

## B.S. Information Sciences + Data Science (IS + DS)

Guide for course planning for the BS IS + DS Major. Meet with an iSchool Advisor to confirm requirements.

<https://ischool.illinois.edu/degrees-programs/undergraduate/bs-data-science>

### General Education Requirements

<input type="checkbox"/> <b>Composition I</b> RHET or CMN or ESL	<input type="checkbox"/>	<input type="checkbox"/> <b>Quantitative Reasoning I &amp; II</b> STAT 107 STAT 207
<input type="checkbox"/> <b>Advanced Composition</b> Take After Comp. I (INFO 303 approved)	<input type="checkbox"/>	Completed with MATH 220/221/234 & STAT 107 & STAT 207
<input type="checkbox"/> <b>Western</b> 1 Course	<input type="checkbox"/>	<input type="checkbox"/> <b>Social &amp; Behavioral Sciences</b> IS 101 IS 202
<input type="checkbox"/> <b>Non-Western</b> 1 Course	<input type="checkbox"/>	Completed with IS 101 & IS 202
<input type="checkbox"/> <b>U.S. Minority</b> 1 Course	<input type="checkbox"/>	<input type="checkbox"/> <b>Language other than English</b> <input type="checkbox"/> Third Level Required
<input type="checkbox"/> <b>Humanities &amp; the Arts</b> 6 Hours Required	<input type="checkbox"/>	<input type="checkbox"/> <b>Complete</b> > <b>In-Progress</b> ^ <b>Future Registered</b>
<input type="checkbox"/> <b>Natural Sciences &amp; Tech</b> 2 Courses Required	<input type="checkbox"/>	GenEds required of all undergraduate students at ILLINOIS, managed by each college (iSchool requirements listed) Some courses count as multiple GenEds and/or in IS Major

### Information Sciences Core Requirements

- IS 100** Exploring the iSchool with a Human-Centered Lens (First Semester)
- IS 101** Introduction to Information Sciences
- IS 202** Social Aspects of Info Technology (INFO 202)
- IS 204** Research Design for Information Sciences
- IS 206** Intro to Database Concepts & Applications

**INFORMATION SCIENCES & CULTURE Select One:**

- IS 308 Race, Gender, & Information Technology
- IS 309 Computers & Culture
- IS 310 Computing & Humanities
- IS 311 Historical Foundations of the Info. Society

Additional IS 308-311 may be taken to count as IS electives

No substitutions in IS curriculum

### INFORMATION SCIENCES ELECTIVES (24 hrs)

IS/INFO Any Level (12 hr. 100 & above, may be INFO):

- [1] IS
- [2] IS
- [3] IS
- [4] IS

IS Advanced (12 hr. 300/400-level, must be IS):

- [5] IS
- [6] IS
- [7] IS
- [8] IS

DS Core Courses (listed below) do not count as IS Electives

### Data Science Core Requirements

- MATH 220** Calculus (or MATH 221 or MATH 234)
- MATH 227 or 257** Linear Algebra for DS/Computational Apps.
- STAT/IS/CS 107** Data Science Discovery
- STAT 207** Data Science Exploration
- CS 307** Modeling & Learning in Data Science
- CS 277** Algorithms & Data Structures for Data Science (Sub: CS 225)
- IS 467** Ethics & Policy for Data Science
- IS 477** Data Management, Curation, & Reproducibility

### MEANINGFUL RESEARCH OR DISCOVERY (6 hrs)

Select from different experiences: IS 189/389 / INFO 199/399  
Independent Study; IS 249 Practicum; IS 304 Adv. Research Design; IS 400 Colloquium; Others approved by Advisor

- [1]

- [2]

### Additional Requirements

123 Total Hours Remaining: In-progress: Done:  
21 Adv. Hours  60 ILLINOIS Hours

Beginning Term:

Expected Graduation:

FA22	SP23	FA23	SP24	FA24	SP25	FA25	SP26

Notes:

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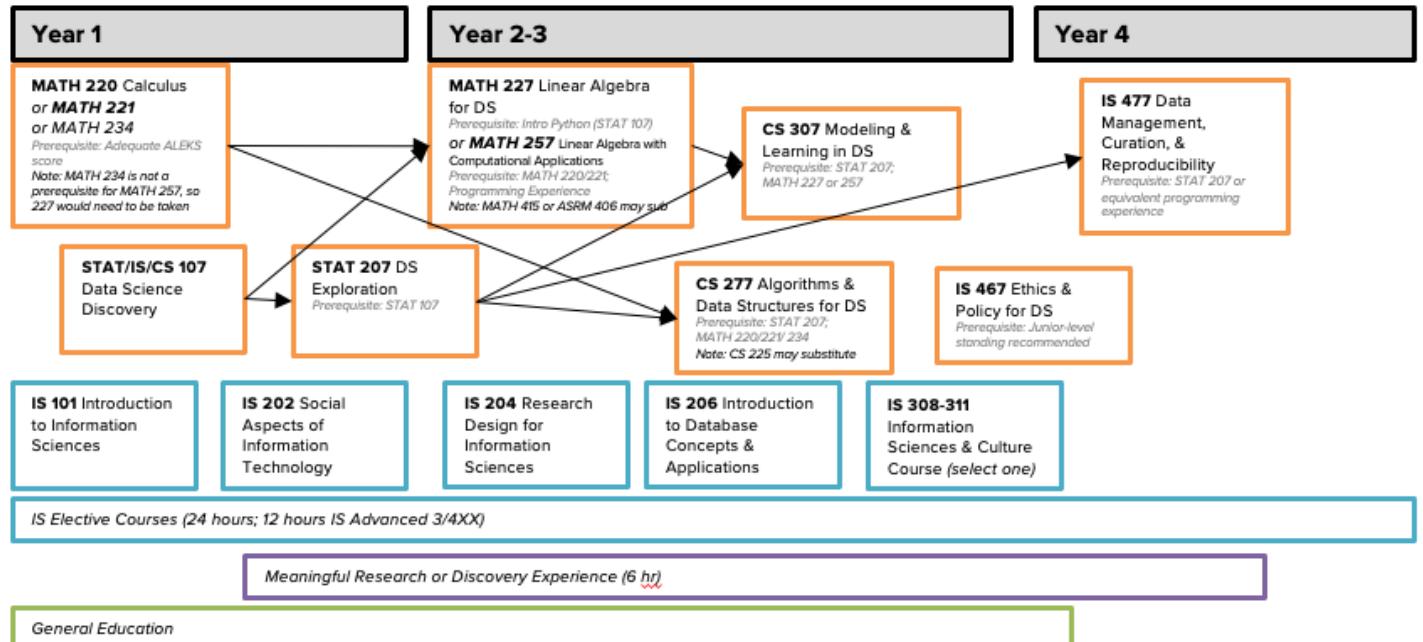
## Information Sciences (IS) Electives

There are a number of IS electives (100-400 level) to fulfill the 24 hr. requirement. Electives may be any course not listed in the IS/DS Core Requirements. Electives vary each semester in availability (check the Course Explorer each semester for current offerings). View all IS Courses here: <http://catalog.illinois.edu/courses-of-instruction/is/>  
 "Pathways" are areas of interest, & students may focus on one pathway, or across multiple. May align with careers and/or areas of interest. Students do not "declare" a pathway. <https://go.ischool.illinois.edu/BSISpathways>

## Data Science Notes

Many courses require prerequisites and these should be closely followed. Please discuss course planning and degree requirements with an iSchool advisor.

## IS+DS Curriculum Flow Chart



Course	Offering/Restrictions	Prerequisites
<b>MATH 220 or 221 or 234</b>	<b>Fall &amp; Spring &amp; Summer</b>	Adequate ALEKS Score required
<b>MATH 227 or MATH 257</b>	<b>Spring Only</b> <b>Spring Unrestricted (Fall: Restricted)</b>	Calculus (MATH 257 requires MATH 220 or 221; MATH 227 includes MATH 234)
<b>STAT/IS/CS 107</b>	<b>Fall &amp; Spring</b>	<i>No Prerequisites</i>
<b>STAT 207</b>	<b>Fall &amp; Spring</b>	STAT 107
<b>CS 307</b>	<b>Fall Only</b>	STAT 207; one of MATH 225, MATH 257, MATH 415, MATH 416, ASRM 406 <i>(Note: MATH 227 being added as prerequisite, request override with CS)</i>
<b>CS 277 (CS 225 may substitute)</b>	<b>Spring Only</b>	STAT 207; one of MATH 220, 221, or 234. CS 277 cannot be taken concurrently with CS 225. <i>(CS 225 has additional prerequisites)</i>
<b>IS 467</b>	<b>Fall &amp; Spring</b> Major Restriction	Junior or Senior Level
<b>IS 477</b>	<b>Fall &amp; Spring</b> Major Restriction	Junior or Senior Level STAT 207