

University / Academy : Menoufiya University

Collge / Institute : Faculty of Electronic Engineering

Department : Computer science and Engineering

Course Specification

1- Course basic information :		
Course Code: CSE 466	Course Title LABORATORY IV	Academic year: Level (4) – Semester : 2
Department requirement	Teaching hours: Lecture <input type="text" value="1"/> Lab <input type="text" value="3"/>	

2- Aim of the course	<ul style="list-style-type: none">• Understand the principles of Networks, protocols and network elements.• Understand the network operations• Understand how to construct a LAN and to use its resources• Routing protocols principles• Configuration of different Routers
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3- Intended Learning Outcomes:

A- Knowledge and Understanding:	
B- Intellectual Skills	B6- Investigate the failure of components, systems, and processes. B9- Judge engineering decisions considering balanced costs, benefits, safety, quality, reliability, and environmental impact. B10- Incorporate economic, societal, environmental dimensions and risk management in design.

<p>C- Professional Skills</p>	<p>C3- Create and/or re-design a process, component or system, and carry out specialized engineering designs. C4- Practice the neatness and aesthetics in design and approach. C5- Use computational facilities and techniques, measuring instruments, workshops and laboratory equipment to design experiments, collect, analyze and interpret results. C6- Use a wide range of analytical tools, techniques, equipment, and software packages pertaining to the discipline and develop required computer programs. C13- Design and operate computer-based systems specifically designed for business applications. C14- Use appropriate specialized computer software, computational tools and design packages throughout the phases of the life cycle of system development;</p>
<p>D- General Skills</p>	<p>d1. Collaborate effectively within multidisciplinary team. d2. Work in stressful environment and within constraints. d3. Communicate effectively. d4. Demonstrate efficient IT capabilities. d5. Lead and motivate individuals. d6. Effectively manage tasks, time, and resources.</p>
<p>4- Course Contents</p>	<p>1 Introduction to routing and packet forwarding</p> <p>2 Static routing</p> <p>3 Introduction to dynamic routing protocol</p> <p>4 RIP Version 1</p> <p>5 Distance vector routing protocol</p> <p>6 VLSM and CIDR</p> <p>7 RIP version 2</p> <p>8 EIGRP</p> <p>9 Link state routing protocols and OSPF</p>

Content Topics	Week	A- Knowledge & Understanding	B- Intellectual skills	C- Professional and practical skills	D- General and transferable skills
1 Introduction to routing and packet forwarding	1		B6, b9	C3, c4, c5	D1, d2, d3
2 Static routing	2		B6, b9	C3, c4, c5	D1, d2, d3
3 Introduction to dynamic routing protocol	3		B6, b9 B10	C3, c4, c5 C6	D1, d2, d3
4 Distance vector routing protocol	4, 5		B6, b9 B10	C3, c4, c5 C6	d1, d2, d3
5 RIP Version 1	6		B6, b9 B10	C3, c4, c5 C6	d1, d2, d3, d4
6 VLSM and CIDR	7		B6, b9 B10	C3, c4, c5 C6	d2, d3,d5, d6
7 RIP version 2	9, 10		B6, b9 B10	C3, c4, c5 C13	d3, d4, d5
8 EIGRP	11, 12		B6, b9 B10	, c5, C6, c13, c14	d3, d4, d5, d6
9 Link state routing protocols and OSPF	13, 14		B6, b9 B10	C3, , c5 C6, c13, c14	d3, d4, d5, d6

Course coordinator:

Prof. Dr. Nawal A. El-Fishawy

Head of Department:

Prof. Dr. Nawal A. El-Fishawy

Date: / /