

Shri Shivaji Education Society Amravati's

SHRI SHIVAJI COLLEGE OF ART'S, COMMERCE AND SCIENCE, AKOLA

DEPARTMENT OF GEOLOGY & GEOINFORMATICS

VISION OF THE INSTITUTE

"Excellence in higher education, empowerment through knowledge, inclusive growth for socio-economic change and sustainable development"

Motto

*"To enlighten minds of poor and
needy students with all might"*

Objectives of the Department

- To prepare a human resource well acquainted in diverse fields of Geology.
- To make them ready to accept challenges of further study in Geology or self employment according to their choice.
- The Post graduate course of Geoinformatics is introduced with intention to provide human resource ready with the knowledge of Remote Sensing, GPS and GIS, having application in fields like Geology, Hydrology, Urban Planning, Watershed Management, Agriculture, forestry & life Sciences etc.
- **Establishment of the Department-**
 - A. UG- 1983
 - B. PG (M.Sc. Geoinformatics)- 2008 (Self-financed)

❖ Intake capacity -

➤ UG -- 40

➤ PG -- 20

Courses Offered

Sr. No.	Programme	Type	Scope
1	B.Sc. Geology	Semester	Geology is study of Earth. It deals with study of its minerals, rocks. Determination of its age, origin. Study of fossils, Natural resources like minerals, Groundwater, Natural oil and gas. Study of natural hazards, methods of their monitoring and mitigation.
2	M.Sc. Geoinformatics	(CBCS)Semester	Geoinformatics is study of the technique to collect the locational data of geography, geosciences, agriculture, climate change, telecommunication, biodiversity conservation etc. Then Interpretation of data to solve the

related problem.

Faculty

Name	Qualification	Designation	Specialization	No. of Years of Teaching Experience
Dr. K. C. Shah	M.Sc.(Tech.) Applied Geology	Associate Professor	Environmental Geology	29 years –UG Geology 06 years-UG Geo-exploration and Drilling Technology 06 years-PG Geology as CHB 02 years-COP Groundwater

				Exploration
Dr. N. R. Kokate	M.Sc. Geology Ph.D.	Assistant Professor CHB		15 years
Dr. S. S. Deshmukh	M.Sc., M.Phil., Ph.D.	CHB	Hydrogeology	06 years
Ku. K. N. Moharir	M. Sc., PG. Diploma in Watershed Tech. and Mgmt.	CHB	Geoinformatics	03 years
Shri D. M. Kanherkar	M.Sc. Geology	CHB	-----	2 year
Shri G. M. Tikar	M.Sc. Geology	CHB	-----	1 Year
Ku. S.N. Thorat	M.sc Geoinformatics	CHB	Geoinformatics	1 year

Supportive staff

Name	Qualification	Designation	No. of Years of Experience

Shri Jayant Shriram Thokal	B.A., M.A.(Political Science)	Laboratory Attendant	23years
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Infrastructural facilities:

1. Two well equipped separate laboratories for PG and UG.
2. Large number of Rock, Mineral/ Ores and Fossils specimens.
3. Wooden and Crystal Models.
4. Thin Section of Rocks and Minerals; microscopes
6. Steroscopes, Brunton Compass and Clinometer compass
7. Toposheets and Maps of SOI, Aerial Photographs and satellite imageries
8. About 10 PCs and 01 Server
9. Two printers & scanners

10. Arc GIS and ENVI Software

11. Global Positioning System (GPS)

12. LCD Projector

13. Light Tables

Research Projects

S.NO.	Title	Collaboration ,if any	Type	Status	Principal Investigator	Funding Agency
1	“Environmental Impact Assessment of Urbanization of Nagpur city and area around, Nagpur District, Maharashtra, using Remote Sensing and Geographic Information System.”	MRSAC, Nagpur	Minor	On-going	Dr. K. C. Shah	UGC, Pune

Research Work

S. No.	Name of Faculty	Research Papers published	Research papers Presented	Abstracts presented/ published	Research Guidance	Conferences /Workshops/Symposium attended	Trainings attended	Work shops Organized
1.	Dr. K. C. Shah	4	2	3	Nagpur University Recognized Ph.D. Supervisor in the subject Geology	Around 30	4	Two awareness Work shops (for students) Two Work shops (related to syllabus) for teachers As Convener

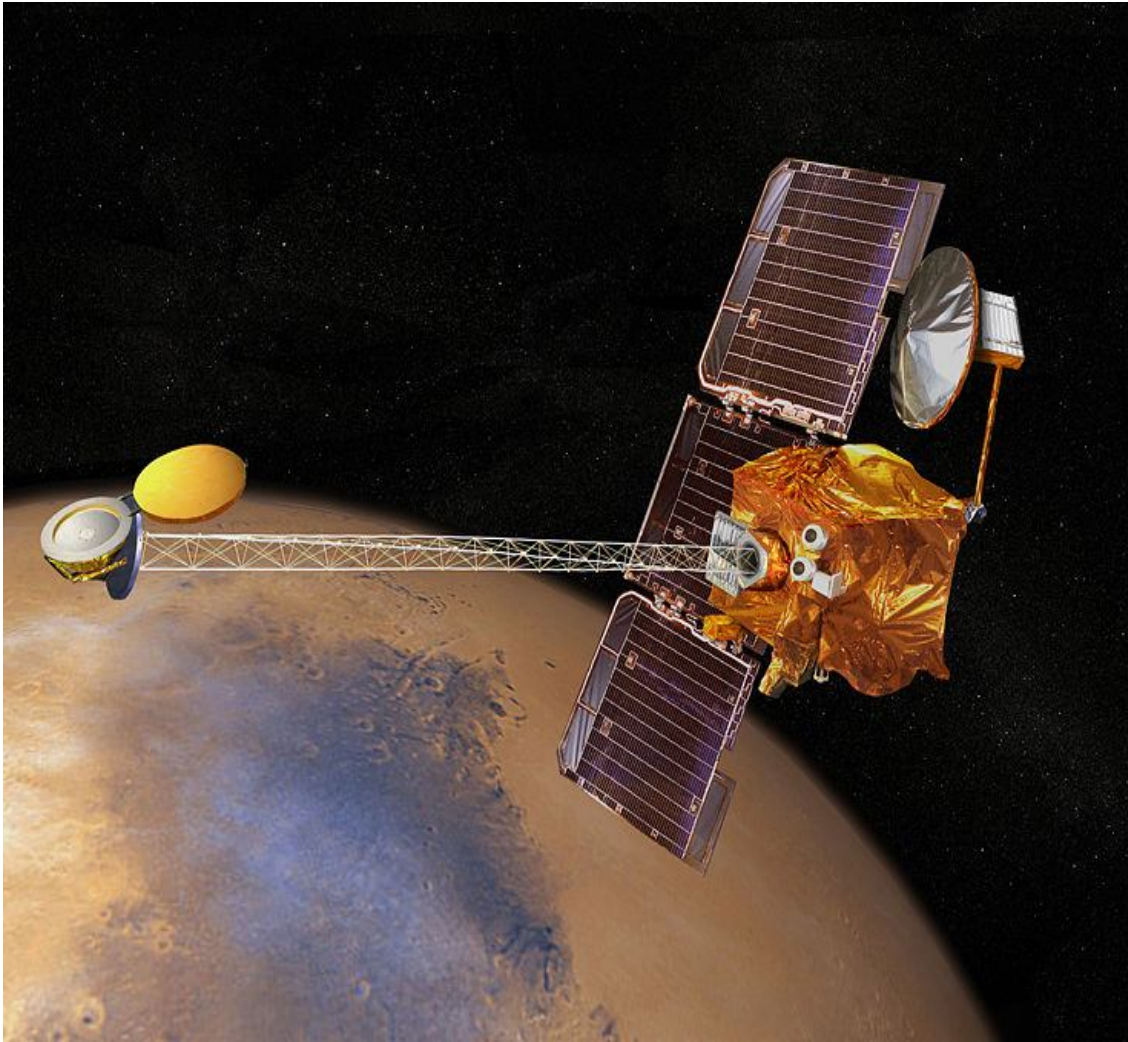
Student profile Programme / Course wise:

Name of the Course /Programme	Enrolled *M *F		Pass percentage
B.Sc. I	22	07	60
B.Sc. II	09	04	25
B.Sc. III	08	03	72.73
M.Sc. I	01	06	50
M.Sc. II	06	07	71%

Concept of Remote Sensing

- Collection of information of an object remotely just using a balloon, an aircraft, Satellite or space craft.

- Analysis of this information to understand and find out details of the object.
- Thus collections of information about rock tell us lot about its characters and hence may tell us about its origin, its influence on developmental factors etc.



Applications of Remote Sensing

- Study of Geological and Geo-morphological features and their interpretation.
- Mineral Exploration
- Oil & Gas Exploration
- Finding new sources of Groundwater and Management.
- Study of rock and soil distribution and use for the various fields like engineering.
- Groundwater Prospects and Recharge Zone Mapping
- Forecasting Agricultural output using Space, Agro-meteorology and Land based observations (FASAL)
- Flood Mapping and Monitoring
- Snow and Glaciers Studies
- Biodiversity Characterization
- National Agricultural Drought Assessment and Monitoring System
- Indian Forest Fire Response and Assessment System (INFFRAS)
- National Urban Information System (NUIS)