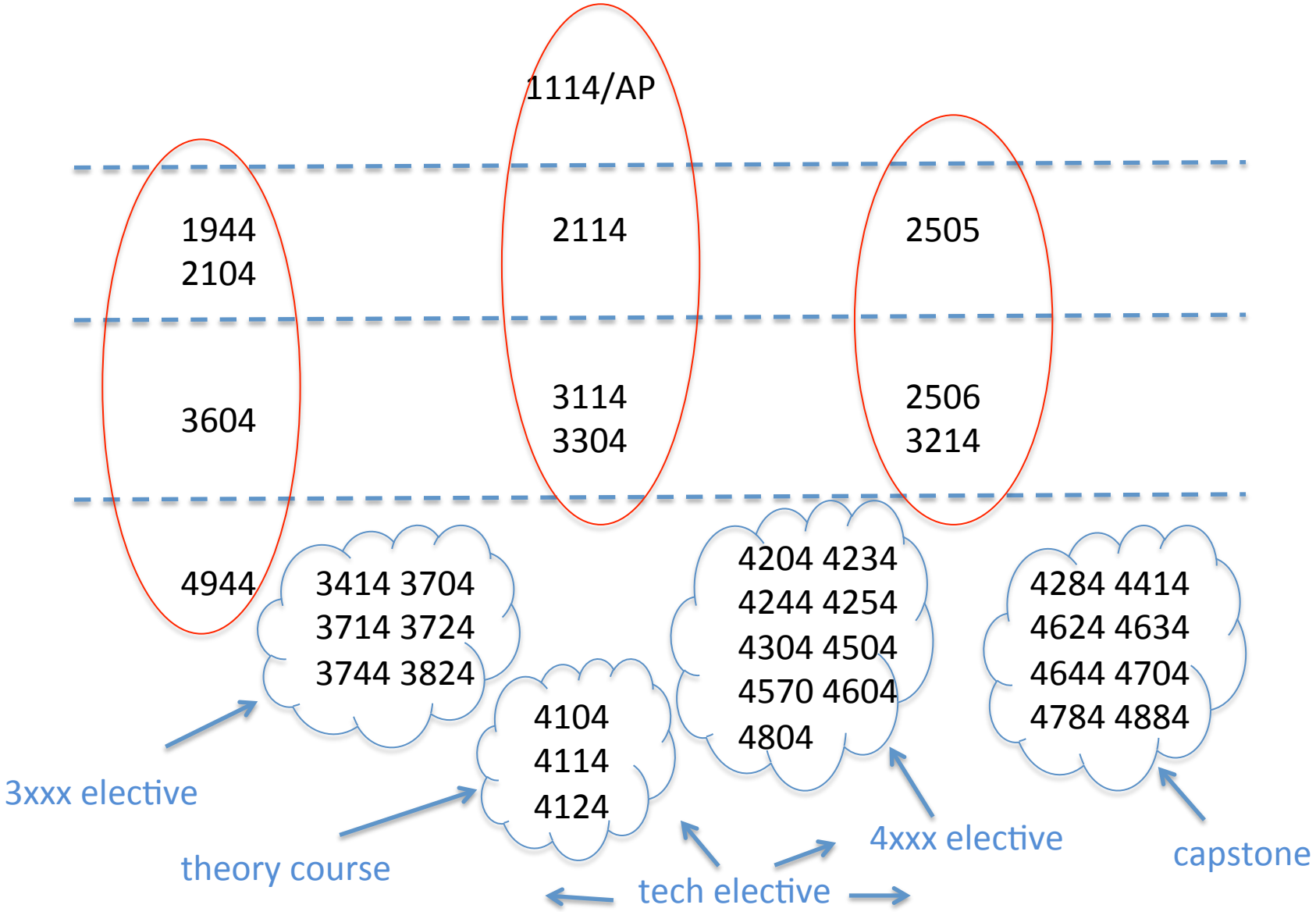
CS@VT Undergraduate Curriculum Overview



Accreditation: ABET (www.abet.org)

CS@VT Undergraduate Program Educational Objectives

Within a few years of graduation, alumni will have:

1. *demonstrated technical expertise by applying computer science knowledge and practice to solve challenging problems, whether in employment, graduate study, or individual pursuits;*
2. *advanced their skills in communication, teamwork, and professional and ethical behavior;*
3. *demonstrated leadership in their technical or professional pursuits;*
4. *engaged in post-graduate learning through graduate studies, professional improvement opportunities, or self-study;*
5. *served society through professional or personal contribution.*

CS@VT Undergraduate Student Outcomes

The undergraduate computer science program at Virginia Tech seeks to have its graduates demonstrate the following program outcomes:

1. an ability to apply knowledge of mathematics and science to carry out analysis of computer science problems and design appropriate solutions
2. an ability to use techniques, skills, and modern software development tools necessary for computing practice
3. an ability to identify, formulate, and solve computer science problems
4. an ability to design a computing system to meet desired needs
5. an ability to apply problem-solving strategies to new, unknown, or open-ended situations in computer science
6. knowledge and understanding of the impact of the many sub-disciplines of computer science
7. an ability to function on teams
8. an ability to use written and oral communication skills effectively
9. an understanding of professional and ethical responsibility
10. a recognition of the need for and ability to engage in lifelong learning
11. an ability to acquire and use the ever-changing technical knowledge required of computing professionals

Navigating Toward Your Degree

- READ EMAIL
- Take responsibility.
- Don't cheat!
- Start acting like a professional.
- See an advisor regularly
  - checksheets, DARS, tracks
  - course request, anticipated course offerings
  - progress-to-degree, "contracts", grade appeals, course withdrawals
  - CLE, minors, 2nd majors
  - Scholarships
  - Study aboard

Navigating Toward Your Degree

- Choosing electives: personal interests, tracks, friends, faculty, advisors, practicalities, grades, availability.
- Get to know a few professors:
  - office hours
  - IS/UR (see vturcs.cs.vt.edu)
  - advice
  - references
- Get to know other students:
  - McB 106
  - student groups
  - Mentoring
  - conferences, e.g., Grace Hopper, Tapia
- Learn some tools, e.g., GitHub

Navigating Toward Your Degree

- Advice from senior exit interviews:
  - Go to office hours
  - Do something outside of class
    - Internship
    - Club
    - UTA
    - Personal projects
    - Study abroad
    - Programming team