



ELEC 1151 SYLLABUS

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| Course Number Course Name | ELEC 1151 Electrical Code II |
| Credit Value (Breakdown of theory and lab credits) | 3 (3 Theory) |
| Catalog Course Description | Students will continue to learn about National Electrical Code (NEC) requirements related to building wiring, conductor ampacity, branch circuits, boxes and fittings and raceway calculations. Pre-requisites: ELEC 1141 |
| Student Learning Outcomes/Objectives /Competencies of the Course | <p>Outcomes</p> <ul style="list-style-type: none"> • Explain NEC requirements for cable assembly • Identify boxes and fittings • Calculate conductor ampacity <p>Topics</p> <ul style="list-style-type: none"> • Understanding the principles involved in sizing of building wire • Branch circuits I • Branch circuits II • Feeders and outside branch circuits and feeders • Services • Switches, receptacles, and luminaries • Conduit and raceway basics • NEC requirements for cable assemblies • General requirements for wiring methods and materials • Conductors for general wiring • Electrical non-metallic tubing • Liquid tight flexible conduit: types LFMC and LFNC • Beginning to calculate conductor ampacity • Determining conductor ampacity • Finalizing ampacity calculations • Identifying boxes and fittings as defined by the NEC • Performing box size and fill calculations • Calculating raceway fill |
| College-Wide Student Learning Outcomes | <i>College Wide Student Learning Outcomes:</i> Communication Critical Thought |