IEC National Curriculum General Outline

FIRST YEAR CURRICULUM

101	Orientation, The Independent Way Safety	119	Living Room/Study Circuits Series/Parallel Circuits
102	First Aid and CPR	120	Laundry Outlets Series/Parallel Proportionality
103	First Aid and CPR	121	Garage Circuits Kirchoff's Laws
104	Hand Tools & Math/Reading Evaluations	122	Rec. Rooms & Workshops Efficiency
105	Intro to Electricity Whole Numbers/Fractions	123	Water Pumps & Heaters Power Sources
106	Electrical Symbols & Outlets Electric Current, Decimal Fractions	124	Kitchen Outlets
107	Lighting & Appliance Circuits, Magnetism, Percent & Averaging	125	Special Purpose Outlets
108	Conductor Sizes & Types, Wiring Basic Circuits Powers & Roots	126	Heating Systems
109	Switch Control, Receptacle Bonding, etc. OHMS law Introduction Measures	127	Mid-Term Review Mid-Term Exam
110	Mid-Term Review Mid-Term Exam	128	Low Voltage Systems
111	Ground Fault Protection Simple OHMS Law-Circuits Ratio & Proportion	129	Lamp Identification Low Voltage Lighting
112	Lighting Fixtures OHMS Law-Series Circuits Formulas	130	Fire Alarm & Security System
113	Bedroom Lighting Parallel Circuits	131	Remote Control Systems Knots & Rigging
114	Lighting Branch Circuits Using Fractions in Parallel Circuits	132	Pipe Bending
115	Entry Lighting Trigonometry	133	Service Entrance Equipment
116	Kitchen Circuits	134	Swimming Pools
117	Review First Semester	135	Review First Year
118	First Semester Final Exam	136	First Year Final Exam

SECOND YEAR CURRICULUM

201	Registration, Orientation	219	General Wiring, Wire Conduit and Box Sizing
202	First Aid & CPR Refresher	220	Outlets, Appliance. Lighting & Heating
203	Trigonometry & Vector Math	221	Services & Feeder Calculations
204	Introduction to AC Electricity	222	Grounding, Bonding & Overcurrent Protection
205	Inductance & Transformer Theory	223	Hazardous Locations, Motor Circuit Wiring
206	Capacitance	224	Health Care Facilities, Emergency Systems
207	Series AC Circuits	225	Industrial & Commercial Wiring
208	AC Power & Resonance	226	Special Applications Wiring & Code Review
209	Three-Phase AC	227	Mid-Term Review & Exam
210	Mid-Term Review & Exam	228	Motor Control Circuits, Connection & Testing
211	Meters	229	Motor Control Hookups & Review
212	Generators	230	Transformer Operation & Installation
213	DC Motors	231	Transformer Sizing & Protection
214	AC Motors	232	Transformer Connections & Testing
215	Motor Operation, Types & Components	233	Autotransformers & Secondary Ties
216	Motor Conductors & Protection	234	Review of Motors & Transformer
217	Review of First Semester	235	Second Year Review
218	First Semester Final Exam	236	Second Year Final Exam

THIRD YEAR CURRICULUM

301	Registration & Orientation	319	Introduction to Motor Controls
302	First Aid & CPR Review	320	Introduction to Logic & Line Diagrams
303	Motor & 3-Phase Systems Review	321	Motor Controls Lab Session #1
304	Transformer Review	322	Contactors, Starters & Solenoids
305	Intro to Blueprint Reading	323	AC/DC Contactors & Magnetic Motor Starters
306	Blueprint Reading Fundamentals	324	Time Delay and Complex Line Diagrams
307	Construction Process & Concrete Blueprints	325	Motor Control Lab Session #2
308	Steel & Framing Blueprints	326	Application & Installation of Control Devices
309	Mid-Term Review & Exam	327	Mid-Term Review & Exam
310	Plumbing, Masonry & Welding Blueprints	328	Revising Circuits
311	Mechanical Systems	329	Power Distribution Systems
312	Electrical Blueprints	330	Motor Control lab Session #3
313	Advanced Blueprint Reading	331	Hazardous Locations
314	Introduction to Grounding	332	Special Hazardous Locations & Fireproofing
315	Grounding Conductors	333	Signs & Sign Connections
316	Grounding Equipment	334	Basic Fiber Optics
317	Fault Currents/Semester Review	335	Third Year Review
318	First Semester Final Exam	336	Third Year Final Exam

FOURTH YEAR CURRICULUM

401	Registration & Orientation	419	Introduction to Fire Prevention Signaling Systems
402	Safety & Haz Com First Aid & CPR	420	Alarm Initiating Devices & Indicating Appliances
403	First Aid & CPR	421	Installation & Start up of Fire Alarm Systems
404	Solid State Electronic Control Devices	422	Maintenance & Troubleshooting of Fire Alarm Systems
405	Electromechanical & Solid State Relays	423	Fire Alarms Lab
406	Advanced Controls Lab #1	424	Wiring Methods, Materials & Design
407	Photoelectric & Proximity Controls	425	Design & Protection of Circuits
408	Programmable Controls	426	Motors, Controls, Air Conditioning & Refrigeration
409	Advanced Controls Lab #2	427	Mid-Term Review & Exam
410	Mid-Term Review & Exam	428	Transformers & Grounding
411	AC Reduced Voltage Starters	429	Services
412	Accelerating & Decelerating Method	430	Dwellings
413	Advanced Control Labs #3	431	Industrial & Commercial Locations
414	Preventative Maintenance & troubleshooting	432	Hazardous Locations & Swimming Pools
415	Triacs, Diacs & Transistor Amplifiers	433	Code Review & Test Preparation
416	Advanced Controls Lab #4	434	Leadership
417	Semester Review	435	Fourth Year Review
418	First Semester Final Exam	436	Fourth Year Final Exam