

# **EECE.2160: ECE Application Programming**

Fall 2017

Lecture 6: Key Questions  
September 18, 2017

1. Describe the basic elements of a flowchart.

2. Design a flowchart to solve the following:
  - Prompt a user to enter four numbers on a single line, which represent the contents of a 2x2 array
  - After reading the values, your program should print the matrix represented by these values
    - For example, if the user enters “1 2 3 4”, print:  
1 2  
3 4
    - Assume all values have the same number of digits
  - Also, calculate the matrix discriminant and print it on a separate line
    - In the example above, discriminant =  $(1 \times 4) - (2 \times 3) = 4 - 6 = -2$

3. Convert the flowchart you wrote into a C program.