

수업계획서

강의개요 및 교수목표

선수 및 후수과목: To learn this course student need to know basic understanding of Computer and Networking and distributed system.

강의개요: The course will provide students with a thorough knowledge ubiquitous computing (UbiComp) and allows students to work on a variety of smart applications. Students will learn basic of building UbiComp systems and advanced prototyping techniques. This course consists of a different computing topic such as HCI, Smart computing, etc These include human-computer interaction (HCI), machine learning, embedded systems, signal processing, tangible computing, electronics, and sensors.

교수목표: Ubiquitous computing is a computing model which allows human-computer interaction with networked computing devices that have been integrated into a plethora of objects in the world. This course will take an interdisciplinary look at the ubiquitous computing.

학습효과: At the end of this course, student will be able to understand and work on following topic: Basic of Ubiquitous Computing, Sensing and Basic Electronics, Internet of Things, Systems and Evaluation, Wearable Computing, Mobile Health etc.

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주 차	강의내용		참고도서 page
1 주	1차시. What is Ubiquitous computing		
	2차시. Introduction to Ubiquitous Computing		
	3차시. How does it works?		
2 주	1차시. Living in a Digital World		
	2차시. Vision and Challenge Part 1		
	3차시. Vision and Challenge Part 2		
3 주	1차시. Smart Devices and Services		
	2차시. Service Architecture Models		
	3차시. Service Provision Life-Cycle		
4 주	1차시. Smart Mobile Devices		
	2차시. Smart Card and Mobile Code		
	3차시. Security in Mobile Devices		
5 주	1차시. Introduction to HCI		
	2차시. HCI & eHCI & iHCI		
	3차시. HCI Design		
6 주	1차시. Tagging		
	2차시. Sensing		
	3차시. Controlling		

7주	1차시. Context	
	2차시. Context Aware Design	
	3차시. Context Awareness	
8주	1차시. Intelligent Systems (Basic)	
	2차시. Intelligent Systems Model part 1	
	3차시. Intelligent Systems Model Part 2	
9주	1차시. Introduction to Intelligent Interaction	
	2차시. Interaction Protocol	
	3차시. Multi Agent System	
10주	1차시. Network Communication	
	2차시. Ubiquitous Networks	
	3차시. Service-Oriented Networks	
11주	1차시. Autonomous Systems	
	2차시. Self-Awareness and Autonomic Computing	
	3차시. Complex Systems and Artificial Life	
12주	1차시. Management of UbiCom System	
	2차시. Security Management	
	3차시. Information and Privacy Management	
13주	1차시. Overview of Future Challenges	
	2차시. Smart Device Challenges	
	3차시. Human Intelligence and Social issues	