



# Industrial Electricians: Certificate

<http://catalog.ivcc.edu/guidesheet/certificate/industrialelectricians/>



This Career Pathway Plan of Study is to serve as a guide as coursework may change. Other career planning materials may be used as learners continue on a career path. Courses listed within this plan are only recommended coursework and should be individualized to meet each learner's educational and career goals.

EDUCATION LEVELS	GRADE	English/ Language Arts	Math	Science	Social Studies/ Sciences	Other Required Courses Other Electives Recommended Electives Learner Activities	Career and Technical Courses and/or Degree Major Courses	SAMPLE Occupations Relating to This Pathway
SECONDARY	9	English I	Algebra I Geometry	Physical Science	World History	Consumer Ed, Am. Gov., Speech  <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;">             11th grade; Take IVCC Placement test           </div>		<ul style="list-style-type: none"> <li>•Appliance Repairer</li> <li>•Broadcast Technician</li> <li>•Cable Installer and Repairer</li> <li>•Construction Tradesperson</li> <li>•Electrical Engineering Technician</li> <li>•Electronics Repairer and Repairer</li> <li>•Elevator Installer and Repairer</li> <li>•Heating, Air Conditioning, Refrigeration Technician</li> <li>•Home Inspector</li> <li>•Industrial Machinery Mechanic</li> <li>•Lineworker</li> <li>•Security Systems Technician</li> </ul>
	10	English II	Geometry Algebra II	Biology			Drafting/other one semester elective, Electricity, Welding, Woods, Machine Skills	
	11	AP English Language English III	Algebra II Pre-Calculus	Chemistry	US History			
	12	English IV	Pre-Calculus Calculus	Physics			<b>DUAL CREDIT COURSES*</b> (see high school counselor) The following courses may be offered as dual credit at the Area Career Center & some high schools <b>ELE 1206, EMS 2200</b>	
To view detailed descriptions of the below courses, go to: <a href="http://catalog.ivcc.edu/courses/">http://catalog.ivcc.edu/courses/</a>								
POSTSECONDARY	Year 13					<u>REQUIRED COURSES</u> <u>FALL (Year 13)</u> <b>ALH 1221</b> Industrial First Aid OR <b>HPE 1004</b> First Aid OR <b>EMS 2200*</b> Emergency Medical Responder	<u>FALL</u> <b>ELE 1200</b> Basic Industrial Electricity I <u>SPRING</u> <b>ELE 1201</b> Basic Industrial Electricity II	<ul style="list-style-type: none"> <li>•Appliance Repairer</li> <li>•Broadcast Technician</li> <li>•Cable Installer and Repairer</li> <li>•Construction Tradesperson</li> <li>•Electrical Engineering Technician</li> <li>•Electronics Repairer and Repairer</li> <li>•Elevator Installer and Repairer</li> <li>•Heating, Air Conditioning, Refrigeration Technician</li> <li>•Home Inspector</li> <li>•Industrial Machinery Mechanic</li> <li>•Lineworker</li> <li>•Security Systems Technician</li> </ul>
	Year 14	<u>FALL</u> <b>ENG 1205**</b> Written Communication Skills for Bus, Ind & Tech OR <b>SPH 1204**</b> Oral Communication Skills for Bus, Ind & Tech				<u>FALL</u> <b>ELE 1202</b> Motors and Controls I <u>SPRING</u> <b>ELE 1203</b> Motors and Controls II <b>ELE 1206*</b> Electrical Wiring		
	Year 15					<u>FALL</u> <b>ELE 1204</b> Programmable Logic Controllers I <b>ELT 1200</b> Beginning Industrial Electronics <u>SPRING</u> <b>ELE 1205</b> Programmable Logic Controllers II <b>ELT 1203</b> Industrial Instrumentation		
	Year 15 & 16 Continue courses in the area of specialization							

\*\* Go to [www.catalog.ivcc.edu/autosubstitutions/](http://www.catalog.ivcc.edu/autosubstitutions/) to view allowed substitutions for required courses that may be offered as Dual Credit/Dual Enrollment at area high schools 2/12/16