



ELECTRICAL CODE I

Course Number Course Name	ELEC 141 ELECTRICAL CODE I
Credit Value (Breakdown of theory and lab credits)	3, 3T+0S
Catalog Course Description	National Electrical Code (NEC) requirements for single and multi-family dwellings, use of NEC tables and calculations. (3, 3T+0S)
Student Learning Outcomes/Objectives /Competencies of the Course	<p>Outcomes</p> <ol style="list-style-type: none"> 1. Explain the purpose and history of NEC and layout 2. Interpret and apply general requirements of the NEC 3. Interpret and apply wiring and protection requirements 4. Interpret and apply wiring methods and materials 5. Install equipment for general use <p>Topics</p> <ol style="list-style-type: none"> 1. Electrical Theory <ul style="list-style-type: none"> ○ Ohms law ○ Alternating current ○ Direct current 2. NEC calculations <ul style="list-style-type: none"> ○ Raceway fill ○ Box fill ○ Conductor size 3. Advanced NEC calculations <ul style="list-style-type: none"> ○ Dwelling units ○ Multifamily dwelling ○ Commercial and transformer
College-Wide Student Learning Outcomes	Critical Thought