

School of Earth Sciences
Swami Ramanand Teerth Marathwada University
M.Sc. Geology (2 years-4 semesters-100 credits)

	Semester I Code	Theory Paper	Credits	Semester II Code	Theory Paper	Credits	Semester III Code	Theory Paper	Credits	Semester IV Code	Theory Paper	Credits
Core Subject (4 Credits)	GEO-C101	Mineralogy	4	GEO-C201	Igneous Petrology	4	GEO-C301	Geomorphology and Morphotectonics	4	GEO-C401	Coal and Petroleum Geology	4
	GEO-C102	Structural Geology and Geotectonics	4	GEO-C202	Thermodynamics And Metamorphic Petrology	4	GEO-C302	Hydrogeology	4	GEO-C402	Economic Geology & Geology of Indian Mineral Deposits	4
	GEO-C103	Palaeontology	2	GEO-C203	Sedimentary Petrology	2	GEO-C303	GIS and Remote Sensing	4	GEO-C403	Dissertation	4
	GEO-C104	Geochemistry	2	GEO-C204	Environmental Geology	2						
Elective For Subject/School (2 Credits)	GEO-E101	Geostatistics	3	GEO-E201	Computer applications in Geology	3	GEO-E301	Principles of Geophysics	3	GEO-E401	Geoexploration	3
	GEO-E102	Crystallography		GEO-E202	India as a Geological Entity		GEO-E302	Hydro-Geochemistry		GEO-E402	Mining Geology	
	GEO-E103	Geochemistry For Environmental Science		GEO-E303	Watershed Management		GEO-E403	Mineral Economics and National Mineral Policy				
	GEO-E104	Basic Geology		GEO-E304	Geology of Maharashtra		GEO-E404	Disaster Management				
	GEO-E105	Geology of India		GEO-E305	Groundwater prospecting		GEO-E405	Engineering Geology				
							GEO-E406	Advanced Geochemistry				
Open Elective For Other Schools In University (2 Credits)				GEO-OE201	Earth System Sciences	2	GEO-OE301	Fundamentals of GIS and Remote Sensing	2	GEO-OE401	Geological Wealth and Committee of Nations	2
	GEO-OE101	Origin And Evolution Of Life	2	GEO-OE202	Geology For Chemists	2	GEO-OE302	Water Conservation	2	GEO-OE402	Spatial technologies for Societal Development	2
				GEO-OE203	Geology For Biologists	2						
				GEO-OE204	Geology For Physicists	2						

Core Subjects: Should Be 75% per Each Semester

Electives for Subject/School: At Least 3/4 Electives (2 Credits) Should Be Provided

Open Electives for Other Schools In The University: At Least 1 Elective (2 Credits) Should Be Provided. Open electives for 4-8 credits need to be completed in 2 year course.

Open Electives Can also Be Obtained From MOOCS/NPTL/SWAYAM

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M.Sc. Geology (2 years-4 semesters-100 credits)

<u>M.Sc. Geology, I Year, I Semester (Total Credits 25)</u>									
Sr. No.	Subject	Code	Theory Paper	Credits		Sr. No.	Code	Practical Paper	Credits
1	Core	GEO-C101	Mineralogy	4		1	GEO-C105	Mineralogy	2
2	Core	GEO-C102	Structural Geology and Geotectonics	4		2	GEO-C106	Structural Geology and Geotectonics	2
3	Core	GEO-C103	Palaeontology	2		3	GEO-C107	Palaeontology	1
4	Core	GEO-C104	Geochemistry	2		4	GEO-C108	Geochemistry	1
5	Discipline Specific Elective Course (DSEC) for Subject/School Student (Choose any One)	GEO-E101	Geostatistics	3		5	GEO-E106	Geostatistics	1
		GEO-E102	Crystallography				GEO-E107	Crystallography	
		GEO-E103	Geochemistry For Environmental Science				GEO-E108	Geochemistry For Environmental Science	
		GEO-E104	Basic Geology				GEO-E109	Basic Geology	
		GEO-E105	Geology of India				GEO-E110	Geology of India	
6	Generic Elective Course (GEC) (Open Elective) (To be selected by the School Student from other schools in university/ Moocs/Swayam/NPTL/Skill Oriented Course)			2		6	GEO-C109	Seminar/Field Report	1
	Open Elective For Other Schools In University	GEO-OE101	Earth Materials						
		GEO-OE102	Origin And Evolution Of Life						
			Total	17				Total	8

School of Earth Sciences, Swami Ramanand Teerth Marathwada University
M.Sc. Geology (2 years-4 semesters-100 credits)

<u>M.Sc. Geology, I Year, II Semester (Total Credits 25)</u>									
Sr. No.	Subject	Code	Theory Paper	Credits		Sr. No.	Code	Practical Paper	Credits
1	Core	GEO-C201	Igneous Petrology	4		1	GEO-C205	Igneous Petrology	2
2	Core	GEO-C202	Thermodynamics And Metamorphic Petrology	4		2	GEO-C206	Thermodynamics And Metamorphic Petrology	2
3	Core	GEO-C203	Sedimentary Petrology	2		3	GEO-C207	Sedimentary Petrology	1
4	Core	GEO-C204	Environmental Geology	2		4	GEO-C208	Environmental Geology	1
5	Discipline Specific Elective Course (DSEC) for Subject/School Student (Choose any One)	GEO-E201	Computer applications in Geology	3		5	GEO-E203	Computer applications in Geology	1
		GEO-E202 /	India as a Geological Entity		GEO-E204		India as a Geological Entity		
6	Generic Elective Course (GEC) (Open Elective) (To be selected by the School Student from other schools in university/ Moocs/Swayam/NPTL/Skill Oriented Course			2		6	GEO-C209	Seminar/Field Report	1
	Open Elective For Other Schools In University	GEO-OE201	Earth System Sciences						
		GEO-OE202	Geology For Chemists						
		GEO-OE203	Geology For Biologists						
		GEO-OE204	Geology For Physicists						
			Total	17				Total	8

School of Earth Sciences, Swami Ramanand Teerth Marathwada University
M.Sc. Geology (2 years-4 semesters-100 credits)

<u>M.Sc. Geology, II Year, III Semester (Total Credits 25)</u>									
Sr. No.	Subject	Code	Theory Paper	Credits		Sr. No.	Code	Practical Paper	Credits
1	Core	GEO-C301	Geomorphology and Morphotectonics	4		1	GEO-C304	Geomorphology and Morphotectonics	2
2	Core	GEO-C302	Hydrogeology	4		2	GEO-C305	Hydrogeology	2
3	Core	GEO-C303	GIS and Remote Sensing	4		3	GEO-C306	GIS and Remote Sensing	2
4	Discipline Specific Elective Course (DSEC) for Subject/School Student (Choose any One)	GEO-E301	Principles of Geophysics	3		5	GEO-E306	Principles of Geophysics	1
		GEO-E302	Hydro-Geochemistry		GEO-E307		Hydro-Geochemistry		
		GEO-E303	Watershed Management		GEO-E308		Watershed Management		
		GEO-E304	Geology of Maharashtra		GEO-E309		Geology of Maharashtra		
		GEO-E305	Groundwater prospecting		GEO-E3010		Groundwater prospecting		
5	Generic Elective Course (GEC) (Open Elective) (To be selected by the School Student from other schools in university/ Moocs/Swayam/NPTEL/ Skill Oriented Course)			2		6	GEO-C307	Seminar/Field Report	1
	Open Elective For Other Schools In University	GEO-OE301	Fundamentals of GIS and Remote Sensing						
		GEO-OE302	Water Conservation						
			Total	17				Total	8

School of Earth Sciences, Swami Ramanand Teerth Marathwada University
M.Sc. Geology (2 Years, 200 Credits)

<u>M.Sc. Geology, II Year, IV Semester (Total Credits 25)</u>				
Sr. No.	Subject	Code	Theory Paper	Credits
1	Core	GEO-C401	Coal and Petroleum Geology	4
2	Core	GEO-C402	Economic Geology & Geology of Indian Mineral Deposits	4
3	Core	GEO-C403	Dissertation	4
4	Discipline Specific Elective Course (DSEC) for Subject/School Student (Choose any One)	GEO-E401	Geoexploration	3
		GEO-E402	Mining Geology	
		GEO-E403	Mineral Economics and National Mineral Policy	
		GEO-E404	Disaster Management	
		GEO-E405	Engineering Geology	
		GEO-E406	Advanced Geochemistry	
5	Generic Elective Course (GEC) (Open Elective) (To be selected by the School Student from other schools in university/ Moocs/Swayam/NPTL/ Skill Oriented Course			2
	Open Elective For Other Schools In University	GEO-OE401	Geological Wealth and Committee of Nations	
		GEO-OE402	Spatial technologies for Societal Development	
			Total	17

Sr. No.	Code	Practical Paper	Credits	
1	GEO-C404	Coal and Petroleum Geology	2	
2	GEO-C405	Economic Geology & Geology of Indian Mineral Deposits	2	
3	GEO-C406	Dissertation	2	
5	GEO-E407	Geoexploration	1	
	GEO-E408	Mining Geology		
	GEO-E409	Mineral Economics and National Mineral Policy		
	GEO-E4010	Disaster Management		
	GEO-E4011	Engineering Geology		
	GEO-E4012	Advanced Geochemistry		
6	GEO-C407	Seminar/Field Report	1	
			Total	8