



**Construction Electrician (NOC 7241) Solar Photovoltaic (PV) Systems Certified**

**EXAM Blueprint**

<b>Section Number</b>	<b>Section Name</b>	<b>Percent Weighting (100%)</b>
<b>1</b>	<b>Solar Photovoltaic (PV) Systems Safety</b>	<b>23%</b>
	1.1 Complies with legal requirements (e.g., code), standards and project-specific policies and procedures applicable to Solar PV Systems	6%
	1.2 Performs hazard analysis and risk assessment	5%
	1.3 Controls risks related to multiple energy sources	6%
	1.4 Uses safety equipment	6%
<b>2</b>	<b>Solar Photovoltaic (PV) Pre-Installation On-Site Review</b>	<b>15%</b>
	2.1 Interprets design documents	6%
	2.2 Reviews site-specific installation documents	5%
	2.3 Develops implementation strategy	4%
<b>3</b>	<b>Solar Photovoltaic (PV) Systems Installation</b>	<b>49%</b>
	3.1 Verifies site conditions with reference to design documents	3%
	3.2 Installs modules and arrays	6%
	3.3 Installs inverters	4%
	3.4 Installs bonding, grounding, surge and lightning protection	6%
	3.5 Installs electrical protection and controls (e.g. disconnects overcurrent protection, combiner boxes.)	5%
	3.6 Installs utility metering equipment	2%
	3.7 Connects to distribution systems	5%
	3.8 Installs batteries and charge controllers	5%
	3.9 Installs energy monitoring and control systems	4%
	3.10 Coordinates inspection with authority having jurisdiction	5%
	3.11 Commissions PV systems	4%
<b>4</b>	<b>Solar Photovoltaic (PV) Systems Troubleshooting and Maintenance</b>	<b>13%</b>
	4.1 Monitors system performance	2%
	4.2 Troubleshoot PV system problems	5%
	4.3 Maintains PV Systems	3%
	4.4 Decommission PV System for Repair	3%