COLLEGE OF ARTS & SCIENCES

EARTH SCIENCES

Earth Sciences is an interdisciplinary applied science that examines **the Earth**, **its structure**, **its processes** and **its history**. Earth scientists use their understanding of the Earth to address issues such as climate change, natural hazards, sustainability, resource management and the future of our planet.

DEPARTMENT STRENGTHS

- Interdisciplinary Curriculum. Courses give students a broad but solid background in the sciences, including physics, chemistry, biology and mathematics, alongside geology and geography.
- Flexible Program. The department offers various degree types and several concentrations, enabling students to forge their own paths in Earth Sciences.
- Outcomes-Focused Academics. The program provides the perfect springboard for career opportunities in numerous fields and prepares students for grad school.

SAMPLE CURRICULUM

Core Courses

- ESCI 4202 Geomorphology
- ESCI 4515 Geographic Information Science
- ESCI 4521 Quantitative Methods
- ESCI 4531 Field Methods in Earth Sciences

Concentration Core Courses*

- ESCI 1010 Weather & Climate
- ESCI 1040 Physical Geology
- ESCI 1050 The Earth Through Time
- ESCI 1103 The Human Planet

DEGREE OPTIONS

- BA in Earth Sciences
  - Environmental Science
  - Geoarchaeology
  - Geography
  - Geology
  - Honors in Earth Sciences
- Minor in Earth Sciences
- Accelerated BA/MS in Earth Sciences
- Geographic Information Systems (GIS) Certificate**
- MA in Earth Sciences
- MS in Earth Sciences
  - Archaeology
  - Geography
  - Geology
  - Geophysics***
  - Interdisciplinary Studies
- PhD in Earth Sciences
  - Geophysics***

CENTERS & FACILITIES

- Center for Applied Earth Science & Engineering Research
- Center for Earthquake Research & Information
- Chucalisa Museum
- Clement Archaeology Laboratory
- SAGE Laboratory

THE UNIVERSITY OF MEMPHIS
College of Arts & Sciences

EARTH SCIENCES
MAJOR FACT SHEET

BY THE NUMBERS (Spring 2024)

Student Enrollment

111	52	59
Total	Undergraduate	Graduate

Number of Minors

8
Total

Student Demographics

- 50% Male
- 45% Under 25
- 23% Pell Grant
- 26% First Gen

Degrees Awarded

35
Total

16	8
Bachelor's	GRCT
7	4
Master's	Doctorate

Career Outcomes‡

$54K	$59K
Avg Expected Salary First Destination	Avg Annual Salary 1-3 Years Post-Grad
71%	68%
Employed in TN	Employed in Memphis

Faculty Employed

7:1
Student-Faculty Ratio†

16	0
Full-Time	Part-Time
10	26
Grad Asst	Total

TN Employment Outlook

19.1%	33
10-Year Job Growth	Avg Annual Job Openings

CAREER OPTIONS

Job Titles

- Cartographer
- Environmental Lawyer
- Geodesist
- GIS Analyst
- Hydrogeologist
- Land Use Planner
- Paleoclimatologist
- Petroleum Engineer
- Stratigrapher
- Volcanologist

Industries

- Construction
- Energy
- Environment
- Government
- Research

WHO YOU ARE

Personality

- Adventurous
- Conscientious
- Imaginative
- Observant
- Purposeful
- Resourceful

Interests & Hobbies

- Collecting
- Conservation
- Earth & Environment
- Gems & Minerals
- Outdoor Activities
- Traveling

WHAT YOU'LL LEARN

Core Skills

- Digital Literacy
- Field Methods & Procedures
- Geochemical Sampling
- Geological Mapping
- Geospatial Analysis
- Lab Equipment & Techniques

Transferable Skills

- Analytical Reasoning
- Pattern Recognition
- Problem Solving
- Project Management
- Teamwork
- Written & Oral Communication

* *The specified courses are for example purposes only. It is not a complete list of core courses by concentration.*
** *Online degree options are available for the specified programs through UofM Global.*
*** *The specified graduate concentrations are hosted by the Center for Earthquake Research & Information.*

† *Calculated based on the number of student majors and the number of full-time faculty.*
‡ *Based on self-reported post-graduation outcomes of UofM students who have earned a Bachelor's degree in the last ten years.*