

## A-5000

### ALLEN-BRADLEY SLC-500 Programmable Controllers/Level One Maintenance & Troubleshooting

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<b>Course Description</b>	This 36 hour training program allows students to gain hands-on experience in the troubleshooting and maintenance of the Allen-Bradley SLC-500 programmable controller. Hardware and software troubleshooting techniques are heavily emphasized throughout the course. The instructor will use example of actual troubleshooting experiences to enhance the learning process.
<b>Topical Outline</b>	<ul style="list-style-type: none"><li>▪ Introduction to Programmable Controllers</li><li>▪ Hardware Description/Configuration<ul style="list-style-type: none"><li>- CPU Processor Module</li><li>- Input/Output Modules</li></ul></li><li>▪ Safety Considerations</li><li>▪ IBM Compatible Terminal Operation</li><li>▪ Program Entry and Interpretation<ul style="list-style-type: none"><li>- Ladder Diagram Instructions</li><li>- Timers and Counters</li><li>- Data Manipulation Instructions</li><li>- Program Control Instructions</li></ul></li><li>▪ Use of Software Utilities in Troubleshooting (Force, Search, Histograms)</li><li>▪ Program Editing</li><li>▪ Troubleshooting<ul style="list-style-type: none"><li>- Software</li><li>- Hardware Components Including Processor and I/O</li></ul></li><li>▪ Peripheral Operations<ul style="list-style-type: none"><li>- Program Loading</li><li>- Program Printing</li></ul></li></ul>
<b>Program Software</b>	Training is available utilizing Rockwell Software APS Series, AI Series and RSLogix500 software products
<b>Prerequisites</b>	This course is designed to meet the needs of both plant maintenance and engineering personnel. Students should be familiar with relay ladder logic
<b>Course Length</b>	36 hours
<b>CEU's</b>	3.3
<b>Objectives</b>	Students completing this course should be able to: <ul style="list-style-type: none"><li>▪ Identify the hardware components of the SLC-500 programmable controller.</li><li>▪ Configure and install a SLC-500 programmable controller system.</li><li>▪ Develop and interpret simple programs utilizing an IBM compatible terminal.</li><li>▪ Troubleshoot programs and isolate faults within the SLC-500 system.</li><li>▪ Properly use peripheral devices to store, copy and print programs.</li></ul>