After completing Industrial Automation I (EET 461) the student will be able to*:

1. Use motors including AC, DC, stepper, and linear.
2. Use motor drives in automation systems.
3. Use motor controllers in automation systems.
4. Use actuators in automation systems.
5. Use encoders including optical and magnetic.
7. Measure vibration using accelerometers.
8. Use sensors in automation systems.
9. Control test equipment using LabVIEW.
10. Use PLC’s to control automation equipment.
11. Measure sound levels produced by vibration.
12. Measure and analyze audio noise frequency spectrum using LabVIEW.
13. Use PID loops.
14. Describe the elements of an automation system.
15. Operate a remotely-located automation system via internet.
16. Measure power-line harmonic distortion.
17. Use Rockwell modeling tools
18. Analyze, design and implement a control system.

*The above outcomes will be introduced in EET 461 and will be covered in more detail in EET 462.