COMPUTER NETWORKS

LEVEL OF COURSE UNIT

Bachelor

LEARNING OUTCOMES OF COURSE UNIT

Students know the principles of computer networks and their components. They understand specific protocols, mechanisms, and algorithms on all layers of computer communication.

COURSE CONTENTS

Principles: Network Software, Network Hardware, Reference Models; The Physical Layer: Guided Transmission, Wireless Transmission; The Data Link Layer: Framing, Error Detection, Elementary Protocols; The MAC Sublayer: Multiple Access Protocols, Ethernet, Wireless LANs; The Network Layer: Design Issues, Routing, Internetworking, The Network Layer in the Internet; The Transport Layer: Services, UDP, TCP; The Application Layer: Principles, some protocols, e.g. DNS, Email, HTTP/HTTPS

LANGUAGE OF INSTRUCTION

English

NUMBER OF ECTS CREDITS ALLOCATED

3