# **Guidelines** for

# MATH 492: Internship in Mathematics and CMSC 492: Internship in Computer Science

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# **IMPORTANT: WE CANNOT GIVE INTERNSHIP CREDIT AFTER IT HAS BEEN COMPLETED – YOU MUST REGISTER BEFORE BEGINNING THE INTERNSHIP.**

**IMPORTANT: YOU MUST REGISTER FOR YOUR INTERNSHIP BEFORE THE LAST "ADD" DAY OF THE SEMESTER OR** SUMMER SESSION. THERE WILL BE NO LATE **REGISTRATIONS ALLOWED.** 

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# I. Introduction

### When Should I Complete MATH/CMSC 492?

Students typically complete MATH/CMSC 492 during the summer between their junior and senior years. In some cases, students may complete MATH/CMSC 492 earlier if they have met the necessary requirements, or during the fall semester of their senior year.

#### How Do I Find an Internship?

There are four basic ways that most students use to find internships.

- 1) <u>Networking</u>. Good old-fashioned networking is still one of the best ways to find an internship. If you are looking for an internship, let all of your friends and contacts know that you are looking for an internship and the type of internship for which you are looking.
- 2) <u>Career Center</u>. Longwood University's Career center maintains databases of available internships that are available for free to all current Longwood students. All you need to do is register with the Career Center to access their databases. They won't do the work for you, but they can help guide you through the process. This is a great resource for your search especially for the Computer Science internship.
- <u>Departmental information</u>. The internship director and other faculty may know of opportunities. For computer science, there is a Facebook group that lists opportunities. Ask a faculty member about joining.
- 4) <u>Independent Search</u>. Students may conduct their own independent search to identify internship possibilities.

#### Why Do I Have to Register for the MATH/CMSC 492 Course?

Like any other course at Longwood, students are required by the Registrar's Office to register for the course at the time the work is being completed. For internships completed during the summer, this means registering for MATH/CMSC 492 during Longwood University's Summer Session.

#### Why Do I Have to Pay an Internship Fee?

The supervision of internships is not counted as a normal part of a faculty member's teaching load. Internship fees exist to compensate the faculty members who supervise and evaluate student internships, much as if the faculty member were compensated to teach an additional course over and above his or her normal teaching load.

## How Do I Get Signed Up for MATH/CMSC 492?

Once your proposal has been approved by the internship director and the internship supervisor, the course will be created and you will be enrolled.

#### How many credit hours should I choose for MATH/CMSC 492?

Goal 14 requires one credit hour. In the MATH/CMSC department, an individual internship is 1 credit hour. In *exceptional* cases, an internship may be up to 3 credit hours. In cases where a student wishes for more than one credit hour then consultation with the internship director will be required. A proposal will need to be submitted that explains why more credit is warranted.

#### Can I get credit for more than one internship?

In the Mathematics and Computer Science department, we allow up to two separate internships. You

may not receive more than 6 credit hours total.

#### Can I get paid for this internship?

Yes. For most internships, the company sponsoring the internship will pay the intern. There is no restriction on this for the course.

#### What work must I do for the course beyond the work at the company?

The student will maintain a log of activities, write two short reflective essays, make a presentation, and complete a self-evaluation form. See the syllabus for timeline and details.

#### How is the course graded?

See the syllabus for the course.

#### Where can I find the syllabus for the course?

The syllabus is linked from the department website: <u>http://www.longwood.edu/mathematics/23493.htm</u>.

#### Are there guidelines on how to have a successful internship?

Yes. For a successful internship, interns should:

- make sure that the hours required for the internship are being met,
- meet with the internship supervisor periodically to ensure that the requirements of the internship are being met appropriately,
- dress appropriately for the internship,
- always conduct themselves in a professional manner.

#### What if I have other questions about the internship program?

If other questions arise, please contact the appropriate Dr. Poplin (Math) or Dr. McElfresh (CS).

## **II. Timeline** Arranging for the Internship and Getting Credit for the Course

### Months ahead of time:

- Begin conversations with the company regarding the planned work.
- Talk to the internship director about the appropriateness of the position for course credit.

### One month ahead of time.

- When an understanding is reached, the *student* submits an **Internship Proposal Form** (linked from the department website: <u>http://www.longwood.edu/mathematics/23493.htm</u>).
- The *internship director* will work with the internship supervisor at the company to verify the planned work.

#### Once approval is granted:

- The course will be created and the student will be enrolled.
- Tuition must be paid as per usual Registrar timelines.

## During the internship:

• Maintain a daily log and submit to internship director when specified by the syllabus.

## After the internship:

- Submit the daily log and other work as required by the syllabus.
- Make arrangements through the internship director for your presentation.

#### MATHEMATICS 492 INTERNSHIP IN MATHEMATICS SYLLABUS

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<u>Course Description</u>: The internship experience should enhance the student's academic experience in the major. Internships provide an on-the-job learning experience giving students the opportunity to apply their technical and professional skills to the work situation and observe organizations in action. The sponsoring firm should provide a challenging learning experience related to the intern's major in mathematics. The intern works with both the internship supervisor at the sponsoring firm and the internship director for the Department of Mathematics & Computer Science at Longwood University to identify the roles and responsibilities for the internship experience. SP.

<u>Objectives:</u> The objectives of the internship program are to introduce the student to on-the-job experiences, providing an opportunity for the student to apply classroom knowledge to the work situation and preparing the student to make the transition from classroom to workplace. The internship should help the student to grow personally and professionally as he/she faces real problems and ethical choices in the work situation.

<u>Prerequisites:</u> To be eligible to enter the internship program, the student must:

- 1. be a declared math major,
- 2. have both a cumulative GPA & a major GPA of at least 2.0, and
- 3. have a minimum of 60 earned credit hours.

<u>Requirements:</u> The student will receive 1 credit hour in MATH 492 for the internship work. Before starting an internship, the student must make arrangements with both the internship sponsor and the internship director in the Department of Mathematics & Computer Science. The student must work with the sponsor to complete the **Internship Agreement** which defines the roles and responsibilities of the intern and contracts the number of credit hours to be earned. This form must be signed by the intern, supervisor, and internship director prior to registering for the internship. A minimum of 40 hours internship work is required for a one credit hour internship.

During the internship, the student must keep a **daily journal** and regularly submit the journal to the director. The journal should include both a log of daily work activities and reflections of how/when the student uses his/her academic training and preparation, either directly or indirectly, to perform the work assigned.

A **Final Internship Report** is due after the intern has returned to school, no later than 4 weeks into the next term (in time to remove any incomplete). The exact nature of this report will be determined by consultation between the intern and director, but will certainly include a presentation to peers and faculty of the work done during the internship. The report/presentation should include (1) an overview of the internship, (2) your overall, and some specific, responsibilities, (3) your overall critique of the internship program. The presentation should **not** include information about your living arrangements, traveling to/from work, etc. I expect the presentation to be approximately 20 minutes long.

**Presentation:** This course is a speaking intensive course. You will give a presentation at the end of the internship. The presentation is generally given to a group of faculty and students. Presentation grades will be based on the following department score sheet.

Component	Points (Max)
Content Knowledge	(12)
Organization	(12)
Time Management	(4)
Verbal Delivery	(4)
Presentation Skills	(8)
	(40)

Grading: The intern will be graded based on the following:

Journal of Daily Work Activities	25%
Final Internship Report / Presentation	40%
Confidential Supervisor's Evaluation	25%
Self Evaluation	10%

The final grade will be given as:

А	90 - 100
В	80 - 89
С	70 – 79
D	60 – 69
F	Below 60

#### CMSC 492 INTERNSHIP IN COMPUTER SCIENCE SYLLABUS

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**Course Description:** The internship experience should enhance the student's academic experience in the major. Internships provide an on-the-job learning experience giving students the opportunity to apply their technical and professional skills to the work situation and observe organizations in action. The sponsoring firm should provide a challenging learning experience related to the intern's major in computer science. The intern works with both the internship supervisor at the sponsoring firm and the internship director for the Department of Mathematics & Computer Science at Longwood University to identify the roles and responsibilities for the internship experience. The student will work a minimum of 40 hours and can receive 1 credit hour in CMSC 492. SP

**Objectives:** The objectives of the internship program are to introduce the student to on-the-job experiences, providing an opportunity for the student to apply classroom knowledge to the work situation and preparing the student to make the transition from classroom to workplace. The internship should help the student to grow personally and professionally as he/she faces real problems and ethical choices in the work situation.

**Prerequisites:** To be eligible to enter the internship program, the student must:

- 1. be a declared computer science major,
- 2. have both a cumulative GPA & a major GPA of at least 2.0, and
- 3. have a minimum of 60 earned credit hours.

**Requirements prior to the internship:** Before starting an internship, the student must make arrangements with both the internship sponsor and the internship director in the Department of Mathematics & Computer Science. The forms for making these arrangements are available from the internship director and on the department web site. The internship director and the student will agree on a "mid-way point" to be used for the course. Once agreements are made, the student will be able to register for the internship course.

#### Requirements during the internship.

- <u>Workload</u>. A minimum of 40 hours internship work is required for a one credit hour internship.
- <u>Daily journal.</u> During the internship, the student must keep a daily journal. The journal should include a log of daily work activities in addition to the time spent on the internship that day. This journal will be submitted twice, at the mid-way point and at the end.
- <u>Reflections</u>. The student will write two short essays (less than 300 words each) reflecting on the relevance of his/her academic coursework to the work in the internship, as well as a description of how the internship has influenced decisions about the student's future education and/or career. These essays will be submitted at the mid-way point and at the end.
- <u>Presentation</u>. The intern will give a presentation to peers and faculty. Details for the presentation are elsewhere in this syllabus.
- <u>Self-evaluation</u>. Students will complete a self-evaluation at the end of the internship.

#### **Presentation:**

The intern will give a presentation to peers and faculty. The presentation should be between 15 and 20 minutes long, and should include:

- an overview of the internship
- your overall, and some specific, responsibilities;
- how your Longwood education prepared you for the internship; and
- how the internship affected your perspective of your Longwood education.
- (optional) living arrangements, traveling to work, etc. This should only be included if this will give other students in attendance useful knowledge of the internship experience, and should not be more than 5 minutes.

#### Evaluation:

Presentation grades will be based on the following department score sheet.

Component	Points (Max)
Content Knowledge	(12)
Organization	(12)
Time Management	(4)
Verbal Delivery	(4)
Presentation Skills	(8)
	(40)

Students are encouraged to give a "practice" presentation to the internship director ahead of time.

<u>Scheduling</u>: Scheduling of the presentation is arranged with the internship director. If the presentation cannot be scheduled during the internship, the student will be assigned an incomplete grade. The presentation must then be scheduled to be given after the intern has returned to school, no later than 4 weeks into the next term (in time to remove any incomplete).

Grading: The intern will be graded based on the following:

Journal of Daily Work Activities	15%
Reflective Essays	15%
Final Internship Presentation	40%
Confidential Supervisor's Evaluation	20%
Self Evaluation	10%

The final grade will be given as:

А	90 - 100
В	80 - 89
С	70 – 79
D	60 - 69
F	Below 60