University of Technology

Computer Engineering Department

Academic Year 2023 - 2024

Forth Year – Second Semester – Network Engineering Branch



CE-CN447	Network Management	2 Hours/Week	2 Units
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Contents of Syllabus			Hours
1- Course Introduction			2
2- What it network management and why it is important			2
3- Managing networks			2
4- Architectural functional blocks for network management			2
5- Network management tools			2
6- FCAPS: fault management			2
7- FCAPS: configuration, and accounting management			2
8- FCAPS: performance, and security management			2
9- Introduction to SNMP			2
10- SNMP: SMI, defining objects			2
11- SNMP: object identifiers, communities			2
12- SNMP: operations, lexicographical order			2
13- SNMP: MIB-II			2
14-SNMPv2: SMIv2, operations			2
15- Mid Examine			2

References

- Alexander Clemm, "Network Management Fundamentals," Cisco Press 2007, ISBN 1-58720-137-2
- William Stallings, "SNMP, SNMPv2, SNMPv3, and RMON 1 and RMON2". Addison-Wesley 1996 (3rd edition), ISBN 0-201-48534-6
- L. Peterson and B. Davie, "Computer Networks: A Systems Approach", 5th Edition, Morgan Kaufmann Publishers Inc., San Francisco, CA, 2012
- Text Book: Jianguo Ding, Advances in Network Management, Auerbach Publication, 2009, ISBN-10: 1420064525, ISBN-
- 978-1420064520 (available on-line)