

Wireless Network					
Course code CIF61024	student workload 90 hours	credits (according to ECTS) 4.5	semester Sem. 5/7	frequency each odd-semester	duration 16 meetings
1	Types of courses Elective	contact hours 63 hours	independent study 27 hours	class size 40 students	
5	Prerequisites for participation Must have taken Computer Network course.				
2	Learning outcomes IF-ILO-3 Graduates are able to develop professional careers in the field of computer science based on quality aspects, data-based decision making, be responsible, and make continuous improvements. IF-ILO-7 Mastering the theoretical concept and principles of computer science, especially in the aspect of algorithms, programming, intelligent systems, information management, parallel and distributed computing, information security, human-computer interaction, software engineering, and fundamentals of computer systems and networks. IF-ILO-11 Graduates are able to plan, develop, manage, and analyze the computer network-based system and the services running on top of them by considering the network security aspects.				
3	Subject aims <ol style="list-style-type: none"> 1. Students are able to explain the basic concepts of signal transmission, transmission media and radio signal propagation. 2. Students are able to explain multiple access: problems, approaches used. 3. Students are able to explain the need for resource allocation; and fixed (TDM, FDM, WDM) and dynamic allocation methods. 4. Students are able to explain the principle of congestion control in wireless. 5. Students are able to explain the principle of cellular network. 6. Students are able to explain various standard protocols for wireless communication, both at the physical layer, datalink layer (IEEE802.1x, Bluetooth), and network layer (routing protocols). 7. Students are able to design a wireless network using the Wireless routing protocol in a simple simulation and/or reality. 				
4	Teaching methods lectures, case study, class discussion, presentation				
6	Assessment methods assignment, mid-term examination, end-term examination, project evaluation, practical-skill				

	assessment
8	This module is used in the following degree programmes as well
10	Responsibility for module
11	Other information William Stallings, Wireless Communication and Networks: Second Edition. Prentice Hall, 2005