NASARAWA STATE UNIVERSITY, KEFFI

DEPARTMENT OF COMPUTER SCIENCE

FACULTY OF NATURAL & APPLIED SCIENCE

DEPARTMENTAL HANDBOOK AND STUDENT'S PROSPECTUS

2018/2019

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2018-2019 ACADEMIC CATALOGUE

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Keffi,
Nasarawa State
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FOREWORD

In keeping with the practice of providing periodic general information on the Department of Computer Science, Nasarawa State University, Keffi, this second edition of the Students' Information Handbook set out to highlight key issues and information about the Department that the student needs at one point or the other during his/her stay in the University.

Every student of this Department will find this student handbook useful, as new things have been included and the curriculum of the programmehas been updated.

Since taking up the responsibility as Head of Department, we have been trying to move the Department forward through the cooperation of all members of staff and the forthrightness of the students' body. I commend all members of staff for their cooperation.

Prof. David O. Adewumi,
Head of Department of Computer Science,
Faculty of Natural and Applied Sciences,
Nasarawa State University,
Keffi.

THE UNIVERSITY SYMBOLS
THE UNIVERSITY CREST

LOGO
The theme of the logo is the exploitation of natural resources of Nasarawa State through appropriate education for the betterment of the society.

DESCRIPTION OF LOGO
The logo of the University consist of a circle, maize, drilling machine, book and light. These constituents are explained below:

a. The Circle symbolizes the Nigerian Nation in the global village setting where Nasarawa State is located.
b. The Maize symbolizes the rich agricultural resources of the state, while the drilling machine stands for mining technology.
c. The Book stands for quest for knowledge by the people of the state.
d. The Light depicts wisdom and knowledge in the lives of the people of the state.

MOTTO
The motto of the University is "Knowledge for Development". It is an indication of the resolve to provide such knowledge that would lead to the socio-economic and technological development of the state and the country as a whole.

UNIVERSITY COLOURS
The university is depicted by four colours, namely: Green Yellow Blue and White. "Green" for Agriculture, "Yellow" for Solid Minerals, "Blue" for Education and "White" for peace and prosperity

FACULTY COLOUR

Natural & Applied Sciences — Yellow

FLAG OF NASARAWA STATE UNIVERSITY

The flag of the Nasarawa State University is Yellow, Green and Blue, as shown below"

NASARAWA STATE UNIVERSITY ANTHEM

1. NSU we hail, we love thee
   Our great citadel of learning
   We call on God to help us to
   Acquire knowledge for development

2. As a mark of our love for
   Thee we pledge to shun all
   Forms of vice so that our
   Institution can be a
   Reference point in our nation

3. All hail the vision of our founding fathers
   To establish on solid minerals
   A great University of note
   To take our state to enviable heights

NATIONAL ANTHEM

Arise, O compatriots, Nigeria's call obey
To serve our fatherland
With love and strength and faith
The labour of our hero's past
Shall never be in vain
To serve with heart and might
One nation bound in freedom
Peace and Unity.

O God of creation, direct our noble cause
Guide our Leaders right
Help our youth the truth to know
In love and honesty to grow
And living just and true
Great lofty height attain
To build a nation where peace and justice
Shall reign

NATIONAL PLEDGE

I Pledge to Nigerian my country
To be faithful, loyal and honest
To serve Nigeria with all my strength
To defend her unity
And uphold her honour and glory
So help me God

1.0 GENERAL INFORMATION ABOUT THE UNIVERSITY

The Nasarawa State University was established under the Nasarawa State Law No. 2 of 2001. It officially took off for effective academic activities in March 2002, following the appointment for a distinguished educationist, Professor AdamuBaikie, as pioneer Vice-Chancellor. The purposes for which the university was established are listed in sections 4 and 5 of the University's enabling law as follows:

a. To encourage and promote the advancement of learning and hold out all persons without distinction of race, creed or sex.
b. To provide courses of instruction and other facilities and to make available those facilities for the pursuit of learning in all its branches and to make those facilities available on proper terms to such persons(s) as equipped to benefit from them.
c. To serve as both a teaching and examining body, subject to the provision of the University Law specifying the functions of the University.

The University is located in Keffi, headquarters of Keffi Local Government Area, some forty-seven (47) kilometers from Abuja, the Federal Capital Territory of Nigeria. It is the University's Main campus which in addition to being the seat of the institution's administrative structure and accommodates the Faculties of Administration, Arts, Education, Law, Natural and Applied Sciences, Social Sciences and Environmental Sciences.

There are two (2) other campuses namely: the Lafia campus located in the State capital which accommodates the Faculty of Agriculture and the Pyanku campus located on Nasarawa Road bye pass in Keffi town, where the Directorate of Preliminary Studies is located.

Since October 2018, Professor Suleiman, Bala Mohammed whose attitude and agenda are fast raising its profile as a centre for academic excellence has headed the University. History records Professor Suleiman, Bala Mohammed as the fifth Vice-Chancellor of the University (after Professor AdamuBaikie - the pioneer Vice-Chancellor, Professor Shamsudeen O. O. Amali, Professor AminuMikailu and Prof. M. A. Mainoma), but the second indigenous Professor to occupy its No. 1 Seat.

In running the affairs of the University, the Vice-Chancellor is assisted by the following principal officers:

a. The Deputy Vice-Chancellor (Academics)
b. The Deputy Vice-Chancellor (Administration)
c. The Registrar
d. The Bursar
e. The University Librarian

Though the University principally services the indigenes of Nasarawa State and also catersfor the citizens of the catchment areas of Plateau State, Benue State, Kwara State and Kogi States, it also admits at least 20% of its student's population from other states of the Federation and the Federal Capital Territory.

The University has more than 2000 academic and non-academic staff and a student population of about 31,000. It has more than 28 departments grouped under eight Faculties of Arts, Agriculture, Administration, Education, Law, Natural and Applied Sciences,Social Sciences and Environmental Sciences.

Furthermore, it has the School of Postgraduate Studies, the Directorate of Preliminary Studies, the Directorate of General Studies,Centre for Cyberspace Studies,the Sandwich and Long Vacation Training (LVT) programmes in the Institute of

Education and Directorate of Guidance and Counseling including Part-Time Programmes in the Centre for Continuing Studies amongst other Centres.

1.1 VISION AND MISSION OF THE UNIVERSITY

VISION

To offer education for the liberation of the body, soul and spirit; for the development of a great, humane and egalitarian society.

MISSION

To encourage and enable individuals to develop their full potentials by providing qualitative and stimulating learning environment, encompassing a wide range of relevant education activities for efficient, dedicated and selfless service to the state, nation and the world at large. This commitment is predicated on its philosophical belief in constructive thinking, positive action and freedom of conscience.

1.2 UNIVERSITY VISITOR AND CURRENT PRINCIPALOFFICERS OF THE UNIVERSITY

VISITOR

His Excellency, Engr. Abdullahi A. Sule,
The Executive Governor of Nasarawa State

CHANCELLOR

HRH Dr.AlhajiShehuChindoYamusa III Ph.D,
The Emir of Keffi

PRO-CHANCELLOR AND CHAIRMAN OF COUNCIL

ProfessorAdamu D.Baikie

VICE-CHANCELLOR
Professor Sulaiman,Bala Mohammed
DEPUTY VICE-CHANCELLOR (Academics)
Professor OlayemiAkinwumi

DEPUTY VICE-CHANCELLOR (Administration)
Professor I. M. Haruna

REGISTRAR
AlhajiBala I. Ahmed II, mnim, fcia, fcim

BURSAR
Mr.Michael Sabo Waki

UNIVERSITY LIBRARIAN
Dr.AliyuAbdulkadir

1.3 ORGANS OF THE UNIVERSITY

According to the law establishing the University, the University comprises of the following organs:

a. **The Principal Officers:** This include the Visitor, Chancellor, Pro-Chancellor, Vice-Chancellor, Deputy Vice Chancellor (Academics & Administration), Registrar, Bursar and University Librarian.

b. **The Congregation:** This is made up of all staff of the University who are holders of degree or equivalent certificate recognized by the University. It advices the Management on various issues that will help in the efficient running of the University.

c. **Convocation:** All graduates of Nasarawa State University, who register as members of the University Alumni constitute the convocation. The convocation helps in raising funds to facilitate the development of the

University and also promotes activities that will enhance the image of the University as an esteemed citadel of learning. Furthermore, it contributes to the management of the University through its elected representative on the University Council.

d. The Faculties, Directorates, Institutes and other teaching and research units of the university

e. All Graduates and Undergraduates

f. All persons who are members of the University in accordance with provision made by the University Law

1.4 MEMBERS OF THE UNIVERSITY GOVERNING COUNCIL

According to Section 9 (1) of the Law establishing the University, the University Governing Council is the Governing Body of the University charged with general control and superintendence of policies and property of the University including public relations.

Members of the University Governing Council consist of:

a. The Pro-Chancellor and Chairman of council
b. The Vice-Chancellor
c. The Deputy Vice-Chancellors
d. Representative of State Ministries
e. Four Representatives of the University Senate
f. Representatives of University Congregation
g. Registrar and Secretary to the Council

1.5 THE SENATE

According to Section 10(1) of the Law establishing the University, the University Senate is the highest academic organ of the University. It comprises the Vice-Chancellor as Chairman, the Registrar as secretary, all Deans, all Heads of Departments and all Professors in the University. The functions of the Senate include the following:

a. Organizing and controlling the teaching of the University, the admission of students and the discipline of students, and promoting teaching and research in the university.

b. Establishing, organizing and controlling campuses, colleges, faculties, departments, institutes and other teaching and research units of the University and allocating responsibilities for different branches of learning.

c. Organizing and controlling courses of study at the University and examination held in conjunction with these courses, including the appointment of examiners, both internal and external, and

d. Awarding of degrees and such other qualification as may be prescribed in conjunction with examination held.

1.6 THE FACULTY BOARD

At the Faculty level, there exist a Faculty of Natural and Applied Sciences Board, comprises of all lecturers in the Faculty including senior laboratory scientists. The Faculty Board considers all academic issues affecting students in the faculty. It is also responsible for organizing examinations, marking and processing of results. The Board is headed by

the Dean of the Faculty. The Faculty Management Board comprises of all Heads of Departments in the Faculty.

1.7 THE DEPARTMENTAL BOARD

The Departmental Board is made up of all lecturers in the Department with the Head of Department as the Chairman. The Departmental Board organizes and controls the teaching of all courses in the Department and the examination held in those courses.

2.0 DEPARTMENTAL INFORMATION

ADMINISTRATIVE ROLES:

Head of Department:	Prof. David O. Adewumi
Postgraduate Programmes Coordinator:	Dr. Binyamin A. Ajayi
Undergraduate Project Coordinator:	Mr. KefasYunana
Field TripCoordinator:	Mr. SalihuA. Abdullahi
Examinations Officer:	Mr. A.U. Mustafa
Asst. Examinations Officer:	Mr. KefasYunana
Time-Table Officer:	Mr. G.I.O.Aimufua
Asst. Time-Table Officer:	Mohammed U. Ogah
SIWES Coordinator:	Kene T.Anyachebelu
Staff Adviser:	Prof. D. O. Adewumi
Students/NACOSS Adviser:	Kene T. Anyachebelu
Research/Seminar Coordinator:	Dr. U. M. Mbanaso
Library Officer:	Dr. D.C. Onyekwelu
Curriculum Review Coordinator:	Dr. D.C. Onyekwelu
Welfare Officer:	Mr. A. U. Mustafa

Officer In-Charge of Publications:	Dr. U. M. Mbanaso
100 Level Coordinator:	Mr. A. U. Mustafa
200 Level Coordinator:	Mr. Kefas Yunana
300 Level Coordinator:	Kene T.Anyachebelu
400 Level Coordinator:	Mr. G.I.O.Aimufua

2.1 DEPARTMENTAL COMMITTEES

ACCREDITATION COMMITTEE MEMBERS

1.	Prof. A. A. Obiniyi	Chairman
2.	Dr. D. C. Onyekwelu	Member
3.	Mr. G. I. O. Aimufua	Member
4.	Dr. Samaila Musa	Member
5.	Dr. B. A. Ajayi	Member
6.	KeneT. Anyachebelu	Member
7.	Mr. Mustafa Ahmed Umar	Member
8.	Mr. KefasYunana	Member
9.	Mr. Salihu A. AbdullahiA.	Member/Secretary

CURRICULUM REVIEW COMITTEEE MEMBERS

1.	Prof. A. A. Obiniyi	Chairman
2.	Dr. D. C. Onyekwelu	Member
3.	Dr. Samaila Musa	Member
4.	Dr. B. A. Ajayi	Member
5.	Mr. G. I. O. Aimufua	Member
6.	KeneT. Anyachebelu	Member
7.	Mr. Mustafa Ahmed Umar	Member
8.	Mr. KefasYunana	Member
9.	Mr. SalihuAbdullahi A.	Member/Secretary

2.2 LIST OF ACADEMIC STAFF

PROFESSORS			
SN	**STAFF**	**QUALIFICATION**	**AREA OF SPECIALIZATION**
1.	Prof. Adewumi, David O.	B.Sc., M.Sc., Ph.D	Database
2.	Prof. A. A. Obiniyi	B.Sc., M.Tech, Ph.D (ABU, Zaria, 2009)	Networking and Cybersecurity
3.	Prof. D. N. Choji	B.Sc., M.Sc., Ph.D	Simulation, Modeling and Algorithm
4.	Prof. N. V. Blamah	B.Tech., MSc, Ph.D (FUTY)	Intelligence System
SENIOR LECTURERS			
SN	**STAFF**	**QUALIFICATION**	**AREA OF SPECIALIZATION**
5.	Dr. Onyekwelu, Denis C.	B.Sc., M.Sc.,Ph.D (Leeds, 1979)	Information Systems/Operations Research
6.	Mr. Gilbert. I. O.Aimufua	B.Sc., M.Sc., (UniLag,1986) M.Sc., (UI, 1998)	Information systems, Data Science, Data Mining &GIS
7.	Dr. Mbanaso, Uche M.	HND, M.Sc., Ph.D (Salford, 2009)	Communication & information Security
8.	Dr. Mafara, Samaila Musa	B.Sc., M.Sc., Ph.D (Malaysia, 2016)	Software engineering, Database and Search algorithms
9.	Dr. MorufuOlalere	B.Sc., M.Sc., Ph.D	
OTHER LECTURERS			
SN	**STAFF**	**QUALIFICATION**	**AREA OF SPECIALIZATION**
10.	Mr. Adegoke, Kola G.	B.Sc., M.Sc., (Bauchi, 2009)	Computer Science
11.	DrAjayi, Binyamin Adeniyi	B.Sc.(LASU), PGD (FUNAAB), M.Sc. (UNILAG), MIT,Ph.D (Malaysia, 2017)	Information systems; ICT4D; Mixed method Research
12.	Mr. Offiong, Mitchel N.	B.Sc., M.Sc., (UniLag, 2011)	Machine Learning and Hydro-informatics
13.	DrIsiaka, Fatima M.	B. Tech (2002), PGDC (2005), M.Sc., Ph.D(Sheffield, 2017)	HCI/Data Mining

OTHER LECTURERS			
SN	**STAFF**	**QUALIFICATION**	**AREA OF SPECIALIZATION**
14.	Mrs. Alu, Esther	B.Tech., M.Sc., (Bauchi, 2015)	Data Mining
15.	Mr. Anyachebelu, T. Kene	B.Engr., M.Sc. (Bedfordshire, 2011)	Wireless Sensors, Artificial Intelligence& Data management
16.	Mr. Abdullahi, Salihu A.	B.Tech, M.Sc., (NSUK, 2017)	Networking, Network Security and Computational Intelligence
17.	Mr. Mustafa, Ahmed Umar	B.Sc., M.Sc., (UK, 2016)	Information System Research, Data Mining & Crime Intelligence Analysis, Computer Security Architecture & Engineering and Computing Project Management
18.	Mr. Yunana, Kefas	B.Sc., M.Tech., (Minna, 2015)	Networking, Wireless Sensor Network and Computer Hardware
19.	Mr. Salisu, Wada Yahaya	B.Sc., M.Sc., (UK, 2017)	Robotics, Sensing and Perception, Ambient Intelligence and Smart Homes, Interactive Software Development
20.	Mr. Mansur, K. Dankaura	B.Sc., M.Sc.	Computer Science
21.	Mr. Muhammed, U. Ogah	B.Sc., M.Sc. (Stratford Uni., USA, 2014)	Information System
22.	Miss Obianuju, Maka	B.Sc., M.Sc.	Data Management
23.	Miss Yunus, Fatima A.	B.Sc. (NSUK, 2017)	Software Engineering
24.	Mrs. Asmau Rabiu Abdullahi	B. Sc. (2016)	Technologist II
25.	Mr. Sahad T. M.	B. Tech. (2014)	Technologist II

2.3 STAFF DIRECTORY

SN	STAFF	PHONE NUMBER	EMAIL ADDRESS
1	Prof. David O. Adewumi	08023293168	olambohade@yahoo.com
2	Prof. A. A. Obiniyi	08034518843	aaobiniyi@gmail.com
3	Prof. D. N. Choji	08035957341	blamahn@yahoo.com
4	Prof. N. V. Blamah	08053353678	chojid@yahoo.com
5	Dr. Onyekwelu, Denis C.	08033299173	cvso2001@yahoo.com
6	Mr. Gilbert I.O. Aimufua	08032977816	aimufuagio@nsuk.edu.ng
7	Dr. Mbanaso, Uche M.	08162254170	uche.magnus@mbanaso.org
8	Dr. Mafara,Samaila, Musa	08065670727	samailaagp@gmail.com
9	Dr. MorufuOlalere	08034680087	lerejde@futminna.edu.ng
10	Mr. Adegoke, Kola G.	08068321949	adegokegkola@yahoo.com
11	Dr. Ajayi, Binyamin Adeniyi	08083701713	badeniyiajayi@nsuk.edu.ng
12	Dr. Isiaka, M. Fatima	09030601166	fatimaisaq@yahoo.com
13	Mr. Offiong, Mitchel N.	08038172195	offiongmitchel@nsuk.edu.ng
14	Mrs. Alu, Esther	08035995804	esther@gmail.com
15	Mr. Anyachebelu T. Kene	08141851728	anyachebelutk@nsuk.edu.ng
16	Mr. Abdullahi, Salihu A.	08161234802	abdulgiz@gmail.com
17	Mr. Yunana, Kefas	08061560912	Faske03@yahoo.com
18	Mr. Salisu, Wada Yahaya	08156358426 08036039329	salisu.wada@nsuk.edu.ng
19	Mr. Mustafa, Ahmed U.	07052653347 09098643598	mustafha1@yahoo.com
20	Mr. Mansur, K. Dankaura	08033335238	mansurdankaura1@yahoo.com
21	Mr. Muhammed, U. Ogah	08149576750	mohammedogah@gmail.com
22	Miss Obianuju.Maka	08145755333	makacscdept@gmail.com
23	Miss Yunus, Fatima A.	07069010931	fatimufy@gmail.com

2.4 INTRODUCTION OF THE DEPARTMENT

The Department of Computer Science at Nasarawa State University, Keffi strives to give to the students a high-quality education in the computer studies. The Department offers B.Sc. programme in Computer Science.There are specialized areas that students can choose to concentrate on depending on their interest. The Department serves the needs of the students throughout Nigeria by offering programmes that prepare them with applied knowledge and practical skills in the mathematical sciences. It also promote critical thinking, creative problem solving and helps them develop effective communication and entrepreneurial skills.
As part of this mission, the lecturers engage in applied, integrative, collaborative and pedagogical scholarship.

Computer Science deals with the fundamental scientific laws and engineering principles which govern the design, implementation, use and maintenance of computer system. A computer scientist is involved in work ranging from mathematical and empirical studies of problem-solving procedures to research in advanced computing systems. The field covers the study of theoretical and applied principles of computer systems. As computer systems have become a part of everyday life, the demand for specialized professionals in the area has increased astronomically.

The B.Sc. degree programme in Computer Science is designed with core courses that provide breadth and depth in the field along with a strong theoretical component as a foundation for good software engineering and information systems. The program includes courses in chemistry, physics and mathematics, general education requirements in the humanities and an in depth sequence of specialized computer sciences courses.

Core courses for our B.Sc. programme in Computer Science include Principles of programming, Data Structures and algorithms, Computer Architecture, Operating Systems, Data Communication and Database Systems supported by a strong foundation in computing principle such as Design of Programming Languages, Problem Analysis Design and Implementation. The programme provides a balance on theoretical core courses covering both software and hardware through integrated lectures, laboratory sequences and individual and group projects often with direct application.

The curriculum is very flexible and provides the students with opportunities for concentration in specific areas of interest through their choice of appropriate technical and computer science electives

2.5 MISSION OF THE DEPARTMENT

To be a global centre of research and teaching in Computer Science

2.6 VISION OF THE DEPARTMENT

Todevelop exceptional research competence and build extreme human ability via realistic research, training and innovative activities for information sciences and technology in Nigeria.

2.7 PHILOSOPHY AND OBJECTIVES

The curricular of the Department of Computer Science are designed to provide the student the opportunity to prepare him/herself for specialized professional studies.

These curricular lead to the honours degree of Bachelor of Science (B.Sc.)in Computer Sciencenormally at the end of four years (full-time) or five years (part-time).

The Department places special emphases on the practical components, projects and industrialattachment for all the students. It has set for itself the following objectives:

a. To create in students the awareness of and enthusiasm for computer science and its capabilities.
b. To involve the students in an intellectually stimulating and satisfying experience of learning and studying.
c. To provide a broad and balanced foundation in computer science knowledge and practical skills.
d. To accomplish outstanding research in Computer Science and their applications which are fundamental and useful to innovative scientific advancement.
e. To provide an excellent education in Computer Science for undergraduate students that is of the highest international standards.
f. To recognize and respond to the changing needs of the society through specific high quality research, teaching programmes and initiatives.
g. To develop in students through an education in Computer science, a range of transferable skills of value in information technology to all aspect of human endeavor.
h. To generate in students an appreciation of the importance of computer science in an industrial economic, environment and social context.
i. To provide students with knowledge and skills base from which they can proceed to further studies in computer science or multi-disciplinary areas involving computer science.

2.8 DEGREE OFFERED

The Department of Computer Science offers B.Sc. (Hons) Computer Science.

2.9 ENTRY REQUIREMENTS

a. Candidates must satisfy the general minimum University and Faculty entry requirements of a minimum of five O level credits including Mathematics and English Language and three other Credit pass from the Core sciences.
b. Special requirements for the programme areCredit passes in Mathematics, English Language, Physics and any other two from Chemistry, Biology, Agricultural Science, Economics, Geography and Further Mathematics. Candidates with good passes in A/Level (or equivalent) in Mathematics, Physics and any other subject may be admitted.

Preliminary Placement

A successful candidate from the Preliminary Department of the Nasarawa State University must have among others the following grades at the end of one year Preliminary programme before being admitted into the Department of Mathematics:

a. A minimum of B in Mathematics
b. A minimum of C in Physics and Chemistry
c. An attempt of the Biology courses

2.10 REQUIREMENTS FOR THE AWARD OF DEGREE

To be eligible for award of anHonours degree of Bachelor of Science in Computer Science, a candidate should have:

a. Satisfied the Normal University Requirements.
b. Satisfied the approved Faculty of Natural and Applied Science requirements in respect of workload, registration for courses, lecturer attendance and programme duration.
c. Satisfied the departmental requirement at each level

B.Sc.
COMPUTER SCIENCE

CURRICULUM

2.11 CURRICULUM FOR B.Sc. (Hons) IN COMPUTER SCIENCE

A. 100 LEVEL

FIRST SEMESTER

Course Code	Course Title	Status	L	P	T	Total
MTH111	Elementary Mathematics I (Algebra & Trigonometry)	C	2	0	1	3
MTH 112	Elementary Mathematics II (Vector, Geometry & Dynamics)	C	2	0	1	3
CMP111	Introduction to Computer Science	R	2	0	1	3
PHY 111	Mechanics & Properties of Matters	C	2	1	0	3
CHM111	General Physical Chemistry	C	2	1	0	3
GST111	Communication in English I	C	2	0	0	2
GST112	Logic, Philosophy and Human Existence	C	2	0	0	2
GST 113	Nigerian Peoples and culture	C	2	0	0	2

SECOND SEMESTER

Course Code	Course Title	Status	L	P	T	Total
MTH121	Elementary Mathematics III (Differential & Inferential Calculus)	C	2	0	1	3
STA121	Probability I	C	2	0	1	3
CMP121	Introduction to Problem Solving	R	2	1	0	3
PHY 123	Sound, Heat & Optics	C	2	1	0	3
GST121	Use of Library Skills & ICT	C	2	0	0	2
GST122	Communication in English II	C	2	0	0	2
GST 123	Communication in Arabic/French	C	2	0	0	2

INSTRUCTIONS

a. To satisfy the 30 units minimum requirement, students should register and pass at least 8 credit unit courses that are suitable and available for them from 100 level courses in a combination of at least three of the following Departments; Physics, Chemistry, Statistics, Geology and/or Biology.

b. All courses registered will count towards graduation

B. 200 LEVEL

FIRST SEMESTER

Course Code	Course Title	Status	L	P	T	Total	Prereq uisite
CMP211	Computer Programming I	C	2	1	0	3	CMP111 /121
CMP212	Introduction to Computer System (Low-Level Language)	C	2	0	0	2	CMP111
Course Code	**Course Title**	**Status**	**L**	**P**	**T**	**Total**	**Prereq uisite**
CMP21	Computer	C	2	1	0	3	CMP121

3	Electronics						
CMP 214	Computer Hardware	C	2	1	0	2	CMP111 /121
CMP 215	Introduction to Data Structure	C	1	0	1	2	CMP111
CMP 216	Operating Systems I	C	2	1	0	2	CMP111 /121
MTH21 1	Mathematical Methods I	C	2	0	1	3	MTH112 /121
MTH21 4	Linear Algebra I	C	2	0	1	3	MTH111
GST 211	History and Philosophy of Science	C	2	0	0	2	

SECOND SEMESTER

Course Code	Course Title	Status	L	P	T	Total	Prereq uisite
CMP22 1	Computer Programming II	C	2	1	0	3	CMP111 /211
CMP22 2	Introduction to Database Management System	C	2	1	0	3	CMP211
CMP22 3	Logic Design	C	2	0	1	3	CMP211
CMP 224	Introduction to Web Programming	C	1	1	0	2	CMP211
CMP 225	Discrete Structure	C	1.	0	1	2	MTH 214
MTH 221	Introduction to Numerical Analysis	C	1	0	1	2	MTH111 /121
STA22 3	Statistics for Physical Sciences	C	2	0	1	3	
ESP221	Entrepreneur Process & Skill Development I	C	2	0	0	2	
GST 222	Peace & Conflict Studies	C	2	0	0	2	

INSTRUCTIONS

a. To satisfy the 30 units minimum requirement, (i.e. a minimum of 15 credit units per semester and a maximum

of 24 credit units per semester), students should register for courses for which they have the pre-requisite, starting with the carry over courses first.

b. All courses registered will count towards graduation.

c. Direct entry students are to register all GST courses in 100 level and 200 level respectively.

C. 300 LEVEL

FIRST SEMESTER

Course Code	Course Title	Status	L	P	T	Total	Prerequisite
CMP311	Introduction to Digital Design &Microprocessors	C	2	1	0	3	CMP213
CMP312	Operating Systems II	C	2	1	0	3	CMP212
CMP313	Computer Architecture I	C	2	0	1	3	CMP222
CMP314	Data Structures Algorithms	C	3	0	0	3	CMP211
CMP315	Compiler Construction I	C	2	1	0	3	CMP213
CMP316	System Analysis and Design	C	2	0	1	3	CMP212/ 222/223
CMP317	Management Information System	C	2	0	1	3	CMP222/ 315
CMP318	Automata Theory Computability & Formal Languages	E	2	0	0	2	CMP221
CMP319	Database Design and Management	C	1	1	0	2	CMP221
CMP329	Lab. Field work for Computer Science	C	0	1	0	1	
MTH317	Numerical Analysis I	E*	2	0	1	3	MTH221

Course Code	Course Title	Status	L	P	T	Total	Prerequisite
STA 319	Operations Research I	E*	2	0	1	3	STA 223/STA 221
ESP311	Entrepreneur process & skill development 1	C	2	0	0	2	
CSS 301	Communications in Sciences	C	2	0	0	2	

Note: E*: Compulsory Elective - Student should select either MTH 317 or STA 319

SECOND SEMESTER

Course Code	Course Title	Status	L	P	T	Total	Prerequisite
CMP 399	SIWES	C		6		6	6 Months

INSTRUCTIONS

a. To satisfy the 32 units minimum requirement for all 300 level students, (i.e. a minimum of 32 credit units for the first semester and 6 credit units (SIWES) for second semester), students should register for courses for which they have the pre-requisite, registering carry over cause first.

b. All courses registered will count towards graduation.

c. Only student who has carryover less than 12 units are permitted to go for SIWES in second semester, else such students will stay behind in the second semester to sit for the failed courses.

D. 400 LEVEL
FIRST SEMESTER

Course Code	Course title	Status	L	P	T	Total	Prereq uisite
CMP411	Organization of Programming Languages	C	2	0	1	3	CMP312
CMP412	Data Communication/ Network	C	2	1	0	3	CMP 311/317
CMP 413	Computer Architecture II	E	2	0	1	3	CMP 313
CMP 414	Object Oriented Programming	C	2	1	0	3	CMP 316
CMP415	Software Design and Management	C	2	0	0	2	CMP312
CMP416	Computer Graphic	E	2	0	0	2	CMP313
CMP417	Net Centric Computing	C	2	0	1	3	CMP313
CMP 410	Research Methodology/Seminar	C	1	1	0	2	
MTH416	Discrete Mathematics	E	2	0	1	3	MTH211
MTH417	Numerical Analysis II	E	2	0	1	3	MTH223

SECOND SEMESTER

Course Code	Course Title	Status	L	P	T	Total	Prereq uisite
CMP421	Artificial Intelligence	C	2	0	1	3	CMP312
CMP422	Algorithms &Structured Programming	C	2	1	0	3	CMP 312
CMP423	Compiler Construction II	C	2	0	0	2	CMP 315
CMP424	System Modeling and Simulation	C	2	0	1	3	CMP316
CMP 425	Expert Systems	E	2	0	0	2	CMP 416

Course Code	Course Title	Status	L	P	T	Total	Prereq uisite
CMP 426	Human Computer Interface	C	2	0	1	3	CMP 416
CMP428	Queuing System Performance Evaluation	E	2	0	0	2	CMP411
CMP499	Project	C				6	

INSTRUCTIONS

a. To satisfy the 30 units minimum requirement, (i.e. a minimum of 15 credit units per semester and a maximum of 24 credit units per semester), students should register for courses for which they have the pre-requisite, starting with the carry over courses first.
b. All courses registered will count towards graduation.
c. All core courses must be registered.

2.12 COURSE DESCRIPTION FOR B.Sc. COMPUTER SCIENCE PROGRAMME

CMP 111: INTRODUCTION TO COMPUTER SCIENCE (3 UNITS)

History of Computer Science and their generations. Computer Hardware; functional componentsand Modern I/0 units Software: Operating Systems, Application Packages Program: Development; Flow charts and algorithms; Program Objects VISUAL BASIC Fundamentals.

CMP 121: INTRODUCTION TO PROBLEM SOLVING

Problem solving strategies, Role of algorithm in problem solving process, implementations strategies, concepts and properties of algorithm.

CMP 211: COMPUTER PROGRAMMING I (3 UNITS)

Introduction to problem solving methods and algorithm development, designing, coding, debugging and documenting programs using techniques of a good programming language style, programming language and programming algorithm development. A widely used programming (JAVA)language should be used in teaching the course.

CMP 212: INTRODUCTION TO COMPUTER SYSTEM (Low-Level Languages) (3 UNITS)

Computer structure, Machine language; Assembly language; Addressing techniques Macros; file I/O; assemble segmentation and linkages; assembler construction; interpretive routines.

CMP 213: COMPUTER ELECTRONICS (3 UNITS)

Elementary digital circuits; basic Boolean algebra, AND,OR, NAND, NOR gates. Simple computer circuits; Simplesequential circuits; registers, counters,multiplexers, decoders. Laboratoryexercises.

CMP 214: COMPUTER HARDWARE (3 UNITS)

Computer circuits; diode arrays, PIAs etc, Integrated circuits fabrication process.Use of MSI, LSI and VLSI IC' hardware Design. Primary and Secondary memories; core memory, etc. Magnetic devices; disks, tapes, video disks etc.Peripheral devices; printers, CRT's, keyboards, character recognition.Operational amplifiers; Analog-to- digital and Digital-to-analog converter.Analog computers. Assemble of Computer

CMP 215:INTRODUCTION TO DATA STRUCTURE (2 UNITS)

Bits, bytes, words, linear structures and list structures, Arrays, tree structures, set and relations, Higher-level language data types and data-handling facilities.

CMP 216: INTRODUCTION TO OPERATING SYSTEM (3 UNITS)

Introduction to computer processes; multi-programming and multi-processingsystems. Issues in analyzing and designing operating systems, memory management; name management, protection; resource allocation.

CMP 221: COMPUTER PROGRAMMING II (3 UNITS)

Principle of good programming; structured programming concepts. Debugging and testing; string processing, internal searching and sorting, Data structures, Recursion. Use a programming language different from that in 211

CMP 222: INTRODUCTION TO DATABASE MGT SYSTEM (2 UNITS)

Introduction to Data management files; and job-control, language application; An over-view 0f I/O (Input/Output) system architecture; logical filesorganization, mapping logical organization onto physical storage; Backup procedure, file recovery; Higher level language data management facilities.

CMP 223: LOGIC DESIGN (3 UNITS)

Boolean Algebra and Logic gates; Switching function minimization; e.g. algebraic, Kamaugh map, QuineMcCluskey, etc. Combination circuits Design; Combination logic with MST and LST; Sequential circuits design; Bi-stables, SR, JK, D&T, registers,Counters and the memory unit; Register Transfer logic; sequential machine Minimization; Arithmetic circuits; Instruction formats and sequencing, error detection and

correction. Ar metic Logic; synchronous and asynchronous control logic desig CPU logic design.

CMP 224: INTRODUCTION TO WEB PROGRAMMING (2 UNITS)

Introduction to the concept of World Wide Web (WWW) and components, client-server programming model and protocols. The structure and functionality of the www, programming languages used in the development of web pages, www standards, web hosting services, and publishing webpages for the worldwide view.

CMP 225: DISCRETE STRUCTURE (3 UNITS)

Basic Set Theory: Basic definitions, Relations, Equivalence Relations Partition, Ordered Sets. Boolean Algebra & Lattices, Logic, Graph theory: Directed and Undirected graphs, Graph Isomorphism, Basic Graph Theorems, Matrices; Integer and Real matrices, Boolean Matrices, Matrices med m, Path matrices. Adjacency Vectors/Matrices: Path adjacency matrix, Numerical & Boolean Adjacency matrices. Applications to counting, Discrete Probability Generating Functions,

CMP 311: INTRODUCTION TO DIGITAL DESIGN AND MICROPROCESSORS(3 UNITS)

Combinatorial logic, Sequential Logic, microprocessors and microcomputers.

CMP 312: OPERATING SYSTEMS I (3 UNITS)

Introduction to computer processes; multi-programming and multi-processing systems. Issues in analyzing and designing operating systems, memory management; name management, protection; resource allocation.

CMP 313: COMPUTER ARCHITECTURE I (3 UNITS)

Basic logic design; Data Representation, Instruction formats; computer architecture; study architecture of an actual simple minicomputer. Memory system, general characteristics of memory operation, (Technology- magnetic recording.Semi-conductor memory, charge coupled devices magnetic bubble); memory addressing, memory hierarchy, virtual memory control system. Hard ware control, micro programmed control. Asynchronous control, I/O controls. Introduction to the methodology of fault-tolerant computing.

CMP 314: DATA STRUCTURES AND ALGORITHMS (3 UNITS)

Bits, bytes, words, linear structures and list structures, Arrays, tree structures, set and relations, Higher-level language data types and data-handling facilities.

CMP 315: COMPILER CONSTRUCTION I (2 UNITS)

Review of compilers assemblers and interpreters; structure and functional aspects of a typical compiler, syntax semantics and pragmatics; functional relationship between lexical analysis, syntax analysis, expression analysis and code generation. Internal form of course programmes. Use of a standard compiler (FORTRAN, COBOL OR PL/1) as a working vehicle.Error detection and recovery.Grammars and language; the parsing problem.The scanner.

CMP 316: SYSTEMS ANALYSIS AND DESIGN (2 UNITS)

Introduction to system design; Analysis tool, determining system alternatives; physical design of computer sub-system: physical design of manual sub-system special design of features.

CMP 317: I AGEMENT INFORMATION SYSTEM (3 UNITS)

System theory and concepts: Definition, inter-relationship and classification.Basic concepts of MIS: definition, objectives, requirements, and characteristics. Benefits and design alternatives; the application development cycle. Managing and controlling the MIS function. The effects of MIS on Management and the management process. Management involvement and influence in MIS. The future of MIS and information Resource management in Nigeria.Case studies.

CMP 318: AUTOMATA THEORY, COMPUTABILITY & FORMAL LANGUAGES(2 UNITS)

Formal grammars and automata, Regular languages, context-free languages; Deterministic parsing of context-free languages Recursive languages.

CMP 319: DATABASE DESIGN AND MANAGEMENT (2 UNITS)

Database management systems review of basic concepts; functions and components of DBMS*file design and access path, future directions in DMOS*.

CMP 329: LAB FIELD WORK FOR COMPUTER SCIENCE (1UNIT)

The students are to visit Mathematical Centres where applied Mathematics like Computing and Statistical Analysis is being demonstrated to give a clear picture of the classroom theory. Students are to writea concise report of the academic visit.

CMP 399: INDUSTRIAL TRAINING II (6 Units) (3 months)

Student's Industrial work experience of 6 months duration. Student's reports will be presented in a seminar.

CMP 411: ORGANISATION OF PROGRAMMING LANGUAGES (3 UNITS)

Language definition structure, Data types and structures; Review of basic data types; including lists and trees; control structure and data flow, Runtime consideration; interpretative languages; lexical analysis and parsing

CMP 412: DATA COMMUNICATION/NETWORKS (2 UNITS)

Introduction, waves, Fourier analysis, measure of communication channelcharacteristics, transmission media, noise and distortion, modulation anddemodulation, multiplexing TDM FDM & FCM.Parallel and serial transmission (synchronous vs. asynchronous). Bus structures and loop systems,computer network. Examples and design consideration; data switching principles; broadcast techniques, network structure for packet switching protocols, description of network e.g. ARPANET, DSC, etc.

CMP 413: PROJECTS METHODOLOGY/SEMINAR (2 Units)

Introduction to Projects and the Project Process, Project Ethics and Integrity, Critical appraisal, Application of engineering principles and analytical techniques, planning and management of processes, organization, optimization and decision-making processes. Project requirements and scoping, problem structuring and searching for relevant information.

CMP 414: NET-CENTRIC COMPUTING (3 Units)

Distributed Computing, Mobile & Wireless computing, Communication Security principles; Client/Server Computing, Cloud Computing, Building Web Centric Applications.

CMP 415: SOFTWARE DESIGN AND MANAGEMENT (2 UNITS)

Standard structure, organization; project control standards; project-teamstandards.Documentation implementation; project technical standards; projectsystem manual.

CMP 416: COMPUTER GRAPHICS (2 UNITS)

Hardware aspect;plotters microfilm, plotters displays, graphic tables, lightpens, other graphical input aids, Facsimile and its problems. Refresh display;refresh huggers, changing images, light pen interaction. Two and three-dimensional transformations, perspective.Clipping algorithms; hidden liveremoval, Bolden surface removal; warlock's method, shading, data reductionfor graphical input.Introduction to hard writing and character recognition. Curve synthesis and fitting. Contouring. Ring structures versus doubly-linked lists. Hierarchical structures; Data structure; organization for interactive graphics.

CMP 421: ARTIFICIAL INTELLIGENCE (3 UNITS)

Introduction to artificial intelligence; understanding natural languages, knowledge representation; expert system, pattern recognition, the language LISP

CMP 422: ALGORITHMS & STRUCTURED PROGRAMMING (3 UNITS)

Principle of good programming style, expression and documentation; structured programming concepts debugging, testing, verifying, code inspection;semantic analysis, string processing data structures.Recursion efficiencyof algorithms. Principle of good programming style, expression; structuredprogramming concepts; control flow invariant relation of a loop; stepwise refinement of both statements and data; programme modularization (Bottom-up approach, to-down approach, nested virtual machine approach);

languagefor structured/programming debugging, testing verifying code inspection; semantic analysis. Test construction. Programme verification; test generationand running.

CMP 423: COMPILER CONSTRUCTION II (2 UNITS)

Grammars and language recognizers, To-down and Bottom-up; productionlanguage; Run-time storage organization. The use of display in run-timestorage allocation: LR grammars and analysis, construction of LR table.Organization of symbol tables.Allocation of storage to Run-time variables.Code generation.Optimization.Translator writing systems.

CMP 424: SYSTEM MODELLING AND SIMULATION (3 UNITS)

The concepts and techniques used in modeling and simulation methodologyand suitable simulation languages modeling generation of random variables,transformation of random numbers; parameter estimation design experiment;factorial design optimization.

CMP 425: EXPERT SYSTEMS (2 UNITS)

What are expert systems? Basic concepts for building expert systems, Architecture of expert systems; construction of expert systems, Tools for buildingof expert systems reasoning about reasoning; evaluation of expert systems;language and tools, knowledge of engineering.

CMP 499: PROJECT (6 Units)

Students should embark on work that will lead to substantial software development under the supervision of a member of staff.

3.0 THE COURSE CREDIT SYSTEM

This is a system of study where courses are divided into levels and units, and students are expected to register a certain minimum number of credit units at a particular level to qualify for graduation. The system allows to repeat failed courses at higher levels (also refer to carry over), except when such failed course(s) is a pre-requisite to courses at higher levels. With this arrangement students can graduate at their own pace, but within the specified period of study approved by the university.

Students who register courses beyond the acceptable university maximum of 48 credits units per session shall have their excess units cancelled. Such courses cancelled shall not be considered by the university in computing his/her CGPA or considered as duly registered courses for the session.

3.1 APPROVED SCORING & GRADING SYSTEMS

a. Semester grade are calculated as Grade Point Average (GPA) on the basis of A, B, C, D and F which is equivalent to 5, 4, 3, 2 and 0 grade point respectively for classified degrees.
b. The minimum pass mark is 45% or a GPA of 1.50. Hence a minimum CGPA of 1.50 is required for graduation. In order to obtain an overall pass in the examinations in any year of study, a student is required to maintain a CGPA of

at least 1.50 to be in good academic standing. Grade point are computed in courses as follows:

Scores	Grade	Point
70 – 100	A	5
60 – 69	B	4
50 – 59	C	3
45 – 49	D	2
0 – 44	F	0

The **Class of Degree** as described below is determined by the effort a student put into his or her studies from 100 level to 200 level, as the casemay be to the final year of his/her studies.

Class of Degree	CGPA
4.50 – 5.00	First Class
3.50 – 4.49	Second Class Upper
2.40 – 3.49	Second Class Lower
1.50 – 2.39	Third Class

AN EXAMPLE OF HOW TO COMPUTE CGPA

Let's consider an example to show how a student computes his/her semester and sessional result. Suppose a 100 level student in Computer Science has the following results in the first and second semester of 2016/2017 Academic session. Before we go further let defined the following acronym:

TCR: Total Credit Registered **TCE:** Total Credit Earned
TCP: Total Credit Point **GPA:** Grade Point Average (Per Semester)
CGPA: Cumulative Grade Point Average (until graduation)
TCP = Column (c) x Column (e), **TCR** = Sum of Column (c)
NB: GPA reflect a particular semester result.

FIRST SEMESTER

(a) Course Code	(b) Course Title	(c) Credit Unit	(d) Grade	(e) Grade Point	(f) Credit Point
MTH 111	Elementary Mathematics I	3	A	5	15
MTH 112	Elementary Mathematics II	3	A	5	15
PHY 111	Mechanics & Properties of Matters	3	C	3	09
CHM 111	General Physical Chemistry	3	C	3	09
CMP 111	Intro. to Computer Science	3	A	5	15
GST 111	Communication in English I	2	C	3	06
GST 112	Logic, Phil& Human Existence	2	B	4	08
GST 113	Nigerian Peoples and culture	2	A	5	10
	Total	**21**			**87**

For First Semester, we have

GPA$=\frac{TCP}{TCR}=\frac{87}{21}=4.14$ (100 Level, 1) 1 for first semester

SECOND SEMESTER

(a) Course Code	(b) Course Title	(c) Credit Unit	(d) Grade	(e) Grade Point	(f) Credit Point
MTH 121	Elementary Mathematics III	3	B	4	12
STA121	Probability I	3	A	5	15
STA 122	Elementary Statistics II	3	C	3	09
CMP121	Introduction to Problem Solving	3	C	3	09
PHY 123	Sound, Heat & Optics	3	D	2	06
GST121	Use of Library Skills & ICT	2	C	3	06
GST122	Communication in English II	2	B	4	08
GST 123	Communication in Arabic/French	2	C	3	06
	Total	**21**			**71**

For Second Semester, we have

GPA$=\frac{TCP}{TCR}=\frac{71}{72}=3.38$ (100 Level, 2) 2 for second semester

CGPA reflect a **series** of result.

CGPA$=\frac{TCP(FS)+TCP(SS)}{TCR(FS)+TCR(SS)}$ $\frac{87+71}{21+21}=\frac{156}{42}=3.71$

Current result of the student at the end of 100 level is 3.71 (Class of Degree is Second Class Upper)

The fraction $\frac{156}{42}$ is to be kept for future computation of 200 level first semester result. Many students do not take the diligence to copy all their result including grade gotten in each course, into a safe place, the only copy the CGPA (i.e. in this case 3.71) and forgot the fraction that result in 3.71.

In summary to compute both a particular semester result (GPA) and the cumulative (CGPA) use the formula:

$$\textbf{GPA} = \frac{\text{Present TCP}}{\text{Present TCR}}$$

$$\textbf{CGPA} = \frac{\text{Previous TCP} + \text{Present TCP}}{\text{Previous TCR} + \text{Present TCR}}$$

3.2 PROBATION AND WITHDRAWAL

a. If a student's CGPA falls below 1.00 during one session, he or she would be placed on probation (that is a warning period) to allow the student to improve in the following session.
b. If in the following session, the student's CGPA still falls below 1.00, he or she is advised to withdraw from the programme.
c. A student so withdrawn for poor academic performance in one programme may be considered for another programme on application, if the university is convinced that he or she stands the chance in another programme. Application forms for such transfer are available at the academic secretary's office.

3.3 SPILL OVER

a. Students who are not able to graduate at the end of their approved period of study shall be allowed to carry over such courses into the following session. This period shall be referred to as "first spill over". All grades scored in that session shall be fully credited to the student and scored class of degree awarded.

b. Failure in any course during the first spill over which leads into second year (second spill over), the CGPA notwithstanding.

c. Students who could not graduate at the end of the second spill over shall be advised to withdraw from the University. It should be noted that the period of study of an undergraduate students shall not exceed, by more than four semesters, the minimum number of semesters prescribed for it.

d. Students shall report immediately to the Head of Department or Dean through the examination officer, any discrepancies in the grade communicated to them.

4.0 STUDENTS' INDUSTRIAL WORK EXPERIENCE SCHEMES (SIWES)

In the Faculty of Natural and Applied Sciences, students are to go for a six (6) months industrial attachment during their 300 level second semester period. Only students whose second semester 200 level results shows that their carry over's courses credit units sum up to less than 12 credit units are permitted to go for SIWES. Those students with second semester 200 level result showing credit units of carry over courses to be more than 12 units are to stay behind to register for such courses in their second semester 300 level, attend lectures and write the second semester examination.

Students will, during the period of industrial attachment, be placed in industries, commercial establishments, etc. where they will be exposed to the practical realities of what they have been taught in the classroom. The process of placement to SIWES locations is done by the SIWES Directorate of the University headed by the SIWES Director with each department in the faculty having its own SIWES Coordinator.

Students on attachment are expected to:

a. Keep standard logbooks where they record all training activities and other assignments during the six months period on a day to day basis.
b. Be regularly present at their respective place of attachment and sign attachment register regularly and daily.

c. Keep and abide strictly by all rules in the workplace and organization.
d. Complete the end of programme evaluation form (also referred to as **ITF Form 8**)
e. Write a comprehensive report of their experiences during the period of attachment, and present such report in the Department for scoring and assessment.

4.1 STUDENTS UNDERGRADUATE PROJECT

Final year students are required to write and present a mandatory final project in only one area of their course of study. Students have the option of writing their project in any area of major subject which they are offering. Group projects are not allowed, except for projects that are well guided and that require design of some sort of systems and where each member independently works to achieve some stated objectives different from the other members in the same group.

Project writing must meet the faculty and departmental requirements in terms of chapter structures, chapters' titles, in-text referencing style, general referencing style (APA referencing style is recommended in the faculty), reporting formats and data presentation format. Student must learn how to prepare PowerPoint presentation of their work and how to do oral presentations.

Students are to have good working relationship with their supervisors and show some level of seriousness and hard-

work. Any challenges during the period should be taken to the Departmental Project Coordinator for proper guidance and counseling. Where such challenges persist, the students can write to the Head of Department through the Departmental Project Coordinator for redress and solution. All resources needed for data gathering, and organization must be handy and made available by the students and his/her sponsor; such as laptop, flash drive, files, modem, data for browsing or using the university internet facilities, ability to search the internet for quality information relevant to the work, etc.

Student repeating the final year due to spill over courses yet to be cleared shall be exempted from repeating his/her project provided that the project requirement has already been satisfied by the supervisor and the external examiner. The last date of submission of an approved and completed project shall be determined by the Project Committee and communicated to the students through the Departmental project Coordinator. Any project submitted later than that date shall be rejected for that academic session.

4.2 STUDENTS' EXAMINATION GUIDELINES AND REGULATIONS

a. Communication between students is strictly forbidden during examinations. Any student found to be giving or receiving assistance will be sanctioned. Such a student may be required to withdraw from the examination and subsequently made to face the University Examination Malpractice Panel.

b. Students are not permitted to smoke or sing or pray aloud or engage in any activity that may distract others in the examination hall.
c. Bags and brief cases are not allowed in the examination hall. The University will not be liable for any loss or damage of a student's personal effects/property.
d. Unauthorized materials (such as textbooks, course materials, notebooks, sheets/scraps or paper) in print or electronic form are not allowed in the examination hall.
e. Pagers are not permitted at all in the examination hall.
f. Students must observe the supervisor's instructions regarding the commencement and end of an examination. Students who start writing before being told to do so, or who continue writing after being asked to stop, will be sanctioned.
g. Write on both sides of the page (except where otherwise instructed).
h. Begin each answer on a fresh page.
i. Write the number of each question on the top of each page.
j. Cross out rough work.
k. If supplementary sheets are used, they must all be fastened together at the end of the booklet and inside the cover. Answers must not be written on the supplementary sheets, unless all the leaves in the booklet have already been used.
l. In your own interest, you should enter in the space provided below, the number of the question which you have attempted (with sub-sections where necessary).
m. In no circumstance must answer booklets, used or unused, be removed from the examination room by a candidate.
n. Candidates are warned that importance is attached by the examiners to accuracy and clarity of expression.
o. **Mobile Telephones** should **NOT** be brought into the Examination Hall.

NOTE:*Examination malpractice attracts expulsion from the University.*

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