## Behavioral and Social Data Science

The Bachelor of Science in Behavioral and Social Data Science is designed for students interested in understanding, classifying, and predicting human behavior, emotions, and intentions. This major offers interdisciplinary training at the intersection of data analytics and human behavior. Students will think creatively and critically about the prediction of human behavior and how to work with a variety of data types, such as physiology, neuroimaging, language, and/or health-related outcomes. Students are also trained in experimental design and ethics, enabling them to evaluate new research findings and communicate their findings in written and oral presentations. What distinguishes this major from related majors is that it provides significant training in the analysis and understanding of human behavior - at the level of the individual, social group and society. Students who successfully complete this program will develop a technical toolkit to tackle the most ambitious problems involving human behavior and help create the next-generation data science workforce. Training will be offered in the curation, visualization, analysis, and ethical treatment of realworld data using programming languages including R and python. The program is designed to prepare graduates primarily for entry level data science careers in industry, although positions in other settings, such as government, nonprofit agencies, universities and other research settings, may also be appropriate. The degree is offered by the College of Liberal Arts.

A total of 120 semester hours is required. Thirty-nine hours must be in upper-division courses. At least 60 hours, including 24 hours of upper-division coursework, must be completed in residence at the University. Provided these residence rules are met, credit may be earned by examination, by extension, by correspondence (up to 30 percent of the hours required for the degree), or, with the approval of the dean, by work transferred from another institution. Up to 16 semester hours of classroom and/or correspondence coursework may be taken on a pass/ fail basis; coursework taken on a pass/fail basis may count toward electives.

Students in this degree program may pursue any of the honors programs available to Bachelor of Arts, Plan I, students. These programs are described in the section Liberal Arts Honors Programs, Plan I. All students must complete the University's Core Curriculum. All students also must complete the following Skills and Experience flags required by the College of Liberal Arts:

- a. Writing: Three flagged courses beyond Rhetoric and Writing 306 or its equivalent. One must be upperdivision.
- b. Quantitative Reasoning: one flagged course
- c. Global Cultures: one flagged course
- d. Cultural Diversity in the United States: one flagged course
- e. Ethics: one flagged course
- f. Independent Inquiry: one flagged course

Courses that may be used to fulfill core curriculum and flag requirements are identified in the Course Schedule. Courses that fulfill core curriculum and flag requirements may be used simultaneously to fulfill other requirements, unless otherwise specified. Students may not earn the cultural diversity and global cultures flags from the same course. Generally, flag requirements must be satisfied with in-residence courses. See a Behavioral and Social Data Science advisor for details. A list of approved courses satisfying the University core curriculum and Liberal Arts requirements is available on the College of Liberal Arts web site. The specific requirements for the Bachelor of Science in Behavioral and Social Data Science consist of prescribed coursework, coursework in the major, and electives. Only in the following cases may a single course be counted toward more than one requirement:

- a. A course that fulfills a core curriculum requirement may also be counted toward any specific requirement of the Bachelor of Science in Behavioral and Social Data Science unless otherwise stated.
- b. A course that fulfills another requirement may also be used to fulfill a flag requirement.
- c. Up to three hours of coursework counted toward prescribed work or toward the core curriculum may also be counted toward a minor or certificate. Completion of a transcript-recognized minor or certificate is not a requirement of the Bachelor of Science in Behavioral and Social Data Science, but may be earned.

The student must fulfill the University's General Requirements for graduation and the requirements given in the sections Special Requirements of the College of Liberal Arts and Applicability of Certain Courses. University requirements for graduation include a grade point average of at least 2.00 in all courses taken at the University (including credit by examination, correspondence, and extension) for which a grade or symbol other than Q, W, X, or CR is recorded. The student must also earn a grade point average of at least 2.00 in courses taken at the University and counted toward major requirements. More information about grades and the grade point average is given in the General Information Catalog.

## **Prescribed Work**

- a. Humanities and writing: English 316L, 316M, 316N, or 316P. Three courses beyond Rhetoric and Writing 306 that carry a writing flag. One of these courses must be upper-division. Courses that carry a writing flag are identified in the Course Schedule. Courses that carry a writing flag may be used simultaneously to fulfill the core curriculum and the major.
- b. Foreign language: Proficiency in a language other than English is required.
  - i. Certified proficiency on a placement or credit-by-exam test.
  - ii. Students with previous experience in the language they plan to use to meet the language requirement must take a language placement test. A student may not select for credit a language course below this placement level without departmental permission.
  - iii. A passing grade in a language course listed below: The study of a second language contributes in an important way to a broad education for today's students, who live in a world where the overwhelming majority of people do not speak or read English and where much of the knowledge that is disseminated may never appear in English. Knowledge of a second language is important for an appreciation of the culture of the people using that language, and it also helps students to understand the structure and complexities of their own native language. Students with sufficient preparation may be able to use the second language for study in their chosen discipline. An intermediate level of competency as determined by the completion of any one of the following options:

Requirements		Hours	
ASL 311D	American Sign Language III: Intermediate		3
ARA 611C	Intensive Arabic II		6
BEN 312L	Second-Year Bengali II		3
CHI 612	Accelerated Second-Year Chinese		6
CHI 312L	Second-Year Chinese II		3

CZ 611C	Intensive Czech II	6
CZ 412L	Second-Year Czech II	4
DAN 612	Accelerated Second-Year Danish	6
DCH 612	Accelerated Second-Year Dutch	6
FR 611C	Intermediate French	6
FR 412K	Intermediate French I	4
GER 612	Accelerated Second-Year German: Readings in Modern German	6
GK 312K	Intermediate Greek II	3
GK 312L	Intermediate Greek II: Biblical Greek	3
GK 610C	Intermediate Modern Greek	6
GK 310K	Second-Year Modern Greek II	3
HEB 612C	Intensive Biblical Hebrew II	6
HEB 611C	Intensive Hebrew II	6
HIN 312L	Second-Year Hindi II	3
HIN 612	Accelerated Second-Year Hindi	6
ITL 611C	Intermediate Italian	6
JPN 611D	Intermediate Japanese	6
KOR 312L	Second-Year Korean II	3
LAL 611C	Intensive Indigenous Language of Latin America II	6
LAT 511K	Accelerated Intermediate Latin	5
MAL 312L	Second-Year Malayalam II	3
NOR 612	Accelerated Second-Year Norwegian	6
PRS 611C	Intensive Persian II	6
PRS 612C	Intensive Persian for Heritage Speakers	6
POL 611C	Intensive Polish II	6
POL 312L	Second-Year Polish II	3
POR 611D	Second-Year Portuguese	6
RUS 611C	Intensive Russian II	6
RUS 412K	Second-Year Russian I	4
SAN 312L	Second-Year Sanskrit II	3
S C 312L	Second-Year Bosnian/Croatian/ Serbian II	3
SAL 312L	Second-Year South Asian Languages II	3
SEL 611C	Intensive Slavic and Eurasian Languages II	6
SEL 312L	Second-Year Slavic and Eurasian Languages II	3
SPN 311	Intermediate Spanish	3
SPN 611D	Second-Year Spanish	6
SPN 311J	Intermediate Spanish for Heritage Learners	3
SWA 611C	Intensive Swahili II	6
SWE 612	Accelerated Second-Year Swedish	6
TAM 312L	Second-Year Tamil II	3
TEL 312L	Second-Year Telugu II	3
TUR 611C	Intensive Turkish II	6
URD 312L	Second-Year Urdu II	3
UKR 312L	Second-Year Ukrainian II	3

YID 612	Accelerated Second-Year Yiddish	6
YOR 611C	Intermediate Yoruba	6

- d. Students who wish to meet the requirement with proficiency in a language not listed in the table above should contact the Texas Language Center.
- Social science: Three semester credit hours in a social science field, in addition to the course taken to satisfy the Social and Behavioral Science requirement of the core curriculum. This course may count toward the major.
- 4. Cultural expression, human experience, and thought: Three semester hours of approved coursework. This course must be in a field of study taught in the College of Liberal Arts. A course counted toward any requirement of the core curriculum may not also be counted toward this requirement. A course counted toward the foreign language and culture requirement may not also be counted toward this requirement. A list of approved courses is available on the College of Liberal Arts web site.
- 5. Mathematics and Natural Sciences:
  - i. Mathematics 408C or 408K
  - ii. Psychology 317L or 120R
  - iii. Two of the five following sequences:
    - 1. Biology 311C, 311D, and 206Lor Integrative Biology 208L
    - 2. Chemistry 301, 302, and 204
    - Physics 317K, 117M, and 117N; or Physics 301, 101L, 316, and 116L; or Physics 303K, 103M, 303L, and 103N; or Physics 302K, 102M, 302L, and 102N
    - Computer Science 303E, 313E, and one of the following: Computer Science 323E, 324E, 326E, 327E, 329E
    - 5. Mathematics 408D, 340L, and either 346 or 362K
- 6. Three hours upper-division Mathematics

## **Major Requirements**

At least twenty-nine hours are required, of which twenty-one must be upper-division, consisting of

- a. Psychology 301
- b. Psychology 317L or 120R
- c. Psychology 371E, 371F, and 420M
- Multicultural/diversity/inclusion in the behavioral sciences: Psychology 332U, 364T, 365D, or a course chosen from an approved list available at <u>https://liberalarts.utexas.edu/psychology/</u>

At least twelve of the additional hours of upper-division hours must be in Psychology courses with Psychology 420M as a prerequisite.

## **Electives**

In addition to the core curriculum, prescribed work, minor requirements, and major requirements, the student must complete enough elective coursework to provide the 120 semester hours required for the degree. These 120 hours may include no more than 12 hours of conference courses and internship courses combined as described in Conference Courses and Internship Courses; 12 hours of Bible courses; nine hours of designated coursework in air force science, military science, or naval science, except for students enrolled in the Military Leadership minor; 16 hours completed on a pass/fail basis; 39 hours in any one field of study in the College of Liberal Arts or the College of Natural Sciences; and 36 hours in any other single college or school of the University. Mathematics courses at the level of college algebra may not count toward elective hours.