Welcome!
CS By The Numbers!

• 866 Majors!

• 50 Applicants

• 88 Minors

• ~101 UGs graduating each year (Feb, May, Sept)

• 50 Faculty

• ~250 Graduate Students
  – 175 PhD track (5 Bay State)
  – 75 MS track (25 Bay State)
Undergraduate Academic Program Officers

Chair (Allan)

Associate Chair for Academic Affairs (Barrington)

Student Outreach Committee

UG Events (Moll)

Undergraduate Program Director (Grupen)

Chief Undergraduate Adviser (Richards)

Peer Advising Manager (Verts)

UG Events (Moll)

Honors Program (Marlin)

UPM (Fahey)

UPA (Tara LaFlamme)

Transfers (Anderson)

CS ROCKs 5 Student Leadership Committee

ACE 5 Student Leadership Committee

CS Program
BS in Computer Science

• Comprehensive Training in Computer Science

• Course Requirements
  – 14 Computer Science
  – 4 Math
  – 2 Majors-Level Science

• BS-CMPSCI Students Prepared For
  – Graduate Study in CS
  – Most Technical Entry-Level Jobs in Industry
BA in Computer Science

• Computing Focus Degree in CS

• Course Requirements (Less CS)
  – 10 Computer Science
  – 3 Math
  – Foreign Language
  – 4-Course Concentration

• BA-CMPSCI Students Prepared For
  – Application of computing to a secondary area
Timeline & Progress

• Planning is important
  – CS Classes you need to take
  – Requirements you need to fulfill

• Keep track of your progress!
  – Tracking Forms
Computer Science
Bachelors of Science

Freshmen Year

Thoughts
- Study Habits
- Attendance/Participation!
- Office Hours!
- What courses did I like/dislike
Computer Science
Bachelors of Science

Sophomore Year

Thoughts
• Am I interested in the ACM group?
• Internships?
• Semester Abroad?
• Post-Grad Plans?
• Baystate Fellowship?
## Computer Science
### Bachelors of Science

#### Junior Year

**Thoughts**
- CMPSCI 320 – Integrative Experience
- Internship?
- Baystate?
- REU Program?
- Industry or Grad School?

---

### Two introductory CS courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Term</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>121</td>
<td></td>
<td></td>
</tr>
<tr>
<td>187</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Four math courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Term</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>M131</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M132</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M233</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M235</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Four core CS courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Term</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>220</td>
<td></td>
<td></td>
</tr>
<tr>
<td>250</td>
<td></td>
<td></td>
</tr>
<tr>
<td>230</td>
<td></td>
<td></td>
</tr>
<tr>
<td>240</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Students are strongly encouraged not to take 220 and 230, or 240 and 250 together in the same semester.

### Eight CS electives. Choose a subplan (see back for requirements)

- General Computer Science (below)
- Networking
- Software Engineering
- Security & Privacy
- Robotics, Vision, and Graphics
- Theory of Computation
- Artificial Intelligence
- Computer Architecture

**Prerequisites:**
- CMPSCI 320
- CMPSCI 325

**Minimum 2.0 cumulative GPA in all courses** applied to major, Pass/Fail not allowed in major.

### GENCOMPSCI

<table>
<thead>
<tr>
<th>Course</th>
<th>Term</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>377</td>
<td></td>
<td></td>
</tr>
<tr>
<td>311</td>
<td></td>
<td></td>
</tr>
<tr>
<td>383</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Minimum 2 credits of science courses:**

- BIOL 100, 101
- CHEM 111, 121, 121, 121
- GEO 101 with lab; or
- PHY 151, 152 (or 181, 182)

**6 credits + 300**

**9 credits + 400**

CS courses only.

---

Univ. and GenEd requirements should be checked on SPRE. This form is for guidance only. The College has waived the Foreign Language Requirement for the B.S. degree (not the B.A.); ignore warnings on spire.
Thoughts

- Industry or Grad School?
- Is my resume in order? (career center)
- I should be planning to speak to recruiters!
BS-CMPSCI Tracks

- General CMPSCI
- Artificial Intelligence
- Computer Architecture
- Networking
- Programming Languages & Compilers
- Theory of Computation

- Robotics, Vision, 7 Graphics
- Search & Data Mining
- Security & Privacy
- Software Engineering
- Software Systems
Computer Science Bachelors of Arts

Differences

MATH 127/128 VS MATH 131/132

Required:
Concentration Plan by end of junior year (courses/statement of purpose)

Must Satisfy:
Foreign Language Requirement
ROCKs
Leadership and Outreach Committee

• ROCKs Students...
  – are Juniors or Seniors in CS
  – have been successful in the CS program
  – serve as Student Ambassadors
  – are knowledgeable about the CS program
  – recruit new CS students
  – give tours
  – represent CS at university open houses and other outreach events
  – answer questions from prospective students
ACE
Advising Center Committee

• ACE Students…
  – are Juniors or Seniors in CS
  – have been successful in the CS program
  – are knowledgeable about the CS program
  – are knowledgeable about CS courses
  – know how to navigate the program to ensure success as a CS student
Where can you find ACE?

USpace
Room 144
Computer Science Building

To be the first point of contact to first-year students, applicants to the major, and anyone interested in CS!

To be excellent peer advisors to the undergraduate CS population!
First Year Student Advising

• Have a Freshman Advisor
  – Gordon Anderson
  – froshadvising@cs.umass.edu

• CS Peer Advisors
  – ACE is the place!

• Registration/Advising Meeting
  Registration for Spring 2016
  Will be announced
Second Year Student Advising

• **Have a Sophomore Advisor**
  – Tim Richards
  – [sophadvising@cs.umass.edu](mailto:sophadvising@cs.umass.edu)

• **CS Peer Advisors**
  – ACE is the place!

• **Registration/Advising Meeting**

  *Registration for Spring 2016*

  Will be announced
Post Grads & Transfers

• **Faculty Advisors**
  – Have been assigned to you

• **Advising Appointments**
  – Contact your advisor during registration period (they may contact you first, but don’t assume)
  – Be prepared to discuss your course selection
Advising & Tracking Forms

- You are responsible for your progress!
- Fill this out!
- Keep it updated!
- Bring it to Advising Meetings!

It will help you and your advisor make good choices that will help lead you to success!
Advice & Strategies

• **Focus on Doing Well!**
  – Do not overload

• **Be Proactive**
  – Contact ACE or advisor
  – Update your tracking form

• **Do not rush your degree!**
  – It is enticing to finish early, but…

• **Get involved!**
Getting Involved!

- ACM
  [http://umass.acm.org](http://umass.acm.org)
- UMass Programming Team
- CS Women
- USpace (Room CS 144)
- Leadership Committees
  - ACE Peer Advising
  - ROCKs Recruiting & Outreach
Research Opportunities

• Research Labs
  – Lots of opportunity to participate!
  – Great for jobs and graduate school in CS!

• Independent Studies
  – Work individually with a faculty member

• Honors Program ([https://www.honors.umass.edu](https://www.honors.umass.edu))
  – Departmental honors / capstone experience

• Paid Undergraduates
Bay State Program

• **Tuition-Free Masters Degree**
  - Complete BS-CMPSCI degree
  - GPA at least 3.6
  - With Small Assistantship ($$)

• [http://www.cs.umass.edu/admissions/bay-state-fellowship-program](http://www.cs.umass.edu/admissions/bay-state-fellowship-program)
Internship Opportunities

• Where do CS students get internships?
  – BBN/Ratheon, Cisco, EMC, Fiksu, Google, Yahoo!, TripAdvisor, Vistaprint, Amazon, Microsoft, LinkedIn, General Dynamics, …

• How do they do this?
  – Attending Career Fairs (several at UMass)
  – Solid Resume, **Start Sophomore Year**
  – UMass CareerConnect
    http://umass.experience.com/experience/login
Computer Science
Welcomes You!
Departmental Resources

FAQ
http://www.cs.umass.edu/ugrad-education/faq-bs-program

CS course schedules
http://www.cs.umass.edu/ugrad-education/courses

Tracking Forms:
  Bachelor of Science:
  Bachelor of Arts:

Transfer Procedures: (transfer admits and pre-approval for courses taken elsewhere)
https://www.cs.umass.edu/admissions/transfer-students

General Advising:
https://www.cs.umass.edu/ugrad-education/advising-and-advisors
https://www.cs.umass.edu/ugrad-education/registration-counseling

Advice on Proposing BA Concentrations (subject to UPD approval):
http://www.cs.umass.edu/ugrad-education/ba-degree-requirements
University Resources

Dean’s Office (Academic Advising)
http://www.cns.umass.edu/students/academic-advising

Registrars Office:
http://www.umass.edu/registrar/

UMass Career Services - internships, resumes, job search
http://www.umass.edu/careers/

University Health Services - Mental Health Services
http://www.umass.edu/uhs/mentalhealth/

Academic Regulations
http://www.umass.edu/registrar/students/policies-and-practices/academic-regulations