

2018 - 2019 5th Year Syllabus and Schedule

Test Date:	9/17	Transformers	Level	II	Test Grade:
Syllabus Number	Title	Book Name	Lesson/Lab #	Date Covered	Homework Due Date
1	Reactors and Isolation Transformers	Transformers Textbook	Lesson 1	8/22/2018	8/27/2018
2	Autotransformers	Transformers Textbook	Lesson 2	8/27/2018	8/29/2018
3	Buck-Boost Transformers	Transformers Textbook	Lesson 3	8/29/2018	9/10/2018
4	Understanding Transformer Overcurrent Protection	Transformers Textbook	Lesson 4	9/10/2018	9/12/2018
5	Transformer Overcurrent Protection with associated tap rules	Transformers Textbook	Lesson 5	9/12/2018	9/17/2018

Test Date:	10/3	Transformers	Level	III	Test Grade:
Syllabus Number	Title	Book Name	Lesson/Lab #	Date Covered	Homework Due Date
6	Electrical Safety	Transformers Textbook	Lesson 1	9/17/2018	9/19/2018
7	Special Transformers	Transformers Textbook	Lesson 2	9/19/2018	9/24/2018
8	Special Connections	Transformers Textbook	Lesson 3	9/24/2018	9/26/2018
9	Selection and Installation	Transformers Textbook	Lesson 4	9/26/2018	10/1/2018
10	Maintenance and Troubleshooting	Transformers Textbook	Lesson 5	10/1/2018	10/3/2018

Test Date:	11/5	Motor Control	Level	II	Test Grade:
Syllabus Number	Title	Book Name	Lesson/Lab #	Date	Due Date
11	Basic Electronics for Motor Control Devices	Motor Control (J209.H)	Lesson 10	10/3/2018	10/8/2018
12	More Electronics for Motor Control Devices	Motor Control (J209.H)	Lesson 11	10/8/2018	10/10/2018
13	Solid-State Motor Control Pilot Devices	Motor Control (J209.H)	Lesson 12	10/10/2018	10/15/2018
14	Solid-State Relays	Motor Control (J209.H)	Lesson 13	10/10/2018	10/15/2018
15	Motor Control Centers	Motor Control (J209.H)	Lesson 14	10/15/2018	10/17/2018
16	Special Purpose Starters	Motor Control (J209.H)	Lesson 15	10/17/2018	10/22/2018
17	Electronic Programmable Timers	Motor Control (J209.H)	Lesson 16	10/22/2018	10/24/2018
18	Special Control Components	Motor Control (J209.H)	Lesson 17	10/24/2018	10/29/2018
19	AC Motor Speed Control	Motor Control (J209.H)	Lesson 18	10/29/2018	11/5/2018

Test Date:	12/3	Motor Control	Level	III	Test Grade:
Syllabus Number	Title	Book Name	Lesson/Lab #	Date	Due Date
20	DC Motor Control	Motor Control (J209.H)	Lesson 19	11/5/2018	11/7/2018
21	Understanding Analog Signals	Motor Control (J209.H)	Lesson 20	11/7/2018	11/12/2018
22	Analog Pilot Devices	Motor Control (J209.H)	Lesson 21	11/7/2018	11/12/2018
23	Working With Solid-State Devices in Motor Control	Motor Control (J209.H)	Lesson 22	11/12/2018	11/14/2018
24	Variable Frequency Drives	Motor Control (J209.H)	Lesson 23	11/14/2018	11/26/2018
25	Programmable Logic Controllers	Motor Control (J209.H)	Lesson 24	11/14/2018	11/26/2018
26	Controlling Synchronous, Stepper, and Servo Motors	Motor Control (J209.H)	Lesson 25	11/14/2018	11/26/2018
27	Networked Motor Control	Motor Control (J209.H)	Lesson 26	11/26/2018	11/28/2018
28	Troubleshooting Electrical Systems	Motor Control (J209.H)	Lesson 27	11/28/2018	12/3/2018

Test Date:	1/21	Code Calculations	Level	II	Test Grade:
Syllabus Number	Title	Book Name	Lesson/Lab #	Date	Due Date
29	Determining Conductor Ampacity	Code Calculations (J227.I)	Lesson 2	12/3/2018	12/10/2018
30	Finalizing Ampacity Calculations	Code Calculations (J227.I)	Lesson 3	12/5/2018	12/10/2018
31	Performing Box Size and Fill Calculations	Code Calculations (J227.I)	Lesson 5	12/10/2018	12/12/2018
32	Calculating Raceway Fill	Code Calculations (J227.I)	Lesson 6	12/12/2018	1/7/2019
33	Introduction to Electrical Load Calculations	Code Calculations (J227.I)	Lesson 12	1/7/2019	1/9/2019
34	Range and Appliance Calculations	Code Calculations (J227.I)	Lesson 13	1/9/2019	1/14/2019
35	Calculating the Parameters of Multifamily Dwelling Loads in Accordance with the NEC	Code Calculations (J227.I)	Lesson 15	1/14/2019	1/16/2019
36	Calculating the Parameter of Commercial Loads in Accordance with the NEC	Code Calculations (J227.I)	Lesson 16	1/16/2019	1/21/2019

Test Date:	2/20	PLC	Level	I	Test Grade:
Syllabus Number	Title	Book Name	Lesson/Lab #	Date	Due Date
37	Introduction to Programmable Logic Controllers	Programmable Logic Controllers (J237.H)	Lesson 1	1/21/2019	1/23/2019
38	Input Devices and Output Actuators	Programmable Logic Controllers (J237.H)	Lesson 2	1/23/2019	1/28/2019
39	Introducto to PLC Programming I	Programmable Logic Controllers (J237.H)	Lesson 3	1/28/2019	1/30/2019
40	Introduction to PLC Programming II	Programmable Logic Controllers (J237.H)	Lesson 4	1/30/2019	2/4/2019
41	Programming Timers	Programmable Logic Controllers (J237.H)	Lesson 5	2/4/2019	2/6/2019
42	Programming Counters	Programmable Logic Controllers (J237.H)	Lesson 6	2/6/2019	2/11/2019
43	Arithmetic and Move Instructions	Programmable Logic Controllers (J237.H)	Lesson 7	2/11/2019	2/13/2019
44	BCD Conversion and Comparison Instructions	Programmable Logic Controllers (J237.H)	Lesson 8	2/13/2019	2/18/2019
45	Program Control Instructions	Programmable Logic Controllers (J237.H)	Lesson 9	2/18/2019	2/20/2019

Test Date:	3/18	PLC	Level	II	Test Grade:
Syllabus Number	Title	Book Name	Lesson/Lab #	Date	Due Date
46	Indirect and Indexed Addressing	Programmable Logic Controllers (J237.H)	Lesson 10	2/25/2019	2/25/2019
47	Data Handling and Manipulation Instructions	Programmable Logic Controllers (J237.H)	Lesson 11	2/25/2019	2/25/2019
48	PLC Sequencer Functions	Programmable Logic Controllers (J237.H)	Lesson 12	2/25/2019	2/27/2019
49	Analog Sensors and Control Systems	Programmable Logic Controllers (J237.H)	Lesson 13	2/27/2019	2/27/2019
50	PLC Standard IEC 61131-3 Function Block diagram	Programmable Logic Controllers (J237.H)	Lesson 14	2/27/2019	2/27/2019
51	Intermittent and Continuous Process Control	Programmable Logic Controllers (J237.H)	Lesson 15	2/27/2019	3/4/2019
52	PLC Standard IEC 61131-3 Structured Text Language	Programmable Logic Controllers (J237.H)	Lesson 16	3/4/2019	3/4/2019
53	PLC Standard IEC 61131-3 Sequential Function Chart	Programmable Logic Controllers (J237.H)	Lesson 17	3/4/2019	3/4/2019
54	Industrial Networks and Distribution Control	Programmable Logic Controllers (J237.H)	Lesson 18	3/4/2019	3/18/2019

Test Date:	3/25	Code & Practices 4	Level	I	Test Grade:
Syllabus Number	Title	Book Name	Lesson/Lab #	Date	Due Date
55	Installing Electrical Services	Code & Practices 4/5 (J236.I)	Lesson 11	3/20/2019	3/20/2019
56	Swimming Pools, Fountains, and Similar Installations	Code & Practices 4/5 (J236.I)	Lesson 12	3/20/2019	3/20/2019
57	Understanding Emergency and Standby Systems Installation Requi	Code & Practices 4/5 (J236.I)	Lesson 13	3/20/2019	3/20/2019
58	Over 600 Volt Installations	Code & Practices 4/5 (J236.I)	Lesson 14	3/20/2019	3/20/2019
59	Remote-Control, Signaling, and Power-Limited Circuits	Code & Practices 4/5 (J236.I)	Lesson 15	3/20/2019	3/20/2019
60	Changes to the NEC - Part I	Code & Practices 4/5 (J236.I)	Lesson 16	3/20/2019	3/20/2019
61	Changes to the NEC - Part II	Code & Practices 4/5 (J236.I)	Lesson 17	3/20/2019	3/20/2019
62	Preparing to Take NEC Competency Examinations	Code & Practices 4/5 (J236.I)	Lesson 18	3/20/2019	3/20/2019

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Test Date:	4/1	Torque	Level	I	Test Grade:
Syllabus Number	Title	Book Name	Lesson/Lab #	Date	Due Date
63	Torque Theory	Torque (J242)	Lesson 1	3/25/2019	4/1/2019
64	Threaded Fasteners Basics	Torque (J242)	Lesson 2	3/25/2019	4/1/2019
65	Introduction to Torque Applications	Torque (J242)	Lesson 3	3/25/2019	4/1/2019
66	Torque Products	Torque (J242)	Lesson 4	3/25/2019	4/1/2019
67	Real World Electrical Torque Applications	Torque (J242)	Lesson 5	3/25/2019	4/1/2019

Test Date:	4/8	Orientation	Level	III	Test Grade:
Syllabus Number	Title	Book Name	Lesson/Lab #	Date Covered	Homework Due Date
68	The National Electrical Benefit Fund (NEBF)	Orientation	Lesson 17	4/3/2019	4/8/2019
69	After Apprenticeship	Orientation	Lesson 18	4/3/2019	4/8/2019
70	Soon to be an Instructor	Orientation	Lesson 19	4/3/2019	4/8/2019
71	Your National Program	Orientation	Lesson 20	4/3/2019	4/8/2019
72	Keys to Success-Motivation and Leadership	Orientation	Lesson 21	4/3/2019	4/8/2019
73	The National Labor Relations Board	Orientation	Lesson 22	4/3/2019	4/8/2019
74	The Economics of Unemployment	Orientation	Lesson 23	4/3/2019	4/8/2019
75	The Realities of Construction	Orientation	Lesson 24	4/3/2019	4/8/2019

August 2018

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

September 2018

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

Planning	Total Lessons	80
Tests = 10	# of classes before AOTYE	45
	Total # of Classes for Material	54
	Total # of Classes Off	27

October 2018

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

November 2018

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

December 2018

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

JANUARY

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

February 2019

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		

March 2019

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

April 2019

Sun	Mon	Tue	Wed	Thu	Fri	Sat
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

MAY

Su	Mo	Tu	We	Th	Fr	Sa
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

	= Guest Instructor		= Mandatory Union Meeting
	= AOTYE		= Class Day
	= No School		= First/Last Day of Class
	= Test Night		= Need a Substitute