



## Course Description Template

### Course Description

This course description provides a concise summary of the main features of the course and the expected learning outcomes for the student to achieve, demonstrating whether they have made the most of the available learning opportunities. It is essential to link this description with the program description.

<b>1. Educational Institution</b>	<b>Shatt Al-Arab University</b>
<b>2. Scientific Department</b>	<b>Computer Science</b>
<b>3. Module Code</b>	<b>Computer Network 1</b>
<b>4. The available attendance types</b>	<b>Mandatory</b>
<b>5. Year</b>	<b>2024 - 2025</b>
<b>6. SWL (hr/sem)</b>	<b>40</b>
<b>7. Date</b>	<b>2025</b>

#### **8. Module Aims:**

**An understandable introduction to the fundamentals of computer networking and communications, including an overview of their benefits, basics, forms, structures, layers, types, and services, as well as the capabilities they provide and how to use them.**

## 9. Module Learning Outcomes :

1. Understanding computer networks and communication systems in general.
2. Learning about network architectures and models such as OSI and TCP/IP.
3. Understanding how data is encoded for transmission across computer networks.
4. Learning how data is routed across the network and the protocols used in the process.

## Learning and Teaching Strategies

- Readings, self-learning, discussion sessions
- Activities and dialogues inside the classroom
- Guiding students to certain websites for further benefit

## Module Evaluation

### Quizzes

10% (10)

### Report

10%

### Midterm Exam

30%

### Final Exam




50%

## 10. Course Structure

Weeks	Study Hours	Subject	Intended Learning Outcomes	
Week1		Network Models (OSI and Internet models)		
Week2		Introduction to Computer Networks		
Week3		Network Models (OSI and Internet models)		
Week4		TCP/IP Protocol Suite and Addressing		

<b>Week5</b>		<b>Data and Analog Signals</b>		
<b>Week6</b>		<b>Digital Signals and Transmission Noise</b>		
<b>Week7</b>		<b>Network Performance</b>		
<b>Week8</b>		<b>Transmission Media</b>		
<b>Week9</b>		<b>Addressing</b>		

11. Recommended Books and References	
Prescribed Textbooks	<p>-Behrouz A. Forouzan, <i>Data Communications and Networking</i>, Fourth Edition, 2007.</p> <p>-Tanenbaum A., <i>Computer Networks</i>, 2000.</p>
Main References (Sources)	-Cisco Networking Academy Website
Recommended References	<p>-Mikrotik Official Website</p> <p><a href="https://mikrotik.com">https://mikrotik.com</a></p>
Electronic References	11. Recommended Books and References

 عميد الكلية	 رئيس القسم	 مدرس المادة
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