COMPUTER SCIENCE + CROP SCIENCES, BS & CROP SCIENCES, MS

for the degree of Bachelor of Science in Computer Science + Crop Sciences and the Master of Crop Sciences

crop sciences department information: https://cropsciences.illinois.edu/
computer science degree information: https://cs.illinois.edu/academics/undergraduate/degree-program-options/cs-x-degree-programs#requirements
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college websites: https://aces.illinois.edu/ and https://engineering.illinois.edu
computer science contact: undergrad@cs.illinois.edu (academic@cs.illinois.edu)
crop sciences contact: sbartlet@illinois.edu

The five-year joint B.S.-M.S. program in Crop Sciences combines a B.S. in Crop Sciences with a non-thesis M.S. in Crop Sciences or a B.S. in Computer Science and Crop Sciences with a nonthesis M.S. in Crop Sciences. Current University of Illinois at Urbana-Champaign undergraduate students enrolled in the Department of Crop Sciences who have completed between 60 and 96 credit hours, maintain superior academic performance are eligible to apply for this program. Students admitted to the program will receive both degrees once all requirements for the B.S.-M.S. program are completed.

for the degree of Bachelor of Science in Computer Science + Crop Sciences and the Master of Crop Sciences

For the Computer Science + Crop Sciences, BS

Prescribed Courses including Campus General Education

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RHET 105 &amp; CMN 101</td>
<td>Writing and Research and Public Speaking</td>
<td>6-7</td>
</tr>
</tbody>
</table>

Advanced Composition

Select from campus-approved list. | 3-4

Cultural Studies

Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists. | 9

Foreign Language

Coursework at or above the third level is required for graduation.

Quantitative Reasoning I
See Mathematical Foundations for specific requirement. | 3
Quantitative Reasoning II
See Mathematical Foundations for specific requirement. | 3
Natural Sciences and Technology
See Crop Sciences Core for specific requirement. | 6

Humanities and the Arts
Select from campus-approved list. | 6
Social and Behavioral Sciences
Select from campus-approved list. | 6

ACES Required

ACES 101 Contemporary Issues in ACES | 2

Computer Science Core

CS 100 Freshman Orientation (recommended) | 1
CS 125 Introduction to Computer Science | 4
CS 126 Software Design Studio | 3
CS 173 Discrete Structures | 3
CS 225 Data Structures | 4
CS 374 Introduction to Algorithms & Models of Computation | 4
CS 421 Programming Languages & Compilers | 3

Computer Science Technical Track | 8-11

Choose from the following options:

CS 233 Computer Architecture & CS 241 and System Programming

OR

CS 240 Introduction to Computer Systems & Two CS 4XX Any two (2) 400-level CS courses except CS 491

Mathematical Foundations (fulfills Quantitative Reasoning I and II) | 12-13

CS 361 Probability & Statistics for Computer Science | 3
MATH 220 or MATH 221 Calculus Calculus I | 4-5
MATH 225 Introductory Matrix Theory | 2
MATH 231 Calculus II | 3

Crop Sciences Core | 16

CPSC 102 Foundational Skills in Crop Sciences | 2
CPSC 112 Introduction to Crop Sciences | 4
CPSC 393 Crop Sciences Internship or CPSC 395 Undergrad Research or Thesis | 3
CPSC 498 Crop Sci Professional Develpment | 1
Select two of the following: | 6

CPSC 226
CPSC 270 Applied Entomology
PLPA 204
Foundational Data Analytics | 6-8
CPSC 440 Applied Statistical Methods I | 4
And select one of the following:

CPSC 441

Information listed in this catalog is current as of 07/2021
Computer Science + Crop Sciences, BS & Crop Sciences, MS

CPSC 444  Introduction to Spatial Analytics

<table>
<thead>
<tr>
<th>Crop Sciences Electives</th>
<th>6</th>
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</thead>
<tbody>
<tr>
<td>CPSC/HORT/ PLPA 4XX</td>
<td>At least one (1) 400-level CPSC/HORT/PLPA course</td>
</tr>
<tr>
<td>CPSC/HORT/ PLPA XXX</td>
<td>Any CPSC/HORT/PLPA course except CPSC 241</td>
</tr>
</tbody>
</table>

Total Hours 126

For the Crop Sciences, MS Non-Thesis Option

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPSC 594</td>
<td>Professional Orientation CPSC</td>
<td>1</td>
</tr>
<tr>
<td>CPSC 598</td>
<td>Seminar (when presenting)</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>Electives including at least 4 hours of graded coursework at the 500 level other than CPSC 599</td>
<td>30</td>
</tr>
</tbody>
</table>

Total Hours 32

Other Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
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<tbody>
<tr>
<td>Other requirements and conditions may overlap</td>
</tr>
<tr>
<td>Minimum Hours Required Within the Unit: 1</td>
</tr>
<tr>
<td>Minimum 500-level Hours Required overall: 12</td>
</tr>
<tr>
<td>Minimum GPA: 3.0</td>
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</tbody>
</table>

1 Twelve (12) hours of graduate level concentration electives in the BS requirements will overlap with 12 hours of electives required for the MS requirements.

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