

## Course Information

<b>Course Title</b>	National Electrical Code I
<b>Course Prefix, Num. and Title</b>	ELPT 1325 National Electrical Code I
<b>Division</b>	Vocational Science
<b>Department</b>	Air Conditioning, Heating, Refrigeration and Electrical Technology
<b>Course Type</b>	WECM Course
<b>Course Catalog Description</b>	An introductory study of the National Electric Code (NEC) for those employed in fields requiring knowledge of the Code. Emphasis on wiring design, protection, methods, and materials; equipment for general use; and basic calculations
<b>Pre-Requisites</b>	None
<b>Co-Requisites</b>	Enter Co-Requisites Here.

## Semester Credit Hours

<b>Total Semester Credit Hours (SCH): Lecture Hours:</b>	3:2:2
<b>Lab/Other Hours</b>	
<b>Equated Pay Hours</b>	3
<b>Lab/Other Hours Breakdown: Lab Hours</b>	2
<b>Lab/Other Hours Breakdown: Clinical Hours</b>	Enter Clinical Hours Here.
<b>Lab/Other Hours Breakdown: Practicum Hours</b>	Enter Practicum Hours Here.
<b>Other Hours Breakdown</b>	List Total Lab/Other Hours Here.

## Approval Signatures

Title	Signature	Date
<b>Prepared by:</b>		
<b>Department Head:</b>		
<b>Division Chair:</b>		
<b>Dean/VPI:</b>		
<b>Approved by CIR:</b>		

## Additional Course Information

**Topical Outline:** Each offering of this course must include the following topics (be sure to include information regarding lab, practicum, and clinical or other non-lecture instruction).

- Sizing of conductors
- Boxes
- Raceways
- Conductors
- Overcurrent protection
- Service
- Branch circuits

### Course Learning Outcomes:

**Learning Outcomes – Upon successful completion of this course, students will:**

- 1) Locate and interpret the sections in the NEC that pertain to electrical installations
- 2) Calculate the size of conductors, boxes, raceways, and overcurrent protective devices for branch circuits supplying electrical equipment
- 3) Calculate conductors, overcurrent protection, and service equipment as applied to building services
- 4) Compute the size of branch circuits, feeders, and equipment for motors

### Methods of Assessment:

- 1) Classroom quiz and examination questions
- 2) Classroom quiz and examination questions
- 3) Classroom quiz and examination questions
- 4) Classroom quiz and examination questions

### Required text(s), optional text(s) and/or materials to be supplied by the student:

NEC Code ISBN 13:978-087765790-3

### Suggested Course Maximum:

30

### List any specific or physical requirements beyond a typical classroom required to teach the course.

Air Conditioning, Heating, Refrigeration, and Electrical - Lab

**Course Requirements/Grading System:** Describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course.

90% to 100%	= A
80% to 89%	= B
70% to 79%	= C
60% to 69%	= D
Below 60%	= F

The semester final grade is based on the percentage basis between daily lab work, daily classroom assignments, and semester final.

Daily lab work counts for 50% of final: Daily Classroom work is 20% of final: End of semester written final and lab final is 30% of final average.

### Curriculum Checklist:

- Administrative General Education Course** (from ACGM, but not in WCJC Core) – No additional documents needed.
- Administrative WCJC Core Course.** Attach the Core Curriculum Review Forms
  - Critical Thinking
  - Communication
  - Empirical & Quantitative Skills
  - Teamwork
  - Social Responsibility
  - Personal Responsibility
- WECM Course** -If needed, revise the Program SCANS Matrix and Competencies Checklist