Welcome to Stevens Computer Science

Philippos Mordohai
Director, MS in Computer Science
August 18, 2016
CS Offers 4 Masters Degrees

https://www.stevens.edu/schaefer-school-engineering-science/departments/computer-science/graduate-programs

1. Computer Science
2. Cybersecurity
3. Enterprise and Cloud Computing
4. Media and Broadcast Engineering
MS-CS Degree

- 30 credits, 3.0 GPA
- Courses must be numbered 500 or higher
- 7 courses must have CS number; 3 courses may be any grad course
- At least 3 courses must be in CS core set 510, 511, 513…694 (see online under “curriculum overview”, 20 courses)
- Your admission letter may state conditions
  - Courses taken to fulfill conditions count toward degree
Core Courses

- CS 510 Principles of Programming Languages
- CS 511 Concurrent Programming
- CS 513 Data Mining and Knowledge Management
- CS 520 Introduction to Operating Systems
- CS 521 TCP/IP Networking
- CS 522 Mobile Systems and Applications
- CS 524 Introduction to Cloud Computing
- CS 526 Enterprise and Cloud Computing
- CS 537 Interactive Computer Graphics
- CS 541 Artificial Intelligence
- CS 545 Human Computer Interaction
- CS 546 Web Programming
- CS 548 Enterprise Software Architecture and Design
- CS 549 Distributed and Cloud Computing
- CS 561 Database Management Systems I
- CS 573 Fundamentals of Cybersecurity
- CS 578 Privacy in a Networked World
- CS 600 Advanced Algorithm Design and Implementation
- CS 677 Parallel Programming for Many-core Processors
- CS 694 Advanced Computational Modeling in Biology and Biomaterials
CS Focus Areas

- A “focus area” is a *suggested* set of courses that allow students to specialize.
- Focus area is NOT listed on diploma or transcript.
- You may follow focus area or not; it’s up to you. You may take as many or few of the listed courses as you wish.
Example Focus Areas

[link]
https://www.stevens.edu/schaefer-school-engineering-science/departments/computer-science/graduate-programs/computer-science-masters-program/curriculum-overview

- Cloud Computing
- Databases
- Gaming and Simulation
- Mobile Systems
- Network and Systems Administration
- Secure Systems
- Software Development
- Web Application Development
Course Information - Important

- See CS department intranet
- Go to my.stevens.edu and click on Campus Directory, navigate to Computer Science
Course Information - Important

See CS department intranet
Course Information - Important

- Intranet has course syllabi and outcomes
  - Outcomes are what students should be able to do at the completion of the course
- The department page has ALL courses, regardless of whether they are offered in the current semester

- See Registrar’s page for courses offered this semester ([stevens.edu/registrar](stevens.edu/registrar))
  - Click “Course Offerings”, “Home” and “Course Section Search” for advanced search options
Courses

- Courses offered in-class and via WebCampus
  - Equivalent
  - US government restricts international students to take at least 6 credits on campus per semester
- First digit indicates level: e.g., 600-level more advanced than 500-level
- Important exception: “special topics” courses always numbered CS 810
  - Consider taking these one-time courses
  - Three offered this semester
CS 810 Courses

- Programming the Internet of Things with iOS
- Formal Modeling and Analysis for Software Security
- From NAND to Tetris
Grades

- Graduation requires minimum average of 3.0 on 4-point scale (i.e., B average)

- Cause for probation:
  - GPA falls below 3.0, or
  - Receive 3 grades C or worse, or
  - Receive an F in any course
  - Fail to fulfill an admission requirement (e.g., take CS 590 and get a B)
Registration procedure today

- Choose courses now
- Conditions in your admission letter?
- Enroll via MyStevens; registrar staff available in Babbio Center until 5pm
- To waive pre-requisites: attend first class, get permission of instructor; submit “change of enrollment” (add/drop) form:

https://www.stevens.edu/directory/office-registrar/forms
Master’s ☐ Study Plan ☐ Application for Candidacy
(Choose one)

Name: ___________________________ Student Identification No.: ___________________________
Department: ___________________________ Concentration: ___________________________

Exact Name of Degree Being Pursued:

An Application for Candidacy (AC) is an absolute requirement for graduation. Your AC must be approved by your advisor and received by the Registrar before October 1 for Fall completion or February 15 for Spring completion.

If you plan on attending the ceremony in May, please check here ☑.

**Major (Must Include Core Courses)**

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<thead>
<tr>
<th>Year</th>
<th>Term</th>
<th>Institution (if not Stevens)</th>
<th>Course Number</th>
<th>Course Name</th>
<th>Grade (if Rec’d)</th>
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**Electives**

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<th>Course Name</th>
<th>Grade (if Rec’d)</th>
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**No Credit**

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<th>Institution</th>
<th>Course Number</th>
<th>Course Name</th>
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STUDENT SIGNATURE ___________________________ DATE: ____________

ADVISOR SIGNATURE ___________________________ DATE: ____________

ADVISOR NAME (PRINT) ___________________________

DEAN OF GRADUATE ACADEMICS (Interdisciplinary Programs Only) ___________________________

STUDENT EMAIL ADDRESS ___________________________

REGISTRAR ___________________________ DATE: ____________

STUDENT DAYTIME TELEPHONE NUMBER ___________________________

Please keep a copy for your records

January 29, 2013, SP_AC_Masters.doc
# GRADUATE ENROLLMENT FORM

If at all possible, please enroll on line. Instructions can be found at: http://www.stevens.edu/sit/Registrar/policies-procedures/

### PLEASE PRINT CLEARLY OR TYPE ALL INFORMATION

<table>
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<tr>
<th>LAST NAME</th>
<th>FIRST</th>
<th>MIDDLE</th>
<th>DATE OF BIRTH (MM/DD/YYYY)</th>
<th>MALE</th>
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### SEMESTER:
- [ ] FALL
- [ ] WINTER
- [ ] SPRING
- [ ] SUMMER I
- [ ] SUMMER II
- [ ] SUMMER III
- [ ] YEAR TERM 20

### SPECIAL NOTES ABOUT ENROLLMENT:
- It is the student’s responsibility to drop/withdraw from an enrolled course. Non-attendance, for example, will not drop you from a course and you will still be financially responsible for the course.
- If tuition is being paid by a third party (sponsor, employer, etc.), and they do not pay, responsibility to pay falls to the student.
- Enrollment into more than 12 credits requires the approval of the advisor and the Dean of Graduate Academics.
- Initial Study Plans are due by the mid-point of the term. Failure to submit a Study Plan will result in not being allowed to enroll in subsequent terms.
- The Application for Candidacy (A/C) is an absolute requirement for graduation.
- If you are completing in the fall, your A/C must be submitted by October 1 in the term you that are completing the degree.
- If you are completing in the spring, your A/C must be submitted by February 15 in the term you that are completing the degree.

### COURSE INFORMATION:

<table>
<thead>
<tr>
<th>COURSE NUMBER</th>
<th>SECTION EX: MGT 599</th>
<th>COURSE SECTION TITLE EX: Project Management Fundamentals</th>
<th>INSTRUCTOR SIGNATURE (IF NEEDED)</th>
<th>REASON FOR APPROVAL (E.G., WAIVE PRIOR ED AND/OR CAP)</th>
<th>CREDITS EX: 3</th>
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**ONLY COMPLETE THIS SECTION IF YOU HAVE NOT PROVIDED THIS INFORMATION BEFORE.**

If you have not provided your Social Security Number to Stevens before, it is not required, but strongly recommended that you do so. Please enter it in the Student Identification Number box at the top of the form.

In conjunction with the Civil Rights Act of 1964 of the United States Department of Health, Education and Welfare, we are required to collect basic racial-ethnic information of the student body at Stevens. This information is needed for many state and federal reports and it is held as confidential material and will not be released without your consent. Only statistical data is released to government or any agencies. It is not mandatory for you to complete this section, however, we would appreciate your cooperation in assembling this necessary data. Some Government funding, which Stevens receives, is based upon this data.

**ETHNICITY:**
- [ ] HISPANIC OR LATINO
- [ ] NOT HISPANIC OR LATINO

**RACE (CHOOSE ONE OR MORE):**
- [ ] AMERICAN INDIAN OR ALASKA NATIVE
- [ ] ASIAN
- [ ] BLACK OR AFRICAN-AMERICAN
- [ ] HAWAIIAN OR OTHER PACIFIC ISLANDER
- [ ] WHITE

### STUDENT SIGNATURE (REQUIRED)

DATE

### ADVISOR APPROVAL (IF REQUIRED)

DATE

### OFFICE OF GRADUATE ACADEMICS APPROVAL (IF REQUIRED)

DATE
Last day to add/drop: Monday Sep 12
General Advice

- If there are conditions on your admission, advisors will not waive them

- Pre-requisites may be waived by course instructors
  - The same pre-requisite (e.g. CS 590) may mean different things for different courses

- If you plan to take more than 3 technical courses, don’t do it in the first semester
MS Advisors

- Computer Science: Professors Klappholz, Duggan, Kleinberg and Mordohai
- Cybersecurity: Prof. Portokalidis
- Enterprise and Cloud Computing: Prof. Duggan
- Media and Broadcast Engineering: Prof. Mordohai

- Associate Director for graduate programs: Prof. Engling
Which MS-CS Advisor to See?

- See your admission letter and potentially follow-up email

- Prof. Engling will be at CS Advising Center (Lieb 103): Monday-Thursday 4:30-6:00 (subject to change)

- Advisor office hours will be posted when classes begin
To Get Help

- **Academics**: your advisor or Prof. Engling
  - See FAQ on CS intranet first!
- **Paperwork**: CS main office (2nd floor Lieb)
  - Ms. Dawn Garcia: dgarcia@cs.stevens.edu, 201-216-5578
- **Visa issues**: ISSS
- **Financial Issues**: Student Service Center
- **Computer/network issues**:
  - IT Knowledge Base: https://sit.teamdynamix.com/TDCClient/KB/
Email

- You MUST maintain your “myStevens account” (i.e., ID@stevens.edu)
  - Important email announcements sent there
  - You may set up email forwarding to elsewhere
  - “Maintain” means: either read email at www.stevens.edu/mymail or forward email to your preferred address
  - Account is created automatically for you
Programming Facilities

- linux-lab.cs.stevens.edu is a set of Linux machines – DNS alias randomly connects you to one of several machines
- Any student taking a CS course is entitled to an account – your instructor will arrange it
Job Opportunities On Campus

- Within CS department:
  - Research assistant (RA) -- $2400/mo stipend, plus tuition remission
  - Teaching assistant (TA) -- same
  - Graduate assistant (GA) -- tuition remission
  - Course Assistant (CA) - $15/hour
  - Grader -- $10/hour

- We do not hire first-semester students
- CURRENTLY, NO POSITIONS AVAILABLE
- Openings in future semesters will be announced by email
Curricular Practical Training (CPT)

- CPT allows student to work off campus (for pay, experience, to make contacts) while maintaining full-time student status

- International student must have spent at least one academic year as full time student before CPT is permitted (a US government rule)

- CS department offers CPT in two ways:
  1. Co-op (full time work for pay, no credit)
  2. 1-credit CPT course, CS 703 (full or part time)
Co-op

- Student placed into job in local industry; i.e., job is arranged for you
- Full time work, no credit
- Must be a top student to participate:
  - Must have 3.5 GPA
  - Must have taken at least 4 CS courses, including one core course
  - Must be recommended by Prof. Engling
- For further info: contact Prof. Engling
CS 703

- 1-3 credit course
- You must find your own job (full or part time)
- Job must be technical & related to your education
- Job must be pre-approved by your advisor before you can register
- At end of semester, must write a report of activities and give oral presentation on campus