

# Commercial Electrical Design Certificate

---

This three semester certificate provides the student the basic skills needed for employment as an electrical design technician for commercial electrical projects. The electrical design process for commercial construction includes design for three-phase electrical services, feeders, branch circuits, appliances, lighting, communication/data, fire safety, motors and control circuits.

## Suggested/Sample Course Sequence

The sequence taken by the student may vary depending on prerequisites, course availability, and personal/ professional responsibilities.

(Major Code 5060; State CIP Code 46.0302)

- Electrical Technology (<http://www.jccc.edu/electrical-tech>)

### First Semester

DRAF 120	Introduction to Drafting	2
DRAF 130	Introduction to CAD Concepts - AutoCAD*	3
MATH 130	Technical Mathematics I*	3
ELTE 123	Electromechanical Systems	4
Total Hours		12

DRAF 120 and DRAF 130 are 8-week courses and are offered consecutively in the same semester, same time and days.

### Second Semester

ELTE 200	Commercial Wiring Methods*	4
ENGL 121	Composition I*	3
DRAF 230	Intermediate CAD: AutoCAD*	3
ELTE 122	National Electrical Code I	4
Total Hours		14

### Third Semester

ENGL 123	Technical Writing I*	3
DRAF 250	Electrical Drafting*	3
ELTE 202	Electrical Estimating*	3
Total Hours		9

**Total Program Hours: 35**