

FEDERAL UNIVERSITY OYE-EKITI,
EKITI STATE, NIGERIA



FACULTY OF SCIENCE
DEPARTMENT OF GEOLOGY

UNDERGRADUATE ACADEMIC PROSPECTUS

2017 – 2020

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Dean,
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Prof. O. J. Ojo
Head of Department,
Department of Geology

FOREWORD

Our Vision:

The Vision of the Department of Geology, Federal University Oye-Ekiti is to be a Centre of Excellence recognized internationally in terms of Knowledge Impartation and Research in Exploration Geology

Our Mission

- ❖ to train and encourage scientists in areas of oil and gas exploration, exploration for minerals and ores, environmental, engineering and groundwater investigations
- ❖ to provide a mission-oriented geosciences knowledge and expertise to all the students that go through the programme and equip them with the necessary skills to have adequate knowledge of the composition of the Earth's subsurface and be able to fully exploit the earth's natural resources for national development
- ❖ to advance the science of Geology through series of meaningful research programmes
- ❖ to bring together the ingredients necessary for a well-paid career as required in the mineral/oil industry and engineering/groundwater-related areas of the national economy and in the relevant government establishments.

This edition of the prospectus is packaged to reflect regulations, staff list, undergraduates' admission/graduation requirements and the curriculum.

Finally we extend our sincere gratitude to the University Vice-Chancellor, Professor Kayode Soremekun and the management for the encouragement to date.

Prof. O. J. Ojo

Head, Geology Department

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VISITORS AND PRINCIPAL OFFICERS OF THE UNIVERSITY

Visitor

GEN. MOHAMMADU BUHARI

*President and Commander-in-Chief of the Armed Forces of the Federal
Republic of Nigeria*

Chancellor

Oba Michael Oboni

The Attah of Ighala Kingdom

Pro-Chancellor

Prof. SaidaMabadeje

Vice-Chancellor

Prof. Kayode Soremekun

Acting Registrar

Mrs Oyeyimika Koyejo-Fasakin

Head of Bursary

Mrs. B. Akande

University Librarian

Mr. Michael Afolabi

DEPARTMENTAL PROGRAMME

B.Sc. (Geology)

DEPARTMENTAL COMMITTEES

1. Fieldwork Committee
2. Welfare Committee
3. Accreditation Committee
4. Appraisal and Promotion Committee
5. Examination Committee
6. Adhoc Committee

1.0 BRIEF HISTORY OF THE DEPARTMENT

The Department of Geology was established following the senate decision of March 20, 2014 to create the Department in the Faculty of Science of the University. The Academic Programme is designed/structured in line with the Nigerian University Commission (NUC) Benchmark Minimum Academic Standards (BMAS) specifications. It started admitting students in the 2014/2015 Academic session. Nineteen (19) students were admitted through the UTME and Post-UTME conducted by the University. Geology Department started with seven (7) academic staff, four (4) laboratory staff and three (3) administrative staff. The academic staff comprises of three Professors, four Senior Lecturers and three Assistant Lecturers. The Departmental courses are coded GLY. The prominent feature of the programme is the exposure of all intending *B.Sc. Geology* graduates to courses in major areas of Geology, Exploration techniques as well as computer science. This is to ensure a high level of competence of the graduates of Geology and increase their flexibility in fitting into diverse careers and industries.

2.0 PROGRAMME PHILOSOPHY

The Department of Geology provides broad based education in resource exploration, as well as expertise in solving various environmental, groundwater, energy (Oil and Gas) and engineering geological-related problems. This is achieved through intensive training in an excellent academic environment.

The products of this programme will be suitable for employment in the oil and oil-related industries, water boards or corporation, mineral industry, environmental and engineering establishments, the civil service and institutions of higher learning. They can also be self-employed.

3.0 PROGRAMME AIM AND OBJECTIVES

The main aim and objectives of the degree programme in Geology are to:

- a) instill in students a sense of enthusiasm for Geology, an appreciation of its application and relevance in the solution of different societal developmental problems, and to involve them in an intellectually stimulating and satisfying experience of learning and studying.
- b) provide students with a broad and balanced foundation of geological knowledge and practical skills.
- c) develop students to be able to apply their geological knowledge and skills to the solution of theoretical and practical problems in geology.
- d) enable students acquire a range of transferable skills and attitudes that are of value in geological and non-geological employment.
- e) provide students with a knowledge and skills base from which they can proceed to further in specialized areas of geology or multi-disciplinary areas involving geology.
- f) empower students to appreciate the importance of Geology in an industrial, economic, environmental, technological and social development.

4.0 STUDENT ADMISSION AND GRADUATION POLICY OF THE UNIVERSITY

4.0.1 Admission Policy

- (a) Candidates seeking admission to the University for First Degree Courses must obtain and complete the Joint Admissions and Matriculation Board (JAMB) forms.
- (b) For admission to all courses, candidates must satisfy the admission requirement of the University for some Courses, additional Faculty/Department requirements have to be satisfied.
- (c) New Admissions will normally be made only in September/October every year.
- (d) At the time of registration in the University, each candidate will be required to present the originals of the certificates or any

other acceptable evidence of the qualifications on the basis of which the offer of admission has been made.

- (e) If it is discovered at any time that a candidate does not possess any of the qualifications, which he/she claims to have obtained, he/she will be expelled from the University.
- (f) Students shall, on admission pay to the university, all the fees prescribed by regulations.

4.1 General Admission Requirements for Geology

The admission requirements into the undergraduate Geology programme of the Federal University Oye–Ekiti shall be as follows:

- (i) Admission shall be open to all irrespective of religion, ethnic group, gender, creed and disability;
- (ii) All admissions shall be through the Joint Admissions and Matriculation Board (JAMB);
- (iii) For admission to 100 Level (via UTME), candidates must: obtain five (5) credits at SSCE (or equivalent) in relevant subjects at not more than 2 sittings including credit passes in English and Mathematics; and attain acceptable point in UTME in relevant subjects;
- (iv) For admission by direct entry (200 Level), candidates shall, in addition to having five (5) SSCE credits, obtain at least two (2) A' level (or its equivalent) passes in relevant subject, or possess ND, HND, with credit passes, or possess a good first degree in another field as the case may be;
- (v) Credit passes in English Language, Mathematics, Chemistry, Physics, and Biology shall be compulsory;
- (vi) Those who meet the requirements for admission shall be subjected to screening interview to be conducted by the University; and
- (vii) The University shall not accept transfer students until after at least the first two years of its existence.

Potential students must, in addition to meeting the general admission requirements, also satisfy the faculty and departmental requirements detailed below:

Programme	Admission Requirements		Remarks
	UTME	Direct Entry	
Geology	Five Credits at SSCE (or its equivalent) including English, Mathematics, Physics, Chemistry and Biology.	Two 'A' level passes from Geology, Chemistry, Physics, Biology and Mathematics.	UTME subjects are; English, Chemistry, Physics, and Biology or Mathematics.

4.2 Probation, Expulsion, Withdrawal

4.2.1 Probation

Students shall be placed on probation whose academic performance, measured by the Cumulative Grade Point Average (CGPA), falls below 1.5 at the end of a year study. Such students shall register for the courses failed as well as some courses from the next level provided the total credit load taken shall not exceed the maximum allowed. A student whose CGPA falls below 1.5 at the end of a probation period shall be required to withdraw from the programme of study.

4.2.2 Withdrawal of Students

4.2.2.1 Voluntary Withdrawal

Conditions for voluntary withdrawal from the Federal University Oye-Ekiti shall be as follows:

- i. A student who wishes to withdraw from the university shall be required to notify the Registrar in writing through the Dean of the Faculty and the Head of Department and the withdrawal shall be approved by the Senate;
- ii. New students shall give notice of withdrawal not later than two weeks after matriculation. Other students shall give notice of

- withdrawal not later than four weeks after the beginning of the semester;
- iii. A student withdrawing from the university shall be required to give the reason(s) for and the effective date of the withdrawal;
 - iv. The university shall refund fees paid in excess of the period spent in the University;
 - v. A student shall retain grades earned for the semester examinations preceding the date of voluntary withdrawal;
 - vi. A student who voluntarily withdraws from the University shall, in order to be re-admitted, send a formal application to, and receive clearance from the Registrar; and
 - vii. Senate shall provide guidelines to be followed before a student who voluntarily withdrew can resume the programme of study after a period of withdrawal.

4.2.2.2 Withdrawal without Authorization

A student who withdraws from the Federal University Oye-Ekiti without the approval of the Senate shall only be considered for readmission after the case has been addressed by the appropriate authority and the approval of Senate obtained for re-admission.

4.2.2.3 Withdrawal for Health Reasons

A student shall be asked to withdraw for health reasons certified by the University's Director of Health Services or by a recognized hospital. Such a student may be readmitted only after a valid medical report from an approved medical doctor and certified by the Director of the Health Centre had been received to the effect that the student is medically fit to continue the programme.

4.2.3 Disciplinary Withdrawal and Expulsion

A student suspended on disciplinary grounds shall only be readmitted with the approval of the Senate and the Vice-Chancellor. A student shall be expelled from Geology as a result of gross misconduct, examination malpractice or any other offences as determined by laws

and regulations of the University. Such a student shall be given the opportunity to defend him/herself, but shall not be readmitted to the University at any other time if expelled.

4.3 Transfer of Students

A student may be considered for transfer from another university in Nigeria or a recognized university abroad to Geology at 200 level for a 3-year programme provided the candidate has attained a CGPA of not less than 2.0.

4.4 Grading System and Requirement for Graduation in Geology

This describes the grading system used in the evaluation of students and the requirements for graduation in Geology. It also explains how repeats in final examinations are handled.

4.4.1 Academic Grading System for Graduation

Students Work Load

The maximum number of units a student can register for is 24 per semester. The minimum number of units a student can register for is 15 per semester.

Grading System

Mark	Letter Grade	Grade Points
70-100	A	5
60-69	B	4
50-59	C	3
45-49	D	2
40-44	E	1
0-39	F	0

Computation of Results

The following terminologies and abbreviations are commonly used in the computation of Grade Point Average (GPA)

i. Total Load Units (TLU)

This is the number of course units carried by a student in a particular semester. It is the summation of the load units on all courses carried during the semester. For example, a student who is taking 6 courses of 3 units each has TLU of 18 for that semester.

ii. Cumulative Load Units (CLU)

This is the summation of Total Load Units over all the semesters from the beginning to date. A student who is prone to repeating courses will finish (if he does not drop out) with a higher CLU than his non-repeating colleagues, and will most likely require a longer time to complete requirements for the award of degree.

iii. Total Credit Points (TCP)

This is the sum of the products of course units and rating in each course for the entire semester or re-sits period. For example, consider a student who took 4 courses of 3 units each. Suppose the grades he obtained in the four courses were A, B, C and D respectively. The TCP of this student is obtained as:

$$(3 \times 5.0) + (3 \times 4.0) + (3 \times 3.0) + (3 \times 2.0) = 15.00 + 12.00 + 9.0 + 6.0 = 42.00$$

iv. Cumulative Credit Point (CCP)

This is the summation of Total Credit Points over all semesters from the beginning to date.

v. Grade Point Average (GPA)

This is the total credit points (TCP) divided by the total load (TLU). For example, consider the student's scores referred to in Number 3. His TCP is 42.0 and his TLU is 12. His GPA is therefore;

$$GPA = \frac{42}{12} = 3.50$$

The highest possible GPA that can be earned is 5.0 and that is when a student has earned a grade of 'A' in every course during the semester. The lowest GPA obtained is 0.0.

vi. Cumulative Grade Point Average (CGPA)

This is not the summation of GPA's for semesters. Rather, it is the summation of TCP for all semesters to date, divided by the summation of TLU for the said semesters. Like the GPA, CGPA's obtainable range from 0.0 to 5.0.

$$\text{In effect, } CGPA = \frac{CCP}{CLU}$$

4.4.2 Final Assessment and Class of Degree

Class	CGPA
First Class	4.50-5.00
2 nd Class Upper Division	3.50-4.49
2 nd Class Lower Division	2.40-3.49
3 rd Class	1.50-2.39

4.4.3 Carry over Courses

A student who is unable to graduate due to a number of outstanding courses would be required to register and sit for the failed courses when available, that is either during the first, or the second semester. This category of students would simply be called "Non-graduating students".

4.5 GENERAL ACADEMIC REGULATIONS FOR GEOLOGY COURSES

Registration Procedure

- Registration for a course shall normally be within the first two weeks of resumption in a semester.
- Late registration shall only be allowed after payment of the late registration fee and shall come up within the week following the normal registration period.
- Any student who fails to register up to the end of the late registration period shall be deemed to have unilaterally withdrawn from the University for that semester.
- Registration for a course shall mean simultaneous registration for the course and its examination.

- A student may drop a course or add a course provided he/she completes the prescribed form within four weeks of the commencement of lectures in the course and obtains the approval of his/her Head of Department.
- The maximum Total Load Unit (TLU) to be carried by a student is 24 units per semester and the minimum is 15. If it is established that student illegally registered for more than the maximum number of units, the best course that makes excess unit(s) shall be cancelled. Where a student has lower level course(s) outstanding, such a lower level course(s) should be registered for at the next available opportunity before registering for the higher level courses equivalent to the number of outstanding lower level courses.
Every student shall register in person and cases of impersonation will be punished. Submission of course registration forms on behalf of any other student shall be treated as impersonation and shall, be punished.
- Completed course registration forms duly signed by the Head of Department should be forwarded to the Registrar not later than six weeks from the beginning of the semester.
- The list of students registered for each course shall be forwarded to the Teaching Department and the Registry not later than eight weeks from the beginning of the semester.

EXAMINATION REGULATIONS AND DISCIPLINARY ACTIONS REQUIREMENTS FOR THE EXAMINATION

- In order to be eligible for a course examination, a student shall be expected to attend a minimum of 80% of the lecture, tutorials, practical and classes for the course in which he/she is registered. In this regard, course lecturers shall obtain and keep records of attendance.
- Once a student has registered for a course and he/she has not withdrawn from the course by the middle of the semester, he/she is

automatically deemed to have registered for the course examination.

- No student who has been entered for an examination shall postpone or withdraw from the examination except on acceptable medical grounds, and in consultation with the Head of Department and the Dean of the Faculty.
- Candidates who fail to present themselves for an examination for reasons other than illness, accident or some exceptional circumstances shall be deemed to have failed the course. Any student absent on the ground of illness must produce a medical report certified by the University Director of Health Services.

Components of Examination

Final grades in courses shall comprise continuous assessment and end-of course examinations in the theory, practical, studio, oral examination, Seminars, SIWES, and others as otherwise specified.

Continuous Assessment

Students' achievement shall be based on continuous assessment of the course and final examinations. For continuous assessment, there shall normally be at least two tests/assignments. The student shall be periodically informed of his/ her standing in the course. The final examination for each course shall normally be at the end of the semester in which the course is offered. Such final examination will normally comprise a theory paper, a practical/oral examination. The course grade will be made up of the student's score in the continuous assessment as well as the end-of course examination. The continuous assessment shall carry a maximum mark of 40% unless otherwise specified.

Instructions to Candidates

- A candidate shall be admitted into the examination hall on production of his/her student identity card, and be properly identified to avoid impersonation.

- Candidates must attend punctually at the times assigned for their papers and must be ready to be admitted into the examination hall ten minutes before the time the examination is due to start.
- Candidates shall not be permitted in any circumstances to enter the examination hall more than fifteen minutes before the time appointed for the commencement of the examination. Candidates arriving more than half an hour after the examination has started shall be admitted only at the discretion of the Chief Invigilator. Candidates who come late shall not be allowed extra time.
- Similarly, except with the special permission of the Chief Invigilator candidates must not leave the examination hall during the first half and the last quarter of an hour of the examination. Outside those periods candidates with the special permission of the Chief Invigilator, may leave the room temporarily and then only if accompanied by an official.
- No books or any unauthorized materials shall be brought into the examination hall. Candidates may bring with them only authorized materials such as pens, pencil, erasers and any such other materials, which they are specially allowed to bring to the examination hall. Programmable calculator, accounting calculator, desktop/laptop/notebook/hand-held computer, data banks may only be brought to the examination hall with the permission of the Chief Examiner.
- While the examinations is in progress, communication between candidates is strictly forbidden, and any candidate found to be giving or receiving irregular assistance, cheating or aiding and abetting any irregularity in an examination shall face disciplinary actions.
- Silence must be observed in the examination hall. The only permissible way of attracting the attention of the invigilator is by the Candidate raising his/her hand.
- The use of scrap paper is not permitted. All rough work must be done in the answer sheets and crossed out neatly.

- Supplementary answer booklets, even if they contain only rough works must be tied inside the main answer booklet,
- Candidates are advised in their own interest to write legibly and avoid using faint ink, Answers must be written in English, except otherwise instructed,
- Before handling in their scripts at the end of the examination, candidates must satisfy themselves that they have inserted at the appropriate places their matriculation numbers and the numbers of the questions they have answered,
- It shall be the responsibility of each candidate to personally hand in his/her scripts before he/she leaves the examination hall. Except for the question papers and any materials they have permission to bring with them candidates are not allowed to remove or mutilate any paper or material supplied by the University.
- Candidates must personally complete attendance sheet and submit same to the Invigilator as evidence of taking the examination before leaving the hall.
- Mobile phones/sets or radio communication sets are not permitted in the examination hall.

MISCONDUCT BEFORE EXAMINATION

- Involvement in and bearing responsibility for examination question leakage. **Penalty:** Expulsion from the University
- Participating in or benefiting from question leakage. **Penalty:** Expulsion from the University.
- Attempting to participate in and, or benefit from examination question leakage. **Penalty:** Suspension for two semesters.
- Coming into the examination hall within 30 minutes of the commencement of an examination. **Penalty:** The candidate should be allowed into the examination hall but should not be given extra time.

- Coming into the examination hall later than 30 minutes after the commencement of an examination. **Penalty:** The candidate should not be allowed into examination hall and should be scored 0 (F) in the course examined.

MISCONDUCT DURING EXAMINATIONS

- Sitting for an examination for which a candidate did not register for or qualify to sit for. **Penalty:** The result of the candidate in the course should be nullified. He/she should be scored 0 (F) and be issued a letter of warning.
- Representing or standing in for another in the course of an examination. **Penalty:** Expulsion from the University.
- Conniving with another candidate/student/person to represent or stand in for another in an examination. **Penalty:** Expulsion from the University.
- Destroying, effacing, mutilating or swallowing of potentially incriminating material relating to a course during the course of an examination. **Penalty:** Suspension for two semesters. In addition, the candidate should be scored 0 (F) in the course.
- Displaying of inappropriate or anti-social behaviour (e.g. smoking, singing, cat calls, etc) capable of causing delay and/or disruption of an examination process. **Penalty:** Suspension for one semester
- Displaying of inappropriate or anti-social behaviour leading to disruption and suspension of an examination. **Penalty:** Suspension for two semesters
- Giving, or receiving, or in anyway benefiting from information relating to a course in an examination through electronic, personal dress material, part of the body in any manner or form whatsoever. **Penalty:** Suspension for two semesters
- Leaving the examination hall without the permission of the Invigilator. **Penalty:** Letter of warning. In addition, the candidate should be scored 0 (F) in the course examined.

- Leaving the examination hall with examination material before the end of the examination without the permission of the Invigilator. **Penalty:** Suspension for two semesters
- Substituting or exchanging answer script(s) given to a candidate in whatever manner or form during the examination. **Penalty:** Expulsion of all the students involved from the University.
- Exhibiting insulting, rude, impolite behaviour to another student during the course of an examination. **Penalty:** Letter of warning
- Exhibiting insulting, rude, impolite behaviour to a staff during the course of an examination. **Penalty:** Suspension for two semesters
- Physical assault on another student during the course of an examination. **Penalty:** Suspension for two semesters
- Physical assault on staff during the course of an examination. **Penalty:** Expulsion from the University
- Talking to or communicating with another candidate without due permission during the course of an examination. **Penalty:** Letter of warning
- Bring in prohibited/unauthorized material(s) into the examination hall by a candidate without proven evidence of using the material(s). **Penalty:** Suspension for one semester. The candidate should also be scored 0 (F) in the course.
- Bring in unauthorized material(s) into the examination hall by a candidate with proven evidence of using the material(s) or any part thereof. **Penalty:** Suspension for two semesters. The candidate should also be scored 0 (F) in the course.
- Failure by a candidate to submit his/her answer script after taking part in an examination. **Penalty:** Suspension for two semesters. In addition, the candidate should be scored 0 (F) in the course.
- Giving/receiving irregular assistance, cheating or aiding and abetting by a candidate/student in an examination. **Penalty:** Suspension for two semesters

MISCONDUCT AFTER EXAMINATION

- Involvement in an attempt to substitute or change or remove or effect changes in examination script(s), record sheet(s), attendance register or any examination related material/document. **Penalty:** Expulsion from the University
- Gentle/subtle exertion of influence with a view to obtaining undue advantage in the grading of scripts or award of marks on an internal or external examiner. **Penalty:** Letter of warning.
- Non-gentle/non-subtle exertion of influence with a view to obtaining undue advantage in the grading of scripts or award of marks by an internal or external examiner. **Penalty:** Expulsion from the University.
- Any case of impersonation and, or conspiracy with impersonator during an examination. **Penalty:** Expulsion from the University
- Talking to or communicating with another candidate without due permission during the course of an examination. **Penalty:** Letter of warning
- Bring in prohibited/unauthorized material(s) into the examination hall by a candidate without proven evidence of using the material(s) **Penalty:** Suspension for one semester. The candidate should also be scored 0 (F) in the course.
- Bring in unauthorized material(s) into the examination hall by a candidate with proven evidence of using the material(s) or any part thereof. **Penalty:** Suspension for two semesters. The candidate should also be scored 0 (F) in the course.
- Failure by a candidate to submit his/her answer script after taking part in an examination. **Penalty:** Suspension for two semesters. In addition, the candidate should be scored 0 (F) in the course.
- Giving/receiving irregular assistance, cheating or aiding and abetting by a candidate/student in an examination. **Penalty:** Suspension for two semesters.

Computation of Examination Results

- There shall be a departmental panel of examiners to consider all examination results before they are presented to the Faculty Board of Examiners.
- Computation of examination results shall be the responsibility of each Chief Examiner/Head of Department. Computed results must be taken to the Faculty Board of Examiners for consideration.
- The master marks sheets or results must be signed by the Chief Examiner of that department.
- The Faculty's Board of Examiners shall take measures to ensure the correctness of all results presented to it before they are passed to the Board of Studies for consideration and ratification for presentation to Senate.

Release of Examination Result

- The results of each semester examination, signed by the Dean concerned shall be published not later than 24 hours after the meeting of the Faculty's Board of Examiners and shall remain provisional until approval by Senate.
- After Senate approval, the result shall be forwarded to the Registrar who shall have the responsibility of informing the students and their sponsors of the results
- The seasonal results shall be released to the students before the beginning of the following session.
- All amended results executively approved by the Vice-Chancellor shall come before Senate for ratification.

5.0 ADMISSION REQUIREMENTS

(a) UTME Admission:

Admission into 100 level is through the University/Tertiary Matriculation Examination (UTME) and University administered Post-UTME and Pre-Degree Science Programme (PDS). To be eligible for admission, candidates are expected to obtain credits in at least five

subjects including English Language, Physics, Mathematics and Chemistry at not more than two sittings in the West African Senior School Certificate Examination (WASSCE), NECO, General Certificate of Education Ordinary Level (GCE, O/L) or their equivalent.

UTME Subjects: English Language, Physics, Mathematics and Chemistry.

(b) Direct Entry

Candidates may be admitted to 200 Level if they have:

- (i) For admission by direct entry (200 Level), candidates shall, in addition to having five (5) SSCE credits, obtain at least two (2) A' level (or its equivalent) passes in relevant subject, or possess ND, HND, with credit passes, or possess a good first degree in another field as the case may be;
- (ii) Credit passes in English Language, Mathematics, Chemistry, Biology and any other subject shall be compulsory for admission into Geology;
- (iii) Those who meet the requirements for admission shall be subjected to screening interview to be conducted by the University; and
- (iv) The University shall not accept transfer students until after at least the first two years of its existence.

6.0 PROGRAMME DURATION

This programme is essentially a 4 or 3 year programme. Those who are admitted with WASSCE, SSCE and UTME certificates spend four years (eight semesters) and those admitted with diplomas spend three (3) years (six semesters), starting at the second year of the programme to obtain a Bachelor of Science degree in Geology. However, if the student fails to graduate at the end of the normal academic sessions, he/she would not be allowed to exceed a total of 12 semesters for UTME students and 9 semesters for direct entry students.

7.0. REQUIREMENTS FOR GRADUATION

University Graduation Requirements

The Federal University Oye-Ekiti shall require its undergraduate students to take and pass all courses specified and offered, including industrial attachment where applicable, by the faculty/department and approved by the senate before graduating from the chosen programme of study. The minimum pass mark shall be 40% (E) for all courses offered in the Federal University, Oye-Ekiti, except in selected professional courses where the pass mark shall be 50% (C). A student shall repeat a course in which he failed to obtain the minimum pass grade so as to be used in computation of CGPA. Other undergraduate graduation requirements are:

- i. The Federal University Oye-Ekiti shall awards its degrees on the authority of Senate only to students who have been found worthy in character and in learning;
- ii. Students shall successfully complete and pass all prescribed examinations for courses required for a degree programme;
- iii. Students shall not be involved in gross misconduct, such as, but not limited to: examination malpractice; conviction on felony; other convicted criminal offences; and association with or membership of secret cult or of any organisation prescribed by the university or government;
- iv. Students shall submit a research project which shall, as much as possible, develop the research skills of students;
- v. Students shall be required to complete their studies in not more than one and a half times the normal duration of the programme to qualify for an Honour's degree except in cases of ill-health or as determined by Senate;
- vi. For a student to be in good academic standing, the student must obtain a minimum cumulative grade point average of 1.5 at the end of each session. A student who fails to do so shall be placed on academic probation. If at the end of the probation year the CGPA still fall below 1.5, such a student shall be asked to withdraw from the programme registered without prejudice to being admitted into another programme in the University;

- vii. Students who attain a CGPA of less than 1.5 shall first register their backlog of required courses before they can, within the ceiling of 48 credit units, be allowed to register for other courses;
- viii. Students who absent themselves for two consecutive semesters without a valid reason may be asked to withdraw from the University, irrespective of their CGPA;
- ix. Students, for good reason and with the approval of Senate and upon recommendation by the Dean, may suspend their programme of study for a maximum of one calendar year; and
- x. Students who transfer from one programme to another or from another University may be credited with those course credit units earned which are relevant to the curriculum of the new programme.

Departmental Graduation Requirements

To be eligible for the award of B.Sc. in Geology, a student is expected to have:

- (a) passed all departmental compulsory or core courses, University/School required courses as well as the electives taken;
- (b) accumulated a minimum of 173 course units for students admitted through the UTME and 137 course units for direct entry students and obtained a CGPA of not less than 1.5;
- (c) completed successfully all industrial attachment training, seminars and project.

In addition, students who are admitted by direct entry are expected to audit and pass the following University required courses – GST101, 102, 103, 105, 106, 108/110 and GLY 102. If a student fails any of the courses, he/she will be required to offer it formally.

Language of Instruction: English Language

8.0. COURSE OUTLINE

8.1. COURSES' STRUCTURE BY SEMESTER 100 LEVEL FIRST SEMESTER

Course Code	Course Title	Pre-requisite	Status	Contact Hours			
				L	T	P	U
GST 101	Communication in English I		C	2	-	-	2
GST 103	Use of Library and ICT		C	2	-	-	2
GST 105	Introduction to Entrepreneurship		C	1	-	-	1
PHY 101	General Physics I		C	3	-	-	3
PHY 107	Practical Physics I		R	-	-	3	1
CHM 101	General Chemistry I		C	2	1	0	3
CHM 107	Practical Chemistry I		R	-	-	3	1
BIO 101	General Biology I		C	2	0	3	3
MTH 101	Elementary Mathematics I		C	2	1	-	3
CSC 101	Introduction to Computing I		R	2	-	-	2
GLY 101	Introduction to Geology I		C	2	-	-	2
	Total Credit Units (Compulsory)						23
	Total Credit Units (Elective)						0
	Total Credit Units						23

100 LEVEL SECOND SEMESTER

Course Code	Course Title	Pre-requisite	Status	Contact Hours			
				L	T	P	U
GST 102	Communication in English II		C	2	-	-	2
GST 106	Evaluating Opportunities & Business Concept		C	1	-	3	1
GST 108/ GST 110	Government, Society & Economy/ African Culture & Civilization		C	2	-	-	2
CHM 102	General Chemistry II		C	2	1	-	3
CHM 108	Practical Chemistry II		R	-	-	3	1
BIO 102	General Biology II		C	2	1	-	3
PHY 102	General Physics II		C	2	1	-	3
PHY 108	Practical Physics II		R	-	-	3	1
MTH 102	Elementary Mathematics II		C	2	1	-	3
CSC 102	Introduction to Computing II		R	2	-	-	2
GLY 104	Introduction to Geology II		C	2	-	-	2
	Total Credit Units (Compulsory)						23
	Total Credit Units (Elective)						0
	Total Credit Units						23

200 LEVEL FIRST SEMESTER

Course Code	Course Title	Pre-requisite	Status	Contact Hours			
				L	T	P	U
GST 203	Feasibility Plans & Investment Decision		C	1	-	-	1
GST 205	Introduction to Philosophy, Logic & Human Existence		C	2	-	-	2
CHM 201	Basic Inorganic Chemistry I		C	2	-	-	2
CHM 203	Physical Chemistry		R	2	-	3	3
CSC 201	Structured Programming		R	2	-	-	2
GPY 201	Introduction to Earth Physics	MTH 101	C	3	-	-	3
GLY 201	Physical Geology		C	1	-	-	1
GLY 205	Systematic Paleontology		C	2	-	0	2
GLY 207	Mineralogy and Crystallography		C	2	-	0	2
	Total Credit Units (Compulsory)						18
	Total Credit Units (Elective)						-
	Total Credit Units						18

200 LEVEL SECOND SEMESTER

Course Code	Course Title	Pre-requisite	Status	Contact Hours			
				L	T	P	U
GST 202	Peace Studies & Conflict Resolution		C	2	-	-	2
GST 204	Resources Management and Organizational Behaviour		C	1	-	-	1
MTH 232	Statistics For Physical Science and Engineering		R	2	1	-	3
CHM 204	Organic Chemistry 1		R	2	-	-	2
CHM 206	Analytical Chemistry		R	1	-	3	2
GLY 208	Principles of Stratigraphy		C	2	-	-	2
GLY 210	Introduction to Surveying		C	2	-	3	3
GLY 212	General Petrology		C	2	-	-	2
GLY 214	Introduction to field mapping and Geological Map Interpretation		C	2	-	-	2
GLY 216	Field Mapping Techniques I		C	-	-	6	2
	Total Credit Units (Compulsory)						21
	Total Credit Units (Elective)						-
	Total Credit Units						21

INTER SEMESTER BREAK

GLY 216 Field Mapping Techniques I

300 LEVEL FIRST SEMESTER

Course Code	Course Title	Pre-requisite	Status	Contact Hours			
				L	T	P	U
GPY 311	Principles of Geophysics	GPY 201	C	2	1	-	2
GLY 301	Sedimentology I	GLY 208	C	2	-	3	3
GLY 305	Igneous Petrology	GLY 212	C	2	-	-	2
GLY 321	Geostatistics		E	2	-	-	2
GLY 323	Principles of Geochemistry		C	2	-	3	3
GLY 325	Metamorphic Petrology	GLY 212	C	2	-	3	3
GLY 327	Optical and Determinative Mineralogy	GLY 207	C	1	-	3	2
GLY 329	Structural Geology	GLY 201	C	2	-	3	3
	Total Credit Units (Compulsory)						18
	Total Credit Units (Elective)						2
	Total Credit Units						20
GLY 331	Geology for Engineering students		E	3	-	1	3

300 LEVEL SECOND SEMESTER

Course Code	Course Title	Pre-requisite	Status	Contact Hours			
				L	T	P	U
GLY 312	Exploration and Mining Geology	GLY 207	R	2	-	3	3
GLY 318	Energy Resources		E	2	1	-	2
GLY 322	Precambrian Geology/Geochronology		C	2	-	-	2
GLY 324	Geotectonics		R	2	-	-	2
GLY 326	Regional Geology of Africa		E	2	-	-	2
GLY 328	Crustal Evolution and Metallogeny		E	2	-	-	2
GLY 332	Photogeology, Remote Sensing and GIS		C	2	-	3	3
GLY 334	Independent Field Mapping	GLY 216	C	-	-	9	3
GLY 336	Environmental Geology		C	2	-	-	2
	Total Credit Units (Compulsory)						13
	Total Credit Units (Elective)						6
	Total Credit Units						21

INTER SEMESTER BREAK

GLY 334 Independent Field Mapping

400 LEVEL FIRST SEMESTER

Course Code	Course Title	Pre-requisite	Status	Contact Hours			
				L	T	P	U
GLY 399	Industrial Training/SIWES		C	-	-	18	6
GLY 401	Engineering Geology		C	2	-	3	3
GLY 403	Petroleum Geology		C	2	-	3	3
GLY 411	Palynology	GLY 205	R	2	-	3	3
GLY 413	Micropaleontology	GLY 205	R	2	-	3	3
GPY 413	Applied Geophysics	GPY 311	C	2	-	3	3
	Total Credit Units (Compulsory)						21
	Total Credit Units (Elective)						-
	Total Credit Units						21

400 LEVEL SECOND SEMESTER

Course Code	Course Title	Pre-requisite	Status	Contact Hours			
				L	T	P	U
GLY 404	Exploration Geochemistry	GLY 323	E	2	-	-	2
GLY 406	Marine Geology		R	2	-	-	2
GLY 410	Seminar		C	1	-	-	1
GLY 416	Economic Geology		C	2	-	-	2
GLY 418	Sedimentology II	GLY 301	E	2	-	-	2
GLY 420	Hydrogeology		C	2	-	3	3
GLY 422	Geology of Nigeria	GLY 301	C	1	-	3	2
GLY 499	Research Project		C	-	-	18	6
	Total Credit Units (Compulsory)						16
	Total Credit Units (Elective)						4
	Total Credit Units						20

C = Core Course

R = Required Course

E = Departmental Elective Course

9.0 COURSE DESCRIPTION OR SYNOPSIS

GST 101 COMMUNICATION IN ENGLISH I (2+0+0 2 Units)

Communication in English will focus on two languages skills: listening and speaking as word classes. Listening skills: listening strategies, note-taking. Speaking skills: segmental consonants, vowels; supra-segment-stress, intonation; dictionary and pronunciation skills in English; grammatical structures and communication: nouns, verbs, pronouns, adverbs, prepositions and adjectives in communication, English, sentence types, punctuation marks, vocabulary development, common errors, figures of speech, and effective communication, spelling. Students are to read two recommended texts.

GST 103 USE OF LIBRARY AND ICT (2+0+0 2 Units)

Brief history of libraries; Library and education; University libraries and other types of libraries; Study skills (reference services); Types of library materials, using library resources including e learning, e-materials, etc.; Understanding library catalogues (card, OPAC, etc.) and classification; Copyright and its implications; Database resources; Bibliographic citations and referencing. Development of modern ICT; Hardware technology; Software technology; Input devices; Storage devices; Output devices; Communication and internet services; Word processing skills (typing, etc.).

GST 105 INTRODUCTION TO ENTREPRENEURSHIP (1+0+0 1 Unit)

History and background of entrepreneurship thought, definition of entrepreneurship and entrepreneur, relationship between entrepreneurship, entrepreneurship, technopreneurship, and management, entrepreneurship theory and Nigeria experience, approaches to entrepreneurship: psychological approach, sociological approach and distinctive competence. Understanding the entrepreneurial mindset. Business opportunities profile. Entrepreneurial case analysis/Training workshop.

PHY 101 GENERAL PHYSICS I (2+1+0 3 Units)

(Mechanics, Thermal Physics and Waves)

Space and Time, frame of reference, Invariance of physical law, relativity of simultaneity, relativity of time interval, relativity of length, Units and dimension, standard and units, unit consistency and conversions, Kinematics; displacement, Time, and average velocity, instantaneous velocity, average acceleration, motion with constant acceleration, freely falling bodies, position and velocity vector, acceleration vector, projectile motion, motion in a circle and relative velocity. Vectors: units vectors, addition vectors, products vectors. Fundamental Laws of Mechanics; forces and interaction, Newton's laws of motion, mass and weight. Statics and dynamics: application of Newton's laws, dynamics of particles, frictional forces dynamics of circular motion. Galilean invariance; Universal gravitational; work and energy; Rotational dynamics and angular momentum; Conservation laws.

PHY 107 PRACTICAL PHYSICS I (0+0+3 1 Unit)

This introductory course emphasizes qualitative measurements, the treatment of measurement errors, and graphical analysis. A variety of experimental techniques will be employed. The experiments include studies of meters, the oscilloscope, mechanical system, electrical and mechanical resonant systems, light, heat, viscosity, etc. covered in PHY 101, PHY 102, PHY 103.

CHM 101 GENERAL CHEMISTRY I (2+1+0 3 units)

Physical quantities and Units, Error treatments, States of matter: Derivation and calculations involving the use of the laws of gases. The mole concepts and determination of relative masses. Chemical equation and Stoichiometry: Modern electronic theory of atoms and electronic Configuration. Building up of periodic table and the periodicity. Chemical bonding and intermolecular bonds. Concept of Acid, Base and Salts. Chemical equilibria. Chemical Kinetics. Thermochemistry. Electrochemistry. Introduction to Nuclear Chemistry.

CHM 107 PRACTICAL CHEMISTRY I (0+0+3 1 Unit)

A course designed to illustrate the principle covered in lecture course of CHM 101 Viz; Measurements using measuring Cylinder and use of the Top loading Balance, Data treatments; Volumetric Analysis: titration of strong acid against strong base/weak base, Standardization of Potassium tetraoxomaganate, Ethanoic acid; Back titration.

BIO 101 GENERAL BIOLOGY I (2+0+3 3 Units)

The scope of Biology and its place in human welfare including characteristics of life, concepts in biology, topical issues in biology and career opportunities. Diversity and classification of living things. Cell structure and organization; functions of cellular organelles; diversity, general reproduction, interrelationship of organisms, heredity and evolution; elements of ecology and types of habitat. Differences between plants and animals. Variation and life cycles of plants to include non-vascular plants like algae, fungi, bacteria, viruses, bryophytes and petridophytes. Varieties and forms or life cycles and functions of flowering plants.

MTH 101 ELEMENTARY MATHEMATICS I (2+1+0 3 Units)
(Algebra and Trigonometry)

Elementary set theory; Subsets; Union; Intersection; Complements, Venn diagrams. Real numbers: integers, rational and irrational numbers, mathematical induction, real sequences and series, theory of quadratic equations, binomial theorem. Complex numbers: algebra of complex numbers; the Argand Diagram. Re moivre's theorem, nth roots of unity. Circular measure, trigonometric functions of angles of any magnitude, addition and factor formulae.

CSC 101 INTRODUCTION TO COMPUTING I (2+0+0 2 Unit)

History of computers, functional components of a computer, characteristics of a computer, problem-solving, flowcharts and algorithms. The internet, social, ethical and professional issues of computing; software, hardware and networking development trend.

Social application of computing; network communication, internet piracy/crime and computing technologies. Computer applications.

GLY 101 INTRODUCTION TO GEOLOGY I (2+0+0 2 Units)

Constitution of the Earth, Origin of the solar systems, The Geologic Time Scale and its methods of measurement. Origin and chemical evolution of atmosphere, hydrosphere and biosphere; the history of life. Earth Internal Structure: Plate Tectonics and Earthquakes. Minerals and internal processes of the Earth: magmatism and Igneous Rocks

GST 102 COMMUNICATION IN ENGLISH II(2+0+0 2 Units)

In Communication in English II, two language skills: writing and reading in communication will be emphasized. In Writing: getting started, strategies in writing, planning a good writing, parts of an essay, paragraph development, transitional devices, types of writing-definition, narrative, explanatory, argumentative, instructions; report writing, its features, types: technical and non- technical reports; technical type: laboratory, Project report e.g. dissertation or thesis writing; non-technical report.: term paper; reading skill's reading and literary appreciation- literature and its features, types, elements and relevance; genres of literature; application of the literary features and genres to three recommended reading texts on the three genres of literature.

GST 106 EVALUATING OPPORTUNITIES AND BUSINESS CONCEPTS (1+0+3 1 Unit)

Perceiving market opportunities, sources of new ideas including census data. Method of generating ideas. Creative problem solving. Developing the business concept. Conducting market research. Product planning development process. Legal issues in starting a business. Creativity, Business Innovation and Products Development

GST 108 GOVERNMENT, SOCIETY AND ECONOMY (2+0+0 2 Units)

Concept of government, society, development and economy; The organization and structure of government; Evolution of the state;

Political Philosophy; System of Government, The Rule of Law; Resources and Resource System; Social Mobility and Social Change; Environment and Culture; Social stratifications

GST 110 AFRICAN CULTURE AND CIVILISATION
(2+0+0 2 Units)

The study of African cultural history and characteristics, arts in pre-colonial times. It also looks at the evolution of Africa as a political unit; phenomenon of indigene/settlers and its conflicting outcome as well as traditional concept of trade, social justice, individual and national development. Moreover, peculiar norms and values, national attitudes and conducts (cult activities and related vices), reorientation, moral obligations of citizens, national values and environmental problems will be discussed. Particular attention will be on Nigerian local cases.

CHM 102 GENERAL CHEMISTRY II (2+1+0 3 Units)

Introduction to Organic Chemistry: Hybridization in carbon Sp^3 , Sp^2 Sp . Nomenclature and classes of organic compounds. Homologous series of hydrocarbons, functional groups. Types of organic reactions: elimination, addition, substitution and rearrangement. Isomerism: structural and stereoisomerism. Chemistry of benzene, alcohols, phenols, aldehydes, ketones, acids, amines and amides. Structure of simple sugars, polysaccharides such as starch and cellulose, peptides and proteins, fats and oils. Isolation and purification of organic compounds.

CHM 108 PRACTICAL CHEMISTRY II (0+0+3 1 Unit)

A course designed to illustrate the principle covered in lecture course of CHM 102 Viz; Test for Organic functional groups: Unsaturated hydrocarbons, alcohols, aldehydes and ketones., carboxylic acids, Ester, Phenol. Determination of melting point; determination of suitable solvent for recrystallization; separation by distillation

BIO 102 GENERAL BIOLOGY II (2+1+0 3 Units)

A generalized survey of the plant and animal kingdoms based mainly on study of similarities and differences in the external features, ecological adaptation of these forms.

PHY 102 GENERAL PHYSICS II (2+1+0 3 Units)

Electrostatics; conservation law of electric charges, electrons and electrostatics, Coulomb's law, electric field and forces, electric field line, electric dipoles charged particles in an electric field, charge and electric flux, Gauss's law and its applications, electric potential, electric potential due to a single charge, electric potential due to a dipole, electric potential due to continuous charge distribution equipotential surfaces. Conductors and currents: electric current, resistors and resistance, electric power, capacitors in series and parallel energy storage in capacitors and electric field energy, Gauss's law in dielectrics. Magnetism: magnetic field, magnetic force on a current carry conductor, Ampere's law, Bio-Savart law, electromagnetic induction, inductance, self-inductance, mutual inductance, Maxwell's equations; electromagnetic oscillations and waves; Applications.

PHY 108 PRACTICAL PHYSICS II (0+0+3 1 Unit)

This introductory course emphasizes quantitative measurements, the treatment of measurement errors and graphical analysis. A variety of experimental techniques will be employed. The experiments include studies of meters, the oscilloscope, mechanical system, electrical and mechanical resonant systems, light, heat, viscosity etc. covered in PHY101, PHY102, PHY 103

MTH 102 ELEMENTARY MATHEMATICS II (2+1+0 3 Units)

Calculus: Function of a real variable, graphs, limits and idea of continuity. The derivative, as limit of rate of change. Techniques of differentiation. Extreme curve sketching; Integration as an inverse of differentiation. Methods of integration. Definite integrals. Application to areas, Volumes.

CSC 102 INTRODUCTION TO COMPUTING II (2+0+0 2 Units)

System description techniques; flowcharts, algorithms, data flow diagrams, decision tables, etc. Program development life cycle, error. BASIC programming: statement, symbolic names; arrays, subscripts expression and control statements. Introduction to Visual BASIC Programming Language.

GLY 104 INTRODUCTION TO GEOLOGY II (2-0-0 2 Units)

Earth External processes, Sedimentation and Sedimentary Rocks; weathering, erosion, transportation and deposition. Principles of stratigraphy: uniformitarianism, superposition, fauna and flora succession. Deformation and geological structures. Concepts of Paleoclimates, paleogeography, paleoceanography, paleomagnetism and paleoenvironment.

GST 203 FEASIBILITY PLAN AND INVESTMENT DECISION (1+0+0 1 Unit)

Executive Summary, Business Concept, Industry/Market Analysis, Management Team, Product /Service Development Analysis, Financial Analysis (Cash Flow), Sources of Raw Materials, Sources of start-up Capital. Nature of investments. Basis of investment decision. Risk return relationship. Financial Market. Nigerian Stock Exchange. Methods of raising capital on the capital market. Capital Market efficiency. Stock exchange transaction and transfer procedure. Interpretation and analysis of financial statement and introduction to portfolio management. Training workshop/industrial.

GST 205 LOGIC, PHILOSOPHY AND HUMAN EXISTENCE (2+0+0 2 Units)

The course is designed to equip students with the capacity to adequately understand the concept of human existence(meaning, method and application of Philosophy, Philosophical foundation of Human Existence) and man's role in the affairs of life (the value of Philosophy to man and society, ethics and human conduct, the significance of Philosophy, Culture and Religion to national

development. It aims at providing ways and means through careful reflection, purposeful thinking and logical reasoning (Philosophy and Education, Philosophy of Language), a useful foundation for a meaningful life (the Nature of Logic, the meaning, structure and types of arguments, fallacies and the use of truth table, symbolizing statements and argument in propositional logic).

CHM 201 BASIC INORGANIC CHEMISTRY I (2+0+0 2 Unit)

A quantitative introduction to the basic principle of inorganic chemistry. The theory of valency - molecular orbital, crystal field and valence bond theory. Three centre ionic bonding, electronegativity, ionic solids and lattice energy. Hydrogen bonding, molecular solids introduction to coordination chemistry of the first row Periodicity of Physical Properties: The variation in physical properties with atomic number across the 2nd and 3rd periods (lithium to neon, sodium to argon). Variation in first ionization energies, atomic radii, melting points and explanation in terms of structure and bonding in elements. The relevance of ionization energy and electronic configuration. Comparative chemistry of Group IA, IIA, VA and VIII elements. Chemistry of noble metals (Ag, Au, Cu and Pt) and their uses.

CHM 203 PHYSICAL CHEMISTRY (2+0+ 3 3 Unit)

Bond dissociation energies. Energy cycles (Born – Haber cycle) of covalent compounds. Heats of formation and their determination. The law of thermodynamics; Entropy and free energy, reaction and phase equilibria, chemical kinetics- Factors affecting the rates of chemical reactions. Rate laws. Order of reaction and molecularity of elementary processes. Relationship of order to mechanism. Rate equation for zero, first and second order reactions. Half lives. Experimental investigation of reaction rates. Sampling and physical methods of following reactions. Determination of order. Effect of temperature on reaction rate. The Arrhenius equation. Presentation of collision and transition state theories. Catalysis, simultaneous reactions, opposing, consecutive, side and chain reactions; Mechanism and theories of elementary processes; Photochemical reactions. Basic electrochemistry: Properties

of electrolytes Concept of activity-Debye-Huckel theory, conductance and its measurement, interaction in electrolyte solutions. Ideal solutions, non-ideal solutions; Interfacial relationships, adsorption, adsorption isotherms, Colloidal systems, classification of colloidal systems, Micelle and its formation. Preparation and properties of lyophilic and lyophobic sols. colligative properties. Non-aqueous solvents. Solution properties of compounds i.e. solute-solvent interactions.

CSC 201 STRUCTURED PROGRAMMING (2+0+0 2 Units)

Introduction; the basic rules of Structured Programming; Programming Steps; Structured effects; I/O techniques; File Management; Solution of selected problems, objects, tools, properties and structure of applications using PASCAL.

**GPY 201 INTRODUCTION TO EARTH PHYSICS
(3+0+0 3 Units)**

The Earth's History. The Earth's interior. Seismicity and earthquake zones. The nature of the gravity field of the earth. The measurement of gravity and the figure of the earth. The Earth's magnetic field. Rock magnetism, Polar wandering and the continental drift. Heat flow and geothermometry.

GLY 201 PHYSICAL GEOLOGY (1+0+0 1 Units)

Planet Earth: its composition from core to crust. Weathering and other surface processes. Landforms and major earth structures. Interpretation of topographic and simple geology maps. Deformation processes - joints, faults and folds. Minerals and rocks-origin, distribution, identification and classification.

GLY 205 SYSTEMATIC PALEONTOLOGY (2+0+0 2 Units)

Fossil and Fossil processes. Morphology, evolution and identification of major animal phyla, viz: Protozoa, Porifera, Coelenterata, Bryozoa, Brachiopoda, Mollusca, Arthropoda, Echinodermata, Graptolithina, their stratigraphic and paleoecologic distributions. Vertebrates and plants fossils. Paleobiology: paleontological principles and

paleobiologic models, macro- and micro- evolution. Statistical data analysis of paleontological data.

GLY 207 MINERALOGY AND CRYSTALLOGRAPHY
(2+0+0 2 Units)

Formation of a crystal; principles of crystal chemistry; Systematic description:- nesosilicates, sorosilicates, cyclosilicates, inosilicates, phyllosilicates and tectosilicates. Occurrence and uses of common rock forming minerals. Association of minerals in rocks. Physical and optical properties, and identification of common rock forming minerals; crystal state, crystal structure – crystallographic notations; crystal lattice and unit cell; elements of symmetry. Crystal systems, twinning. Polymorphism, pseudomorphism, polytypism and solid solution. Systematic mineralogy;. Introduction to X-ray crystallography.

GST 202 PEACE STUDIES AND CONFLICT RESOLUTION
(2+0+0 2 Units)

Basic Concepts in peace studies and conflict resolution; Peace as vehicle of unity and development; Conflict issues; Types of conflict, e. g. Ethnic/religious/political/ economic conflicts; Root causes of conflicts and violence in Africa; Indigene/settler phenomenon; Peace – building; Management of conflict and security. Elements of peace studies and conflict resolution; Developing a culture of peace; Peace mediation and peace-keeping; Alternative Dispute Resolution (ADR). Dialogue/arbitration in conflict resolution; Role of international organizations in conflict resolution, e.g. ECOWAS, African Union, United Nations, etc.

GST 204 RESOURCES MANAGEMENT AND
ORGANISATIONAL BEHAVIOUR (1+0+0 1 Unit)

The Entrepreneur as a team leader and coach. Managerial skills and roles. Emerging trends in the workplace. Changing demographics and the impact of technology. Emphasis on team-work. Job design. Behavioural consideration in job design. Physical consideration in job design. Practical: students of like minds work together in an organizational – like group performing different roles.

MTH 232 STATISTICS FOR PHYSICAL SCIENCE AND ENGINEERING (2+1+0 3 Units)

Measures of location, partition and dispersion in simple and grouped data. Elements of probability and probability distributions – Bernoulli, binomial, Poisson, geometric, negative binomial and normal distributions. Estimation and tests of hypothesis concerning parameters using t-, chi-square, and F- distributions. Regression and correlation coefficients. Analysis of Experiments using Analysis of Variance (ANOVA). Contingency tables and goodness of fit tests, Non-Parametric Inferences.

CHM 204 ORGANIC CHEMISTRY I (2+0+0 2 Units)

Review of chemical bonding in organic chemistry; Alcohols and their reactions; Ethers and epoxides, carboxylic acids and their derivatives, aldehydes and ketones; Carbanions I and II – Unsaturated compounds, Carbanion II – Amines, Aromatic and Alicyclic chemistry. Preparation and reactions of benzene derivatives. Reactive intermediates: formation and reaction (carbenes, free radicals etc). Nucleophilic substitution at saturated carbon atom (SN1 and SN2 mechanisms). Electrophilic and nucleophilic aromatic substitution reactions. Elimination reactions (E1 and E2 mechanisms). Neighbouring group participation and rearrangement reactions. Stereochemistry: Stereochemistry of organic compounds and optical isomerism of compounds with one or more asymmetric centres. Heterocyclic chemistry- the chemistry of five and six membered ring.

CHM 206 ANALYTICAL CHEMISTRY (1+0+3 2 Units)

Theory of errors; Statistic treatment of data; Theory of sampling; Chemical methods of analysis including volumetric, gravimetric and physiochemical methods. Separation methods; Chromatography: Thin Layer, paper and column chromatograph. The use of R_f values.

GLY 208 PRINCIPLES OF STRATIGRAPHY (2+0+0 2 Units)

Principles of stratigraphy, Concepts of chrono, litho, bio, magneto, seismic, and sequence stratigraphy, and stratotypes. Stratigraphic correlation. The geologic column and time scale. Extinctions in the stratigraphic record. Facies, Stratigraphy of sedimentary basins in Nigerian. Introduction to facies map, correlation and stratigraphic cross-sections.

GLY 210 INTRODUCTION TO SURVEYING (2+0+3 3 Units)

Introduction to measurements. History of Surveying. Introduction to surveying instruments. Types of Surveys – Land, Topographic, Route, City/Municipal, Construction, Hydrographic, Marine, Mine, Forestry, Geological surveys, Photogrammetric, As-built, Control surveys. Geological Surveying techniques. Geographic Information System.

GLY 212 GENERAL PETROLOGY; (2+0+0 2 Units)

Magma: ascent and emplacement. Textures, structures and classification of igneous rocks. Metamorphism and metamorphic rocks. Textures, structures and classification of sedimentary rocks.

**GLY 214 GEOLOGICAL MAP INTERPRETATION
(2-0-0 2 UNITS)**

Detail interpretation of topographic and geological maps; description of deformational structures (e.g. faults, folds, unconformities) and their recognition on maps; determination of geometric forms of outcrops; interpretation of subsurface data. Three-point problems

GLY 216 FIELD MAPPING TECHNIQUES I (0-0-6 2 UNITS)

A basic field course involving the fundamental of field geological mapping and interpretation. Usage of topographic and geological maps. Identification of rock types, minerals and geologic structures: Data acquisition using simple field equipment. Training to be conducted at a field camp with both sedimentary and crystalline rocks exposure outside the campus for two weeks. Student will submit report of the mapping exercise.

GPY 311 PRINCIPLES OF GEOPHYSICS (FOR GEOLOGY STUDENTS) (2+1+0 2 Units)

The nature and scope of geophysics and the role of geophysics in geological prospecting and exploration. Principles, techniques (data acquisition, presentation and interpretation) and principal applications of Gravity, Electrical, Seismic and Electromagnetic prospecting methods. Geophysical well logging; principle, types, data acquisition and interpretation. Hydrocarbon, Mineral and Groundwater exploration using Geophysical prospecting methods. Applications of geophysics in solving engineering and environmental problems

GLY 301 SEDIMENTOLOGY I (2+0+3 3 Units)

Origin of sediments and sedimentary rocks, sedimentary processes. Texture and composition of sedimentary rocks, minerals; evaporites, phosphates and manganese deposits. Diagenetic processes; sandstones carbonates. Properties of flows and sedimentary structures. Walter's law, facies concept and facies analysis. Introduction to depositional environments. quantitative. Petrographic study of sedimentary rocks under the polarising microscope.

GLY 305 IGNEOUS PETROLOGY (2+0+0 2 Units)

The rock cycle. Origin and evolution of magma, chemistry of magma, physical characteristics of magma. Magmatic crystallization; differentiation and magma types. Petrogenesis and petrography of igneous rocks. Chemistry of igneous rocks: silica saturation and alumina saturation. Mode of occurrence of igneous rocks; internal and external processes. Igneous rock province of Nigeria and West Africa; Older and Younger Granites of Nigeria. Charnockites, kimberlites, serpentinites and carbonatites.

GLY 321 GEOSTATISTICS (2+0+0 2 Units)

Map analysis, Geologic Maps, distribution points, contouring, trend surfacing, comparing maps, Fourier series, series of events. Analysis of multivariate data, multivariate extension of elementary statistics. Discriminate functions; factor analysis. Sampling and estimation – The population – sampling; estimation and confidence. Area sampling

schemes. Analysis of Dispersion, Homogeneity of dispersion Maholanobis distance. Geometric representation of Maholanobis distance. Canonical variables.

GLY 323 PRINCIPLES OF GEOCHEMISTRY (2+0+3 3 Units)

Abundance, classification and distribution of elements in the cosmic system, lithosphere, hydrosphere and atmosphere; geochemistry of different rock types and mineral deposits; weathering and soil formation, principles and methods of exploration geochemistry and geochemical analysis. Colloids and clays

GLY 325 METAMORPHIC PETROLOGY (2+0+3 3 Units)

Physical-chemical processes in metamorphism, agents and controls of metamorphic processes; metamorphic differentiation. Classification of metamorphic rocks, metamorphic textures. Metamorphic Facies and Facies series. Facies of contact and regional metamorphism. Retrograde metamorphism, polymetamorphism and orogeny. The carbonatite problem; eclogites. Evolution of gneisses and migmatites; Anatexis, metasomatism and granitisation.

GLY 327 OPTICAL AND DETERMINATIVE MINERALOGY (1+0+3 2 Units)

Characteristic properties and propagation of light. The polarising microscope: Principles of optical crystallography, identification of rock-forming minerals in parallel and convergent light under the polarising microscope: properties of mineral under plane and cross polarized light, mineral chemistry and recalculation of chemical formula. Introduction to X-ray crystallography.

GLY 329 STRUCTURAL GEOLOGY (2+0+3 3 Units)

Stresses and strain analysis; the stress ellipsoid, stress components and trajectories; experimental deformation behaviour of rock materials; rheology in the earth's crust; fold mechanics; brittle and ductile shear zones, small-scale geological structures, salt domes and diapirism. Elements of physical metallurgy- crystal defects and dislocations, work

hardened, ecologic annealing, recovery, recrystallization deformation mechanisms and development of textures and preferred orientation of plastic flow and recrystallization, solution of structural problems by stereographic projection.

GLY 331 GEOLOGY FOR ENGINEERING STUDENTS (3+0+1 3 UNITS)

Geological structure and mapping. Rocks and minerals. Stratigraphy – time scale. Fossils and their importance: special reference to Nigeria. Introduction to the geology of Nigeria. Engineering. Applications - water supply, site investigation – dams, dykes, etc

GLY 312 EXPLORATION AND MINING GEOLOGY (2+0+3 3 Units)

Definition and scope of mineral exploration. Mode of occurrence and detailed exploration techniques – geological, geochemical and geophysical. Types of drilling and machinery. Mine development and mineral economy: ore reserve estimation and calculation. Mining and mining methods. Factors controlling the choice of mining methods. Geological mapping and surveying of open-pit and underground mines. Mineral rights, mining law and taxation

GLY 318 ENERGY RESOURCES (2+1+0 2 Units)

Introduction to Energy Resources. Primary resources; External sources, the Earth's internal heat. Secondary resources. Photosynthesis and fossil fuel, the fossil fuel bank. Global perspective of energy resources, the growth of energy demand, global requirement and distribution. Fossil Energy: Coal: its geology – origins, stages of formation, properties and ages, world coal resources, petroleum, nature, origin and generation. Nuclear Energy: Nuclear reactions and reactors, fuel requirement for reactors; Uranium – geology and geochemistry, Uranium production and economics, its reserves and resources. Side effects of nuclear industry, radioactive waste disposal. Geothermal Energy: Hyper-thermal resources; zones with low conductive shallow strata, hot rocks. Surface Energy Resources: Solar energy, Wind

energy and Wave energy. Energy supply and demand in Nigeria – present and future scenes.

**GLY 322 PRECAMBRIAN GEOLOGY/GEOCHRONOLOGY
(2+0+0 2 Units)**

Principles of Geochronology, Rb/Sr, and K/Ar, U/Pb dating methods. Stable isotopes. Data interpretations, principles of Precambrian stratigraphy and application to major shield areas of the world. Precambrian of Nigeria. Precambrian of Africa and other continents of the world.

GLY 324 GEOTECTONICS (2+0+0 2 Units)

Continental drift, seafloor spreading, magnetic anomalies and paleomagnetism, polar reversals, polar wandering and migration of continents. Earthquakes. Heat flow and vertical movements of the crust. Plate tectonics: causes, relations to mineral resources genesis, diversity and extinction of species, origin and growth of basins, rift valley basins, orogeny and orogenesis. Lunar Geology

**GLY 326 REGIONAL GEOLOGY OF AFRICA
(2+0+0 2 UNITS)**

Geology, structure and evolution of Africa in the Precambrian to Early Paleozoic times and their radiometric ages; Regional tectonic structures of Africa:- nappes; transcurrent faults such as the Nigerian Kalangai fault; horst and graben; block faulting; rift valleys such as the East African rift systems. Cratons and mobile belts - crustal growths and intrusive activities. Fold belts and lithotectonic zones within the belts. Cycles of organic events within African continent and the associated lithostratigraphy. Mineralization in the African cratons and mobile belts. Phanerozoic interior and development of coastal basins in Africa; Structures, stratigraphy, mineralization and economic geology of the coastal basins.

GLY 328 CRUSTAL EVOLUTION AND METALLOGENY (2+0+0 2 UNITS)

The Geological Time Scale. The Archean; petrology, tectonism, metallogeny and crustal evolution. The Early to Mid-late Proterozoic; basic to ultrabasic intrusions, geosynclines, mineralization, Mid-late proterozoic; basin development, crustal evolution and metallogeny. The Paleozoic petrotectonic evolution of continents from Cambrian to Permian; mineralization associated with the tectonism. Mesozoic – Cenozoic: The break-up of Pangea; the evolution of new Atlantic Ocean Petrotectonic evolution and associated mineralization.

GLY 332 PHOTOGEOLOGY, REMOTE SENSING AND GIS (2+0+3 3 Units)

Concepts and foundations of Remote Sensing. The electromagnetic spectrum; interaction with earth surface features and atmosphere. Wien's displacement law and stephann Boltmann constant. Elements of remote sensing platforms and systems. Principles of stereoscopic vision. Principles of aerial photo interpretation and parameters: LANDSAT, SPOT, and RADAR, satellite imagery. Introduction to non-photographic remote sensing systems. The use of remote sensing in reconnaissance mapping. Basic principles of geographic information system (GIS) – spatial information, maps and link between remote sensing and GIS. Basic components and functions of GIS- hardwares and softwares. Capabilities and applications of GIS; monitoring and management of natural resources and the environment.

GLY 334 INDEPENDENT FIELD MAPPING (0+0+9 3 Units)

An independent mapping exercise lasting about 4 weeks in selected part of Nigeria outside the campus; students are supposed to map with minimal supervision and produce a Geological map.

GLY 336 ENVIRONMENTAL GEOLOGY (2+0+0 2 Units)

Surface and sub-surface environment. Mining activities and the environment. Pollution and pollutants:- types and sources, hazards and control: transport and fate of pollutants in ground water environment:

Geologic hazards:- causes, prediction and control. Environmental impact assessment (EIA).

GLY 399 SIWES: STUDENT INDUSTRIAL WORK EXPERIENCE SCHEME (0+0+18 6 Units)

A 6-month industrial attachment

GLY 401 ENGINEERING GEOLOGY (2+0+3 3 Units)

Geotechnique and application in engineering geology; terrain classification principles and application of soil mechanics; water retaining structures, dams, highways, foundation, slope stability, settlement, design of structures. Site investigations: principles and methods-tunnelling, drilling and sampling techniques, engineering-geological maps. Erosion problems and material quality control.

GLY 403 PETROLEUM GEOLOGY (2+0+3 3 Units)

Forms of petroleum occurrence:- solid and liquid forms; surface and subsurface occurrence. The origin, migration and accumulation of petroleum. Evidence of organic matter origin. Organic matter as source rock. Transformation of organic matter and hydrocarbon evolution. Petroleum system: source rock characteristics, maturation, and migration; primary and secondary migrations; Properties of petroleum reservoir, traps and seals. Hydrocarbon traps, abnormal pressure. Exploration methods:- evaluation of petroleum potential and reserves involving organic matter types, concentration and maturation indices. Reserves and basin classification. Subsurface maps. Well-logging and interpretation. Examples of major oil deposits. Bitumen and conventional oil deposits in Nigeria: stages in licensing, exploration and production. Introduction to the use of relevant computer packages for data analyses and graphical presentation.

GLY 409 GEOLOGY OF NIGERIA (1+0+3 2 Units)

Major geomorphic and structural elements in Nigeria. The Basement Complex: origin, structure and evolution of Early-Middle Proterozoic rocks in Nigeria; the Nigeria Schist Belt and problems of Late

Proterozoic lithostratigraphic; Schist Belt mineralization; the Pan African orogeny and the evolution of Older Granites. The Jurassic of Nigeria- Younger Granites. Evolution, stratigraphy and economic geology of sedimentary basins in Nigeria. A geological trip across the Basement complex and sedimentary part of Nigeria.

GLY 411 PALYNOLOGY (2+0+3 3 Units)

Definition: methodology of study; diversity of the palynological representatives in the plant kingdom. Morphology and classification of pollen and spores; their stratigraphic and paleo-environmental applications. Spores:- general treatment, form, kinds of spores, shape and structure of spores and modifications of sutures. Pollen grains:- functions of exines of pollen grains, structure and sculpture of pollen exine, pollen aperture types. Applied palynology in relation to correlation and age determination. Preparation techniques for study of palynomorphs. Introduction to the use of relevant computer packages for data analyses and graphical presentation.

GLY 413 MICROPALEONTOLOGY (2+0+3 3 Units)

Morphology, Classification biostratigraphy and geological history of major groups of micro-fossils, especially Foraminifera, Ostracoda and Conodonts etc. Applied micropaleontology with emphasis on economic, ecologic and stratigraphic significance.

GPY 413 APPLIED GEOPHYSICS (FOR GEOLOGY STUDENTS) (2+0+3 3 Units)

Electromagnetic principles, classifications and amplitude and phase anomaly. Seismic exploration, data acquisition, processing and interpretation. Geophysical borehole logging; principles and techniques, types, data acquisition and interpretation. Gravity and magnetic methods, their techniques, data acquisition, processing and interpretation. Fundamentals and Applications of Self-Potential, Induced Polarization, radioactive and well logging techniques. Resolving different geological mapping minerals and hydrocarbons, groundwater surveys and engineering problems using Geophysical

prospecting methods. Case Histories. Use of seismic methods in geological prospecting and exploration and in solving engineering problems.

GLY 404 EXPLORATION GEOCHEMISTRY (2+0+3 3 Units)

Geochemical cycle. Geochemical environment; distribution of major and trace elements in primary and secondary geochemical environment. Dispersion patterns and mobility of elements. False anomaly: description, causes and remedy, significant anomaly/ mineralisation. Geochemical surveys; sampling media, field operations-sample collection and processing. Surveying techniques, data processing and presentation-map preparation. Interpretation of data. Geochemical methods in mineral prospecting and exploration. Principles of major and trace elemental analysis; preparation of samples and analytical procedures. Case histories of geochemical surveys and of integrated exploration programme. The future of geochemistry in mineral exploration.

GLY 406 MARINE GEOLOGY (2+0+0 2 Units)

Elements of physical, chemical and biological oceanography; methods of oceans floor sampling and probing; structure and physiography of ocean basins; distribution of marine sediments and mineral resources; beach erosion and coastal management.

GLY 410 SEMINAR (1+0+0 1 Units)

Students will write a report and give seminar presentation on an important topic in any of the fields of Geology. It could take the form of a review or compilation of data or case histories in any areas of Geology. Assessment is based on depth of presentation and comprehension of subject matter.

GLY 416 ECONOMIC GEOLOGY (2+0+0 2 Units)

Definition of economic minerals and economic mineral deposits: ore, ore and gangue minerals, tenor and cut-off grade. Geological characteristics of ore deposits: dispersed, confined, discordant and

concordant deposits; veins, pipes and stockwork; stratiform, stratabound, syngenetic and epigenetic deposits. Formation of ore deposits: types and sources of ore-bearing fluids; nature and mode of metal transportation of hydrothermal fluids; movement of ore-bearing fluids; physical, chemical, environmental and structural factors responsible for deposition and localization of ore deposits. Wall-rock alteration. Supergene enrichments. Textures of ore deposits. Paragenesis and zoning in mineral deposits. Geothermometry and geobarometry. Classification of ore deposits. Mineral deposits in Nigeria: tin-niobium-tantalum deposits; lead-zinc deposits; gold deposits; iron deposits; etc. Identification and uses/applications of economic minerals.

GLY 418 SEDIMENTOLOGY II (2+0+0 2 Units)

Major control on sedimentation (sea level changes, climatic changes, tectonic and other circular variations). Quantitative measurement and geostatistical treatment of sedimentological data. Depositional models: alluvial fans, braided and meandering rivers, fluvial deposits. Beaches and barrier islands, intertidal flats, storm and tidal sand ridges, turbidites, reefs and other carbonate deposits. Petrography of sandstones and carbonates; histogram, cumulative frequency, paleocurrent and bivariate plots and reconstruction of paleodepositional environment from outcrops and subsurface data. Basin analysis

GLY 420 HYDROGEOLOGY (2+0+3 3 Units)

Hydrogeology and hydrology-definition and scope. Hydrological cycle; hydrological properties of rocks. Occurrence and movement of groundwater; groundwater and well hydraulics; fundamental hydrodynamics laws. Hydrometeorology- rainfall, overland flow, through flows interception etc; hydrographs; unit hydrograph, theory and application. Explanation of the basic hydrological equation.

GLY 499 RESEARCH PROJECT (0+0+18 6 Units)

Each student under the guidance of an approved supervisor is required to conduct research in an area approved by the department. Culminating in the submission of a project.

9.1. CAREER OUTLETS AND JOB OPPORTUNITIES FOR GRADUATES OF THE PROGRAMME

The products of this programme will be suitable for employment in the

- i. oil and oil-related industries
- ii. water boards or corporations
- iii. mineral industries
- iv. environmental and engineering establishments,
- v. the civil service
- vi. private organisations
- vii. institutions of higher learning
- viii. self-employed

10.0 List of Equipment and Other Materials in Geology Department's Laboratory

Item No	Description of Item	Quantity in Stock	Remarks
1.	Hammer (sledge)	5	
2.	Geological Hammer (soft rock)	15	
3.	Global Positioning System	7	
4.	Sieve Shakers and Sieves	1	
5.	Oven (Muffle Furnace)	1	
6.	Sets of Chisel	5	
7.	Binocular Microscope	4	
8.	Petrological Microscope	5	
9.	Geological Museum	1	
10.	pH Meter	1	
11.	Topographical and geological Maps	5	

11.0 STAFF LIST

S/N	Name	Qualification	Status	Area of Specialization
Academic Staff				
1.	Prof. O. J. OJO	<i>B.Sc. Geology (Ilorin), M.Sc. Geology (Ibadan), Ph.D. Geology (Ilorin)</i>	Professor/ HOD	Petroleum Geology, Sedimentology and Biostratigraphy
2.	Prof. S.O. AKANDE	<i>B.Sc. Geology (Ibadan), M.Sc. Geology (West Ontario), Ph.D. Geology (Dalhousie)</i>	Professor	Economic Geology, Mineral and fossil fuel Exploration, Basin Analysis.
3.	Prof. I.B. OSAZUWA	<i>B.Sc. Physics (Ibadan), M.Sc. Applied Geophysics (ABU), Ph.D. Applied Physics (ABU).</i>	Professor	Applied Geophysics
4.	Dr. O. M. AJIBADE	<i>B.Tech. Applied Geology (FUTA), M.Sc. Mineral Exploration (UI), Ph.D. Applied Geochemistry (UI).</i>	Senior Lecturer	Mineral Exploration and Applied Geochemistry
5.	Dr. A. M. ONIMISI	<i>B.Sc. Geology (UI), MSc. Mineral Exploration/ Geophysics (UI), Ph.D. Mineral Exploration and Geophysics (NSU)</i>	Senior Lecturer	Mineral Exploration and Exploration Geophysics
6.	Dr. J.O. FATOBA.	<i>B.Tech. Applied Geophysics (FUTA), M.Tech. Exploration Geophysics (FUTA), Ph.D. Applied Geophysics (OAU)</i>	Senior Lecturer	Exploration Geophysics
7.	Dr. A.A. AJIBOYE	<i>B.Sc. Biological Sciences (Botany Opt.) (FUNAAB), M.Sc. Botany (Plant Physiology) (FUNAAB), PhD. Botany (Plant Physiology) (FUNAAB)</i>	Senior Lecturer	Plant Physiology
8.	Mr. T. A. BOLAJI	<i>B.Sc. Geology (UNAD), M.Sc. Geology (UNIPORT)</i>	Assistant Lecturer	Reservoir Geology and Sedimentology, Environmental Geology
9.	Mr. M.O. ADEOYE	<i>B.Sc. Geology (Ilorin), M.Sc. Geology (Ilorin)</i>	Assistant Lecturer	Petroleum Geology and Sedimentology
10.	Mr. E.C. CHUKWU	<i>B.Sc. Geology and Exploration Geophysics (EBSU), M.Sc (NAU)</i>	Assistant Lecturer	Economic Geology and Geochemistry

S/N	Name	Qualification	Status	Area of Specialization
Technical Staff				
11.	Mr A. AWE	<i>B.Sc. Geology ((UI), M.Sc. Geology (EKSU), Ph.D. in view (OAU)</i>	Technologist II	Petroleum Geology
12.	Mr O.T. OGUNYEBI	<i>B.Sc. Geology (Unilorin)</i>	Technologist II	Geology
13.	Mrs M.V. IGE	<i>N.C.E. (Ikere)</i>	Senior Laboratory Assistant	
14.	Mr N. BABALOLA	<i>S.S.C.E.</i>	Senior Laboratory Assistant	
Non-Academic Staff				
15	Mrs O.O. OREBE	<i>B.A (UNAD)</i>	Administrative Officer I	
16	Mr O.O. DAODU	<i>B.Sc. (Unilorin) M.Sc. (Unilorin)</i>	Administrative Officer II	
17	Mrs E. OGUNLEYE	<i>O.N.D. (Osun Poly)</i>	Executive Officer	
18	Mrs F. IGE	<i>N. C. E. (Kaduna)</i>	Chief Clerical Officer	
19	Mr A.G. ADEMOLAJU	<i>S.S.C.E.</i>	Senior Clerical Officer	

12.0 STAFF PROFILE

12.1 Academic Staff

Prof. Olusola Johnson OJO.

Professor (Head of Department)

B.Sc. (Unilorin), M.Sc. (UI), Ph.D. (Unilorin), COMEG Regd.

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Sola Ojo graduated from the University of Ilorin with a Bachelor of Science (B.Sc. Hons) Geology and obtained M.Sc. Petroleum Geology / Sedimentology and Ph.D. Geology from University of Ibadan and University of Ilorin respectively. He started his academic career in University of Ilorin in 1994 where he taught and supervised several undergraduate and postgraduate students until 2015 when he joined Federal University Oye-Ekiti. He held various administrative positions

such as Sub Dean of Science, Departmental Postgraduate coordinator and acting Head of Department of Geology Unilorin. He is an active member of professional bodies such as Nigerian Mining and Geosciences Society (NMGS), Nigerian Association of Petroleum Explorationists (NAPE), American Association of Petroleum Geologists (AAPG) and Geological Society of America (GSA). Presently, he is a member of the NMGS council. He has participated in many nationally and internationally funded research. His research interest is focused on the stratigraphy and petroleum prospectivity of inland sedimentary basins in Nigeria. He has attended local and international conferences and has published over 60 articles in reputable learned journals.

Prof. Samuel Olusegun AKANDE.

Professor

B.Sc. (UI), (University of Western Ontario, Canada), Ph.D. (Dalhousie University, Canada).

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Prof. Akande became a Professor in Economic/Petroleum Geology in 1992 at University of Ilorin. He has taught and supervised many doctorate and postgraduate students. He spent a major part of his academic years at the University of Ilorin. He is an active member and a Fellow of several professional bodies such as AAPG, NMGS, NAPE amongst others. He has published over a hundred articles in learned journals. He served as the Dean of Science 2000 – 2002 (Unilorin) and has been a visiting research scholar to the Technical University at Berlin, Germany and Colorado State University, USA.

Prof. Isaac Babatunde OSAZUWA.

Professor

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Prof Osazuwa graduated from the University of Ibadan with a Bachelor of Science (B.Sc. Hons) in 1973. Thereafter, he proceeded to Ahmadu Bello University, Zaria, where he obtained his M.Sc. and Ph.D. (Applied

Geophysics) in 1978 and 1985 respectively. He is a member and Fellow of several notable bodies like IPPS, IAMN, CDA, NIP, RHD and NGS. He has been actively involved in both research and teaching of Geophysics, for over three decades.

Dr. Olumuyiwa Michael AJIBADE.

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Dr. Ajibade began his teaching career as a Teaching Assistant at the Polytechnic Ibadan (2002 – 2006) and was appointed a Lecturer 1 at the Earth Sciences Department of Olabisi Onabanjo University, Ago-Iwoye in 2013. He has, since then, been involved in teaching and research, with focus on Geochemistry and Mineral Exploration. He is also a member of NAH, NMGS and NAPE.

Dr. Abu Martins ONIMISI.

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Dr. Onimisi obtained his Ph.D. (2014) in Mineral Exploration and Geophysics, from Nasarawa State University, Keffi. He was a former Acting Head of Department (HoD), Geology at Kogi State University. He is a member of many professional bodies including NMGS.

Dr. Ogunmola Julius FATOBA.

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Dr. Fatoba obtained his doctorate degree in Applied Geophysics from Obafemi Awolowo University, Ile-Ife. He is a member of various professional bodies like NMGS and NAH. Before joining FUOYE, he had worked as a Senior Research Officer at Nigerian Building and Road

Research Institute and as a Lecturer at Olabisi Onabanjo University, Ago-Iwoye. He has taught at both undergraduate and postgraduate levels. He has over twenty publications to his credit. He was the pioneer coordinator of the department of Geology, FUYOYE.

Dr. Abiodun Akeem AJIBOYE.

Senior Lecturer

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Dr. Ajiboye obtained his Ph.D. in Plant Physiology, from University of Agriculture, Abeokuta in 2009. Prior to this time, he was engaged as a Lecturer II at the University of Osun. In 2012, he was appointed a Senior Lecturer in Plant Science and Biotechnology Department (FUYOYE), where he doubles as the Acting Head of Department (HoD). His research interest is on Plant Physiology.

Mr. Moses Oluwaseun ADEOYE.

Assistant Lecturer

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Adeoye Moses graduated from the University of Ilorin with a Bachelor of Science (B.Sc. Hons) and Master of Science (M.Sc.) in Petroleum Geology and Sedimentology in the year 2008 and 2013 respectively. He further proceeded to the Nigerian Institute of Safety Professionals (NISF) where he was certified as a Safety Advisor.

Upon his university graduation, he joined the United Geophysical (Nig.) Ltd as a Field Seismologist where wealth of seismic experiences were acquired in 2D, 3D, and Pseudo- 4D. Most of his research has focused on the application of new technologies of organic geochemistry to the understanding of Rift basins and implications for hydrocarbon exploration. Currently, he is working on the Modeling of Hydrocarbon Generation, Migration Pathways and Timing of the Southern Benue Trough. He has had several technical papers presented and published. Adeoye is a Corporate member of the Nigerian Mining and Geosciences Society

(NMGS), Nigerian association of Petroleum Explorationists (NAPE), and American Association of Petroleum Geologists (AAPG).

Mr. Taiwo Ayodele BOLAJI.

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Bolaji obtained a Bachelor – B.Sc. (*Hons*) degree in Geology at the University of Ado-Ekiti. He had his M.Sc. in Geology at the University of Port Harcourt. He started his career as a Research Attaché with the University Liaison, SPDC, Port Harcourt and subsequently worked as Survey and Environmental consultant to Batoil Services Limited on Chevron's Funiwa Deep and Addax-Adanga field Projects. He served as Hydrographic Surveyor and Geophysicist on Chevron's EGP-3B Production Platform Modification Installation Project with Oceanridge Limited before joining the university in 2015. He is a member of the American Association of Petroleum Geologists (AAPG), AAPG Division of Environmental Geology (DEG), Nigerian Association of Petroleum Explorationists (NAPE), and Society of Exploration Geophysicists (SEG). He is an NREP certified Registered Environmental Specialist (RES).

Mr. Emmanuel Chibike CHUKWU

Assistant Lecturer

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Mr. Emmanuel Chibike CHUKWU is a lecturer in the department of Geology, Faculty of Science, Federal University Oye – Ekiti (FUOYE), Ekiti State, Nigeria. He graduated in 2007 from the department of Geology and Exploration Geophysics of Ebonyi State University (EBSU), Abakaliki with Second Class Honours (Upper Division). He thereafter proceeded to Nnamdi Azikiwe University (NAU), Awka, Anambra State, where he completed a Master of Science (M.Sc.) Degree in Economic Geology and Geochemistry, in 2016. Mr. Chukwu is a member of learned bodies as

Nigerian Association of Petroleum Explorationists (NAPE) and a Corporate Member, Nigerian Mining and Geosciences Society (NMGS). He has a publication to his credit. His research interest is on Metal Associations, Speciations, Bioavailability and Petrology of Hard rocks. He is also keenly interested in Metals' Contamination and Pollution Studies.

11.2 Technical Staff

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