Semester Curriculum

- **Course Credits (29-38):**
  - Foundation courses: required, unless waived because of prior background
    - Research Foundation (3)
    - Quantitative Foundation (3)
    - Cyberinfrastructure Foundation (3)
    - Teaching Skills Workshop (2)
  - Cyberinfrastructure i-courses: required, one each from the three clusters
    - Infrastructure cluster (3)
    - Interaction cluster (3)
    - Informatics cluster (3)
  - Electives: 3-6 courses, depending on needs (9-18)
  - Notes:
    - Up to 9 credits can be awarded for previous graduate works
    - At least 60% of the credits must be taken for PhD level courses (including courses offered by other PhD programs)

- **Dissertation Credits (22-31):**
  - Varying, depending on the course credits

- **Assessments:**
  - Research Potential Assessment (qualifying exam)
    - End of 1st year for full-time students, and no later than the end of 2nd year for part-time students
    - Three components: grades, advisor's evaluation, and research paper/presentation
  - Doctoral proposal (admission to candidacy)
    - No later than 24 months after the research potential assessment
    - Written proposal, public defense
  - Dissertation
    - Written dissertation, public defense
    - One external reader, independent review

- **Publication requirement**
  - At least one paper before graduation
  - Specific requirements as outlined in the program policy