

DATA SCIENCE (WITH LING CONCENTRATION) 4-YEAR PLAN

DATA DESCRIPTION TRACK/DOUBLE DEGREE (BA/BS)

Freshman			
Fall	Hours	Spring	Hours
PSYC 199 Data I (Major Req.)	3	PSYC 399 Data II/EECS 331 Intro to Data Science (Major Req.)	3
EECS 138 Introduction to Computing (Major Req.)	3	Math 115 Calculus I (Major Req.)	3
Core 34: Math and Statistics (MTS) -- Math 101 (also counts toward BA req.)	3	LING 110 (Core 34: US Culture)	3
LING 106 (Core 34: Global Culture)	3	Core 34: English (ENG) – ENGL 102 (also counts toward BA req. Critical Reading and Writing)	3
Core 34: English (ENG) – ENGL 101 (also counts toward BA req. Composition)	3	Core 34: Communication (CMS)	3
	15		15
Sophomore			
Fall	Hours	Spring	Hours
MATH 107/PSYCH 210 (Major Req.)	3	MATH 290 Elementary Linear Algebra (Major Req.)	3
MATH 116 Calculus II (Major Req.)	3	PSYC 500/SOC 380/ECON 526 (Major Req.)	3
LING 325 Syntax (DS Domain of Appl. 1)	3	LING 312 Phonology (DS Domain of Appl. 3)	3
LING 305 Phonetics (DS Domain of Appl. 2)	3	Core 34: Social and Behavior Science (SBS)	3
Junior/Senior hours	3	Core 34: Arts and Humanities (AH)	3
	15		15
Junior			
Fall	Hours	Spring	Hours
PSYC 599 Data III (Major Req.)	3	PSYC 610 Data IV (Major Req.)	3
LING 527: Morphology (DS Domain of Appl. 4)*	3	LING Diversity requirement	3
Core 34: Natural & Physical Sciences (NPS)	4-5	LING Processing requirement	3
Language course I	5	Language course II	5
Core 34: Arts and Humanities (AH)		Quantitative Reasoning (BA req.)	3
	15-16		17

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Senior			
Fall	Hours	Spring	Hours
LING Acquisition requirement	3	PSYC 699 Community Data Lab (Major Req.)	3
Language course III	5	LING 421 Capstone [†]	3
Core 34: Social and Behavioral Sciences (SBS)	3	Language course IV	5
Any course >300 (Junior/Senior hours)	3	Any course	3
	14		14

* Completes Domain of Application for LING; Completes LING Minor; Counts as Advanced requirement for LING Major.

† Completes LING Major (two different Capstone options are available: LING 420 (offered in Fall, focuses on experimental linguistics) and LING 421 (offered in Spring, focuses on field/theoretical linguistics))

The following courses count towards to the Domain of Application requirement for the Data Science degree. **(Note that all courses in LING require at least one of LING 106/107 or LING 110/111.)**

Analytic Approaches to Language: Foundational concepts in language description and documentation focusing on crosslinguistic data.

- LING 305: Phonetics I
- LING 312: Phonology I
- LING 325: Syntax I
- LING 507: Phonetics II (requires Phonetics I)
- LING 514: Phonology II (requires Phonology I)
- LING 526: Syntax II (requires Syntax I)
- LING 527: Morphology (requires Phonology I and Syntax I)
- LING 531: Semantics (requires Syntax I)
- LING 541: Field Methods in Linguistics Description (requires Phonetics I and Syntax I)

Experimental Approaches to Language: Foundational concepts in experimental and variationist linguistics, focusing on data collection and analysis.

- LING 343: Bilingualism I
- LING 415: Second Language Acquisition I
- LING 425: First Language Acquisition I
- LING 435: Psycholinguistics I
- LING 438: Neurolinguistics I
- LING 443: Language Variation and Change
- LING 516: Second Language Acquisition II (requires Second Language Acquisition I)

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- LING 537: Psycholinguistics II (requires Psycholinguistics I)
- LING 539: First Language Acquisition II (requires First Language Acquisition I)
- LING 542: Neurolinguistics II (requires Neurolinguistics I)

The LING courses are divided into two buckets (Analytic Approaches to Language and Experimental Approaches to Language) so that students can narrow down their course selection depending on their overall interest. Any four courses from these lists will count towards the Domain of Application for the BS in Data Science.

Students are strongly encouraged to complete the three foundational courses **LING 305 (Phonetics I)**, **LING 312 (Phonology I)**, and **LING 325 (Syntax I)** as (i) these courses provide the necessary foundational skills that are central to all approaches to linguistics, (ii) will complement skills acquired in the Data Science portion of the degree, and (iii) set the student up for completion of the LING Major/Minor.