

## HMI212

## Installation Methods II – Course Plan

Week	Outcomes	Format	Hrs	Topic/Content	Readings	Assignments	Assessment	Resources
1, 2	1	Lecture	4	<p><b><i>Review of HMI 202</i></b></p> <p><b><i><u>Demonstrate the ability to correctly select and size overcurrent protection</u></i></b></p> <p><b><i><u>Demonstrate installation common to residential electrical wiring systems and equipment in compliance with the CEC.</u></i></b></p>	Review codes sect. 6,8,10,26 and <b>HMI 202</b> Unit 16	Questions from text as assigned by instructor	Hand in and/or take up	CEC, Residential Electrical Wiring for all classes
		Lab (cont. in week 3)	4	<p><b><i><u>Apply: Demonstrate</u></i></b> the correct installation procedures and wiring connections for common residential switching devices and outlets with strict adherence to the CEC and NBC.</p>	Code Sec. 14	Lab assignment	Evaluation of practical lab assignment	
				<p><b><i><u>Demonstrate</u></i></b> proper installation procedures required for the following wiring methods while insuring strict adherence to CEC regulations: non-metallic sheathed cable, armoured cable, mineral-insulated cable, metallic sheathed cable, rigid / flexible conduit, rigid metallic tubing, and electrical non-metallic tubing. (Section 12)</p> <p><b><i><u>Demonstrate</u></i></b> the proper use of common hand tools in the electrical trade.</p>	Ref. unit 17		Evaluation of practical lab assignment	
3	1	Lecture	2	<p><b><i><u>General regulations regarding Class 2 signal and remote control circuits (Sect. 16 of CEC).</u></i></b></p>	Unit 22 <b>Sect. 16</b>	Questions as assigned by instructor	Hand in and/or take up	
		Lab	2	Continue labs as indicated in weeks 1,2		Lab assignment		

4	1	Lecture	4	<b><i>Review / Test #1</i></b>			Test # 1	
5,6, ½ of 7	1	Lecture	5	<b><i>Identify installation requirements for electric heating installed in single dwelling occupancies as specified in the installation of electrical equipment, section 62 of the CEC</i></b>  <b><i>Apply</i></b> <b><i>Prepare a layout drawing for mast and installation.</i></b>	Unit 22 Code sec. 62	Questions as assigned by instructor	Hand in and/or take up	
		Lab	5	<b><i>Demonstrate the ability to install a complete 100 amp residential service including the following circuits: hot water heaters, range outlets, dryer outlet, split duplex receptacle, bathroom outlet, outside weather-proof receptacle and general branch circuits, etc. (Sections 6, 12, 26)</i></b>	Section 14, 16	Lab assignment	Evaluation of practical lab assignment	
½ of 7 8, 9	1	Lecture	5	<b><i>Identify requirements for the installation of pools, tubs and spas (Section 68).</i></b> <b><i>Describe enclosures and fittings to electrical installations.</i></b>	Units 13, 23  Unit 20	Questions as assigned by instructor	Hand in and/or take up	
		Lab	5	<b><i>Apply</i></b> <b><i>Demonstrate requirements for the installation of pools, tubs and spas (Section 68) including the proper installation of enclosure and fittings common to the electrical trade.</i></b>		Lab assignment	Evaluation of practical lab assignment	
10	1	Lecture	4	<b><i>Review / Test #2</i></b>			Test #2	

11	1	Lecture	2	<b><u>Interpret</u> the CEC regulations regarding the installation of fire alarms, smoke, heat and carbon monoxide detectors located in dwelling units. (sec. 32)</b> <b><u>Describe</u> The CEC regulations for fire alarms.</b>	Unit 21  Unit 24	Questions as assigned by instructor	Hand in and/or take up	
		Lab	2	<b><u>Demonstrate</u> the CEC regulations regarding the installation of fire alarms, smoke, heat and carbon monoxide detectors located in dwelling units.</b>		Lab assignment	Evaluation of practical lab assignment	
12, 13	1	Lecture	4	<b><u>Identify</u> installation requirements for lighting installed in single dwelling occupancies as specified in the installation of electrical equipment (section 30 of the CEC)</b> <b><u>Identify</u> switch control of lighting circuits, receptacle bonding and induction heating resulting from unusual switch connections.</b>	Unit 10  Unit 8	Questions as assigned by instructor	Hand in and/or take up	
		Lab	4	<b><u>Demonstrate</u> the correct installation procedures and wiring connections for common residential switching devices and outlets ensuring strict adherence to the CEC and to National Building Code (NBC) regulations.</b> <b><u>Demonstrate</u> switch control of lighting circuits</b>		Lab assignment	Evaluation of practical lab assignment	
14	1	Lecture	2	<b><u>Identify</u> requirements for television, phone, data and home automation systems (Sections 54 &amp; 60).</b> <b><u>Identify</u> temporary wiring installations requirements for building or project under construction or demolition (section 76) of the CEC.</b>	Unit 24 Sect. 54, 60	Questions as assigned by instructor	Hand in and/or take up	

		Lab	2	<u>Apply</u> Install / prepare for television outlets, antennas, cable, etc. Install / prepare for CATV installation requirements. Prepare conduit for telephone conductors, boxes and outlets.		Lab assignment	Evaluation of practical lab assignment	
15	1	Lecture	4	<b><i>Review / Test # 3</i></b>			Test #3	
16	1			Take up test #3				