1. Course number and name
   (a)TC1007 : Computer Networks I

2. Credits and contact hours
   (b)3-1-8

3. Instructor's or course coordinator's name
   (c)Alejandro Parra Briones

4. Text book, title, author, and year
   (d)* Stallings, William., Data and computer communications / William Stallings., 7th ed., Upper Saddle River, N.J. : Pearson Prentice Hall, c2004., New Jersey, c2004., eng, [0131006819]
   * Tanenbaum, Andrew S., 1944-, Computer networks / Andrew S. Tanenbaum., 4th ed., Upper Saddle River, NJ : Prentice Hall, 2003., New Jersey, 2003., eng, [0130661023]
   * Forouzan, Behrouz A., Data communications and networking / Behrouz A. Forouzan., 3rd ed., Dubuque, Iowa : McGraw-Hill, 2004., , , , [0072923547],[0072515848 (papel alcalino)]
   a. other supplemental materials
      (e)

5. Specific course information
   a. brief description of the content of the course (catalog description)
      (f)Computer Networks I is a basic level course whose purpose is the study of local area computer networks and the functioning of the physical and data link layers of the OSI model. As a result of the learning process for this course, the student will develop: Network design plan, specifications, and justification of its elements and budgeting.
   b. prerequisites or co-requisites
      (g)TC1004 or TE1007
   c. indicate whether a required, elective, or selected elective (as per Table 5-1) course in the program
      (h)Required

6. Specific goals for the course
   a. specific outcomes of instruction, ex. The student will be able to explain the significance of current research about a particular topic.
      (j)Students completing the course will be able to: Understand the protocols, algorithms and standards involved in the first two layers of the ISO/OSI reference model (physical and data link layers). Carry out wiring and local network configuration practices.
   b. explicitly indicate which of the student outcomes listed in Criterion 3 or any other outcomes are addressed by the course.
      (k)1. The student will be able to identify, evaluate, propose and implement business solutions supported with information technologies in organizations and based on the analysis of information about customer's satisfaction, cost, response time and risks

7. Brief list of topics to be covered
   (l)• Introduction to Networks.
   • Signals
   • Physical Media
   • Error detection and correction codes
   • Error and Flow Control Protocols
   • Logic Link Control
   • Ethernet
   • LANs and WANs

- Switched Ethernet
- TCP/IP Model