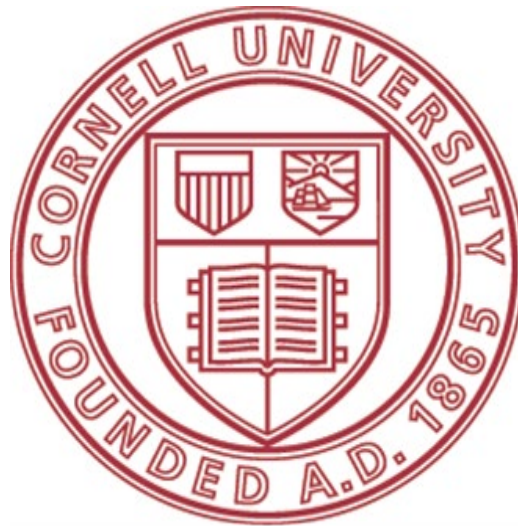


Welcome to Cornell University  
Computer Science  
Master of Engineering Program



# MENG PROGRAM OVERVIEW

**In order to meet degree requirements  
you must complete:**

- 30 credits total (of course you can have more...just not less)
- 15 must come from Computer Science Courses
- Seminars and project credits do not count towards the 15
- 3-6 credits will be from a project (more on that later)
- Most courses are 4 credits so you will probably, over two semesters, complete six courses and a project

# THE FINE PRINT: MORE IMPORTANT THAN YOU MIGHT THINK

- At least 28 credits must be taken for a letter grade or only 2 S/U credits will count towards your degree.
  - But you do not have to take anything for S/U
- For a course to count towards your degree requirements, you must earn at least a “C-”
- For the project to count towards your project requirement, you must earn at least a “B”
- In order to remain in good standing and in order to graduate, you must maintain an overall GPA of 2.5 or higher.

# ARE THERE ANY RULES FOR WHAT COURSES I CAN TAKE?

- **All** courses must be at the 4000 level or higher.
- **Non-CS Courses (Electives)** can be taken but must be:
  - Advanced (4000 and higher)
  - Technical (with some exceptions in the business school and Science and Technology studies.)
  - Pre-approved Electives
    - There is a list (non-comprehensive) of pre-approved electives on the CS website  
<https://www.cs.cornell.edu/masters/academics/preapprovedcourses>
    - If the course you want to take is not listed, send an e-mail to me with the course description, and a brief explanation of why you want to take the course.
    - Not all Non-CS courses are universally approved, and decisions are often made on a case-by-case basis.

# COURSE NUMBERING

**4000-level** CS courses are typically for juniors, seniors and MEng students

- **CS 4999, CS 4090 and CS 4998** do not count towards MEng degree credits.

**5000-level** CS courses are “classic” M.Eng courses.

- Note, some are doubly listed, e.g., CS 4740 and CS 5740. Usually exactly the same course. **Take the 5000 “version”.**

**6000-level** CS courses are typically for PhD students and exceptionally well-prepared\* ugrads and MEng students.

\*[ this means **A-level work in lower level version of the course**]

# HOW LONG DO I HAVE TO GET ALL THIS DONE?

- The CS MEng Program is a two semester program.
- Some students begin the program while still undergraduates at Cornell and are able to finish in one MEng semester.
  - Those who begin as undergraduates are welcome to do a full two MEng semesters.
- If you feel the need to complete an extra (3<sup>rd</sup>) semester, you may do so with the following conditions:
  - You must request it prior to the pre-enrollment period for your third semester.
  - You must register as a full time student and enroll in no fewer than 12 credits.
  - You must take at least 8 credits of courses which could count towards your degree...i.e. 4000 level and above advanced and technical and for a letter grade.
  - In most cases where a student is unable to finish in two semesters unexpectedly, a third semester is allowed. Different conditions apply.

# BALANCING YOUR COURSE LOAD = MAINTAINING YOUR SANITY

- Try to balance the number of compute intensive courses with those that are less so.
- Limit the number of practicums you take each semester
- Pay attention to the work-load balance in the class:

# SOME MORE STUFF ABOUT COURSES

- When planning your two semesters, you can usually assume that most fall 4000/5000 level courses, if taught, will not be taught in the spring semester and vice versa.
  - There are exceptions to this depending on demand and instructor availability (4410, 4700, 4820)
  - When the Department administration is mapping out courses, they occasionally have to switch a course from one semester to the other to manage teaching loads, faculty leaves etc.
  - We try to do so only when the impact will be minimal, however, sometimes there is no choice and the change must be made.



- Courses taught at Cornell Tech in NYC are not available to Cornell students in Ithaca  
**EXCEPTIONS?**

- There are a select few 6000 level courses taught via remote classroom between the two campuses.
- These are limited to CS PhD students or for M.Eng students with special permission from the instructor.

# CS COLLOQUIUM

- **Colloquium** is a one credit speaker series where invited speakers give talks on the research they are doing or other interesting topics.
  - Fall CS 7090 Computer Science Colloquium TR 11:40-12:55 Gates G01 1 credit S/U only
  - Can be taken both semesters
  - You are welcome to attend any and all talks you are interested in whether you are enrolled or not, but since there are no requirements to pass, you may as well enroll.
  - If you have a time conflict with another course, we *cannot* petition to over-ride it
  - Information on the scheduled speakers is available here:
    - <https://www.cs.cornell.edu/events/colloquium>
    - And/or sign up for the colloquium mail list by Send an email to: [CS-Colloquium-L-request@cornell.edu](mailto:CS-Colloquium-L-request@cornell.edu)
      - Subject = Join
      - Message field left blank

# WHAT YOU NEED TO KNOW ABOUT CS SEMINARS

- A meeting of students and faculty engaged in advanced study and original research in a certain area of study to exchange information and hold discussions.
- Some of the CS seminars welcome all students
- Some require that the student be actively engaged in research in the seminar's area – ASK!
- Some seminars require presentation of your research.
- Some consider attending and participating in discussion to be enough.
- Seminars are S/U only. No letter grade.

# TAKING BUSINESS SCHOOL COURSES

- Some classes offered through the Cornell College of Business are approved as eligible for CS MEng Credit.
  - Check the Pre-approved Elective webpage here:  
<http://www.cs.cornell.edu/masters/academics/preapprovedcourses>
- The Cornell College of Business has a course enrollment procedure separate from the Engineering Registrar.
  - If you plan on taking B-school courses, you are responsible for reading the instructions for adding each course as they differ from course to course.
  - Enrollment conditions can be found on the course roster course description <https://classes.cornell.edu/browse/roster/FA19>
  - Some courses can only be added by non-MBA students after the first two weeks of classes. Please note, you must be sure you want to continue in the course because you will not be allowed to drop it without paying a penalty.
  - You are **not** guaranteed enrollment in B-school courses even if you attended the first two weeks of class.

# COURSE ENROLLMENT

- Done on line through Student Center
  - [studentcenter.cornell.edu](http://studentcenter.cornell.edu)
- You ***do not*** need advisor approval to add/drop courses during the add/drop period

## When?

- An Add period at the start of each semester
- A pre-enrollment period about  $\frac{3}{4}$  through the semester before.

# COURSE ENROLLMENT

- Deadline for adding courses online is **September 12, 2019**.
- Deadline for dropping courses is **October 24, 2019**
- If you wish to change credit hours (on credit variable courses only) you can do so until **September 12, 2019**
- If you wish to change grading option (i.e. S/U to Letter or Letter to S/U) you can do so until **October 24, 2019**
- Last day to add a course using a paper form without a petition **October 24, 2019**
- If you drop a course after the **October 24, 2019** deadline, a “W” will appear on your transcript. No exceptions.

# COURSE ENROLLMENT: GOOD TO KNOW

- All changes made after the **October 24, 2019** deadline **must** be processed with a petition.
- **All petitions and paper add/drop forms need to be completed with and signed by Stephanie before being processed by the Engineering Registrar's office.**
- You are responsible for ensuring that dropping a course will not effect the completion of your degree requirements.

- You will need an enrollment pin to add any CS courses (4XXX and 5XXX which are full.
  - Be sure to add yourself to the waitlist and you will be sent a PIN
  - You will have a limited time to use your pin
  - If you decide you no longer wish to enroll in the course, please remove yourself from the waitlist so you are not sent a pin needlessly.
- 
- You will be sent reminders about the add/drop deadlines and should be certain to make sure you have added what you thought you added and dropped what you thought you dropped. It is especially important to make sure that your grading option is correct (Letter or S-U)



# AUDITING COURSES

- Auditing a course means you are only “visiting” and are not *required* to submit any work or take any exams.
- Why Audit?
  - If you want to be exposed to the material, but do not want/need to devote time to the subject.
  - Useful for courses outside of your main focus or field of study which you are interested in.
- Wrong reason to audit:
  - You want the course to show on your transcript, but do not want/have the time to devote to studying the subject or the time/desire to attend.
  - You enrolled in a course and discover you are doing poorly. In this case, drop it before the deadline!

- You will be assigned a “V” grade on your transcript, which indicates “visitor.”
- You will not get any “credit” for audited courses
- Audited courses are not used in the calculation of your GPA
- Audit as a grading option is not permitted for some courses
- Some instructors have an attendance requirement which applies to students auditing as well.
- CS M.Eng students are permitted to Audit one course each semester.

# PROJECT INFORMATION

# PROJECT: WHAT IS IT?

- An M.Eng Project is a computer-centric project in which a student uses their skills and knowledge to develop, design, build or research that which solves a problem, furthers research or otherwise enhances the world.
- A “braggable” addition to a resume which sets you and/or you and your team apart from others

# PROJECT - REQUIREMENTS

- Students must complete a Master of Engineering Project worth at least 3 credits, but no more than 6 credits.
- The Project can be done in the fall, the spring or both.
- A student can complete one project in one semester or two projects (one in each semester or two in one semester.)
- A student can work on the same project over two semesters or two separate projects one each semester.
- Students may work in teams, but each must be able to document their individual contribution. (at the discretion of the project advisor)
- Whether you do one project or two, no more than **a total of six credits** will be counted towards the degree required 30 credits.
- The CS MEng Project does **not** count as part of the required 15 CS course credits.

# CHOOSING A PROJECT: HOW AND WHEN?

- How do you find a project?
  - Check out the list of projects on the project portals
    - For CS Only Projects:
      - <https://csmeng-projects.coecis.cornell.edu/index.cfm>
      - Projects listed here are submitted by people all over campus, by people looking for CS students only.
    - For Projects offered to all M.Eng students:
      - <https://meng-projects.coecis.cornell.edu/index.cfm>
      - Projects listed here are submitted by Engineering faculty who are looking for students in many areas. Many are looking for CS students to support the computational aspects of their work.

# ARE THERE OTHER WAYS TO FIND A PROJECT?

- Come up with a project on your own or with a group, write a proposal and contact faculty members in the subject area to discuss if they would be willing to serve as your project advisor.
- Check out the many Project Teams active throughout the College of Engineering, many need and want Computer Scientists to help with software development.
- Ask your peers what they are doing, they might be involved in a project looking for additional people
- Talk to your Professors, they sometimes have projects they do not advertise

# ADDING PROJECTS

- You can enroll in your project online until September 12th.
  - After the 12th, enrollment is done via paper add form. See me.
- To enroll in a project you need to sign up for CS 5999 under the section assigned to the faculty member who will serve as your project advisor.
  - If your advisor does not have a section, you should sign up under the “staff/Meik” section, but only if your advisor is a CS field or IS Professor without a CS 5999 section or has been pre-approved to serve as a “stand-alone” project advisor. Check with Stephanie.
  - If your project advisor is not a CS faculty or researcher, (and not pre-approved to serve as a “stand-alone” advisor you will have to find someone who has a CS 5999 section number to serve as an “in-house” CS advisor who will confer with your outside advisor and assign your grade.



- If your project is part of a project course in another field (ex. CUAUV or CU Air) you should enroll in the Project course associated with that project in the field it is offered.
- Be aware that some Project Team courses require a two semester commitment (usually fall followed by spring,) and you will have to complete work for both semesters to receive a grade.
- You must also be involved in a computational aspect of the team...not a mechanical aspect.



# M.ENG./MPS STUDY SPACE

- Rhodes Hall 153 and 163
  - prox card [**CU ID Card**] access only
    - Only CS M.Eng. Students and IS MPS Students are permitted to use the M.Eng/MPS Labs.
  - **It is not a public lab.**
    - Please do not let students who are not either CS MEng or IS MPS students into the space...if they are not able to turn the light green with their ID, they should not be in the space.
- CS and IS Masters students share all computing space, computers, displays, and printers.

- **There are 11 computers in RH 163**
  - All computers are set up with Windows
  - Please do not disconnect/remove peripherals
- **Rhodes 163 is reserved for individual study and should be considered a “quiet area.”**
  - Please use 153 for group work/discussions
- **The displays in RH 153 have HDMI cables which you can use to connect your laptop**
  - Students are responsible for providing any proprietary adapters etc. for connecting etc.
- **Printing is on the Net Print Service. You should follow the instructions for setting up your Net Print account on the CIS IT information sheet you received in your packet.**
- **Use University Wi-fi “Eduroam” for secure Wi-fi**

# MORE RH 153/163 INFO:

- Lockers are available for student use.
  - Locks will be provided upon request and must be returned when you leave the M.Eng Program, (hopefully because you graduate.) We will set up a time when we are distributing locks, watch for the message.
- Keep lab clean, clean up spills, do not leave personal papers etc. lying around, use trash bins etc.
- Cleaning supplies are available in the kitchen area for you to use in case of an accidental spill.
- Be considerate of your peers, no loud music, raucous behavior, loud conversations etc.

- Please restrict phone usage to the hallways so you do not disrupt others working in the lab.
- Please only use phone booth for professional calls: i.e. phone interviews etc.
  - Do not occupy the phone booth for longer than is necessary.
- Basic office supplies will be supplied by the CS/INFO Graduate Office (stapler/staples/white board markers.) We will keep extras stored in the lab, send message to Stephanie (sam83) or Erin (epa37) if lab runs out.
- No eating or drinking in RH 163 computer areas.
- Please restrict eating and drinking to lounge area, and again, clean up after yourselves
- Only use markers specifically made for white boards on the white boards. Again, these are supplied by the Graduate Offices 110 D and 104 Gates.
- Markers should not be used to write on desks, non-whiteboard walls, tables etc.

# BEVERAGE AREA

- Free coffee, tea and hot chocolate is available and supplied by CS and IS.
- Coffee and Tea supplies are made available through the generosity of the Computer Science and Information Science Departments and will be re-stocked on a weekly schedule. If something is running low between re-stocking, please send e-mail to Erin [epa27@cornell.edu](mailto:epa27@cornell.edu) and we will notify the supplier.
- MEng and MPS Students are responsible for keeping the beverage area clean
  - Wipe up spills, splashes and drips as they occur
  - Toss out empty sugar packets, tea bags etc. as you use them.
  - Rinse out sink after dumping stuff into it.

- Dishwashing liquid as are sponges and paper towels, will be supplied.
- Please take responsibility for anything you use.
- The Keurig Coffee machine is plumbed into the water line and therefore the reservoir does not need to be filled. The k-cups are automatically discharged into a waste compartment after brewing, and this will need to be emptied on occasion. There will be directions in kitchen on how this is done.
- Please also check the water over-flow tray (under where you place your cup) and empty if it has water in it...helps prevent spills

- Abuse or misuse of the equipment, use of supplies or area in general will result in the removal or suspension of study space privileges.



# JOB SEARCH STUFF

- Submit your resume to the CS MEng resume book
  - Stephanie will request Resumes be sent in early February
  - Resume book is shared with companies who do not recruit on campus but are looking for talented CS Masters students.
- Sign up for Cornell Handshake
  - <https://cornell.joinhandshake.com/login>
  - In order to be contacted about career fairs, tech talks, networking events, workshops etc. you need to have registered with Handshake and completed the tutorial.

## Career Fairs:

- September 11<sup>th</sup> and 12<sup>th</sup> - **Engineering and Technical Career Fair**
- Additional Career fair days early in the spring semester

## On campus resources:

- Engineering Career Center:
- Workshops available for:
  - Resume critique
  - Interviewing skills
  - Networking advice

# ADDITIONAL RESOURCES

- A new website for CIS Professional Masters Students has been developed to help guide you through the process of finding post-graduate employment.
- <https://cis.cornell.edu/future-students/graduate-opportunities/professional-masters-students>
- The website will contain information, tips, Q&A, links to important resources and articles on preparing for your job hunt and navigating through the process of interviewing, fielding offers etc.