The requirements listed below pertain to all students matriculating in August 2024 and January 2025. All of the following sections are required to be completed to graduate.
Courses in areas 1-19 must be taken for a Letter Grade.

<table>
<thead>
<tr>
<th>Overall Credits (REQUIRED)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total: 120 credits</td>
</tr>
<tr>
<td>Human Ecology: 45 credits</td>
</tr>
<tr>
<td>(courses from DEA, FSAD, HD, NS, PUBPOL at any level or HE at the 3000/4000 level)</td>
</tr>
<tr>
<td>Human Ecology, outside the major: 11 credits</td>
</tr>
<tr>
<td>(from DEA, HD, NS, PUBPOL at any level or HE above 1500 level). Special Studies courses (4000, 4010, 4020) do not count.</td>
</tr>
</tbody>
</table>

1. **Fiber Science Core Courses**  (28 credits)
   - Take all of the following:
     - FSAD 1140 Principles of Design Computing
     - FSAD 1350 Fibers, Fabrics, and Finishes
     - FSAD 1360 Fiber and Yarn Analysis Laboratory
     - FSAD 2370 Structural Fabric Design
     - FSAD 3320 Product Quality Assessment
     - FSAD 3350 Fiber Science
     - FSAD 4360 Fiber Chemistry
     - FSAD 4444 FSAD Futures
     - FSAD 4460 Nanotechnology of Fibers and Textiles
     - FSAD 4660 Textiles, Apparel, and Innovation
   - **Note:** Courses taken for this area cannot also count for Area 2 (FSAD Introductory Courses) and Area 3 (FSAD Advanced Courses)

2. **DEA Requirement**  (3-4 credits)
   - Take one 1000-level DEA course in their first year. Choose from the following: (3-4)
     - DEA 1101 Visual Literacy and Design Studio
     - DEA 1110 Making a Difference by Design
     - DEA 1150 Design Graphics and Visualization
     - DEA 1500 Introduction to Environmental Psychology

3. **FSAD Introductory Courses**  (6-8 credits)
   - Take any two additional FSAD courses at the 1000, 2000 level.

4. **FSAD Advanced Courses**  (6 credits)
   - Take any two additional FSAD courses at the 3000 level or above. FSAD 4000, 4010, 4020, 4030, 4990 cannot count here.

5. **Computer Science**  (4 credits)
   - Choose one of the following courses:
     - CS 1110 Introduction to Computing Using Python
     - CS 1112 Introduction to Computing: An Engineering and Science Perspective
     - CS 2110 Object-Oriented Programming and Data Structures

6. **Introductory Chemistry**  (8 credits)
   - Choose one of the following sequences:
     - (a) CHEM 2070 and CHEM 2080 General Chemistry I and II
     - (b) CHEM 2150 Honors General and Inorganic Chemistry (eligible to take with a score of 5 on AP Chemistry)

7. **Organic Chemistry Lecture**  (3 credits)
   - Choose one of the following:
     - (a) CHEM 3570 Introductory Organic Chemistry I for the Life Sciences
     - (b) CHEM 3590 Honors Organic Chemistry I

8. **Organic Chemistry Laboratory**  (2 credits)
   - CHEM 2510 Introduction to Experimental Organic Chemistry
9. **Physics** (8 credits)
   Choose one of the following sequences:
   
   (a) PHYS 1101-1102 General Physics I and II
   (b) PHYS 1112-2213 Physics I: Mechanics & Heat and Physics II: Electromagnetism
   (c) PHYS 2207-2208 Fundamentals of Physics I and II

10. **Additional Approved Elective Sequence** (6-8 credits)
    Choose from one of the following sequences or any other in consultation with your advisor which will require a petition.

    | Apparel Design* | Materials Science and Engineering |
    |-----------------|----------------------------------|
    | FSAD 1450 Introduction to Fashion Design AND | MSE 2610 Mechanical Properties of Materials: From Nanodevices to Superstructures |
    | Choose one of the following: | Choose one from the following: |
    | (a) FSAD 2660 Activewear Design and Product Development | (a) MSE 2620 Electronic Materials for the Information Age |
    | (b) FSAD 3650 New Technologies in Fashion Design | (b) MSE 3010 Chemistry of Materials |
    | (c) FSAD 3990 Smart Clothing: Design & Programming | (c) MSE 3040 Kinetics, Diffusion, and Phase Transformation |
    | (d) FSAD 6900 Functional Aspects of Design and Clothing | (c) MSE 3050 Electronic, Magnetic and Dielectric Properties of Materials |
    | *Courses used here may not apply to Areas 2 or 3 |

Environment and Sustainability

| Choose from one of the following two course groups: |
| NTRES 1101 Environment & Sustainability AND |
| NTRES 1201 Global Water Sustainability |
| OR |
| DEA 2020 Introduction to Sustainable Design AND |
| BEE 3299 Sustainable Development |

Biomedical

| Choose one from the following: |
| (a) BME/ENGRI 1310 Introduction to Biomedical Engineering OR |
| (b) CHEME 2880 - Bimolecular Engineering: Fundamentals and Applications AND |
| MSE 4610 Biomedical Materials and their Applications |

Physical Chemistry

| Choose one of the following sequences: |
| CHEM 2870-2900 Introductory Physical Chemistry |
| CHEM 3890-3900 Honors Physical Chemistry |

11. **CHE Core Curriculum** (5 credits)
    Students must complete all three courses in their first three semesters:
    
    HE 1800 Blazing Your Trail in Human Ecology
    HE 1850 Introduction to Human Ecology
    HE 2000 Human Ecology Pathways to Racial and Social Justice

12. **First Year Writing Seminars** (6 credits)
    Note: The 2 required first year writing seminar courses must be completed during the first two semesters at Cornell.

13. **Psychology** (3 credits)
    Choose one of the following courses:
    
    HD 1120 People in Perspective: Brain, Mind, and Society
    HD 1130 Introduction to Human Development
    PSYCH 1101 Introduction to Psychology

14. **Introductory Microeconomics** (3 credits)
    ECON 1110 Introductory Microeconomics

15. **Humanities** (3-4 credits)
    Choose any course with Course Distribution Historical Analysis (HA or HST-AS), Literature and the Arts (LA or ALC-AS), or Cultural Analysis (CA).

16. **Statistics** (4 credits)
    Must be taken at Cornell, AP Statistics is not accepted.
    Choose one of the following courses:
    
    PUBPOL 2100 Introduction to Statistics (formerly PAM 2100)
    AEM 2100 Introductory Statistics
    ILRST/STSCI 2100 Introductory Statistics
    MATH 1710 Statistical Theory and Application in the Real World
    ENGRD 2700 Basic Engineering Probability and Statistics
17. Calculus (8 credits)
   Choose one of the following sequences:
   (a) MATH 1110-1120 Calculus I and II
   (b) MATH 1110-1220 Calculus I and Theoretical Calculus II
   (c) MATH 1910-1920 Calculus for Engineers and Multivariable Calculus for Engineers

   Note: A score of 4 or 5 on AP Calculus AB fulfills the Calculus I requirement; a score of 4 or 5 on AP Calculus BC fulfills Calculus I and II requirements.

18. Linear Algebra (4 credits)
   Choose one of the following courses:
   MATH 2210 Linear Algebra
   MATH 2230 Theoretical Linear Algebra and Calculus
   MATH 2310 Linear Algebra with Applications
   MATH 2940 Linear Algebra for Engineers

19. Ethics/Sustainability (3-4 credits)
   Choose from one of the following:
   AEM 3205 Ethics in Business and Organizations
   BSOC 2061 Ethics and the Environment (also STS 2061/PHIL 2960)
   COMM 4300 Ethics in New Media, Technology, and Communication
   CRP 3011 Ethics, Development, and Globalization
   DEA 4220 Ecological Literacy and Design
   GDEV 3240 Environmental Sociology
   FSAD 3200 Global Textile & Apparel Sustainability
   DEA/FSAD 4025 Design for Change: Imagining Decolonial Futures
   FSAD 4021 Apparel and Textiles in Developing Nations I
   DEA/FSAD 6800 Ethical Design: Engine of Positive Change
   ILROB 4760 Morality at Work
   INFO 1200 Information Ethics, Law, and Policy
   INFO 4270 Ethics & Policy in Data Science
   NTRES 3320 Introduction to Ethics and Environment

20. Electives (Variable)
   Any courses that are not taken in Areas 1-19 above, count as Electives.

21. Physical Education Requirement (2 courses)
   Physical Education must be completed in order to graduate. However, physical education does not count toward college and university minimum credit requirements for full-time status, nor does it count towards the 120 credits required for graduation.

22. Swim Test Requirement
   A successful swim test must be completed in order to graduate.
College Policies:

- **120 Overall Credits**
  - Students must complete 120 credits toward graduation.
  - A maximum of 15 credits of AP credit and in absentia credit can count towards the 120 total credits.
  - 15 credits of Study Abroad/Exchange and Cornell-In-Washington or 12 credits of Capital Semester can count towards total electives.

- **45 HE Credits**
  - Students must complete a minimum of 45 HE credits.
  - HE non-departmental courses at the 1500-level and below do not count toward the 45 HE credits.
  - Students must enroll in a minimum of one 3-credit course each semester in HE for their first four semesters, excluding winter and summer sessions.

- **11 HE Credits outside the major**
  - Students must complete a minimum of 11 HE credits outside of FSAD.
  - FWS, HE non-departmental courses below the 1500 level, Statistics and Research Methods courses (PUBPOL 2100, PUBPOL 3120, DEA 3550, or HD 2830), Special Studies (4000, 4010, 4020), and teaching assistantships (4030) do not count toward this requirement.
  - These can be taken S/U only if course is NOT used to fulfill a curriculum requirement [Areas 1-19].

- **Pass/Fail Courses [S/U]**
  - S/U grading option may NOT be used for any required course [Areas 1-19] unless it is the only grade option offered for those courses.
  - S/Us MAY be used for the 9 HE Credits outside the major and for electives in Area 20.
  - Students may apply no more than 12 credits of S/U towards graduation requirements. If a required course is only offered S/U, it will not count towards this limit. Students may take more S/Us if they choose, but the additional credit will not be applied towards graduation.
  - The **deadline for changing grade options is the 57th calendar day of the semester**, the same as the “drop” deadline.

- **Special Study Courses [4000, 4010, 4020, 4030]**
  - A maximum of 12 credits of special study course work from Human Ecology or other colleges will count towards the 120 overall credits. Courses will be indicated on the class roster with a Component of either IND or RSC. [Additional credits can be taken but will not be applied.]
  - A maximum of 12 credits of 4000-4030 may count toward the 45 HE Credit requirement.
  - Credits from 4000, 4010, 4020, and 4030 cannot count towards the 11 HE credits outside the major requirement.
  - Students cannot TA (4030) the same course for credit more than once or take and TA the same course simultaneously. 4030 does not fulfill any requirements towards the major. Registration for 4030 may not exceed 5 credit hours per semester.