

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 microcontroller-operated robotic arm.

Academic Term

20/WI

Instructor

Hedrick, James

Location & Meeting Time

Integrated Science & Engineering Complex-176 T/TH 09:00AM-10:45AM LEC

Petition

Y

Credits

1.00

Capacity

12

Total Students

11

Additional Information

<http://ece.union.edu>

Common Curriculum

SET Science, Engineering Tech

Academic Department

Electrical & Computer Engineer

Field Of Study

Electrical & Computer Engineer (ECE)