

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"/> Composition I RHET or CMN or ESL	<input type="text"/>	<input type="checkbox"/> Quantitative Reasoning I & II <input type="text" value="STAT 107"/> <input type="text" value="STAT 207"/>
<input type="checkbox"/> Advanced Composition Take After Comp. I (INFO 303 approved)	<input type="text"/>	Completed with MATH 220/221/234 & STAT 107 & STAT 207
<input type="checkbox"/> Western 1 Course	<input type="text"/>	<input type="checkbox"/> Social & Behavioral Sciences <input type="text" value="IS 101"/> <input type="text" value="IS 202"/>
<input type="checkbox"/> Non-Western 1 Course	<input type="text"/>	Completed with IS 101 & IS 202
<input type="checkbox"/> U.S. Minority 1 Course	<input type="text"/>	<input type="checkbox"/> Language other than English <input type="text"/>
		<i>Third Level Required</i>
<input type="checkbox"/> Humanities & the Arts 6 Hours Required	<input type="text"/>	<input type="text"/>
<input type="checkbox"/> Natural Sciences & Tech 2 Courses Required	<input type="text"/>	<input type="text"/>

■ Complete > In-Progress ^Future Registered

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

<input type="checkbox"/> IS 100 Exploring the iSchool with a Human-Centered Lens (First Semester) <input type="checkbox"/> IS 101 Introduction to Information Sciences <input type="checkbox"/> IS 202 Social Aspects of Info Technology (INFO 202) <input type="checkbox"/> IS 204 Research Design for Information Sciences <input type="checkbox"/> IS 206 Intro to Database Concepts & Applications INFORMATION SCIENCES & CULTURE <u>Select One:</u> <input type="checkbox"/> IS 308 Race, Gender, & Information Technology <input type="checkbox"/> IS 309 Computers & Culture <input type="checkbox"/> IS 310 Computing & Humanities <input type="checkbox"/> 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): <input type="checkbox"/> [1] IS <input type="checkbox"/> [2] IS <input type="checkbox"/> [3] IS <input type="checkbox"/> [4] IS IS Advanced (12 hr. 300/400-level, <u>must be IS</u>): <input type="checkbox"/> [5] IS <input type="checkbox"/> [6] IS <input type="checkbox"/> [7] IS <input type="checkbox"/> [8] IS DS Core Courses (listed below) do not count as IS Electives
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Data Science Core Requirements

<input type="checkbox"/> MATH 220 Calculus (or MATH 221 or MATH 234) <input type="checkbox"/> MATH 227 or 257 Linear Algebra for DS/Computational Apps. <input type="checkbox"/> STAT/IS/CS 107 Data Science Discovery <input type="checkbox"/> STAT 207 Data Science Exploration <input type="checkbox"/> CS 307 Modeling & Learning in Data Science <input type="checkbox"/> CS 277 Algorithms & Data Structures for Data Science (Sub: CS 225) <input type="checkbox"/> IS 467 Ethics & Policy for Data Science <input type="checkbox"/> 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 <input type="checkbox"/> [1] <input type="checkbox"/> [2]
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Additional Requirements

123 Total Hours Remaining: In-progress: Done: **Beginning Term:** **Expected Graduation:**
 21 Adv. Hours ☐ 60 ILLINOIS Hours

FA22	SP23		FA23	SP24		FA24	SP25		FA25	SP26

Notes:

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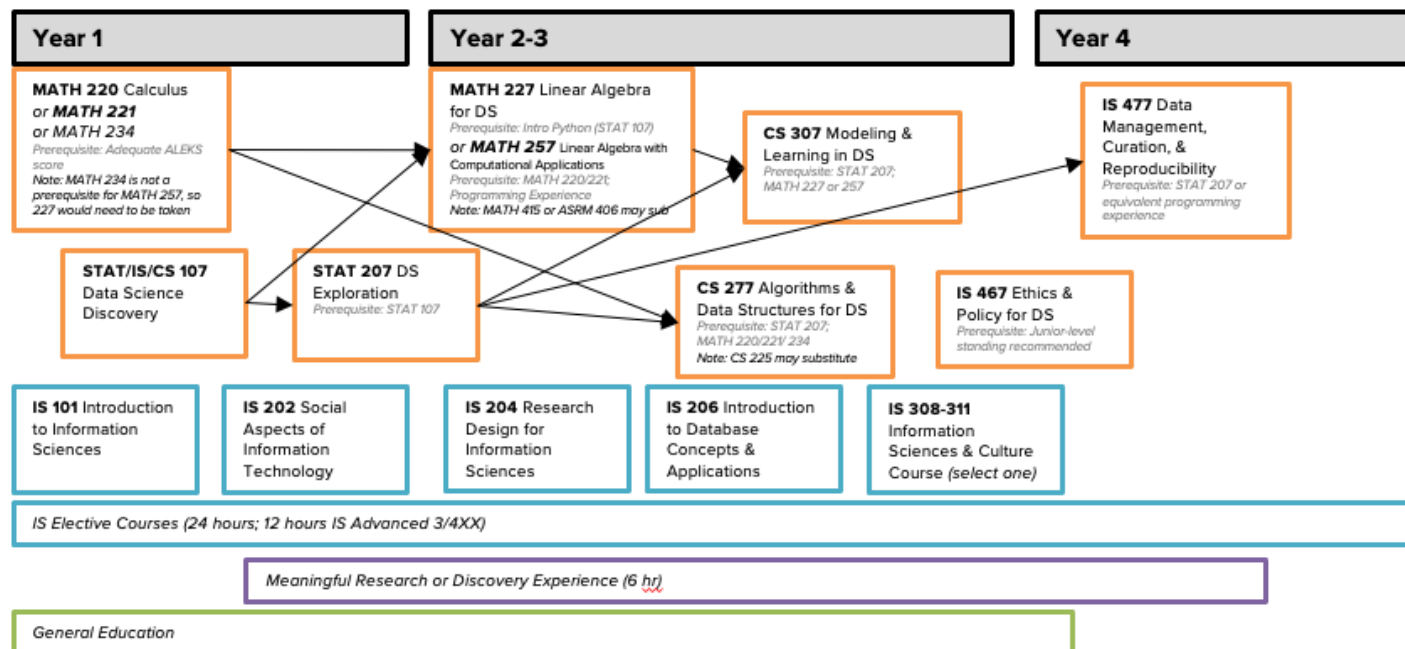
Information Sciences (IS) Electives

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