Academic Advisement Report
UGRD.USCNC.STATDSBA
Undergraduate Career
College of Science Program
Statistics and Data Science Major (BA)
Requirement Term: Fall 2019

MAIN Campus at TUCSON Location

By merging modern data science approaches with a solid mathematical background and practical training, the Undergraduate Degree in Statistics and Data Science provides a curriculum that allows students to make significant contributions at the forefront of knowledge across the vast array of activities in government, education, and industry that rely on statistical thinking.

LEARNING OUTCOMES
- Apply methods and concepts from their coursework to analyze data based scientific problems
- Be able to define mathematical and statistical terms precisely
- Critically evaluate and extend statistical models drawn from current scientific literature
- Effectively communicate their results
- Produce effective analyses from data using a variety of computational, mathematical, and statistical approaches
- Recognize when arguments, especially formal statistical procedures and data visualization, are valid, and identify logical flaws

Undergraduate Graduation Requirements
All coursework and requirements for this degree must be completed prior to the date the degree is awarded. The University of Arizona requirements to follow in this audit are required for graduation and awarding of the degree.

Curriculum:
1. The University of Arizona and the Arizona Board of Regents have sole discretion over all curricula changes.
2. Courses, programs & requirements may be suspended, deleted, restricted, or changed in any manner, at any time.
3. Students must remain currently informed about all policies & other info that bears on completing a degree.

Required Units:
Additional units will be required to complete this degree if a student:
A) is admitted to the UA with deficiencies;
B) changes their academic plan(s);
C) fails to meet minimum course/plan requirements;
D) ineffectively plans or fails to execute a course of study that leads directly to degree completion; or
E) Candidates for a second bachelor's degree at The University of Arizona with a different award date than the first must earn no fewer than 30 units of University Credit in addition to the units required for the first degree, and must meet all requirements for the second degree.

The following requirements must be met for graduation.

Units Required and Cumulative GPA
120 units are required at a 2.0 GPA. View the pdf report grid for units earned toward this degree and cumulative GPA.

Completing a second bachelor's degree at The University of Arizona requires no fewer than 30 units in addition to the units required for the first degree, and all requirements for the second degree must be met.

Upper Division Units
Not Satisfied: A minimum of 42 units of upper-division credit are required for this degree.

- Units: 42.00 required, 0.00 completed, 42.00 needed

Units in Residence
Not Satisfied: A minimum of 30 units in residence at The University of Arizona (excluding correspondence credit and credit by exam) is required.

- Units: 30.00 required, 0.00 completed, 30.00 needed

Final Units in Residence
A minimum of 18 of the final 30 units taken toward degree requirements must be in residence at The University of Arizona.
Consult with your academic advisor if you plan to use transfer credits to fulfill your degree requirements.

**Correspondence and/or Exam Credit Limit**

*Satisfied:* A maximum of 60 units of Correspondence Credit and/or Exam Credit may apply toward graduation.

- **Units:** 0.00 completed

**Non Degree Seeking Limit**

A maximum of 15 units completed as a non-degree seeking student may be used for fulfilling undergraduate degree requirements.

Units exceeding this limit (shown below) must be subtracted from the units required towards the degree and graduation requirements.

**Non-Community College Units**

*Not Satisfied:* Non-Community College Units: While there is no limit to the total number of units of course work that may be transferred from an accredited community college to The University of Arizona, no more than 64 units from a 2-year institution may be applied toward the requirements for a bachelor's degree. Therefore, to reach the required 120 units for a bachelor's degree, a minimum of 56 units must be completed from 1) coursework at a 4-year institution, 2) approved credit by examination (refer to UA Catalog for approved examinations and scores), or 3) any combination thereof.

- **Units:** 56.00 required, 0.00 completed, 56.00 needed

**Success Course Limit**

*Satisfied:* No more than 3 units will apply toward a student's graduation requirements.

All Success courses taken can be seen below. Success Course units exceeding the 3 unit maximum must be subtracted from the total units, residency requirements and cumulative grade point average.

**PE Activity Course Limit**

*Satisfied:* No more than 3 units will apply toward a student's graduation requirements.

All PE activity courses taken can be seen below. PE Activity units exceeding the 3 unit maximum must be subtracted from the total units, residency requirements and cumulative grade point average.

**Foundation Mathematics**

*Not Satisfied:* Foundation Mathematics

**GE Substantial Math Strand**

*Not Satisfied:* Complete 1 course.

**GE Substantial Math Strand**

*Not Satisfied:* Complete 1 course.

- **Units:** 2.67 required, 0.00 completed, 2.67 needed
Courses Available

MATH 122B, MATH 125, MATH 129, MATH 215, MATH 223, MATH 254, MATH 313

Undergraduate General Education and Foundation Requirements

Overall Requirement Not Satisfied: Undergraduate General Education and Foundation Requirements

Foundation Composition

Not Satisfied: Complete 1 of the following 4 Foundation Composition options:
1. 3 Course Foundation Composition Sequence
2. 2 course Foundation Composition sequence
3. Honors Composition with grade of C or higher
4. Honors Composition with a grade of D and Second Semester Composition.

Please note: Students who earn a grade of D in Honors Composition may choose to repeat the course in order to earn a higher grade to satisfy the requirement. Please consult with your major advisor.

Mid-Career Writing Assessment - Complete 2nd semester English Composition with a B grade or higher. Students who do not earn a grade of B or better in 2nd semester English Composition must also satisfy a college or department writing requirement. Consult your major advisor if you do not earn a grade of B in 2nd semester English Composition.

Option 1: Foundation Composition - 3 Course Sequence

· Courses: 3.00 required, 0.00 completed, 3.00 needed

Option 2: Foundation Composition - 2 Course Sequence
Not Satisfied: Complete 2 courses. Complete ENGL 101/107 AND ENGL 102/108

· Courses: 2.00 required, 0.00 completed, 2.00 needed

Option 3: Honors Composition
Not Satisfied: Complete 1 course with a C or better.
Courses: 1.00 required, 0.00 completed, 1.00 needed

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Courses Available

ENGL 109H

**Foundation Second Language - Fourth Semester Proficiency**

Not Satisfied: Credit will not be given for a course at an equivalent or lower level than prior language credit earned.

Course must be taken for a grade, not for pass/fail.

Demonstrate fourth semester proficiency in a second language by completing one of the following:

1. Complete a Fourth Semester Language Course with a grade of C or higher.
2. Complete Arabic 401 and 1 course with a grade of C of higher from Arabic 424B, 427B or 430B.
3. Pass a language proficiency examination at the fourth semester level

**Option 1: Fourth Semester Language Course**

Not Satisfied: Complete 1 course with a grade of C or better.


Courses used to fulfill this requirement may also be used to fulfill other requirements.

Courses: 1.00 required, 0.00 completed, 1.00 needed

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Courses Available


OR **Option 2: Arabic Language**

Not Satisfied: Complete ARB 401, Intermediate Arabic, plus one additional course from ARB 424B, 427B, 439B, 484B.

Courses: 1.00 required, 0.00 completed, 1.00 needed

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Courses Available

ARB 401
AND Option 2: Additional Arabic Courses

Not Satisfied: Complete one additional course with a grade of C or better from ARB 424B, 427B, 439B, 484B.

- Courses: 1.00 required, 0.00 completed, 1.00 needed

Courses Available

ARB 424B, ARB 427B, ARB 439B, ARB 484B

General Education Tier I

Overall Requirement Not Satisfied: Complete each of the following areas.

Tier I Individuals & Societies/150s

Not Satisfied: Complete 2 courses, 6 units total. Transfer students with quarter system credits may satisfy Tier One requirements with 2 courses and 5.34 units.

- Units: 5.34 required, 0.00 completed, 5.34 needed
- Courses: 2.00 required, 0.00 completed, 2.00 needed

Courses Available

(***) (###), AFAS 150B1, ANTH 150B1, ART 150B1, ART 150B2, EAS 150B1, EDP 150B1, ENGL 150B1, ESOC 150B1, FREN 150B1, FSHD 150B1, FTV 150B1, GEOG 150B1, GEOG 150B2, GER 150B1, GWS 150B1, GWS 150B2, GWS 150B3, GWS 150B4, GWS 150B5, HNRS 150B1, HNRS 150B2, HUMS 150B1, ITAL 150B1, LAR 150B1, LAS 150B1, MAS 150B1, MAS 150B2, MIS 150B1, PA 150B1, PHIL 150B1, POL 150B1, RCSC 150B1, RCSC 150B2, RELI 150B1, RSSS 150B1, RSSS 150B2, SOC 150B1, SOC 150B2, SPAN 150B1, SPAN 150B2, TLS 150B1, AED 150A1, ANTH 150A1, ART 150A1, GER 150A1, HWRS 150A1, LING 150A1, MIS 150A1, PAH 150A1, PAH 150A2, PAH 150A3, PHIL 150A1, POL 150A1, PSY 150A1, AED 150C1, ANTH 150C1, AREC 150C1, AREC 150C2, AREC 150C3, CLAS 150C1, ECON 150C1, FIN 150C1, FREN 150C1, GEOG 150C1, HIST 150C1, HIST 150C2, HIST 150C3, HIST 150C4, HIST 150C5, HIST 150C6, HNRS 150C1, HPS 150C1, ITAL 150C1, JOUR 150C1, LAS 150B2, LING 150C1, MAS 150C1, MENA 150C1, NSC 150C1, PHIL 150C1, PLP 150C1, POL 150C1, POL 150C2, POL 150C3, PPEL 150C1, RNR 150C1, SOC 150C1, SOC 150C2, TLS 150C1, PHIL 150D1

Tier I Natural Sciences/170s

Not Satisfied: Complete 2 courses, 6 units total. Transfer students with quarter system credits may satisfy Tier One requirements with 2 courses and 5.34 units.

- Units: 5.34 required, 0.00 completed, 5.34 needed
- Courses: 2.00 required, 0.00 completed, 2.00 needed

Courses Available

Tier I Traditions & Cultures/160s

**Not Satisfied:** Complete 2 courses, 6 units total. Transfer students with quarter system credits may satisfy Tier One requirements with 2 courses and 5.34 units.

- **Units:** 5.34 required, 0.00 completed, 5.34 needed
- **Courses:** 2.00 required, 0.00 completed, 2.00 needed

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Courses Available


General Education Tier II

**Overall Requirement Not Satisfied:** Complete each of the following areas.

Tier II Arts

**Not Satisfied:** Complete 1 course, 3 units total. Transfer students with quarter system credits may satisfy Tier Two requirements with 2.67 units.

- **Units:** 2.67 required, 0.00 completed, 2.67 needed
- **Courses:** 1.00 required, 0.00 completed, 1.00 needed

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Courses Available


Tier II Humanities

**Not Satisfied:** Complete 1 course, 3 units total. Transfer students with quarter system credits may satisfy Tier Two requirements with 2.67 units. Prerequisite course work in Tier 1 Traditions and Cultures (TRAD) must be completed prior to taking. If LAT 201 or 202 are used to fulfill Foundation Second Language Proficiency, they cannot be used to fulfill Tier II Humanities.
### Courses Available


### Tier II Individual & Societies

Not Satisfied: Complete 1 course, 3 units total. Transfer students with quarter system credits may satisfy Tier Two requirements with 2.67 units. Prerequisite course work in Tier I Individuals and Societies (INDV) must be completed prior to taking.

- **Units**: 2.67 required, 0.00 completed, 2.67 needed
- **Courses**: 1.00 required, 0.00 completed, 1.00 needed

### Courses Available

Tier II Natural Sciences

Not Satisfied: Complete 1 course, 3 units total. Transfer students with quarter system credits may satisfy Tier Two requirements with 2.67 units. Prerequisite course work in Tier 1 (NATS) must be completed prior to taking.

- **Units:** 2.67 required, 0.00 completed, 2.67 needed
- **Courses:** 1.00 required, 0.00 completed, 1.00 needed

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**Courses Available**


**Diversity Emphasis Course**

Not Satisfied: One course must be taken that focuses on Gender, Race, Class, Ethnicity, Sexual Orientation or Non-Western Area Studies. Courses used to fulfill this requirement may also be used to fulfill other requirements.

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**Courses Available**

Additional Coursework

Courses listed in this section may include general elective credits, UA courses and transferable courses from other institutions. Consult with your advisor to determine if courses listed in this section may be used to fulfill a requirement or sub-requirement in your degree program.

Courses taken for Pass/Fail option can only count as elective credit. They cannot fulfill any General Education, Major, or Minor requirements.

BA in Statistics and Data Science

Overall Requirement Not Satisfied: Will appear fully satisfied when student satisfies Statistics and Data Science Supporting Computer Science, Statistics and Data Science Core Requirements, Statistics and Data Science Graduation Requirements, and select a minor.

Statistics and Data Science Supporting Computer Science

Satisfied: Will appear fully satisfied when student satisfies Computer Science requirement.

Computer Science

Not Satisfied: Complete 1 course. Courses used to fulfill this requirement may be used to fulfill other requirements.

Courses:

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Courses Available

CSC 110, ISTA 130

Statistics and Data Science Core Requirements

Overall Requirement Not Satisfied: Will appear fully satisfied when student satisfies Calculus I, Calculus II & Vector Calculus, Linear Algebra, Core Courses, and Major Elective.

Calculus I

Not Satisfied: Complete 1 course

Courses:

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**Courses Available**

MATH 122B, MATH 125

*Calculus II & Vector Calculus*  
**Not Satisfied:** Complete 2 courses

- **Courses:** 2.00 required, 0.00 completed, 2.00 needed

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**Courses Available**

MATH 129, MATH 223

*Linear Algebra*  
**Not Satisfied:** Complete 1 course

- **Courses:** 1.00 required, 0.00 completed, 1.00 needed

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**Courses Available**

MATH 310, MATH 313

*Core Courses*  
**Not Satisfied:** Complete 6 courses

- **Courses:** 6.00 required, 0.00 completed, 6.00 needed

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**Courses Available**

DATA 363, DATA 375, DATA 467, MATH 363, MATH 464, MATH 466

*Major Elective*  
**Not Satisfied:** Complete 1 course

- **Courses:** 1.00 required, 0.00 completed, 1.00 needed
Courses Available

DATA 367, DATA 462, DATA 468, MATH 462, MATH 468, SIE 440

Statistics and Data Science Graduation Requirements

Overall Requirement Not Satisfied: Will appear fully satisfied when student satisfies Mid Career Writing Assessment, Major units, Major GPA, Major Upper Division units, and Major Residency requirement.

Mid Career Writing Assessment

Not Satisfied: Complete 2nd semester English Composition with a B grade or higher. Students who do not earn a grade of B or higher in 2nd semester English Composition must also satisfy a college or department writing requirement. Consult your major advisor if you do not earn a grade of B or higher in 2nd semester English Composition.

- Courses: 1.00 required, 0.00 completed, 1.00 needed

Major Units

Not Satisfied: A minimum of 34 units must be completed in the major.

- Units: 34.00 required, 0.00 completed, 34.00 needed

Major GPA

Satisfied: A minimum 2.0 GPA is required in the major coursework.

- Units: 0.00 completed
- GPA: 2.000 required, 0.000 completed

Major Upper Division
Not Satisfied: A minimum of 21 units of upper-division major coursework must be completed.

- **Units:** 21.00 required, 0.00 completed, 21.00 needed

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Major Residency

Not Satisfied: A minimum of 18 units in the pre-major, supporting coursework, professional core, and/or major must be taken at the University of Arizona.

- **Units:** 18.00 required, 0.00 completed, 18.00 needed

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Minor Required

Not Satisfied: A minor outside of the Mathematics Department is required for this major. Consult with your advisor to select a minor or discuss other options such as selecting a second major.