

Department of Electrical and Computer Engineering
University of Massachusetts Dartmouth

ECE160: Foundations of Computer Engineering I

Spring 2023

Homework #1

Name: _____

Instructor: Dr. Liudong Xing

ECE160: Foundations of Computer Engineering I (Spring 2023)

Homework #1

Assigned: **January 23, Monday**

Due: **January 30, Monday, 9am**

Instructions:

1. Print your name on the cover page.
2. Give necessary calculation/derivation process for each problem. Penalty will result, otherwise.
3. Please follow the “[Submission Guidelines](#)” in the Homework section of the course website to submit your answers to the class M: drive.
4. Relevant lecture notes: [Lecture #2](#)

Problems:

1. Convert 10100100111_2 to hexadecimal and decimal.
2. Convert 423_{10} to binary, hexadecimal, and octal
3. Convert $CAFE_{16}$ to binary, octal, and decimal