



## 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

# EARTH SCIENCES

## MAJOR FACT SHEET

### BY THE NUMBERS (Spring 2024)

#### Student Enrollment

111

Total

52

Undergraduate

59

Graduate

#### Number of Minors

8

Total

### WHO YOU ARE

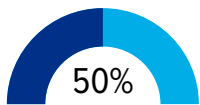
#### Personality

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

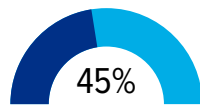
#### Interests & Hobbies

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

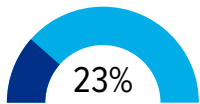
#### Student Demographics



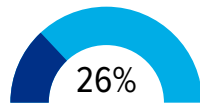
Male



Under 25



Pell Grant



First Gen

#### Faculty Employed

7:1

Student-Faculty Ratio<sup>†</sup>

16

Full-Time

0

Part-Time

10

Grad Asst

26

Total

#### Degrees Awarded

35

Total

16

Bachelor's

8

GRCT

7

Master's

4

Doctorate

#### Career Outcomes<sup>‡</sup>

\$54K

Avg Expected Salary  
First Destination

\$59K

Avg Annual Salary  
1-3 Years Post-Grad

71%

Employed in TN

68%

Employed in Memphis

#### TN Employment Outlook

19.1%

10-Year Job Growth

33

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

### 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

<sup>\*</sup> The specified courses are for example purposes only. It is not a complete list of core courses by concentration.  
<sup>\*\*</sup> Online degree options are available for the specified programs through UofM Global.

<sup>†</sup> Calculated based on the number of student majors and the number of full-time faculty.

<sup>‡</sup> Based on self-reported post-graduation outcomes of UofM students who have earned a Bachelor's degree in the last ten years.