

## IEC National Curriculum General Outline

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

### FIRST YEAR CURRICULUM



### 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 &	233	Autotransformers & Secondary Ties
	Components		
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	<b>Registration &amp; Orientation</b>	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	325	Motor Control Lab Session #2		
	Blueprints				
308	Steel & Framing Blueprints	326	Application & Installation of Control		
			Devices		
309	Mid-Term Review & Exam	327	Mid-Term Review & Exam		
310	Plumbing, Masonry & Welding	328	Revising Circuits		
	Blueprints				
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	420	Alarm Initiating Devices & Indicating	
	First Aid & CPR		Appliances	
403	First Aid & CPR	421	Installation & Start up of Fire Alarm	
			Systems	
404	Solid State Electronic	422	Maintenance & Troubleshooting of Fire	
	Control Devices		Alarm Systems	
405	Electromechanical & Solid	423	Fire Alarms Lab	
	State Relays			
406	Advanced Controls Lab #1	424	Wiring Methods, Materials & Design	
407	Photoelectric & Proximity	425	Design & Protection of Circuits	
	Controls			
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	429	Services	
	Starters			
412	Accelerating & Decelerating	430	Dwellings	
	Method			
413	Advanced Control Labs #3	431	Industrial & Commercial Locations	
414	Preventative Maintenance &	432	Hazardous Locations & Swimming Pools	
	troubleshooting			
415	Triacs, Diacs & Transistor	433	Code Review & Test Preparation	
	Amplifiers			
416	Advanced Controls Lab #4	434	Leadership	
417	Semester Review	435	Fourth Year Review	
418	First Semester Final Exam	436	Fourth Year Final Exam	