

Shri Shivaji Science College, Amravati

Department of Geology

REPORT ON BRIDGE COURSE

Duration: 30th June – 6th July 2025

Venue: Department of Geology Lab. & Museum

1. Introduction

The Department of Geology, Shri Shivaji Science College, Amravati, organized a **Bridge Course** for first-year undergraduate students during the academic year 2025–2026. The program aimed to provide foundational geological knowledge and inspire interest in Earth sciences among new entrants. With a curriculum rich in conceptual, interdisciplinary, and practical topics, the Bridge Course served as a stepping stone to studies in geology and allied sciences.

This initiative is part of the department's academic enrichment program to **smoothen the transition** from school to college-level education, **enhance student engagement**, and **highlight career prospects** in geology.

2. Objectives of the Bridge Course

The primary objectives of the Bridge Course were:

- To provide a **basic understanding** of geology as a scientific discipline.
- To introduce students to the **vocabulary, methods, and scope** of Earth sciences.
- To explain the **interconnectedness of geology** with other fields such as physics, chemistry, biology, and environmental science.
- To discuss **natural phenomena** such as earthquakes, volcanic eruptions, and tsunamis from a geological perspective.
- To develop **practical observation skills** through hands-on learning and museum exposure.
- To create awareness about **career options and higher education opportunities** in geology.

3. Course Design and Content

The Bridge Course was structured into **various modules**, each focusing on a key concept in geology. These modules were selected to balance theoretical understanding with practical relevance and interdisciplinary integration.

Bridge Course Syllabus

Sr. No.	Module Title
1.	<i>The Earth Speaks: What Geology Tells Us</i>
2.	<i>Mineral Magic: Secrets of Earth's Building Blocks</i>
3.	<i>Geo-Logic: Why Geology Matters in Our Lives</i>
4.	<i>Geology Connects: A Bridge Between Sciences</i>
5.	<i>Rock Talk: Understanding Earth's Natural Layers</i>
6.	<i>The Moving Earth: A Journey Through Plate Tectonics</i>
7.	<i>Tectonics to Tsunamis: Disasters Decoded by Geology</i>
8.	<i>Hands on Earth: Field Studies in Geology</i>
9.	<i>Mapping Your Future: Career Paths in Geology</i>
10.	<i>Fossil Files: Secrets Locked in Stone</i>
11.	<i>Ore Quest: Unearthing Earth's Hidden Treasures</i>

4. Faculty Involvement and Session Allotment

Two dedicated faculty members from the Department of Geology conducted the course:

- **Dr. Mayura D. Deshmukh (MMD)**

Assistant Professor and Head, Department of Geology

Known for her deep theoretical insights and interdisciplinary knowledge, she handled:

- *The Earth Speaks*
- *Geo-Logic*
- *Geology Connects*
- *Rock Talk*
- *Fossil Files*
- *Museum Visit*

- **Mr. Saurabh K. Paunikar (SKP)**

Assistant Professor, Department of Geology

Specializing in structural geology, mineralogy, and applied fields, he handled:

- *The Moving Earth*
- *Mineral Magic*
- *Tectonics to Tsunamis*
- *Hands on Earth*
- *Ore Quest*
- *Mapping Your Future*

5. Course Execution

The course was conducted in **two batches** – MAJOR and MINOR – to accommodate all enrolled students. Each session lasted for one hour, with **three lectures per day**.

Batch MAJOR (30th June to 2nd July & 6th July 2025)

Date	12:00–1:00	1:00–2:00	2:00–3:00
30/06/2025	<i>The Earth Speaks</i> (Dr. MMD)	<i>The Moving Earth</i> (Mr. SKP)	<i>Geo-Logic</i> (Dr. MMD)
01/07/2025	<i>Mineral Magic</i> (Mr. SKP)	<i>Geology Connects</i> (Dr. MMD)	<i>Tectonics to Tsunamis</i> (Mr. SKP)
02/07/2025	<i>Hands on Earth</i> (Mr. SKP)	<i>Rock Talk</i> (Dr. MMD)	<i>Mapping Your Future</i> (Mr. SKP)
06/07/2025	<i>Fossil Files</i> (Dr. MMD)	<i>Ore Quest</i> (Mr. SKP)	<i>Museum Visit</i> (Dr. MMD)

Batch MINOR (3rd July to 5th July 2025)

Date	12:00–1:00	1:00–2:00	2:00–3:00
03/07/2025	<i>The Earth Speaks</i> (Dr. MMD)	<i>The Moving Earth</i> (Mr. SKP)	<i>Geo-Logic</i> (Dr. MMD)
04/07/2025	<i>Mineral Magic</i> (Mr. SKP)	<i>Geology Connects</i> (Dr. MMD)	<i>Tectonics to Tsunamis</i> (Mr. SKP)
05/07/2025	<i>Hands on Earth</i> (Mr. SKP)	<i>Rock Talk</i> (Dr. MMD)	–

6. Learning Methods and Pedagogy

The Bridge Course was conducted using a variety of **student-centric pedagogical methods**, including:

- **Multimedia presentations** to visualize geological processes.
- **Real-world examples** such as earthquakes, volcanoes, and fossil discoveries.
- **Hands-on mineral and rock identification** in practical sessions.
- **Field activity exposure** under *Hands on Earth* to simulate real geological investigations.
- **Interactive museum visit** where students explored fossil and mineral specimens.
- **Career guidance and mentoring** to help students plan academic and professional pathways.

7. Highlights of the Course

- **Balanced content** covering physical, historical, and applied geology.
- **Focus on skill development**, especially field and observational skills.
- **Faculty-student interaction** encouraged curiosity and confidence.
- **Integration of academic learning with practical exposure.**
- **Career orientation module** helped students understand geology's scope in government, research, industry, and academics.



Glimpse from Bridge Course Interactive sessions

8. Feedback and Student Response

- Students appreciated the **interactive nature of the sessions**, particularly the hands-on and museum visit.
- Many found the course **eye-opening**, as it highlighted the real-world applications of geology in disaster management, resource exploration, and sustainability.
- The bridge course **increased interest in geology** as a subject of study and potential career.

List of Attachments:

- 1) Timetable of Bridge Course
- 2) Students Attendance Lists of Major and Minor

Date:

Place:

Head
Department of Geology
Shri Shivaji Science College, Amaravti