

FD11 Electrical Maintenance

Course Length: 2 days

<i>Course Synopsis:</i>	This course will familiarize the students with the skills to effectively maintain, diagnose, troubleshoot, and repair the base Nachi FD11 Controller cabinet and Nachi robot arm. To insure sufficient hands-on experience and encourage instructor / trainee discussion, Nachi recommends a maximum class size of six (6) trainees which allows for a minimum of one (1) training robot being made available for each group of three (3) trainees. Performance objectives will be met utilizing a combination of 45% classroom lectures and 55% hands-on lab projects, dependant upon the skill level of the students as a group.
<i>Who Should Attend:</i>	This course is intended for production skilled tradesmen, engineering personnel and workers whose responsibilities include electrical maintenance and repair of the FD11 Controller and electrical robot arm operation.
<i>Prerequisites:</i>	Trainees scheduled for this course should have completed a Nachi FD11 or AX Operation Programming course or have equivalent work experience with the FD11 or AX controller. Use of a digital volt meter and prior machine control troubleshooting is required.
<i>What You Will Learn:</i>	<ul style="list-style-type: none"> • Robot Safety • General Electrical Safety • Basic Operation • Help Messages • Major Robot System components • Control System Overview • Power Distribution • Servo Drive System Analysis • PC Board Description and Function • Schematic Diagram Analysis • Error Code Troubleshooting • Control Cabinet Maintenance • Error Code Logging • Control Cabinet Monitoring • Cabinet Component Replacement Procedure • Power Supply Replacement and Adjustments • Hands-On Troubleshooting • Robot Arm Wiring • Robot Encoder System • Encoder Reset Procedure • Encoder Offset Procedure
<i>Time:</i>	Class time is Thursday – Friday 7:30 a.m. – 3:30 p.m. Breaks are scheduled throughout the day and lunch will be provided at roughly 11:30 a.m.
<i>Course Materials:</i>	Course materials are provided by the instructor. We may change or alter course topics to best suit the classroom situation.
<i>Locations:</i>	The Nachi Training Center is located in Novi, Michigan. Courses can also be conducted at our customer's facility upon request, please contact for special pricing information.
<i>Related Courses:</i>	FD11 Operation Programming
<i>Registration:</i>	Courses are scheduled in accordance to customer requests and requirements. Please visit our website www.nachirobotics.com or call (248) 305-6545 for pricing and availability.

***Students must wear proper attire – long pants, leather shoes, and safety glasses recommended.**