1. Course number and name
   TI3020 Economics Engineering

2. Credits and contact hours
   3-0-8

3. Instructor's or course coordinator's name
   Macedonio Alanís

4. Text book, title, author, and year
   * Baca Urbina, Gabriel., Fundamentos de ingeniería económica / Gabriel Baca Urbina.,
   4a ed., México, D. F. : McGraw-Hill, c2007., Mexico, c2007., spa,
   [9701061136],[9789701061138]

5. Specific course information
   a. brief description of the content of the course (catalog description)
      It is a course that requires knowledge of project management, and it aims to
      provide knowledge of financial estimate, which directly impact the development
      of IT functions that affect the organization.

   b. prerequisites or co-requisites.
      (TI2003 or IN2006)

   c. indicate whether a required, elective, or selected elective (as per Table 5-1) course
      in the program.
      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.
      By the end of this course, students will be able to execute financial estimations for
      IT projects and calculate the costs incurred in planning the equipment and
      recruitment for outsourcing companies to perform some IT tasks; calculate the
      total operating cost for the IT area.

   b. explicitly indicate which of the student outcomes listed in Criterion 3 or any other
      outcomes are addressed by the course.
      This course supports indirectly the program student outcomes.

7. Brief list of topics to be covered
   - Introduction and conceptual principles
   - Characteristics of a company
   - Estimating costs and benefits of an IT project
   - Economic analysis of projects
   - Economic evaluation of investment opportunities
   - Risk analysis

- intellectual property
- Outsourcing and Leasing
- The future of information technology