Course Number ECE-101-01 **Course Description** Introduction to the tools, skills, and principles of electrical and computer engineering. Emphasis is placed on developing an intuitive understanding while learning quantitative methods to design, test, and analyze electronics. Test and measurement tools include oscilloscopes, multimeters, and function generators. Circuit construction techniques include breadboarding and soldering as well as computer software to simulate circuits. Principles such as power, frequency, and modulation are taught through analog and digital electronics projects. Hands-on projects include an audio amplifier, crystal radio receiver, digital clock, and a microcontrolleroperated robotic arm. Academic Term 21/WI Instructor Hedrick, James Location & Meeting Time Integrated Science & Engineering Complex-176 T/TH 11:15AM-01:00PM LEC Hybrid-A LEC Petition Y Credits 1.00 Capacity 10 **Total Students** 9 Additional Information http://ece.union.edu Common Curriculum SET Science, Engineering Tech Academic Department Electrical & Computer Engineer Field Of Study Electrical & Computer Engineer (ECE)