Middle East Technical University
Department of Chemical Engineering
Ins: Prof. Dr. Nevin Selçuk

Course content:

1. Principles of mathematical modelling (2 weeks)
2. Classification of chemical engineering models (1 week)
3. Development of steady and unsteady state models and solution techniques
   3.1 Zero-dimensional modelling (2 weeks)
   3.2 One-dimensional modelling (4 weeks)
   3.3 Two-dimensional modelling (4 weeks)
4. 1 Midterm (1 week)

Format for the Assignments

1. Write the problem statement.

2. Specify your system, assumptions and formulate your problem by making necessary macroscopic or microscopic balances.


4. Write the working form of the equation you are going to solve.

5. Work on the algorithm and draw a flow chart.

6. Present a print out for your computer program including any input/output data files.

7. Present your results in tabulated and graphical forms.

8. Discuss your results.