

STRUCTURE OF THE SYLLABUS FOR 4 YEAR UG PROGRAMME

ROYAL SCHOOL OF ENVIRONMENTAL & EARTH SCIENCES

B.Sc. Geology(Honours / Honours with Research)

1st SEMESTER			
COMPONENT	COURSE CODE	COURSE TITLE	CREDIT
Major	GEOL162M101	Physical Geology	2
Major	GEOL162M112	Physical Geology Practical	1
Major	GEOL162M103	Mineral Science	2
Major	GEOL162M114	Mineral Science Practical	1
Minor	GEOL162N101	Physical Geology	3
Interdisciplinary (IDC)	IKS992K101	Introduction to Indian Knowledge System I	3
Ability Enhancement course (AEC)	CEN982A101	Introduction to Effective Communication	1
Ability Enhancement course (AEC)	BHS982A104	Behavioural Science I	1
Skill Enhancement Course (SEC)	GEOL162S111	Geological Mapping and Surveying	3
Value Added Course (VAC)		VAC 1 (Basket Course)	3
		<i>Course through SWAYAM platform (to be selected by the department)</i>	3 or 4
TOTAL CREDIT FOR 1st SEMESTER			20 + (3 or 4)
2nd SEMESTER			
COMPONENT	COURSE CODE	COURSE TITLE	CREDIT
Major	GEOL162M201	Geochemistry	2
Major	GEOL162M202	Igneous Petrology	2
Major	GEOL162M213	Igneous Petrology Practical	2
Minor	GEOL162N201	Geology and Natural Hazards	3
IDC	IKS992K201	Introduction to Indian Knowledge System II	3
AEC	CEN982A201	Approaches to Verbal and Non-verbal Communication	1
AEC	BHS982A202	Behavioural Science II	1
SEC	GEOL162S211	Geomorphology and Landform Analysis	3
VAC		VAC 2 (Basket Course)	3

		<i>Course through SWAYAM platform (to be selected by the department)</i>	3 or 4
TOTAL CREDIT FOR 2nd SEMESTER			20 + (3 or 4)
3rd SEMESTER			
COMPONENT	COURSE CODE	COURSE TITLE	CREDIT
Major	GEOL162M301	Metamorphic Petrology	3
Major	GEOL162M312	Metamorphic Petrology Practical	1
Major	GEOL162M303	Sedimentology	3
Major	GEOL162M314	Sedimentology Practical - I	1
Minor	GEOL162N301	Mineralogy	3
Minor	GEOL162N312	Mineralogy Practical	1
IDC	GEOL162I301	Physics and Chemistry of Earth	3
AEC	CEN982A301	Fundamentals of Business Communication	1
AEC	BHS982A304	Behavioural Science III	1
SEC	GEOL162S311	Remote Sensing and GIS	3
		<i>Course through SWAYAM platform (to be selected by the department)</i>	3 or 4
TOTAL CREDIT FOR 3rd SEMESTER			20 + (3 or 4)
4th SEMESTER			
COMPONENT	COURSE CODE	COURSE TITLE	CREDIT
Major	GEOL162M401	Principles of Stratigraphy	3
Major	GEOL162M402	Palaeontology	3
Major	GEOL162M403	Earth Science in Ancient India (IKS)	4
Major	GEOL162M414	Stratigraphy and Palaeontology Practical	2
Minor	GEOL162N401	Petrology	2
Minor	GEOL162N412	Petrology Practical	1
Minor	GEOL162N403	Structural Geology	2
Minor	GEOL162N414	Structural Geology Practical	1
AEC	CEN982A401	Communicative English IV	1
AEC	BHS982A404	Behavioural Science IV	1
		<i>Course through SWAYAM platform (to be selected by the department)</i>	3 or 4
TOTAL CREDIT FOR 4th SEMESTER			20 + (3 or 4)
5th SEMESTER			

COMPONENT	COURSE CODE	COURSE TITLE	CREDIT
Major	GEOL162M501	Structural Geology	3
Major	GEOL162M512	Structural Geology Practical - I	1
Major	GEOL162M503	Indian Stratigraphy	4
Major	GEOL162M504	Hydrogeology	3
Major	GEOL162M515	Hydrogeology Practical	1
Major	GEOL162M526	Summer Internship	4
Minor	GEOL162N501	Fuel Geology	3
Minor	GEOL162N512	Fuel Geology Practical	1
TOTAL CREDIT FOR 5th SEMESTER			20
6th SEMESTER			
COMPONENT	COURSE CODE	COURSE TITLE	CREDIT
Major	GEOL162M601	Geostatistics	4
Major	GEOL162M602	Economic Geology	3
Major	GEOL162M613	Economic Geology Practical	1
Major	GEOL162M604	Engineering and Environmental Geology	3
Major	GEOL162M615	Engineering Geology Practical	1
Major	GEOL162M606	Fuel Geology	3
Major	GEOL162M617	Fuel Geology Practical	1
Minor	GEOL162N601	Environmental Geology	4
TOTAL CREDIT FOR 6th SEMESTER			20

7th SEMESTER			
COMPONENT	COURSE CODE	COURSE TITLE	CREDIT
Major	GEOL162M701	Advanced Structural Geology and Tectonics	3
Major	GEOL162M712	Structural Geology Practical - II	1
Major	GEOL162M703	Advanced Igneous and Metamorphic Petrology	3
Major	GEOL162M714	Igneous and Metamorphic Practical	1
Major	GEOL162M705	Advanced Sedimentology and Quaternary Geology	3
Major	GEOL162M716	Sedimentology Practical - II	1

Major	GEOL162M707	Climatology and Oceanography	4
Minor	GEOL162N701	Stratigraphy	4
TOTAL CREDIT FOR 7th SEMESTER			20
8th SEMESTER			
COMPONENT	COURSE CODE	COURSE TITLE	CREDIT
Major	GEOL162M801	Geomorphology	3
Major	GEOL162M812	Geomorphology Practical	1
Minor	GEOL162N801	Research Methodology	4
Project / Dissertation	GEOL162M823	Dissertation	12
Advanced Course in lieu of Dissertation	GEOL162M804	Geology of North-East India	4
	GEOL162M805	Planetary Geology	4
	GEOL162M806	Urban Geology	4
TOTAL CREDIT FOR 8th SEMESTER			20