COURSE TITLE & NUMBER: Commercial/Industrial Wiring Methods: ELM 2102  
CREDITS:  5  (2 Lec / 3 Lab)  
PREREQUISITES: ELM 1101, 1201, 1301, 1102, 1202, 1302, 2101, 2201, 2301 or approval of the instructor  

CATALOG DESCRIPTION:  
Commercial/Industrial Wiring Methods covers the design and installation of wiring methods used in commercial and industrial applications.

OUTLINE OF MAJOR CONTENT AREAS:  
1. Safety  
2. All related National Electric Code articles  
3. Switchboards and panel-boards  
4. Raceways and raceway support systems  
5. Electrical cabinets and enclosures  
6. Underground installations  
7. Hazardous locations  
8. Special conductors and cables

COURSE GOALS/OBJECTIVES/OUTCOMES:  
1. Students will describe general electrical requirements of commercial and industrial locations.  
2. Students will identify electrical protection of conductors, equipment and devices in other than residential locations.  
3. Students will interpret the electrical protection of conductors, equipment and devices used in commercial/industrial locations.  
4. Students will explain the wiring methods used in commercial and industrial locations.  
5. Students will apply wiring methods used in commercial and industrial locations.  
6. Students will identify the electrical requirements of special occupancies.  
7. Students will identify communication and low voltage systems.  
8. Students will apply communication and low voltage system requirements.  
9. Students will identify the purpose and demonstrate the use of Drones in Industrial locations

MNTC GOALS AND COMPETENCIES MET:  
N/A
HCC COMPETENCIES MET:
Working Productively and Cooperatively
Thinking Creatively and Critically
Social/Civic Responsibility

STUDENT CONTRIBUTIONS:
The student is expected to devote the time necessary to become adept at analyzing the material, installation, application, troubleshooting and maintenance procedures relating to commercial and industrial locations.

STUDENT ASSESSMENT SHALL TAKE PLACE USING INSTRUMENTS SELECTED/DEVELOPED BY THE COURSE INSTRUCTOR.

ADDITIONAL INFORMATION:
ELM 2102 requires students to attend 95% of the classes. If 95% attendance cannot be met, a 1-credit make-up class will be required to be taken. The one credit class will be equal to three days of attendance. For every three less than full days (tardy or leaving early) will count as one day absence. If the 95% attendance is not maintained and the 1-credit make-up class is not taken, the student will need to re-take the course.

National Electrical Code, NFPA (Current Edition)
Tools as per tool list and safety glasses

Curriculum Committee Approval Date: March 5, 2019

AASC APPROVAL DATE: March 20, 2019
REVIEW DATE: March 2024