

# Mid-South Independent Electrical Contractors Voice, Data and Video Course Outline

*1<sup>st</sup> year – 2<sup>nd</sup> semester*

<b>Low Voltage Cabling</b>		
Lesson	Lesson Topic	Contact Hours
111	Introduction, Conductors & Insulation, Low Voltage and Fiber Optic Cables	4
112	Low Voltage and Fiber Optic Cables, Commercial Installation	4
113	Commercial Installation, Installation in Plenums, Optical Fiber Cable and Communications Cables (NEC), Coaxial CATV within Buildings	4
114	Lift Safety	4
<b>Pathway and Spaces</b>		
Lesson	Lesson Topic	Contact Hours
115	Raceways, Conduit, Fittings, Bushings, Locknuts, Sealings, Cable and Raceway Supports, Surface Metal and Nonmetallic Raceways	4
116	Cable Trays, Storing and Handling Raceways, Underground Systems, Boxes, Construction Procedures, Overview of Cabling Distribution	4
117	Conduit Bending	4
<b>Wire and Cable Terminations</b>		
Lesson	Lesson Topic	Contact Hours
118	Coaxial Cable and Terminations, Optical Fiber Connections, Terminating UTP Cable	4
119	Terminating UTP Cable, Legacy Connections, Lab installing various types of UTP Modules	4
120	Lab installing Terminating Blocks including 66, 110 & BIX, Lab installing patch panels and coaxial cables	4
121	Review and Mid-Term Exam	4

## Fiber Optics

Lesson	Lesson Topic	Contact Hours
122	Introduction, Fiber Optics Theory, Fiber Optics Components	4
123	Understanding Light Transmission, Receivers, Connectors, Couplers & Splices	4
124	Working with Fiber Optics, Splicing, Fiber Optic Testing	4
125	Lab to install fiber optics connectors,	4
126	Fiber Optic Testing	4

## Site Survey, Project Planning & Documentation

Lesson	Lesson Topic	Contact Hours
127	Introduction, Job Estimating, Job Planning, Documentation, Scheduling	4
128	Acquiring materials, Assigning Labor, Completing Installation, Quality Control, Punch list and completing the job. Retrofitting installations, Additional documentation	4
129	FireStopping and Review	4
130	Final Exam	4
<i>Total Semester Contact Hours</i>		80