

**LAGUARDIA COMMUNITY COLLEGE  
CITY UNIVERSITY OF NEW YORK  
DEPARTMENT OF MATHEMATICS, ENGINEERING, and COMPUTER  
SCIENCE**

**Computer Electronics II** 3 credits; 4 hours (3 lecture, 1 lab)

This course is a continuation of Computer Electronics I. Topics covered include parallel resonance, high and low passive filter circuits, transformers, semiconductor structure, diodes, BJTs, FETs, integrated circuits, power supply circuits, transistor amplifier circuits, operational amplifiers, oscillators, and modulation and receiver circuits. This course will emphasize the laboratory construction and troubleshooting of these circuits. The student should expect to pay for additional materials for this course.

*Prerequisite: CIS241*

**Text Books:**

Electronics Fundamentals: Circuits, Devices, and Applications, Eighth Edition  
8th Edition  
ISBN: 0-13-507295-6

Experiments in Electronics Fundamentals and Electric Circuits Fundamentals  
By Buchla  
6<sup>th</sup> Edition  
ISBN: 0-13-111277-5

**Evaluations:**

Lab projects (4 total) .....	20%
Mid term exam.....	40%
Final exam.....	40%

**Attendance:**

The maximum number of absences will be **7 hours**. Unexcused absences beyond the maximum will result in grade **WU** or **F**.

**Course Outline**

Week	Topics
1	Introduction to Semiconductors and devices

- 2 Transistors
- 3 Op-Amps
- 4 Applicatons of Op-Amps
- 5 Applications of Op-Amps
- 6 Reviews
- 7 Final Exam

Projects: **31,32,33,34,38**