**ECE 2305 – Introduction to C Programming**

**Tutorial 08**

**Mathematical Function Calls**

Write a C++ application that will perform the following calculations using function calls and display the results.

Calculate and display the value of π. Store this value as a constant.

Calculate and display the value of *e*. Store this value as a constant.

Calculate and display the absolute value of – 6.

Calculate and display the absolute value of – 6.4.

Calculate and display the equivalent of 30 degrees in radians.

Calculate and display the equivalent of 3π/4 in degrees.

Calculate and display the sine, cosine and tangent of 30 degrees.

Calculate and display the effect of the **ceil** , **floor** and **round** functions on the values + 8.6, +8.4, – 8.4 and – 8.6.

Calculate and display 20*log*10(100). (This displays the value of 100 in decibels.)

Calculate and display the square root of 2.

Calculate and display the value of .

Display a random number.

Display the **RAND\_MAX** number