

New College
of Interdisciplinary
Arts and Sciences

**Arizona State University** 

Master of Science in Biological Data Science Modality: Campus

Catalog Year: Fall 2025
Total Credit Hours: 33

NCGradAdvising@asu.edu

Semester 1, Fall 2025 (9 cre	edit hours)		
Course Prefix, Number and Title	Credit Hours	Session/Semester	Grade
LSC 540: Statistics for Biological Data Science I	3	Session C	
LSC 555: Molecular Biology	3	Session C	
LSC 562: Applied Mathematics Techniques in Biology	3	Session C	
Semester 2, Spring 2026 (9 cm	redit hours)		
Course Prefix, Number and Title	Credit Hours	Session/Semester	Grade
ACO 501: Database Systems and Problem Solving in Python	3	Session C	
LSC 541: Statistics for Biological Data Science II	3	Session C	
LSC 556: Evolutionary Biology	3	Session C	
Semester 3, Fall 2026 (8 cre	edit hours)		
Course Prefix, Number and Title	Credit Hours	Session/Semester	Grade
Elective (Applied Project students only) OR	3	Session C	
Thesis with Written & Oral Defense (ACO, BIO, LSC, MAT 599)			
Elective	3	Session C	
LSC 547: Wet Laboratory Experience	1	Session C	
LSC 591: Seminar	1	Session C	
Semester 4, Spring 2027 (7 cm	redit hours)		
Course Prefix, Number and Title	Credit Hours	Session/Semester	Grade
Applied Project (ACO, BIO, LSC, MAT 593) <u>OR</u> Thesis with Written & Oral Defense (ACO, BIO, LSC, MAT 599)	3	Session C	
Elective	3	Session C	
LSC 519: Applied Learning Lab	1	Session C	
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# What counts as an elective course?

## **Pre-approved electives:**

### Focus areas:

### Biological and Environmental Sciences

LSC 598 Marine Conservation Policy and Management

LSC 598 Ecosystem Ecology

LSC 598 Soil Science

ENV 485 Environmental Impact Assessment

ABS 555 Wildlife Dynamics

MIC 443 The Microbial Universe & MIC 444 The Microbial Universe Lab

#### Computational Science and Statistics

MAT 450 Mathematical Models in Biology

MAT 422 Mathematical Methods in Data Science

STP 450 Nonparametric Statistics

STP 470 Predictive Analytics

ACO 423 Data Science

SDS 510 Data Wrangling

SDS 528 Communicating Data Science

### Healthcare and Public Health

LSC 432 Fundamentals of Pharmacology

LSC 475 Principles of Toxicology

TPH 550 Data Science for Public Health

TPH 551 Public Health Technologies

TPH 554 AI/ML in Public Health

#### What does not count:

- 593, 595, or 599 credit; 100, 200, or 300 level classes

## **General Guidelines**

## Faculty and chair approval required for:

- up to 6 credit hours of 400-level work may apply toward the master's degree.
- All coursework in the interactive Plan of Study (iPOS). Mere enrollment in a course does not entitle a student to count it toward a graduate degree.
- ACO, BIO, LSC or MAT courses (e.g., 580, 584, 590, 592)

## Academic progress:

- Students are required to meet <u>Satisfactory Academic</u>
   <u>Progress Policy</u> and maintain continuous enrollment as defined by the <u>ASU Graduate College Policy Manual</u>.
- The culminating experience is completed in a student's final year of study. To be eligible for registration consult the program handbook.
- For information regarding the minimum passing grade for the 593 or 599 culminating experience, please go to Satisfactory Academic Progress Policy

### **Policies:**

Core courses can never be transferred from other universities. All work toward a master's degree must be completed within six consecutive years. For more information review the <u>ASU Graduate College Policy Manual</u>.