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VOICE DATA VIDEO CURRICULUM DETAILS						On Outline
<b>1. Safety, First Aid/CPR</b>						
1. First Aid/CPR						
2. OSHA 10						
3. Key Factors involved with safe work practices						
4. Proper Use and Care of Ladders						
5. Reality of Electrical Shock						
6. Caution – Overhead Work in Progress						
7. Hoisting Loads Properly						
8. Hazards Created by Poor Housekeeping on the Job						
9. Maintain Safe Work Area and Tools						
10. Respect and Obey Job Safety Rules						
11. Substance Abuse						
12. Business Practices and Ethics						
<b>2. DC Theory</b>						
1. Electricity						
2. Ohm's Law						
3. Voltage, Resistance, Current, and Power						
4. Series Circuits						
5. Parallel Circuits						
6. Combination Circuits						
7. Voltage Dividers						
8. Voltage Drop						
9. Kirchhoff's Laws						
<b>3. AC Theory</b>						

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4. Inductive Reactance					
5. Capacitance					
6. Capacitive Reactance					
7. Impedance					
8. Resonance					
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10. Parallel Circuits					
11. Combination Circuits					
12. Filters					
13. Power Factor					
4. Codes, Standards, Installation Practices					
1. Purpose and Intent of Electrical Codes					
2. Scope of NFPA/NEC and Local Codes					
3. Introduction to the National Electrical Code					
4. Mandatory Rules					
5. Neat and Workmanlike					
6. Wet, Damp, and Dry Locations					
7. Permissible Loads on Various Circuits					
8. Allowable Raceway and Cable Tray Fills					
9. Hazardous Locations by Class					
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15. Remote Control, Signaling, & Power-Limited Circuits					
16. Optical Fiber Cables					
17. Communications Circuits					
<b>5. Blueprints</b>					
1. Drawing Fundamentals					
2. How to make proper sketches					
3. Architectural Views					
4. Blueprint Scales					
5. Electrical and mechanical symbols					
6. Job costs and takeoffs					
7. Specifications					
8. Bid Drawings					
9. Schematics, Line Drawings, Ladder Diagrams					
10. Approved for Construction					
11. As-Built					
<b>6. Conductors – Wire and Cable</b>					
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1. Copper and Fiber					
2. Hybrid					
3. Coaxial					

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2. Effect of Heat					
3. Sizing					
1. American Wire Gauge Chart					
4. Fire Rating					
5. Effects of Soil Conditions on Underground Cable					
6. Installation Methods					
7. Termination Techniques					
8. Cable Supporting Structures					
9. Backbone Cable Pathways					
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7. Audio Visual Systems					
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2. Rough-in					
3. Telecommunications Concepts					
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3. Signal Transmission					
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<b>10. Grounding &amp; Bonding</b>					
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2. NEC System Grounding					
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<b>11. Network Systems</b>					
1. Network Definitions					
2. Ethernet Basics					
3. The OSI Model					
4. The Networked PC					
5. The Need for Security, Viruses, and Malware					
6. Peer-to-Peer Vs. Client/Server					
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8. Network Interface Cards and LAN Devices					
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