

**Bergen Community College**  
**Division of Mathematics, Science and Technology**  
**Department of Industrial Design Technology**

**Course Syllabus**  
**ELC 100 - Introduction to Electrical Technology**

Semester and year:  
Course Number:  
Meeting Times and Locations:

Instructor:  
Office Location:  
Phone:  
Office Hours:  
Email Address:

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**COURSE TITLE:** ELC-100 Introduction to Electrical Technology

**COURSE CREDIT:** 2 Credits

**PREREQUISITE:** None

**COURSE DESCRIPTION:** Introduction to Electrical Technology presents an orientation to the various sub-specialties within the field, their inter-relationships, and their range of applications. The course also covers introductory topics in electrical and electronics drafting, computer-aided circuit analysis, and electronic fabrication.

**SPECIFIC OBJECTIVES:**

1. To provide an orientation and perspective to the field for entry-level students.
2. To establish the graphical and symbolic language used in the field.
3. To survey the software used in circuit analysis, design and fabrication.
4. To provide insights and skills preparatory to laboratory fabrication, testing, and troubleshooting of electronic circuits.

**TEXTBOOK:** The Successful Electronics Technician, David L. Goetsch, Thomson/Delmar Learning 2008

**MATERIALS:** Equipment, supplies, materials, and manuals are provided in the electronics lab.

<b>CLASS MEETING</b>	<b>TOPIC</b>	<b>No Text Used</b>
1	Power Grid / Energy Storage	
2	Power Grid / Continued	
3	Optronics / Communications / Data Storage	
4	Industrial / Consumer / Automotive	
5	Medical / NANO / Bioelectronics	
6	Aerospace Electronics (Avionics)	
7	Military Electronics	
8	VOM Usage	
9	Oscilloscope - Introduction	
10	Oscilloscope – (Continued)	
11	Simulation Project - Multisim	
12	Continued	
13	Continued	
14	Continued	
15	Final Evaluation	

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