PIS 215: MOBILE APPLICATION SECURITY

	L	T	P	Cr
	3	0	2	4.0

Course Objectives: This course is designed to help students gain the skills necessary to implement a secure mobile device deployment. Students will examine the threats and vulnerabilities affecting mobile device deployments, understand legal issues and constraints facing organizations, and develop policies and controls to guide mobile device using different operating systems.

Mobile Issues and Development Strategies: Issues facing Mobile devices, Securing mobile application development

Android Security: Android Securable IPC Mechanism, Android Security Model, Intents, Activities, Services, Android Security tools

Apple iPhone: iPhone Development environment, Security testing, Application format, permissions and user control, Local data storage, Networking, Push notifications

Windows Mobile Security: Introduction to Windows Mobile platform, Kernel Architecture, Development and security testing, Permissions and user control, Local data storage, Networking

Symbian OS Security: Introduction to Platform, Development and security testing, Code Security, Application Packaging, Permissions and user control, Inter process Communication, Persistent data storage

Laboratory Work: exploring the application development and security tools for different mobile platforms like Android, iPhone, Symbian.

Recommended Books

1. Mobile Application Security, HimanshuDwivedi, Chris Clark, David Thiel, Tata McGraw Hill, 1st Edition, 2010.
2. Hacking Exposed Mobile Security Secrets & Solutions ,Neil Bergman, Mike Stanfield, Jason, Rouse , Joel Scambray , SarathGeethakumar , SwapnilDeshmukh, Scott Matsumoto , John Steven , Mike Price, McGraw-Hill Osborne Media,1st Edition ,2013.
3. Mobile Device Security: A Comprehensive Guide to Securing Your Information in a Moving World, Stephen Fried, Auerbach Publications,1st Edition,2010
4. Mobile Device Security for Dummies, RichaCampagna, SubbuIyer, Ashwin Krishnan, Mark Bauhas,Wiley, 1st Edition, 2011