

## Routing and Switching

Course Title: Routing and Switching						
Course Code: CIE60034		Student Workload: 8.50 Hours/ Weeks	Credits: 3 Credits (4.50 ECTS)	Semester: 6 <sup>th</sup> Semester	Frequency: Even Semester	Duration: 16 Weeks/ Semester ( <i>Lecture: 14 weeks; Midterm assessment: 1 week; Final assessment: 1 week</i> )
1	Types of Courses: Content Knowledge Course	Contact Hours: <i>Lecturing: 1.67 Hours/ Week; Practical Work: 2.83 Hours/ Week</i>		Independent Study: <i>Self-study: 2.00 Hours/ Week; Structured Assignment: 2.00 Hours/ Week</i>		Class Size: 40 Students
2	Prerequisites for Participation (If Applicable): Computer Network					
3	Learning Outcomes: 1. M1: Able to explain how a routing protocol works in an internet protocol network (ILO-5) (0,2) 2. M2: Able to explain how Quality of Service (QoS) Routing and MPLS work (ILO-5) (0,2) 3. M3: Able to implement routing protocols and VLANs (ILO-6; ILO-9) (0,3; 0,3)					
4	Subject aims/Content: At the end of the course, students are expected: 1. L1: Able to implement internet protocol addressing (M1) 2. L2: Able to explain the working principle of the routing protocol and its framework (M1) 3. L3: Able to explain how Quality of Service (QoS) based routing works (M2) 4. L4: Able to implement VLAN (M3)					
5	Teaching Methods: Lecturing, Group Discussion, Project-Based Learning					
6	Assessment Methods: Multiple Choice, Essay, Performance Test, Anecdotal Record/Logbook, Project Assessment					
7	This Course is Used in The Following Study Programme/s as Well: -					
8	Responsibility for Course: Tri Afirianto, S.T., M.T. Faizatul Amalia, S.Pd., M.Pd.					
9	Other Information: Bibliography: 1. Medhi, Deepankar. 2007. Network Routing Algorithm, Protocol and Architectures, Morgan Kaufman. 2. Sofana, Iwan, Cisco CCNA-CCNP, Routing dan Switching.					