Course Profile - Department of Information Technologies

Course Number : IT 485	Course Title : Mobile Application Development Using Java
Required / Elective: Elective	Pre / Co-requisites : Senior standing and consent of the insructor
Catalog Description: Introduction to wireless technology, wireless devices and wireless application infrastructure; Java technology for use in mobile applications; MIDlets; configurations; profiles; introduction to graphics and creating GUIs, GUI components and developing GUI based applications, developing screen and canvas based applications, games, database applications.	Textbook / Required Material : No obligatory text book – Any textbook on computer and data communications will be appropriate

Course Structure / Schedule: (3+0+0) 3 / 6 ECTS

Extended Description: Students will learn the basics of mobile devices, mobile applications, why Java is a solid choice in this area, the components that Java provides. Students will then will experience the components that Java technology provides. Students need to complete a term project by expressing the requirements, analyzing the details, designing and implementing the model. Students are expected to document the project as required, and present to the class.

Design content: Students will design a mobile application as a project.	Computer usage: All phases of project development requires extensive computer
	usage.

**Course Outcomes:** [relevant program outcomes in brackets]:

- 1. Understand basics of mobile devices, and mobile application development [6]
- 2. Master the important details of creating mobile applications [4]
- 3. Master interfacing mobile applications with multiuser databases [3]
- 4. Be familiar with user authentication and authorization techniques, and use them appropriately in the term project [3]
- 5. Create a term project after defining a topic, specifying the reqirements, analyzing, designing the model, implementing, preparing the related documents such as database design document, programmers manual, user manual etc., and presenting the project appropriately [2,3,5,7]

## **Program Outcomes for Management Information Systems Program:**

- 1. A foundation in mathematics and basic sciences and ability to apply acquired knowledge as they relate to the study and practice of information systems management.
- 2. An ability to align information technology, organizational and strategic matters.
- 3. An ability to propose, analyze, design, develop, test and maintain an information technology system including software solutions, security model, computer and network infrastructure, etc. to solve information systems problems.
- 4. An ability to analyze local and global impact of computing on individuals, organizations and society; and the ability to apply information systems techniques, skills, and tools for regular computing practices as well as to improve effectiveness of current methodologies.
- 5. An ability to effectively communicate in oral and written media with all kinds of related audiences; and prepare documentation for this purpose as required.
- 6. An understanding of professional, ethical, legal, and social issues and responsibilities of information systems management profession.
- 7. A taste and breadth of knowledge across several social topics outside the immediate requirements of the information systems management profession, and the ability to work within heterogeneous teams to accomplish a common goal including people from the information systems area as well as other disciplines.
- 8. An ability to engage in life-long learning and professional development for personal improvement to follow contemporary information systems issues.

## Teaching methods

Students will learn the theory by pre-readings and attending affectively to the classes. Student will master the details of Java components when implementing the term project.

## Assessment methods

Small Projects 20%
Term Project 60%
Documentation 10%
Presentation 10%

## Student workload:

Preparatory reading 18 hrs
Lectures, workshop, discussions 42 hrs
Term Project 60 hrs
Small Projects 30 hrs
TOTAL 150 hrs

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