swe)

Couse ID: 151003436	**Description:** Software Project Mangement
Full Course Description: v	
Couse ID: 151003437	**Description:** User Interface Design & Implementation
Full Course Description: d	
Couse ID: 151003438	**Description:** Advanced Software Engineering
Full Course Description: s	
Couse ID: 151003440	**Description:** Software Quality Assurance
Full Course Description: s	
Couse ID: 151003495	**Description:** Selected Topics In Software Engineering
Full Course Description: d	
Couse ID: 151003496	**Description:** Applied Project (1)
Full Course Description: s	
Couse ID: 151003498	**Description:** Practical Training
Full Course Description: d	
Couse ID: 151003499	**Description:** Applied Project (2)
Full Course Description: س	
Couse ID: 2010031221	**Description:** Object Oriented Software Development
Full Course Description: The course provides students with knowledge and practice in object oriented thinking approach in software development process and object oriented modeling using UML. The course aimed to familiarize student with object oriented analysis, design, implementing, and testing.	
Couse ID: 2010031260	**Description:** Fundamentals of Software Engineering
Full Course Description: The course covers the fundamental topics in software engineering. Software production and development models. Software life cycles. Process and system models. Team work models. Software planning, modeling, maintenance, and quality. Requirements specification and management. Software analysis and design. Basics of software testing.	
Couse ID: 2010031272	**Description:** Computer Organization
Full Course Description: The organization of computer systems. Topics include basic concepts of computer architecture and organization, memory hierarchy, data types, computer arithmetic, control structures, interrupt handling, instruction sets, performance metrics, and the mechanics of testing and debugging computer systems.	
Couse ID: 2010031273	**Description:** Advanced Object Oriented Programming
Full Course Description: This course covers advanced object-oriented methods including object-oriented programming, analysis, and design. These methods including inheritance, interfaces, polymorphism, overloading, I/O streams, exception handling, multithreading, and client-server programming.	
Couse ID: 2010031274	**Description:** Visual Programming for Software Engineering
Full Course Description: Programming in one visual programming languages, including visual user interface, event-driven and windows programming, objects and properties, database, file processing, libraries and object oriented principles. The course also covers big data visualization, visual analytics and visual specifications.	

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Couse ID: 2010031320	**Description:** Software Documentation

Full Course Description: This course gives an overview about writing methods and practices that software engineers use to create software documentation. It also covers topics related to software documentation process, documenting for the programmer, documenting system tests and online documentation. In addition, this course covers in details topics related to types of online documentation, user documentation and system documentation.

Couse ID: 2010031323	**Description:** Software Requirements Engineering

Full Course Description: The course covers methods, techniques and tools for the elicitation, analysis, modeling, specification, documenting reviewing and management of Object Oriented software requirements. The course focuses on large scale software projects. The modeling is done via UML notations. The course focus on Object Oriented methodologies on construct, analyze and validate requirements. The topics also include prototyping, risk analysis and management.

Couse ID: 2010031325	**Description:** Software Maintenance

Full Course Description: This course is an introduction to the main issues related to software maintenance and evolution. The topics include reverse engineering, reengineering, program analysis, software complexity, refactoring, and program comprehension.

Couse ID: 2010031332	**Description:** Software Design

Full Course Description: Fundamental design concepts, design notations, architectural design methods for Large-scale software systems, and design patterns. Several design methods are presented and compared, with examples of their use. We will present a range of effective methods to evaluate and meet professional quality standards.

Couse ID: 2010031334	**Description:** Cloud Computing Applications

Full Course Description: This course provides a hands-on comprehensive study of Cloud concepts and capabilities across the various Cloud service models including Infrastructure as a Service (IaaS), Platform as a Service (PaaS), Software as a Service (SaaS), and Business Process as a Service (BPaaS).

Couse ID: 2010031352	**Description:** Software Systems Analysis and Design

Full Course Description: This course covers methodologies, techniques, strategies, and software process models used in different phases of the software development life cycle, including planning, analysis, design, implementation and evolution. It covers applying modern software development processes such as agile development processes. Further, this course covers applying quantitative methods to improve the cost estimation of software development projects, and applying methods for software process improvement and business process improvement such as CMMI and Six Sigma.

Couse ID: 2010031353	**Description:** Software Ethics and Security

Full Course Description: Privacy issues and digital information security is covered by this course. Data cryptology, digital signatures, digital certifications will be also dealt with. Theory and practice of software security, focusing in particular on some common software security risks, including buffer overflows, race conditions and random number generation, and on identification of potential threats and vulnerabilities early in design cycle. Emphasizes methodologies and tools for identifying and eliminating security vulnerabilities, techniques to prove absence of vulnerabilities, ways to avoid security holes in new software, and essential guidelines for building secure software: how to design software with security in mind from the ground up and to integrate analysis and risk management throughout the software life cycle

Couse ID: 2010031354	**Description:** Internet of Things and its Security

Full Course Description: This course will describe the market around the Internet of Things (IoT), the technology used to build these kinds of devices, how they communicate, how they store and secure data, and the kinds of distributed systems needed to support them.

Courses Description

College: Prince Alhussein Bin Abdullah The Second For Information Technology

Department: Software Engineering(Swe)

Couse ID: 2010031355	**Description:** Mobile Devices Applications Development

Full Course Description: Overview of Mobile App Development, Mobile Development Lifecycle Overview, Design and Engineering Considerations, Techniques, Methodologies for Mobile Application Development - Mobile Application Development Frameworks - Persistent Data in Mobile Apps - Maps and Location in Mobile Apps - Testing Mobile Applications - Automated versus Manual Testing - App Distribution Through App Stores

Couse ID: 2010031356	**Description:** Data Science and Artificial Intelligence

Full Course Description: This course provides an overview of the types of problems and techniques in Artificial Intelligence (AI). Major structures used in AI programs. Study of knowledge representation techniques. Application areas of AI such as game playing, expert systems, natural language understanding and robotics. In addition, this course gives an introduction to the key processes of data science including data preparation and manipulation, data cleaning and integration, data analysis with statistics and machine learning, data visualization, as well as working with big data.

Couse ID: 2010031375	**Description:** Web Applications Programming and Engineering

Full Course Description: The course focuses on engineering methods and technologies for building highly interactive web sites. The course focuses on methodologies, technologies and tools required for building and developing high quality (reliable, usable, secure, available, and maintainable) and highly interactive large-scale Web sites. The course utilizes and explores the latest technologies in Web programming and development, client-server programming and component based programming.

Couse ID: 2010031410	**Description:** Software Testing

Full Course Description: The course covers in details various aspects, theories, concepts, techniques and tools of software testing during development, maintenance and evolution. Topics include software testing at different levels (the unit, module, and system levels), testing management, inspections and walkthrough, model checking, designing and verifying test hypothesis, details of the verification and validation (V&V) techniques and concepts, bugs tracking, designing test cases and testing paths, generating of testing data. The course will be supported by practical exercises involving the development of appropriate tests and the application of a range of testing tools.

Couse ID: 2010031436	**Description:** Software Project Mangement

Full Course Description: This course covers the principles of people management, software process implementation, software tools selection, software measurements implementation, project vision and resources' organization. It also studies, in detail, the topics related to project planning, software estimation and scheduling techniques, and project implementation and control.

Couse ID: 2010031437	**Description:** User Interface Design & Implementation

Full Course Description: Principles of user interface design, development and programming, rules of GUI design, user physiology and human computer interaction, adaptive user interfaces, icon and window design, user guidance systems, using MVC model in user interface development.

Couse ID: 2010031440	**Description:** Software Quality Assurance

Full Course Description: The course explores variety of SQA components, activities, standards, and tools that cover: project life cycle (requirements, design, and implementation), project management, risk management, project budget and cost, documentation, and development team. The course also covers software quality metrics (metrics for the quality of analysis, design and code). Software complexity measures are also covered.

Courses Description

College: Prince Alhussein Bin Abdullah The Second For Information Technology

Department: Software Engineering(Swe)

Couse ID: 2010031441	**Description:** Software Measurements

Full Course Description: Measurement theory (overview of software metrics, basics of measurement theory, goal-based framework for software measurement, empirical investigation in software engineering). Software product and process measurements (measuring internal product attributes: size and structure, measuring external product attributes: quality, measuring cost and effort, measuring software reliability, software test metrics, object-oriented metrics), Measurement management

Couse ID: 2010031495	**Description:** Selected Topics In Software Engineering

Full Course Description: This course allows the department to cover one of the recent topics in the field of software engineering.

Couse ID: 2010031496	**Description:** Graduation Project (1)

Full Course Description:

Couse ID: 2010031498	**Description:** Practical Training

Full Course Description:

Couse ID: 2010031499	**Description:** Graduation Project (2)

Full Course Description: Students, divided in groups, design and develop a software system using methods and skills acquired throughout their study.

Couse ID: 2210031100	**Description:** digital culture

Full Course Description: