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STATE OF MICHIGAN MODEL TRAINING PROGRAM FOR RELATED TECHNICAL INSTRUCTION (RTI) FOR APPRENTICE ELECTRICIANS

PROGRAM APPROVED BY THE ELECTRICAL ADMINISTRATIVE BOARD
OCTOBER 2, 2009.

Each electrical apprentice must complete an academic program of not less than 576 RTI hours. Many programs approved by the United States Department of Labor Office of Apprenticeship (USDOLOA) are in excess of the minimum 576 hours. A total of up to 1000 RTI hours accrued through electrical apprenticeship training programs that meet the standards of the USDOLOA and is approved by the Electrical Administrative Board (EAB) can be credited towards the 8000 hours in not less than 4 years required by PA 217 of 1956, The Electrical Administrative Act, to qualify an individual to sit for the State of Michigan journeyman electrical examination. Additional requirements to qualify for examination include 4 years of registration as an electrical apprentice in the State of Michigan and participation in an electrical apprenticeship training program approved through the USDOLOA or a training program approved by the EAB.

While the emphasis on topics may vary somewhat to reflect the work of the employer and/or program sponsor, there are specific courses of RTI that must be included in the core of all electrical apprenticeship training programs. Time requirements for each core element are listed next to the subject matter where applicable. The core elements must be completed in the 4 year period prior to qualifying for the State of Michigan journeyman electrical examination. The minimum 576 RTI hours shall consist of 450 core hours of the subjects listed with contact hours indicated next to them. The remaining 126 hours of RTI shall consist of any of the topics listed or other course offerings that are part of an electrical training program approved by the USDOLOA or the Electrical Administrative Board. Course selections are to be made by the student or employer/sponsor to reflect educational needs of apprentices based on the student's needs or the sponsor's focus of work.

The purpose of the RTI is to provide appropriate classroom training to all electrical apprentices. This training along with on the job experience will benefit electrical apprentices by supplying them with the knowledge necessary to work safely in the electrical industry. In addition, electrical apprentices will be better prepared to pass electrical licensing examinations and the overall electrical apprentice training program will make them more valuable to employers who demand skilled and knowledgeable workers.

Providing for Michigan's Safety in the Built Environment

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DELEG is an equal opportunity employer/program.

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The method of RTI delivery may vary with the RTI provider, such as modular, on-line, distance learning or a traditional classroom setting. The RTI provider must meet the USDOLOA standards or be approved by the Electrical Administrative Board. RTI will be quantifiable and tracked. As stipulated above the core training hours required as part of an approved electrical apprenticeship must be earned while the electrical apprentice is in the 4 year electrical apprentice registration cycle.

Below is a list of courses and hours that may be included as part of the core electrical training program. Areas of instruction that are part of the core hours of training required are indicated by the hours required adjacent to the course category.

	<u>Hours</u>		<u>Hours</u>
Basic HVAC		Material Identification	10
Branch Circuit Distribution	45	Mathematics	30
Blueprint reading	10	Motor Controls	60
Circuit Diagram Interpretation		Motors	30
Communications/Technical Writing		National Electrical Code	60
Conduit Fabrication		OHSA/Safety Awareness	10
Digital Electronics		Overcurrent Protection	30
Distributed Control/Process Control		Programmable Controllers	15
Electrical Theory	60	Remote Control Wiring	
Electrical Grounding	30	Residential Control Systems	
Electronics			
Entertainment/Sound Systems		Security Systems	
Fiber Optics		Systems Analysis, Repair & Certification	
Fire Alarm Systems	15	Telecommunication Systems	
		Instrumentation	
Industry Orientation (Michigan Laws & Rules)	15		
		Tool Identification	
Intelligent Wiring Systems		Transformers	30
Job Information		Video Distribution	
Lightning Protection Systems			
Local Area Network Systems			
Low Voltage Systems			