

Informatics, Human-Centered Data Science (BSI)

Data is one of the most valuable commodities in the information society, and workers who can use data to gain new insights are in great demand. This Informatics major concentration will train students to think critically and use data in an ethically responsible manner in artificial intelligence, machine learning, information retrieval, data curation, and data analysis.

Total Hours Required: 120

Plan of Study

The Plan of Study is a suggested four-year course sequence to support academic planning and serves as a helpful guide. Currently enrolled students should meet with their academic advisor to tailor their course selections and timelines to their individual goals and circumstances.

Course	Title	Hours
Year 1		
Semester 1		
I 301	Introduction to Informatics	3
I 302	Academic Success in the Digital University	3
<u>U.S. History (060)</u>		3
<u>Social and Behavioral Sciences (080)</u>		3
<u>First-Year Signature Course (090)</u>		3
Hours		15
Semester 2		
I 303	Ethical Foundations for Informatics	3
I 304	Programming for Informatics	3
<u>Mathematics (020)</u>		3
<u>U.S. History (060)</u>		3
RHE 306	Rhetoric and Writing	3
Hours		15
Year 2		
Semester 1		
I 305	Research Methods for Informatics	3
<u>Transcript-recognized minor or certificate</u>		3
I 310D	Introduction to Human-Centered Data Science	3
<u>Visual and Performing Arts (050)</u>		3
GOV 310L	American and Texas Government	3
Hours		15
Semester 2		
I 306	Statistics for Informatics	3
I 310J	Introduction to Social Justice Informatics	3
<u>Transcript-recognized minor or certificate</u>		3
E 316L	British Literature	3
GOV 312L	Issues and Policies in American Government	3
Hours		15
Year 3		
Semester 1		
<u>Foreign Language other than English, Beginning Proficiency</u>		3
I 320D	Topics in Human-Centered Data Science	3
<u>Natural Science and Technology, Part I (030)</u>		3
<u>Transcript-recognized minor or certificate</u>		3
Free Elective (upper-division)		3
Hours		15
Semester 2		
I 372	Career Success in the Digital Organization	3
<u>Natural Science and Technology, Part II (093)</u>		3
I 320D	Topics in Human-Centered Data Science	3

Free Elective (upper-division)	3	
<u>Transcript-recognized minor or certificate</u>	3	
Hours	15	
Year 4		
Semester 1		
Hours chosen from: science, technology, engineering, or math course	3	
I 320D	Topics in Human-Centered Data Science	3
Free Elective	6	
<u>Natural Science and Technology, Part I (030)</u>	3	
Hours	15	
Semester 2		
I 379C	Capstone	3
Free Elective (informatics)	3	
Free Elective	3	
Hours chosen from: science, technology, engineering, or math course	3	
<u>Transcript-recognized minor or certificate</u>	3	
Hours	15	
Total Hours	120	

Requirements

All requirements are listed below, starting with the most specialized moving to the most general. Additional requirements may follow the table, so be sure to read the entire page. Some required courses listed below may also satisfy General Education requirements, including Core Curriculum.

Code	Title	Hours
Concentration		
I 301	Introduction to Informatics	3
I 310D	Introduction to Human-Centered Data Science	3
Hours chosen from:		3
I 310C	Introduction to Cultural Heritage Informatics	
I 310J	Introduction to Social Justice Informatics	
I 310M	Introduction to Health Informatics	
I 310S	Introduction to Social Informatics	
I 310U	Introduction to User Experience Design	
Hours chosen from: (advanced topics)		9
I 320D	Topics in Human-Centered Data Science	
I 379C	Capstone (Students pursuing the School of Information Honors distinction may substitute I 679H)	3
Informatics Elective		
Hours chosen from: Informatics elective coursework		3
Subtotal		24
Degree (see details below)		24
Free electives: Additional coursework to reach total hours required.		30
Subtotal		54
General Education		
<u>Core Curriculum</u>		42
<u>Foreign Language other than English, Beginning Proficiency</u>		
Subtotal		42
<u>College Requirements - Natural Sciences</u>		
<u>General University Requirements</u>		
Total Hours		120

Degree-Bachelor of Science in Informatics (BSI)

Code	Title	Hours
I 302	Academic Success in the Digital University	3
I 303	Ethical Foundations for Informatics	3
I 304	Programming for Informatics	3
I 305	Research Methods for Informatics	3
I 306	Statistics for Informatics	3
Foreign Language: Beginning-level proficiency coursework, or the equivalent, in a foreign language		
Hours chosen from: Additional science, technology, engineering, and math beyond the University's Core Curriculum		6
I 372	Career Success in the Digital Organization	3
Total Hours		24

Additional Requirements and Policy

Thirty-six hours must be in upper-division courses. At least 60 hours, including 21 hours of upper-division coursework, must be completed in residence at the University. Provided residence rules are met, credit may be earned with the approval of the dean by examination, by extension, by correspondence, or by work transferred from another institution. Up to 12 semester hours of classroom and/or correspondence coursework may be taken on the pass/fail basis; this coursework may be counted only as electives.

The specific requirements for the Bachelor of Science in Informatics consist of prescribed work, the major, and electives. Only in the following cases may a single course be counted toward more than one requirement:

1. A course that fulfills a core curriculum requirement may also be counted toward any specific requirement of the Informatics major unless otherwise stated below.
2. Courses counted toward the prescribed work may also be counted toward the Informatics major.

In addition, the student must earn a grade point average of at least 2.00 in Informatics courses taken at the University and counted toward the degree and major requirements. The student must earn a grade of at least C- in each course used to fulfill any of the requirements for the degree and major.

Electives

In addition to the core curriculum, prescribed work, and major, students 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 designated coursework in air force science, military science, or naval science; 12 hours completed on the pass/fail basis; and 36 hours in any other single college or school of the University.

Minors and Certificates

Students may choose to pursue a minor and/or certificate to offset elective credit. The minor or certificate consists of a specific number of semester hours of coursework completed outside the student's major field. The requirements of the minor or certificate are established by the offering department. Only one minor may be declared per major. Before planning to use a course to fulfill the minor or certificate requirement, the student should consult the department that offers the course.

Applicability of Certain Courses

Physical Activity Courses

Physical activity (PED) courses are offered by the Department of Kinesiology and Health Education. Up to three semester hours of physical activity coursework may be counted as electives toward any Department of Information degree. All physical activity courses are counted among courses for which the student is enrolled, and the grades are included in the grade point average.

ROTC Courses

The Departments of Air Force Science, Military Science, and Naval Science maintain ROTC units on campus. Information about each program is available from the chair of the department concerned.

Twelve semester hours of coursework in air force science, military science, or naval science may be counted toward any degree in the Department of Information. Such credit may be used only as electives or to fulfill the writing requirement, and only by students who are commissioned by the University ROTC program.

Courses Taken on the Pass/Fail Basis

No more than 12 semester hours taken on the pass/fail basis may be counted toward Department of Information degrees. In general, courses taken on the pass/fail basis will count as general electives. Coursework required for Department of Information major requirements cannot be taken pass/fail. Complete rules on registration on the pass/fail basis are given in the *General Information Catalog*.

Correspondence and Extension Courses

Credit that a University student in residence earns simultaneously by correspondence or extension from the University or elsewhere or in residence at another school will not be counted toward a degree in the Department of Information unless specifically approved in advance by the dean. For additional information about correspondence work by resident students, see the *General Information Catalog*.

In the semester they plan to graduate, students may not take any course to be counted toward the degree at another institution or through University Extension; students who plan to graduate at the end of the summer semester may request approval to take transfer work only in the first summer term.

Bible Courses

Bible courses may be counted as lower-division electives in Department of Information degree programs that have room for such electives. No more than 12 semester hours of such work may be counted toward any degree offered by the University.