COURSE	Name : Internet Engineering
	Code : EE185562
	Credit(s) : 2
	Semester : (Elective Course)

Description of Course

This course provides an introduction to the basic concepts of Internet and web technologies including architecture, protocols and applications. The materials include: Introduction to internet history and Internet services, network basics, TCP / IP protocols (addressing, routing and transport), network programming, web programming, web services, web servers, Internet security, media analisis technique and tools, introduction to e-commerce, internet as social engineering.

Learning Outcomes

Knowledge

(P02) Mastering engineering concepts and principles to develop the necessary procedures and strategies for systems analysis and design in the areas of power systems, control systems, multimedia telecommunications, electronics, intelligent multimedia network, or telematics.

Specific Skill

(KK01) Being able to formulate engineering problems with new ideas for the development of technology in power systems, control systems, multimedia telecommunications, electronics, intelligent multimedia network, or telematics.

General Skill

(KU11) Being able to implement information and communication technology in the context of execution of his/her work.

Attitude

(S09) Demonstrating attitude of responsibility on work in his/her field of expertise independently.

(S12) Working together to be able to make the most of his/her potential.

Course Learning Outcomes

Knowledge

Mastering the basic concepts of network, TCP / IP protocol (addressing, routing and transport), Network programming, Web programming, Web services, Web server, Streaming Server and Internet security.

Skill

Students will be able to build a simple Local Area Network (LAN), Perform basic configuration for routers and switches, and implement IP addressing schemes, configure the internet network equipment such as routers and servers.

Main Subjects

1. Introduction to internet history
2. Internet services and network system,
3. TCP / IP protocols (addressing, routing and transport)
4. Network programming

5. Web programming and Web services
6. Internet security
7. Media sosial analisis technique and tools,
8. Introduction to e-commerce
9. Internet as social engineering and social changer

Reference(s)

[1] D. Comer, Internetworking With TCP/IP, Volume 1: Principles Protocols, and Architecture, 5th edition, 2006.
[2] D. Medhi and K. Ramasamy, Network Routing, Mogran Kaufmann, 2007.
[3] M. Hassan and R. Jain, High Performance TCP/IP Networking: Concepts, Issues, and Solutions, Prentice-Hall, 2003.
[4] G. Varghese, Network Algorithmics, Mogran Kaufmann, 2004.

Prerequisite(s)

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