

<b>COURSE</b>	Name	: Mobile Computing
	Code	: EE185151
	Credit(s)	: 3
	Semester	: I

### Description of Course

In this course, students will learn about mobile platform and special features for mobile devices. Topics studied include developing mobile platforms, mobile device interfaces, personalization and authentication.

### Learning Outcomes

#### Knowledge

(P01) Mastering the concepts and principles of science in a comprehensive manner, and to develop procedures and strategies needed for the analysis and design of systems related to the field of power systems, control systems, multimedia telecommunications, electronics, intelligent multimedia network, or telematics as a preparation for further education or professional career.

#### 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 concept of mobile application development

#### Specific Skill

Able to build distributed applications with complex widgets.

#### General Skill

Able to do prototyping from cloud service-based applications and communication systems

#### Attitude

Demonstrating attitude of being responsible for the work in his/her area of expertise independently.

Working together to be able to make the most of their potential.

### Main Subjects

1. Low-level network services at moving platform
2. The principle of developing mobile applications
3. Network service-based interaction style.
4. Personalization, profiling and authentication
5. Principles of contact-based development and telephone systems
6. Networking and cloud services

### Reference(s)

- [1] Adem Karahoca, Advances and Applications in Mobile Computing, ISBN 978-953-51-0432-2, 236 pages, Publisher: InTech, Chapters published March 30, 2012 under CC BY 3.0 license
- [2] Mark L. Murphy, Beginning Android (Expert's Voice in Open Source) Paperback – 1 Jun 2009
- [3] Yu-Kwong Ricky Kwok, Vincent K.N. Lau, "Wireless Internet and Mobile Computing: Interoperability and Performance", Wiley-IEEE Press, 2007. (Google Book)
- [4] 3. D.P. Agrawal and Q.-A. Zeng, "Introduction to Wireless and Mobile Systems", 2nd edition, Thomson Learning, 2006.

### Prerequisite(s)

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