1. **Course number and name**  
   **ENGR 290: Introduction to MATLAB**

2. **Credits and contact hours**  
   one 2 hours and 50-minute lab sessions/week for seven weeks.

3. **Instructor’s or course coordinator’s name**  
   Instructor: Dr Morris Megerian, Professor of Mechanical Engineering  
   Course coordinator: Dr Morris Megerian, Professor of Mechanical Engineering

4. **Text book, title, author, and year**  
   Not required

   **other supplemental materials**
   David C. Kuncicky, MATLAB Programming. Prentice Hall, 2004

5. **Specific course information**  
   a. **brief description of the content of the course (catalog description)**  
      Basic introduction to MATLAB language. Array manipulations, control-flow,  
      script and function files. Simple 2-D plotting and editing. Programming  
      assignments.

   b. **prerequisites or co-requisites**  
      A course in programming

   c. **indicate whether a required, elective, or selected elective course in the program**  
      Required for Civil and Mechanical Engineering

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.**

      • To introduce the basic operations of the MATLAB language.  
      • To write simple script files and function files in MATLAB and to  
      • Effectively use the built-in features of 2-D plotting.

   b. **explicitly indicate which of the student outcomes listed in Criterion 3 or any**  
      **other outcomes are addressed by the course.**  
      Course addresses ABET Student Outcome(s): a, k.

7. **Brief list of topics to be covered**
To introduce the basic operation of MATLAB language
MATLAB environment
MATLAB functions
Matrix Computations
Symbolic mathematics
Numerical techniques