

B.A. Bioinformatics | Major Map



POPULAR CAREERS

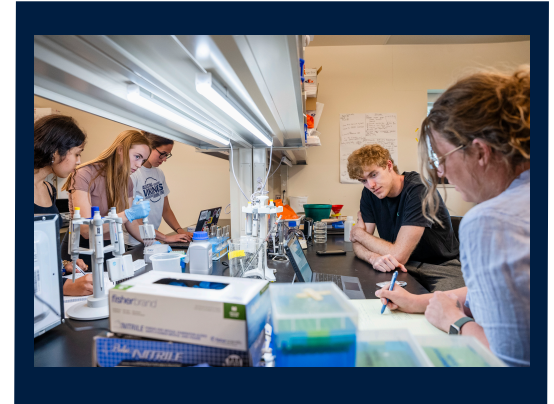
Bioinformatics programmers, research scientists, genome analysts, microbiologists, forensic investigators, software developers, computational biologists, genetic data managers, animal scientists or pharmaceutical researchers

POPULAR EMPLOYERS

Biotechnology & pharmaceutical companies, academic & research institutions, health care institutions, government agencies, bioinformatics service providers, pharmaceutical research & development organizations, agricultural & environmental companies, information technology (IT) companies, startups, nonprofit organizations

SIGNATURE EXPERIENCES

- **Internships**
 - Hospitals & clinics
 - Pharmacies
 - Laboratories
 - Information technology organizations
 - Botanic gardens
- **Study Away**
 - Costa Rica — exploring the history of conservation and how bioinformatics can help conservation efforts with AU faculty
 - Browse the list of current offerings at augie.edu/StudyAwayPortal, and contact the IPO to discover opportunities related to your vocational goals.



WHY MAJOR IN BIOINFORMATICS?

Bioinformatics is the application of computational tools to biology and concerned with implementing tools to analyze big data across biology — all the way from inside the cell and genome to ecological systems. Augustana is the first university in South Dakota to offer bioinformatics at the undergraduate level. As the only bioinformatics program in the region to require courses in both data science and artificial intelligence, AU also allows students to dive deeper into software engineering, the mathematical tools of data science or pursue a track in environmental data analysis.

FIRST YEAR

MIDDLE YEAR(S)

LAST YEAR

EXCEL ACADEMICALLY

- | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none">• Review SOPHIA and program requirements with your academic advisor.• Review your degree audit report, and create a plan of study in Academic Planner.• Participate in FYS 112 to confirm your major, hear from upper-level students about signature experiences and chart a personalized plan for your engagement. | <ul style="list-style-type: none">• Explore possible elective courses and minors.• Contact the Student Success Center to declare any second majors or minors.• Engage in research, and present your work at the annual research symposium.• Speak with your advisor to enroll in any natural science courses tailored to your interests, and time the completion of standardized exams for graduate/professional school (e.g., GRE, MCAT).• Participate in and earn credit for any internship or research experiences. | <ul style="list-style-type: none">• Apply to graduate no later than Oct. 1, and review the degree audit provided by the Registrar's Office.• Continue to gain experience and serve the community (e.g., research, patient care).• Complete your 300-level electives. |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

ENGAGE & APPLY YOUR LEARNING

- | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none">• Access your Viking Central account.• Participate in campus clubs and organizations such as Tri-Beta Honor Society, Biology Club and the Kidney Disease Screening & Awareness Program (KDSAP).• Explore study-away opportunities at the study-away fairs.• Create an account in Augie Opportunities, Augustana's job and internship database. | <ul style="list-style-type: none">• Attend the Sophomore Retreat.• Engage in campus leadership, internships, service and relevant summer employment.• Participate in the alumni mentor program.• Consider elite scholarship opportunities, such as the Fulbright, Goldwater or National Science Foundation.• Earn the Diversity Advocate Certificate.• Apply for experiential scholarships. Pursue elite fellowships. | <ul style="list-style-type: none">• During the summer, share your application to graduate or professional schools with your advisor and CAP specialist for feedback.• Attend the BIG (Business, Industry, Government) Career & Internship Fair.• Participate in mock interviews and networking events.• Complete the career outcome survey to update us of your employment or enrollment in graduate school.• Join the Augustana alumni community. |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

CHART YOUR COURSE TODAY!

Ann Kolbrek, CAP specialist
Student Success Center, EMC, Suite 100
605.274.4127 | ann.kolbrek@augie.edu

Biology Department
Froiland Science Complex | 605.274.4711