

Sub.	Course Description – توصيف مقرر دراسي	الموضوع	 كلية المعرفة ALMAAREFA COLLEGE
Date		التاريخ	

Course Code & No	INFO351	351نظم	رقم المقرر ورمزه
Course Name	Data Communications and Computer Networks	إتصالات البيانات وشبكات الحاسب	اسم المقرر
Credit Hours	3 (2,1,0)	3 (2,1,0)	عدد الساعات المعتمدة
Pre-requisite	INFO 252 and MATH 251	252 نظم و 251 رياض	المتطلب السابق

General Description	توصيف عام
<p>This course aims at introducing the students with: The basics of computer telecommunications systems and networks; public telecommunications services; network topologies; Open Systems Interconnection (OSI) model; the Internet; intranets and extranets; distributed systems; data communications as a competitive advantage; network design and management; and network security.</p>	

Course Objectives	أهداف المقرر
<ul style="list-style-type: none"> Recognize the underlying principles, architectures, topologies, standards and protocols of computer networks. Explain different network hardware and software technologies. Design and implement network based systems. Develop problem solving and management skills for network based systems. Show confidence when dealing with different computer network projects within a team. Demonstrate ethical responsibilities during network management and development. Analyze and choose new tools and trends in the field. Demonstrate the ability to use network management tools. Show the ability to communicate effectively with different situations and clients. 	

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Course Outlines	مفردات المقرر
<ul style="list-style-type: none"> • Basics of computer telecommunications and networks . • Public telecommunications services. • Network topologies. • Local area networks LAN. • Wide area networks WAN • Value added networks VAN • Metropolitan area networks MAN(• Open Systems Interconnection model OSI(• Wireless data transmission. • The Internet. • Intranets • Extranets. • Wired and wireless architectures. • Data communications as a competitive advantage. • Network design and management. • Network performance tuning. • Network security. 	

References	المراجع
<ul style="list-style-type: none"> • Data Communications and Networking by Behrouz Forouzan, McGraw Hill (6th Edition), 2012. • White, C., Data Communications and Computer Networks: A Business User's Approach, 5th Edition, 2010, Course Technology. • Computer Networks by A. Tanenbaum, Prentice Hall (5th Edition), 1010. 	