

## A-5200

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

---

<b>Course Description</b>	<p>This 32-hour training program allows students to gain hands-on experience using the advanced program instructions and communications features of the Allen-Bradley SLC-500 programmable controller. Application projects emphasizing hardware and software troubleshooting techniques are used throughout the course to create a hands-on learning environment.</p>
<b>Topical Outline</b>	<ul style="list-style-type: none"><li>▪ Review of SLC-500 Hardware</li><li>▪ Advanced Programming Terminal Techniques:<ul style="list-style-type: none"><li>- Specialized Edit Keys</li><li>- Documentation</li><li>- Utilities</li></ul></li><li>▪ Instruction Familiarization:<ul style="list-style-type: none"><li>- Indirect Addressing</li><li>- File Fill</li><li>- File Copy</li><li>- FIFO/LIFO</li><li>- Sequencer</li><li>- Bit Shift</li></ul></li><li>▪ Processor Communications Message (MSG) Instruction</li><li>▪ SLC-500 Network Communications:<ul style="list-style-type: none"><li>- RS 232 Serial</li><li>- DH 485</li><li>- DH Plus</li><li>- Ethernet</li></ul></li><li>▪ Analog I/O<ul style="list-style-type: none"><li>- Module Configuration and Scaling</li></ul></li><li>▪ Program Interrupt Instructions:<ul style="list-style-type: none"><li>- Discrete Input Interrupt</li><li>- Selectable Timed Interrupt</li></ul></li><li>▪ Overview Topics:<ul style="list-style-type: none"><li>- (Time Permitting)</li><li>- PID Instruction</li></ul></li></ul>
<b>Program Software</b>	<p>Training is available utilizing Rockwell Software APS Series, AI Series and RSLogix500 software products.</p>
<b>Prerequisites</b>	<p>Students should have successfully completed Intellect Controls Group course A-5000 or have knowledge equivalent to the course description. THIS IS NOT AN ENTRY LEVEL TRAINING PROGRAM.</p>
<b>Course Length</b>	<p>32 hours</p>
<b>CEU's</b>	<p>3.0</p>
<b>Objectives</b>	<p>Persons successfully completing this course will be able to:</p> <ul style="list-style-type: none"><li>▪ Enter and interpret programs utilizing the advanced file instructions of the SLC-500</li><li>▪ Troubleshoot control programs utilizing all available instructions of the SLC-500</li><li>▪ Troubleshoot hardware, communications and process faults using indicators, message displays and a programming terminal.</li><li>▪ Properly connect and establish communications over a SLC-500 network.</li></ul>