3.930/3.931 Internship Report Guidelines
Summer 2015

Due: September 29, 2015 (The due date for submittal of the report will be rigidly administered)

Submit to: Faculty Internship Advisor and Julia Hollingsworth-Brown (jholling@mit.edu)
Electronic copies are usually preferred (unless the faculty supervisor prefers paper).

Length: 3.930 reports are typically around 20 pages in length (minimum 10 pages of text double spaced), and 3.931 reports are 25 or 30 pages.

The following is offered to provide general guidance:

- The 3.930/3.931 report you will write, covering the first/second summer internship, must satisfy academic requirements which are not necessarily of interest to the company. You'll want to keep this in mind as you develop your project.
- In rare cases, perhaps in manufacturing, the company may not care why the materials you are investigating perform as they do but of course your MIT readers will care, so you may occasionally find it necessary to go beyond your company's list of objectives. For instance, your company may refer to materials only by trade names. But you should attempt to find out just what these materials really are: their compositions, how they have been processed, their microstructures, etc.
- Your report should be written at a fairly high technical level. You should seek to use the academic technical background you have accumulated. In some cases, it might be appropriate to place your project work in the context of materials processing structure-properties-performance relationships. If you need help with any of this, don't hesitate to contact your Faculty Internship Advisor for assistance. In some cases, it might be necessary for your Faculty Advisor to contact your Project Supervisor to ensure that all three of you are "on the same page" regarding the project's industrial and academic goals.
- Give some real thought to the expository style of your report. This is a professional document, not a "how I spent my summer vacation" letter. As you do the literature study which is a part of most projects, note the writing styles in order to develop a sense of appropriate phrasing. Generally avoid colloquialisms and personal comments. Given the importance of this document, you may want to work with the MIT Writing and Communication Center (http://cmsw.mit.edu/writing-and-communication-center/) as you prepare the report for submittal.
- The company may also want a final report, but this may or may not meet our
academic goals. For instance, the company report might include proprietary information which cannot be released outside the company. But your academic report must be substantive and make sense on its own; so in some cases the company and academic reports might be quite different.

- It will not always be possible to write a suitable document before leaving the company, and in many cases the faculty will require the document be revised several times (just as theses are). To be sure you are able to do this; you may need to bring computer files (text, graphics, spreadsheets, etc.) back with you to permit rewriting and even re-analysis of your data. However, be sure that the report you intend to submit for 3.930/3.931 has been cleared for release by the company.

Reminder to 3.931 Students: The students are required to complete a public presentation of second internship. The date will be determined early in the fall term (estimated to be held early/mid November 2015).
Department of Materials Science and Engineering
Massachusetts Institute of Technology

DMSE Internship Program

3.930 or 3.931

Report Title

Author's Name

Work Performed at ADD COMPANY NAME

Supervisor's Name
Address
Telephone, E-mail

Internship Faculty Advisor
Telephone, E-mail

Summer 2015                         Date Report Submitted

3                                      May 2015
Additional Report Format: typically in the format of a journal article or a formal 3.014 report

1. Abstract (key words)
2. Acknowledgements
3. Introduction (background)
4. Description of work (experimental procedures)
5. Results
6. Discussion
7. Conclusion
8. References
9. Tables (might alternatively be contained within the text)
10. Figures (might alternatively be contained within the text)
11. Achievements (or lack of, difficulties, plans for future)
MIT COURSE III SB INTERNSHIP PROGRAM

Frequently Asked Questions

1. **If I have a problem with my internship report due to my Company’s concern for confidentiality, what can I do?**

Your report and your presentation (seniors only) are MIT requirements of the Internship and cannot be waived. However, not everything that you do on your Internship need be reported and not everything about your work is confidential or proprietary. Hundreds of MIT Engineering theses are written each year based on off-campus work, some of which could be proprietary or even classified. MIT must evaluate the student’s ability to manage and carry out a project. The student must report or present this aspect of their work. MIT has no direct interest in a specific application, or the costs, or the intellectual property of the company. You can tell your story of managing and carrying out your project without violating any of the Company’s concerns. You can discuss how to do this with your advisor at any time but we encourage you to discuss it with the Company as early as possible.

2. **How long should my report be?**

Five pages is too short and 30 pages is too long. An average might be ten pages (double spaced) of text and an equal amount for figures, photographs, tables and references. The report substitutes for your thesis but it need not, and probably should not be in the thesis format. It represents only one summer and hence is not as extensive as a thesis.

Remember that you need not write everything that you did. You may have worked on several projects during your summer. Pick one and do it well, rather than doing several on a superficial or incomplete basis. Your report should state the problem, briefly describe your approach, provide some results, and importantly provide your critique of either the good or the bad (or both). No one has 100 percent success. Do not be afraid to describe a failure, but let us know what or how you would do it differently if someone were to ask you to fix the deficiencies (or scrap the entire idea). It is your thought process, not a recitation of how you spent your summer that interests us.

3. **How long should my presentation be (seniors only)?**

You will have 15 minutes maximum, so you should plan and organize to do it in 10 minutes. That means a maximum of ten slides. A short presentation is harder than a long one. You must organize it well and you should practice it out loud, preferably in front of a mirror, multiple times; timing it each time so you know it can be done in 10 minutes.