

# RCET 0253 Systems Analog and Digital Lab

## Lab 1 Check-Off Sheet

### Student Information

Name	Start Date
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### Check-Offs

Action item	Date (DD/MM/YY)	Status	Instructor Initials
4a. Set the oscilloscope to trigger on the Probe Compensation Signal. Demonstrate the difference between free-running and triggered by adjusting the trigger level		<input type="checkbox"/> Satisfactory <input type="checkbox"/> Unsatisfactory	
4b. Identify trigger level, rise/fall slope setting, and trigger point		<input type="checkbox"/> Satisfactory <input type="checkbox"/> Unsatisfactory	
5. Demonstrate proper probe compensation		<input type="checkbox"/> Satisfactory <input type="checkbox"/> Unsatisfactory	
8a. Measure the period, frequency, and amplitude of the signal <u>without</u> using the measure function of the scope		<input type="checkbox"/> Satisfactory <input type="checkbox"/> Unsatisfactory	
8b. Measure the period, frequency, and amplitude of the signal <u>with</u> the measure function of the scope		<input type="checkbox"/> Satisfactory <input type="checkbox"/> Unsatisfactory	
8c. Measure the period, frequency, and amplitude of the signal <u>with</u> the cursor function of the scope		<input type="checkbox"/> Satisfactory <input type="checkbox"/> Unsatisfactory	
8d. Show how all three methods compare in a table. Explain any discrepancies		<input type="checkbox"/> Satisfactory <input type="checkbox"/> Unsatisfactory	
10. Measure tilt & rise time		<input type="checkbox"/> Satisfactory <input type="checkbox"/> Unsatisfactory	
11a. Calculate all voltages, phase angles, and frequency response of the circuit.		<input type="checkbox"/> Satisfactory <input type="checkbox"/> Unsatisfactory	
11b. Draw the predicted voltage phasor diagram		<input type="checkbox"/> Satisfactory <input type="checkbox"/> Unsatisfactory	
11c. Measure the circuit and compare to the predicted values. Explain discrepancies		<input type="checkbox"/> Satisfactory <input type="checkbox"/> Unsatisfactory	
12a. reference the Tektronix Lissajous document and draw predicted Lissajous patterns in your lab book at 0° 360°, 45° 225°, 90° 270°, 135° 315°, 180°		<input type="checkbox"/> Satisfactory <input type="checkbox"/> Unsatisfactory	
12b. verify Lissajous patter accuracy using two channels out of the generator and varying the phase of one.		<input type="checkbox"/> Satisfactory <input type="checkbox"/> Unsatisfactory	
13. Predict and Measure the phase difference between the generator and the output using Lissajous pattern		<input type="checkbox"/> Satisfactory <input type="checkbox"/> Unsatisfactory	
16. FFT		<input type="checkbox"/> Satisfactory <input type="checkbox"/> Unsatisfactory	

Check-Off Redo

(write in Action Item!)	Date (DD/MM/YY)	Status	Instructor Initials
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