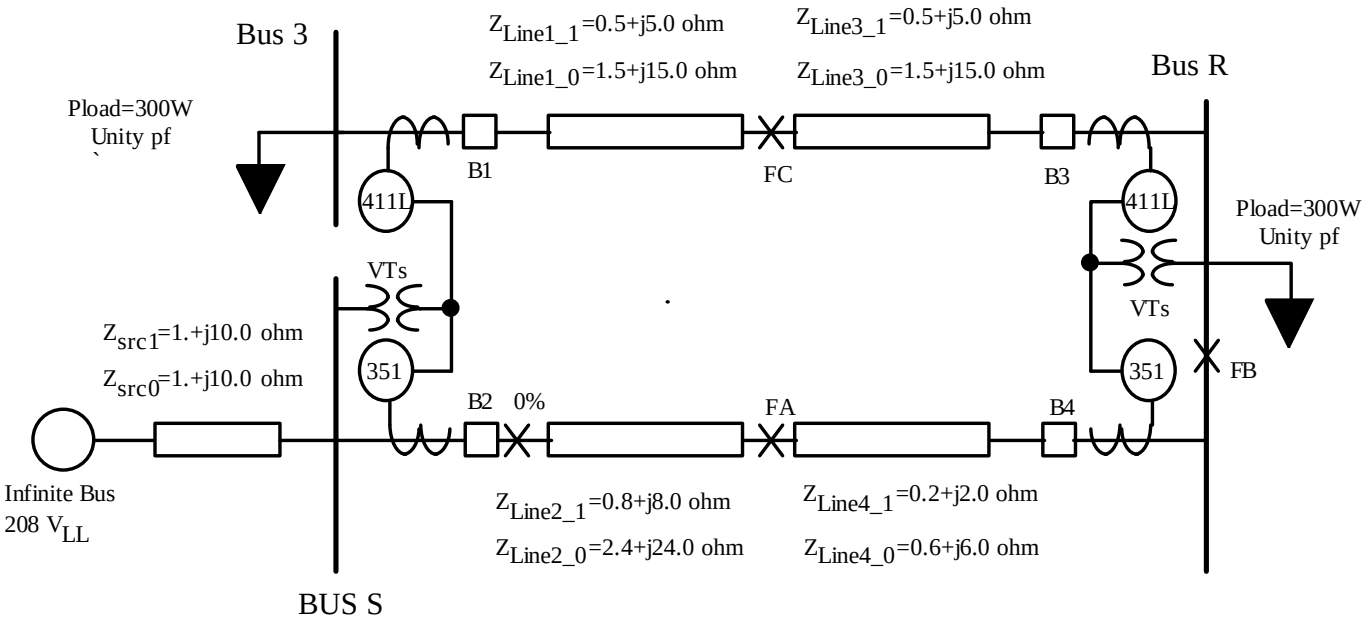
ECE 525: On Campus Lab 2, PART A
Inverse Time Overcurrent Protection
Due: Nov 16

- The CTs all have a CTR of 2:1
- The voltage transformers on the upper line have a VTR of 1.732:1, the voltage transformers on the lower line have a VTR of 2:1

System One line



Lab 2A Procedure:

1. Calculate minimum pick up and time settings for the SEL 351 at Bus 1 and the 411L at Bus 2. You will be using an ANSI/IEEE U3 curve.
   A. Set the source impedance to 0.1 + j1 ohms
   B. There are two loads, each rated at 300W 3 phase
   C. Set 51P, 51G and 51Q for each relay
   D. Your minimum time dial setting is 0.5
   E. Set your CTI at 10 cycles
2. Test your relay settings by applying the following faults (3 phase, SLG, LL, DLG):
   A. 50% of the Line 2-Line 4 combination
   B. Fault at Bus 2
   C. Fault at 50% of Line 1-3
   D. Bus 3