

## Practicum / Internship Process and Guidelines

### What is a Credited Practicum / Internship?

A credited Practicum / Internship is a position in a company, organization, or research lab that provides you with a professional-level educational or training experience while earning academic credit.

Credited Practicum / Internships can take place year-round and may or may not be paid. In addition, you must complete your Practicum / Internship prior to graduation.

### What's involved?

Putting together a Practicum / Internship has 4 major parts: your academic project, your Practicum / Internship Site Supervisor, your Faculty Sponsor, and, the most important part, YOU.

- You must provide a detailed description of what you will be doing and the time commitment it entails as well as a detailed description of your academic deliverables
- Your Site Supervisor is the person who agrees to directly supervise you at their place of business.
- Your Faculty Sponsor ensures the internship has an academic component and connects with your personal program of study.
- You are responsible for bringing together all of the parties above, ensuring that all parts of the registration process are completed by all parties, and confirming that your plans will comply with the requirements.

### How Do I Get a Company to Sponsor a Practicum / Internship?

Students find and secure Practicum / Internships on their own. The BCT Job Site can at times be useful.

### How Much Will It Cost Me? (Internship Credits, Hours and Costs)

Fall and Spring semester internship credits are part of regular tuition -- so no extra cost for full-time graduate students.

A Professional Masters Graduate Student can earn a total of 6 credits for Practicum / Internships during the course of completing your degree.

Credits are registered under ECO 698 (Practicums).

In addition to the academic work you and your Faculty Sponsor agree upon, you need to work 40 hours for each credit earned (1 credit = 40 hours). For any semester-long Practicum / Internships, the total number of hours worked divided by 40 determines the amount of credits earned. These are the recommended hours needed to earn credits over the course of a fall or spring 14-week semester:

Credits	Hours/Week	Hours/Semester
3	9	120
6	17.5	240

### What Does My Faculty Sponsor Do?

When you participate in a Practicum / Internship, your Faculty Sponsor will help determine the amount of credits you will earn and to guide and evaluate the academic component of your placement. Although the Practicum / Internship will be a job, it is also an academic experience, and the grade and credit you receive will be based on the academic component, the Practicum Report. Choose a Faculty Sponsor whose academic work is closely related to your internship field.

### What's an Academic Practicum / Internship Contract?

Registration for all Practicums / Internships start with submitting a Department of Environmental Conservation Practicum Contract (ECO 698): [http://eco.umass.edu/wp-content/uploads/2008/01/ECO\\_IndepStudy\\_Practicum\\_Form\\_2013.pdf](http://eco.umass.edu/wp-content/uploads/2008/01/ECO_IndepStudy_Practicum_Form_2013.pdf). The contract is an agreement between you, your Faculty Sponsor, and your site supervisor that clearly states the academic content and expectations of your Practicum / Internship placement. You and your Faculty Sponsor will determine what kind of work you will do for your credit, what type of credit, and how many credits you will earn (3 or 6). You would include this information as an attachment to the Contract Form.

### UMass Rules About Credited Practicum / Internship

You can develop your own Practicum / Internship. However, you CANNOT work for family or in someone's private home for credit

If you are an international student, you MUST check with the International Programs Office (IPO) regarding work authorization allowed under your specific immigration status; please review the IPO guidelines for CPT approval at <https://www.umass.edu/ipo/iss/curricular-practical-training-cpt>. Call the IPO for assistance at 413-545-2710.

## Once You Accept a Practicum / Internship

During the Practicum / Internship, you must log (track) your weekly work hours and submit them to your Faculty Sponsor.

Towards the end of the Practicum / Internship, you will ask your Practicum / Internship Site Supervisor to submit a Final Evaluation Form to your Faculty Sponsor.

## Professionalism at the Practicum / Internship Site

University of Massachusetts Amherst Practicum / Internship participants are known for their professionalism in the workplace. As a Practicum / Internship participant you represent both your own professional character and the reputation of the University of Massachusetts. It is possible that you were given a Practicum / Internship on the basis of previously successful and professional UMass Practicum / Internship participants that impressed the company in the recent past. You are responsible for carrying that benefit through to future Practicum / Internship participants by maintaining the professional reputation of the university.

Complaints from your Site Supervisor will lead to discussions with your Faculty Sponsor, and Career Services.

A Practicum / Internship participant who feels under-utilized or under-valued at their site should seek a polite conversation with their Site Supervisor to improve working conditions and the working relationship.

A Practicum / Internship participant who feels unsafe or unsupported by their Site Supervisor should immediately contact their Faculty Sponsor. The University is here to ensure that your internship experience is beneficial, educational, productive, and fair.

## After the Practicum / Internship

To receive a grade, you and your Site Supervisor must equip your Faculty Sponsor with enough information to help determine your grade. From your Site Supervisor, that would be an Employer Evaluation sent to your Faculty Sponsor, which includes confirming your total number of work hours as well as a performance evaluation.

In addition, you must submit your Academic Project in the form of a Practicum Report to your Faculty Sponsor. It is a combination of this document coupled with the Site Supervisor's Employers Evaluation that will determine your grade.

Be sure to submit these ASAP so that your Faculty Sponsor has time to calculate and enter your grade before the grade submission deadline.

## Practicum Report

When you sign up for a Practicum, you are responsible for completing an internship with a sponsoring agency and producing a final document. You must submit a proposal, accompanying the ECO698 Practicum Contract Form (signed by you and the Faculty Sponsor), at the beginning of the term. Note: at the end of your practicum, the Faculty Sponsor will be deciding your grade based on you having met the specific objectives in your proposal along with the Employer Evaluation from your Site Supervisor.

Your proposal must address the following:

- What is the nature of the work to be conducted?
- What are your objectives?
- What will be your responsibilities?
- What will be the responsibilities of the sponsor in terms of your training?
- A brief description of the final paper that you will write.

Your proposal (typically 2-4 pages), from which you will develop your paper should include the following:

- Nature of the practicum and its importance.
- What is innovative, original, new, or important about your practicum.
- Clear explanation of duties.
- Detailed description of expected deliverables.
- Timeline for mid-semester evaluation of the work.

The Practicum Report Document should include the following components. (Note: practicums that involve lab and research experience will follow the scientific format described in Appendix A- – How to Write a Scientific Report.)

### Title Page:

- Title should represent the practicum.
- Your name.
- Semester and year of practicum.
- Faculty Sponsor & Site Supervisor.
- Department of Environmental Conservation Graduate Program, Sustainable Building Systems Concentration, University of Massachusetts Amherst.

### Introduction:

- Write a brief description of what the practicum report is about. This paragraph should be about 150 words or less and basically serves as your summary, or abstract.
- Describe the nature of the practicum and the supervising agency that provided you the opportunity to complete the practicum. State the assignment's goals and the greater significance of the practicum, and explain what your assigned duties were.

### Body of Paper:

Include a detailed section on the specific activities you actually did during your practical experience. Explain the time frame required to complete these projects. For repetitive tasks, include the overall time frame of the practicum and an estimated amount of time devoted to each major duty. Also, describe anything you observed while doing your practicum and what techniques or important concepts you learned from these observations.

Explain the practical and theoretical value of the practicum experience. Compare what you did during your practicum to coursework you did prior to the work experience. Describe what outcomes you expected and what results you actually achieved during this experience. Also, explain recommendations for future practicum improvements. In addition, describe how your practicum experience influenced your professional or academic goals.

### Summary:

End the practicum report by providing summary statements that recap the content of your report.

### Appendices:

- Include the Practicum Contract and attachment.
- The official job description of your practicum, if available.
- Include any other attachments that are relevant to your practicum, such as reports/evaluations you produced.

### Bibliography:

References citing any information you used for your report.

### Miscellaneous:

Times New Roman 12 pt.; Double Spaced.

Photographs and other graphics should be referenced in the text (figure 1, 2, etc.), and labeled appropriately.

### **Practicum Reports (6 Credit Practicums; 3 Credit Practicums)**

6 Credit Practicums: Document Word Count is 6000.

3 Credit Practicum: Document Word Count is 4000.

### Notes:

- If 6 Credit Practicum is being executed with two sequential 3 Credit Practicums then 3000-word Outline/Draft of final 600-word document is due at completion of the first 3 credit semester.
- If Practicum work is occurring during the Summer; then Practicum will be enrolled in during the Fall semester with Practicum Report due at conclusion of semester.

Appendix A – How to Write a Scientific Report (adapted from  
[https://www.ideo.columbia.edu/~martins/sen\\_sem/thesis\\_org.html](https://www.ideo.columbia.edu/~martins/sen_sem/thesis_org.html))

Abstract:

- A good abstract explains in one line why the paper is important. It then goes on to give a summary of your major results, preferably couched in numbers with error limits. The final sentences explain the major implications of your work. A good abstract is concise, readable, and quantitative.
- Length should be ~ 1-2 paragraphs, approx. 400 words.
- Abstracts do not have citations.
- Information in title should not be repeated.
- Be explicit.
- Use numbers where appropriate.
- Answers to these questions should be found in the abstract:
  1. What did you do?
  2. Why did you do it? What question were you trying to answer?
  3. How did you do it? State methods.
  4. What did you learn? State major results.
  5. Why does it matter? Point out at least one significant implication.

Title Page:

- Title should represent the study.
- Your name.
- Semester and year of practicum.
- Faculty Sponsor.
- Department of Environmental Conservation Graduate Program, Sustainable Building Systems Concentration, University of Massachusetts Amherst.

Introduction:

You can't write a good introduction until you know what the body of the paper says. Consider writing the introductory section(s) after you have completed the rest of the paper, rather than before.

Be sure to include a hook at the beginning of the introduction. This is a statement of something sufficiently interesting to motivate your reader to read the rest of the paper, it is an important/interesting scientific problem that your paper either solves or addresses. You should draw the reader in and make them want to read the rest of the paper.

The next paragraphs in the introduction should cite previous research in this area. It should cite those who had the idea or ideas first, and should also cite those who have done the most recent and relevant work. You should then go on to explain why more work was necessary (your work, of course.)

What else belongs in the introductory section(s) of your paper?

1. A statement of the goal of the paper: why the study was undertaken, or why the paper was written. Do not repeat the abstract.
2. Sufficient background information to allow the reader to understand the context and significance of the question you are trying to address.
3. Proper acknowledgement of the previous work on which you are building. Sufficient references such that a reader could, by going to the library, achieve a sophisticated understanding of the context and significance of the question.
4. The introduction should be focused on the thesis question(s). All cited work should be directly relevant to the goals of the thesis. This is not a place to summarize everything you have ever read on a subject.
5. Explain the scope of your work, what will and will not be included.
6. A verbal "road map" or verbal "table of contents" guiding the reader to what lies ahead.
7. Is it obvious where introductory material ("old stuff") ends and your contribution ("new stuff") begins?

Remember that this is not a review paper. We are looking for original work and interpretation/analysis by you. Break up the introduction section into logical segments by using subheads.

### Methods and Materials:

What belongs in the "methods and materials" section of a scientific paper?

1. Information to allow the reader to assess the believability of your results.
2. Information needed by another researcher to replicate your experiment.
3. Description of your materials, procedure, theory.
4. Calculations, technique, procedure, and equipment.
5. Limitations, assumptions, and range of validity.
6. Description of your analytical methods, including reference to any specialized statistical software.

The methods section should answer the following questions and caveats:

1. Could one accurately replicate the study (for example, all of the optional and adjustable parameters on any sensors or instruments that were used to acquire the data)?
2. Is there enough information provided about any instruments used so that a functionally equivalent instrument could be used to repeat the experiment?
3. Could one replicate any laboratory analyses that were used?
4. Could one replicate any statistical analyses?

## Results:

- The results are actual statements of observations, including statistics, tables and graphs.
- Include variability of data.
- Mention negative results as well as positive. Do not interpret results - save that for the discussion.
- Lay out the case as for a jury. Present sufficient details so that others can draw their own inferences and construct their own explanations.
- Use S.I. units (m, s, kg, W, etc.)
- Break up your results into logical segments by using subheadings
- Key results should be stated in clear sentences at the beginning of paragraphs. It is far better to say "X had significant positive relationship with Y (linear regression  $p < 0.01$ ,  $r^2 = 0.79$ )" then to start with a less informative like "There is a significant relationship between X and Y". Describe the nature of the findings; do not just tell the reader whether or not they are significant.

## Discussion

Start with a few sentences that summarize the most important results. The discussion section should be a brief essay in itself, answering the following questions and caveats:

1. What are the major patterns in the observations?
2. What are the relationships, trends and generalizations among the results?
3. What are the exceptions to these patterns or generalizations?
4. What are the likely causes (mechanisms) underlying these patterns resulting predictions?
5. Is there agreement or disagreement with previous work?
6. Interpret results in terms of background laid out in the introduction - what is the relationship of the present results to the original question?
7. What is the implication of the present results for other unanswered questions in earth sciences, ecology, environmental policy, etc....?
8. Multiple hypotheses: There are usually several possible explanations for results. Be careful to consider all of these rather than simply pushing your favorite one. If you can eliminate all but one, that is great, but often that is not possible with the data in hand. In that case you should give even treatment to the remaining possibilities, and try to indicate ways in which future work may lead to their discrimination.
9. Include the evidence or line of reasoning supporting each interpretation.
10. What is the significance of the present results: why should we care?

This section should be rich in references to similar work and background needed to interpret results. However, interpretation/discussion section(s) are often too long and verbose. Is there material that does not contribute to one of the elements listed above? If so, this may be material that you will want to consider deleting or moving. Break up the section into logical segments by using subheads.

## Conclusions

- What is the strongest and most important statement that you can make from your observations?
- If you met the reader at a meeting six months from now, what do you want them to remember about your paper?
- Refer back to problem posed, and describe the conclusions that you reached from carrying out this investigation, summarize new observations, new interpretations, and new insights that have resulted from the present work.
- Include the broader implications of your results.
- Do not repeat word for word the abstract, introduction or discussion.

## Recommendations

- Include when appropriate (most of the time)
- Remedial action to solve the problem.
- Further research to fill in gaps in our understanding.
- Directions for future investigations on this or related topics.

## Acknowledgments

Anyone who helped you:

1. technically (including materials, supplies)
2. intellectually (assistance, advice)
3. financially (for example, departmental support, travel grants)

## References

## Appendices