

ELECTRICAL TRAINEE PROGRAM OUTLINE

ELECTRICAL YEAR ONE – NCCER Electrical Trainee Guide Level 1 - 11th Edition

	SUBJECT	MODULE #	HOURS
ELECTRICAL 1A			
Wk			
1	Occupational Overview: The Electrical Industry	26101-23	4
2	Occupational Overview: The Electrical Industry	26101-23	4
3	Safety for Electricians	26102-23	4
4	Safety for Electricians	26102-23	4
5	Safety for Electricians	26102-23	4
6	Hand Bending	26107-23	4
7	Hand Bending	26107-23	4
8	Hand Bending	26107-23	4
9	Hand Bending	26107-23	4
10	Wireways, Raceways and Fittings	26108-23	4
11	Wireways, Raceways and Fittings	26108-23	4
12	Wireways, Raceways and Fittings	26108-23	4
ELECTRICAL 1B			
1	Introduction to the Electrical Circuits	26103-23	4
2	Introduction to the Electrical Circuits	26103-23	4
3	Introduction to the Electrical Circuits	26103-23	4
4	Electrical Theory	26104-23	4
5	Electrical Theory	26104-23	4
6	Electrical Theory	26104-23	4
7	Electrical Test Equipment	26112-23	4
8	Electrical Test Equipment	26112-23	4
9	Electrical Test Equipment	26112-23	4
10	Introduction to the National Electrical Code	26105-23	4
11	Introduction to the National Electrical Code	26105-23	4
12	Introduction to the National Electrical Code	26105-23	4
ELECTRICAL 1C			
1	Outlet, Device, Pull and Junction Boxes	26106-23	4
2	Outlet, Device, Pull and Junction Boxes	26106-23	4
3	Outlet, Device, Pull and Junction Boxes	26106-23	4
4	Conductors and Cables	26109-23	4
5	Conductors and Cables	26109-23	4
6	Conductors and Cables	26109-23	4
7	Basic Electrical Construction Documents	26110-23	4
8	Basic Electrical Construction Documents	26110-23	4
9	Basic Electrical Construction Documents	26110-23	4
10	Residential Wiring	26111-23	4
11	Residential Wiring	26111-23	4
12	Residential Wiring	26111-23	4

ELECTRICAL YEAR TWO – NCCER Electrical Trainee Guide Level 2 - 11th Edition

	SUBJECT	MODULE #	HOURS
ELECTRICAL 2A			
1	Alternating Current	26201-23	4
2	Alternating Current	26201-23	4
3	Alternating Current	26201-23	4
4	Alternating Current	26201-23	4
5	Motors: Theory and Application	26202-23	4
6	Motors: Theory and Application	26202-23	4
7	Motors: Theory and Application	26202-23	4
8	Motors: Theory and Application	26202-23	4
9	Grounding and Bonding	26209-23	4
10	Grounding and Bonding	26209-23	4
11	Grounding and Bonding	26209-23	4
12	Grounding and Bonding	26209-23	4
ELECTRICAL 2B			
1	Conduit Bending	26204-23	4
2	Conduit Bending	26204-23	4
3	Conduit Bending	26204-23	4
4	Conduit Bending	26204-23	4
5	Pull and Junction Boxes	26205-23	4
6	Pull and Junction Boxes	26205-23	4
7	Pull and Junction Boxes	26205-23	4
8	Pull and Junction Boxes	26205-23	4
9	Conductor Installations	26206-23	4
10	Conductor Installations	26206-23	4
11	Cable Tray	26207-23	4
12	Cable Tray	26207-23	4
ELECTRICAL 2C			
1	Conductor Termination and Splices	26208-23	4
2	Conductor Termination and Splices	26208-23	4
3	Conductor Termination and Splices	26208-23	4
4	Circuit Breakers and Fuses	26210-23	4
5	Circuit Breakers and Fuses	26210-23	4
6	Circuit Breakers and Fuses	26210-23	4
7	Electric Lighting	26203-23	4
8	Electric Lighting	26203-23	4
9	Electric Lighting	26203-23	4
10	Control Systems and Fundamental Concepts	26211-23	4
11	Control Systems and Fundamental Concepts	26211-23	4
12	Control Systems and Fundamental Concepts	26211-23	4

ELECTRICAL YEAR THREE – NCCER Electrical Trainee Guide Level 3 - 11th Edition

SUBJECT	MODULE #	HOURS
ELECTRICAL 3A		
1 Load Calculations – Branch and Feeder Circuits	26301-23	4
2 Load Calculations – Branch and Feeder Circuits	26301-23	4
3 Load Calculations – Branch and Feeder Circuits	26301-23	4
4 Conductor Selection and Calculations	26302-20	4
5 Conductor Selection and Calculations	26302-23	4
6 Conductor Selection and Calculations	26302-23	4
7 Practical Applications of Lighting	26303-23	4
8 Practical Applications of Lighting	26303-23	4
9 Practical Applications of Lighting	26303-23	4
10 Overcurrent Protection	26305-23	4
11 Overcurrent Protection	26305-23	4
12 Overcurrent Protection	26305-23	4
ELECTRICAL 3B		
1 Distribution Equipment	26306-23	4
2 Distribution Equipment	26306-23	4
3 Distribution Equipment	26306-23	4
4 Transformers	26307-23	4
5 Transformers	26307-23	4
6 Transformers	26307-23	4
7 Commercial Electrical Services	26308-23	4
8 Commercial Electrical Services	26308-23	4
9 Commercial Electrical Services	26308-23	4
10 Voice, Data and Video	26310-23	4
11 Voice, Data and Video	26310-23	4
12 Voice, Data and Video	26310-23	4
ELECTRICAL 3C		
1 Motor Calculations	26309-23	4
2 Motor Calculations	26309-23	4
3 Motor Calculations	26309-23	4
4 Motor Calculations	26309-23	4
5 Motor Controls	26311-23	4
6 Motor Controls	26311-23	4
7 Motor Controls	26311-23	4
8 Motor Controls	26311-23	4
9 Hazardous Locations	26304-23	4
10 Hazardous Locations	26304-23	4
11 Hazardous Locations	26304-23	4
12 Hazardous Locations	26304-23	4

ELECTRICAL YEAR FOUR – NCCER Electrical Trainee Guide Level 4 - 11th Edition

	SUBJECT	MODULE #	HOURS
ELECTRICAL 4A			
1	Load Calculations – Feeders and Services	26401-23	4
2	Load Calculations – Feeders and Services	26401-23	4
3	Load Calculations – Feeders and Services	26401-23	4
4	Health Care Facilities	26402-23	4
5	Health Care Facilities	26402-23	4
6	Health Care Facilities	26402-23	4
7	Standby and Emergency Systems	26403-23	4
8	Standby and Emergency Systems	26403-23	4
9	Standby and Emergency Systems	26403-23	4
10	Basic Electronic Theory	26404-23	4
11	Basic Electronic Theory	26404-23	4
12	Basic Electronic Theory	26404-23	4
ELECTRICAL 4B			
1	Fire Alarm Systems	26405-23	4
2	Fire Alarm Systems	26405-23	4
3	Fire Alarm Systems	26405-23	4
4	Specialty Transformers	26406-23	4
5	Specialty Transformers	26406-23	4
6	Specialty Transformers	26406-23	4
7	Advanced Controls	26407-23	4
8	Advanced Controls	26407-23	4
9	Advanced Controls	26407-23	4
10	HVAC Controls	26408-23	4
11	HVAC Controls	26408-23	4
12	HVAC Controls	26408-23	4
ELECTRICAL 4C			
1	Special Locations	26412-23	4
2	Special Locations	26412-23	4
3	Special Locations	26412-23	4
4	Heating Tracing and Freeze Protection	26409-23	4
5	Heating Tracing and Freeze Protection	26409-23	4
6	Heating Tracing and Freeze Protection	26409-23	4
7	Heating Tracing and Freeze Protection	26409-23	4
8	Motor Operation and Maintenance	26410-23	4
9	Motor Operation and Maintenance	26410-23	4
10	Motor Operation and Maintenance	26410-23	4
11	Introduction to Leadership	46100-23	4
12	Introduction to Leadership	46100-23	4

ELECTRICAL YEAR FIVE

SUBJECT	MODULE #	HOURS
ELECTRICAL 5A – PROGRAMMABLE CONTROLLERS		
1	Understanding Input / Output	4
2	Processor Units / Numbering Systems	4
3	Memory Organization	4
4	Understanding & Using Ladder Diagrams	4
5	Relay Type Instructions	4
6	Programming Devices	4
7	Small Programmable Controllers	4
8	Latching & Master Control Relays	4
9	Programming Timers & Counters	4
10	Data Manipulation / Arithmetic	4
11	Sequencers	4
12	Start-up & Troubleshooting	4
ELECTRICAL 5B – Electrical Specialty Systems		
1	CCTV Systems	33405 4
2	CCTV Systems	33405 4
3	CCTV Systems	33405 4
4	CCTV Systems	33405 4
5	Fiber Optics	33303 4
6	Fiber Optics	33303 4
7	Intrusion Detection Systems	33402 4
8	Intrusion Detection Systems	33402 4
9	Intrusion Detection Systems	33402 4
10	Audio System	33403 4
11	Audio System	33403 4
12	Audio System	33403 4
ELECTRICAL 5C / NEC PREPARATION CLASS		
1	Interpret Requirements of the NEC	4
2	Interpret Requirements of the NEC	4
3	Help you become familiar with the NEC	4
4	How the NEC is structured	4
5	How the NEC is structured	4
6	Learn basic math and electric formulas	4
7	Series and Parallel Circuits	4
8	How to quickly find answers by identifying keywords	4
9	Find answers by use of table of contents and index	4
10	How to read tables	4
11	How to prepare for and take the test	4
12	How to prepare for and take the test	4