

## **ATR/PCI Laboratory Report Requirements**

### **Overview:**

ATR and PCI labs provide the student with a “hands-on” experience of the theory they learn in lecture. Since the ability to communicate information is as important as obtaining the information, every student will have to submit a lab report for each lab they complete. The requirements for lab reports are detailed below.

### **Report Requirements:**

Every student must submit a laboratory report. The lab report must be:

- Submitted one (1) week after completion at the beginning of the next lab meeting.
- Submitted with a cover sheet providing the course number and section, lab number and/or title, the student’s name and the names of any lab partners, and the date of the experiment. The cover sheet’s text size should be a 16 point font.
- Typed in double-spaced text using a 12 point font.

If a lab is missed, the lab report is still due one (1) week after the class performed that lab. It is the student’s responsibility to schedule lab time to complete the lab and submit the report on the due date. Late labs may have points deducted at the instructor’s discretion.

### **Contents and Grading:**

1. 5pts. Cover sheet: As described above.
2. 20pts. Introduction/Procedure: The student should provide an introduction stating the purpose of the lab and what he hoped to learn from this lab. If there is a written procedure, it should be submitted as part of the lab report. If there was no written procedure followed, the student should provide a summary of what he did in this lab.
3. 20pts. Data/Programs/Schematics: This section should include data recorded during the lab and the code, ladder logic, or schematics that were used in, or designed for, the lab. These items should be done in CAD when available but may be hand-drawn as circumstances require. Multiple items should be numbered (e.g. Fig. 1, Dwg. A, etc.) and referenced by number in the lab. These points will be rolled into the Conclusion if this section is not applicable to the lab.
4. 15pts. Questions: Answer any questions presented in the lab, either in the written procedure or by your instructor. These points will be rolled into the Conclusion if this section is not applicable to the lab.
5. 20pts. Conclusion: This section of the lab should cover the “What did I learn?” details of the lab and the fundamental concepts explored within the lab. The student should give a summary of how the lab worked versus what was expected in the Introduction. He should include a discussion of what problems were encountered during the lab and how these problems were resolved. The student should also describe how this lab relates to the material covered in the lecture.
6. 15pts. Grammar/Spelling: The student should submit a report that has been spell-checked, grammar-checked, and has an overall use of good diction. The ILC’s Writing Center can provide assistance to any student needing help writing a report but cannot provide assistance on the technical content of the report.
7. 5pts. Discretionary: These points may be applied for exceptional work at the discretion of the instructor. Otherwise, the maximum grade received on a lab report will be 95%.