DEPARTMENT OF TELECOMMUNICATIONS ENGINEERING

SCHOOL OF ENGINEERING
AMERICAN UNIVERSITY OF NIGERIA

GRADUATE CATALOG 2025 – 2030

Graduate Catalog Disclaimer

Department of Telecommunications Engineering, School of Engineering, American University of Nigeria makes every reasonable effort to provide accurate information in this catalog. This Catalog is effective from 2025 academic year and the content is subject to change. Its purpose is to provide current students and other interested persons with information about the institution. The university reserves the right to change without prior notice, rules and regulations relating to admission, instruction, and graduation; to alter course offerings, and change the calendar. All changes will be effective as authorized by the appropriate offices. It is the student's responsibility to remain aware of expectations for his/her level of study. It is recommended that students regularly check this Catalog for possible changes.

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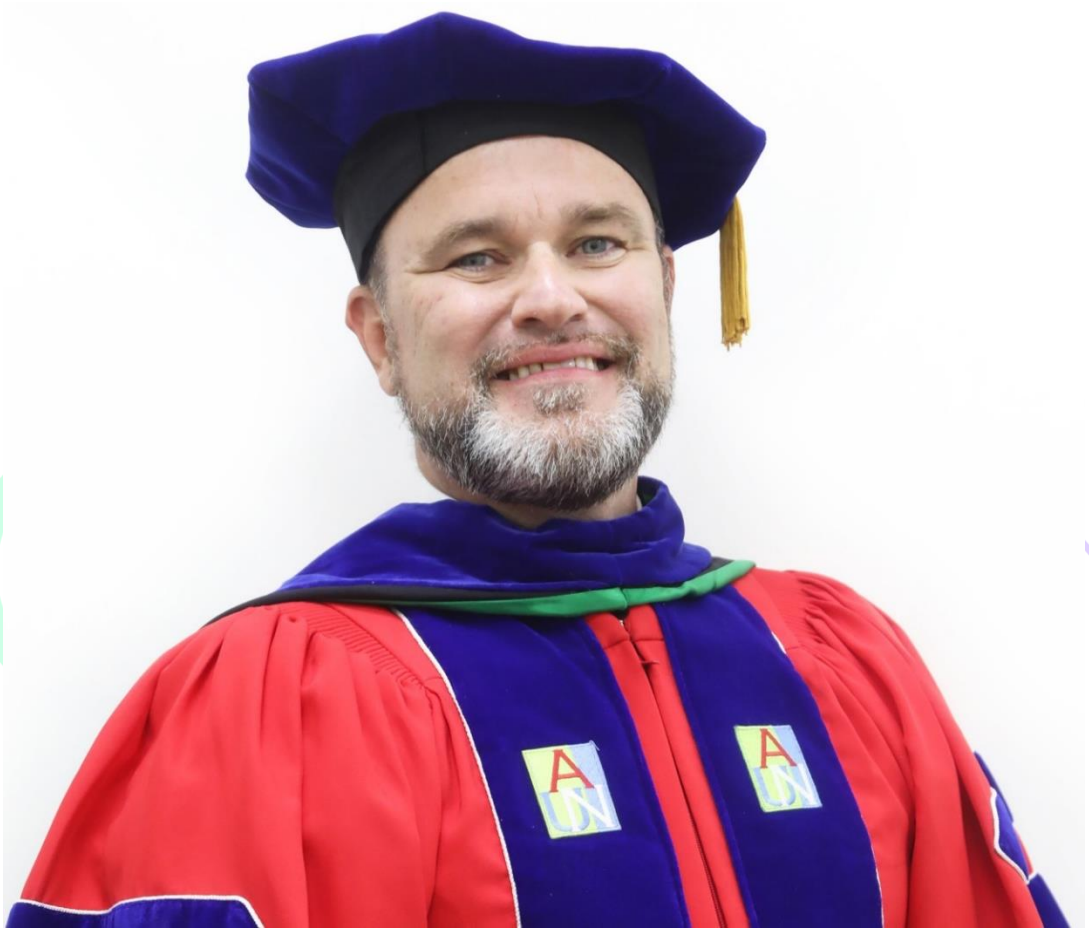
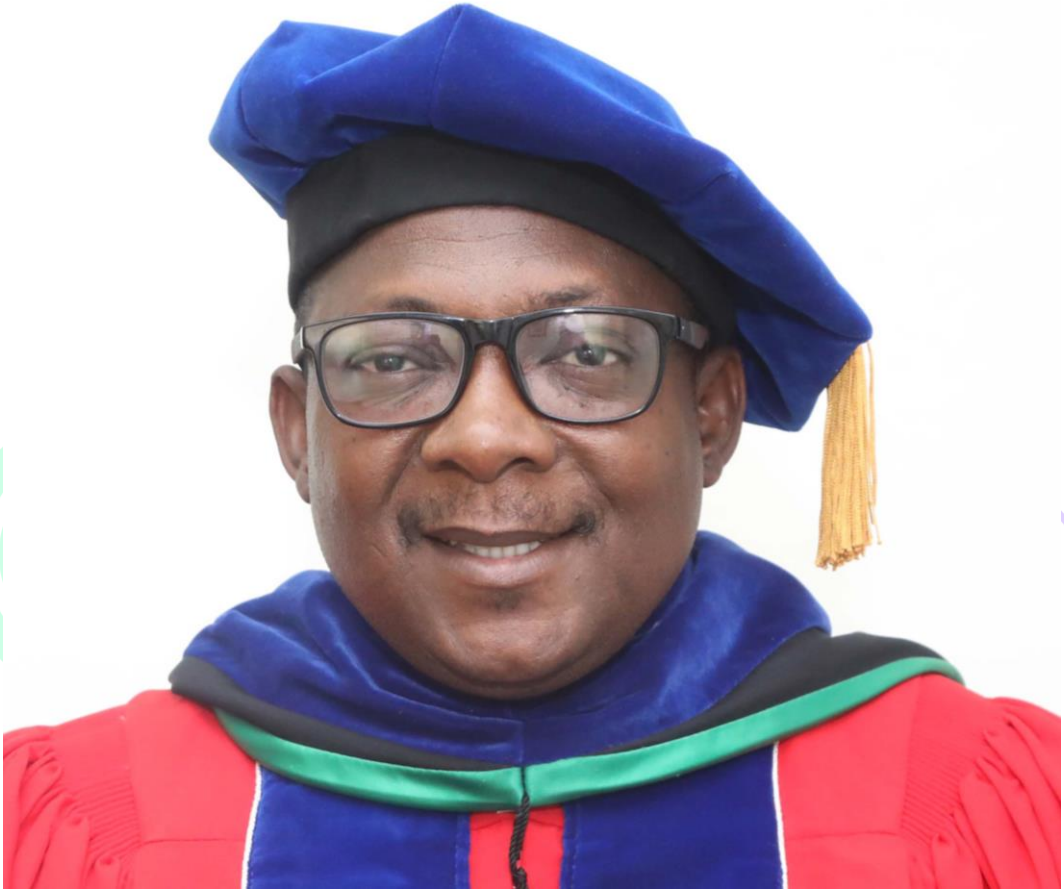


DeWayne P. Frazier, PhD
President/Vice Chancellor, AUN

Paul Vita, PhD
Provost/VP Academic Affairs, AUN



Adewale James, PhD
Dean, Graduate School

SCHOOL OF ENGINEERING

Dean's Welcome Message

My Dear Students,

I welcome you to the School of Engineering Graduate Programs, American University of Nigeria (AUN).

As a guide to your successful career, I want to draw your attention to the fact that the catalog of the School is your most important guiding compass throughout your stay in AUN. The document spells out the philosophy and objectives of the engineering programs, according to the National Universities Commission (NUC) Standards. It also provides all the codes of conduct, and specifies course plan for each of the engineering programs.

As we all know, Science is about knowing, but engineering is about doing - about identifying and solving problems.

I therefore expect all of you to be inspired and sustain your interest in the engineering profession that you have chosen. The word ''ENGINEERING'' comes from the Latin word INGENIUM - meaning ''CLEVERNESS'' and INGENIARE meaning '' TO DESIGN or DEVISE''.

It goes without saying that Engineers are creators. They are the driving force behind the designs, buildings and innovations for sustainable development that shape the world we live in. As you join us at the School of Engineering in AUN, you will gain real-world experience, because we will teach you problem-solving skills and also teach you how to design and build to solve our societal problems. Mathematics, being an essential backbone for engineering, provides you with the platform to gauge all engineering principles, applications; and when you use it along with science, you can apply scientific principles to design, build and innovate for sustainable development.

In July 2019, the National Universities Commission (NUC) approved the establishment of the full time mode of our undergraduate engineering programs to run on our campus, effective from the 2019/2020 academic sessions. Currently, our School offers the following undergraduate programs, leading to the award of Bachelor of Engineering (B.Eng.): 1. Chemical Engineering; 2. Civil Engineering; 3. Computer Engineering; 4. Electrical & Electronics Engineering, and 5. Telecommunications Engineering.

At AUN, we thrive on critical and creative thinking in line with world class Faculty that will shape the future of engineering & technology.

AUN is an institution built on the core philosophy of entrepreneurship and development, providing American style Liberal Arts education.

AUN guarantees study abroad opportunities whereby our students can study abroad at any of our 28 partner universities in the Global Liberal Arts Alliance and the 74 institutions in the Association of American International Colleges and Universities, whilst still paying AUN tuition fees. At the end of their studies, the credits earned from studying overseas are transferred back to AUN, to ensure that participating students are able to graduate on schedule.

AUN maintains small class-size on a 24/7 wireless campus; digital library; 24/7 security surveillance; fully air conditioned residence halls and classrooms; American style Liberal Arts education; active student life and many opportunities for students to serve the community; and we maintain state of the art research and lab facilities.

In November 2022, Engineering Students' Society (ESS) was founded at AUN, with the core philosophy of solving societal problems around Nigeria, Africa and the world. Students of School of Engineering are automatically members of the Engineering Students' Society (ESS).

An important advantage of joining academic studies at AUN, is that, no matter what degree subject students plan to study, we will teach you Telecommunications & Computer networking and emerging mobile technology, which are prerequisite of our modern world. It is our aim at AUN to provide you with the fundamentals of networks and networking, and provide you with the practical insights of the

software and hardware components, that make up the Telecommunications & Computer networks and emerging mobile technology.

Our teaching provides breadth and depth in the field of Engineering, nurturing strong theoretical and practical skills to set the foundation in the digital revolution. The balance between theory and practice elevates the students to the frontier of Innovation in Science & Technology, thereby opening opportunities in government, industry and academic teaching and research.

I like to conclude by thanking you so much for reading. I once again welcome you onboard the AUN train! Welcome to the School of Engineering, American University of Nigeria (AUN).

Abubakar Sadiq Hussaini, MSc, PhD
Dean & Founding Chairman, School of Engineering,
Reader In Telecommunications Engineering

AUN Vision, Mission, Values Statement and Learning Outcomes

Vision

AUN seeks to become a great center of learning and research for Nigeria and Africa, and a catalyst for development in the entire world. In the words of its Founder, it sees its role as a "Development University." Thus, the University will honor the traditional university roles of repository and transmitter of culture and knowledge, and center for the creation of new knowledge. As a "Development University," it will also focus on the practical roles that a great university must play in the development of a great nation and continent.

Mission

To these ends as a "Development University," AUN will foster the creation of leaders committed to sustaining a democracy in which diverse people share in the rights and responsibilities of citizenship, are proficient in creating and applying technology to wise purpose, and are dedicated to securing a humane and prosperous world.

AUN will become a place where students' dreams become Africa's future. At AUN, lives will be transformed for service and leadership to lead Africa and the world in what will surely be the challenging years ahead. To realize this vision and fulfill our mission, we will focus our planning on the following strategic goals: AUN will

Goal 1:	Be the Development University for Africa.
Goal 2:	Retain and recruit faculty with the highest standards of academic excellence who are devoted to teaching, research and mentoring students to solve societal problems.
Goal 3:	Foster and build an environment that develops students who are problem solvers, and whose lives are transformed for service and leadership.
Goal 4:	Develop and encourage the effective use of technology to support learning and research by students and faculty.
Goal 5:	Develop the physical environment to support the learning, teaching and research goals of a Development University.

Goal 6: Accelerate and sustain financial growth to achieve financial stability.
Goal 7: Help create and sustain a social and political environment supportive of these goals.

Values Statement

Our values statement defines what we hold in common as members of the AUN community, and informs our vision and mission statements.

- We believe that tolerance and understanding among national, ethnic, and religious groups are essential to the success of Nigeria or any other nation. The University will actively work to instil these values in its students and will itself reflect them in its policies.
- We believe that the University, in all of its activities, shall demonstrate the highest standards of integrity, transparency, and academic honesty.
- We believe that freedom of expression is fundamental to any intellectual community and affirm that all members of the AUN community will have the freedom to express any opinion without fear of reprisals of any kind.

Sustainability

AUN has adopted a strategic vision to be a Sustainability Leader in all facets of its operations not only in Education and in Africa but also globally.

AUN Learning Outcomes

I. Capacity to think critically and independently, and apply knowledge to solve problems

- Students will develop the skills to analyze, synthesize, and evaluate data and information.
- Students will communicate effectively through expressive and receptive methods (written, oral, quantitative, visual) using appropriate resources, including digital technologies.

- Students will be able to identify, appreciate, and strategize everyday problems.
- Students will develop emotional intelligence.

II. Understanding the importance of sustainable development

- Student will innovate to solve social and development problems.
- Students will develop the ability to apply knowledge to solve social problems.
- Students will develop social responsibility to others through engaging in community service-based projects.
- Students will demonstrate an understanding of national and global issues to function effectively as responsible democratic citizens and global change agents.
- Students will understand and develop the capacity to function effectively in other cultures.
- Students will be able to define their identity in relation to cultural and social differences to include gender, religion, ethnicity, and different lifestyles.

III. Disciplinary and Interdisciplinary knowledge, skills and values

- Students will gain mastery of both disciplinary and interdisciplinary knowledge through their majors and minors. They will be able to use this knowledge to understand their world and participate in civil society.
- Students will gain an appreciation for a liberal arts education.

IV. Ethics

- Students will develop the capacity to act on ethical judgments.
- Students will conduct themselves with honesty and integrity.
- Students will develop a personal code of ethics to guide decision-making rooted in a sense of responsibility as a member of society.

V. Leadership

- Students will become responsible and courageous leaders who will hold themselves and others accountable.

VI. Sustainability

- Students will understand and appreciate economic, political, environmental, and social connections in order to build a sustainable future.
- Students will develop the discipline to manage abundant or scarce resources.

VII. Entrepreneurship

- Students will develop the knowledge and skills to recognize and act innovatively on business and social opportunities.

VIII. Life Skills, Personal Development, and Careers

- Students will be able to prioritize and manage resources effectively.
- Students will be able to manage and resolve conflict productively.
- Students will be able to master independent living skills.
- Students will be able to practice physical, emotional, spiritual wellness.
- Students will be able to compete effectively for a job.
- Students will become lifelong learners.

Engineering Learning Outcomes

a) Regime of Subject Knowledge

Fundamental Emphasis

The programs in engineering shall be designed with full recognition that:

Mathematics and Science are the basic intellectual tools which graduate engineers use to understand and harness the forces of nature to the benefit of mankind. Students need to develop a good understanding of science in general and study the specific sciences in their chosen disciplines to a greater depth. Engineering is professionally directed toward the skilled application of distinctive knowledge based primarily on mathematics and science integrated with business and management in developing, providing and maintaining infrastructure, goods and services for industry and the community.

Criteria for content of degree programs

These are viewed in the context of the understanding and development of skills in mathematics, science, design, information technology, business know-how and professional practice.

Mathematics Content

Appropriate mathematical methods shall be ensured in the program. The knowledge level should include ability to select and apply appropriate mathematical modeling and analyzing engineering problems. It should also include development of transferable skills in terms of manipulation and sorting of data, presentation of data in a variety of ways. The mathematics content of each engineering curriculum should provide opportunities for understanding of significant number of mathematical methods in the particular discipline including an appreciation of their limitation and ways of applicability.

Science Content

The science level selected shall be as deemed appropriate to the specific discipline. It should be capable of imparting knowledge, understanding intellectual abilities and practical skills to use relevant scientific principles in the development of engineering solution to practical problems; use of scientific principles in modeling and analysis of engineering systems, processes and products.

Design Content

Adequate design training shall be ensured. This includes assurance of understanding of general principles of design and design techniques specific to particular products and processes; development of intellectual capabilities in analysis of systems, processes and components requiring engineering solutions; Creation of new processes or products through synthesis of ideas from a wide range of sources; and assurance of knowledge and understanding of the characteristics of engineering materials and components.

Information Technology

Knowledge, understanding and intellectual abilities shall be assured in principles and application of information technology in general and also specific to the discipline. These shall include ability to

select and apply appropriate computer based methods designed for modeling and analyzing engineering problems.

Business Content

Each program shall include adequate knowledge, understanding and intellectual capabilities in management and business practices, including finance, law, marketing, engineering economics, etc.

Professional Practice

Adequate elements of activities in the practice of engineering shall be ensured. These include applicable codes of practice, safety requirements, manufacturing, operational practice, project management, technical risk evaluation, environmental impact assessment and environmental auditing. Strong attachment of students to industry should be ensured.

b) Competencies and Skills

Each curriculum should provide opportunities to develop in the student competencies and skills in the various components of the regime of knowledge. These include the following:

(i) Ability to manipulate data in alternative forms to create deeper understanding.
(ii) Use of relevant test and measurement equipment including assemblage and use of experimental laboratory/workshop activities; ability to estimate errors/accuracy of measurements.
(iii) Research for information to develop ideas further and working with limited or contradictory information.
(iv) Use of information technology tools, including programming languages and a broad understanding of common information technology tools.
(v) Ability to apply engineering techniques taking into account, industrial and commercial constraints, to learn independently and understand new concepts in the discipline.
(vi) Competence in teamwork and leadership.

c) Behavioral Attributes

Graduating engineering students must have an understanding of their professional and ethical responsibilities. Therefore, the broad education necessary to understand these and the impact of their work in a global and societal context (including awareness of relevant contemporary issues) should be ensured.

America In Yola: How An American Education Is Different

Coming to AUN and experiencing an American-style university education is new for most African students and for their parents. We are very conscious of the cultural differences (and similarities) between Nigeria and the United States and work hard to develop an intercultural understanding among all members of the AUN community. An American-style education focuses on critical thinking, problem solving and leadership development. In addition, our education is based on the following principles: that every individual deserves equal respect, is unique, and deserves the knowledge and skills to be good citizens in order to improve society.

General Education

Unlike universities in many other countries, in addition to studying a specialty such as "Petroleum Chemistry" or "Marketing" or "English Literature," American universities have programs in "General Education." That means students study more broadly; they learn ideas from other specialties. They learn ethics, and history, and culture, and languages, and literature, and science. We call this a "well-rounded" education. We are training not just specialists, but also knowledgeable global citizens.

Majors And Minors

As in all universities, each student is expected to specialize in a particular course of study. In the American system, such specialties are called "majors." All students will graduate with a particular major. Some students also want to learn about another field of study in some depth, but not as their primary focus. In the American system, such sub-specialties are called "minors." Thus, one could major in Economics and minor in Journalism, or have some other combinations.

Electives

Some courses are required of all students, and some are courses that students choose themselves as electives. Students (with the help of their Chair and academic advisors) get to choose which course in science--for example--is most interesting and helpful. Even "majors" and "minors" allow students to make some individual choices within their respective specialties.

The result is that at the end of four years with us, no two students have taken exactly the same courses. Everyone would have had an individual education, because everyone has different talents, interests and goals. Everyone is an individual, and every education unique.

Class Participation

Because some of the distinctive features of American education are to help train students to think for themselves, be creative, and solve new problems, students are required to actively participate in class. They don't just sit and absorb what comes from teachers, books, and the Internet. They are expected to ask questions, discuss the course materials with fellow-students and professors, read avidly, think critically, and confidently defend their own ideas. They are also expected to respectfully challenge, engage and debate with their instructors. These, we believe, will help students learn how to become creative, assertive adults; and the activities count towards the final grades for each course taken.

DEPARTMENT OF TELECOMMUNICATIONS ENGINEERING SCHOOL OF ENGINEERING

PGD; M. Eng; PhD in Telecommunications Engineering

(i). PGD **Program: Telecommunications Engineering**

(ii). M.Eng and Ph.D Programs: Telecommunications Engineering

Some common specialization areas in computer engineering are: (i) Computer System Architecture (ii) Software & Firmware Engineering (iii) Intelligent Robotics & Automation

The general philosophy and objectives of the engineering discipline

Philosophy

The philosophy of the graduate programs in Engineering is to develop highly skilled professionals for the public, private and international organizations, as well as for teaching and research in Tertiary Institutions and for global competitiveness.

Goals and Objectives

The aims and objectives of the postgraduate programs in Engineering are geared at:

(i) Providing students with knowledge and competitive skills to enhance their performance and to enable them to assume broader responsibilities in the rapidly changing environment in the context of the global and contemporary knowledge economy;

(ii) Producing high level practitioners who are capable of applying appropriate engineering principles and techniques for solving problems in the local, national and international environment viz-a-viz teaching, research and industry.

(iii) Producing socially responsive and functional engineers capable of positively driving the engine of Nigeria's economy through accelerated technology development.

(iv) Providing opportunity for University graduates in relevant science disciplines and HND holders to convert and aspire to higher degrees in Engineering; and

(v) Producing Engineers in ICT having entrepreneurial skills and leadership qualities, including sound professional ethics.

Basic Admission Requirements and Expected Duration of the Program

The criteria for admission into the Graduate Engineering programs are as follows:

Basic Admission Requirements

All candidates must have five Credit passes including English, Mathematics, Physic, and Chemistry O'Level.

Postgraduate Diploma (PGD)

A graduate from a recognized higher institute with at least a degree or a holder of: –

a. Higher National Diploma, (HND) in Computer Engineering; Electrical/Electronics Engineering; Telecommunications Engineering or related Engineering and Science disciplines with at least, Lower Credit; or

b. B.Eng., or B. Tech., or B. Sc degree in Computer Engineering; Electrical/Electronics Engineering; Telecommunications Engineering with at least Third class (Hons);

Master's Degree

(i) A candidate with a first degree in a relevant Engineering discipline from a recognized University with minimum of a second class lower division may be admitted provided the University matriculation requirement is satisfied.

(ii) A candidate with an upper credit pass in the Postgraduate Diploma (PGD), in a relevant Engineering discipline, from a recognized University may also be admitted to a Master's Degree Programme provided the University matriculation requirements are satisfied.

Doctor of Philosophy (Ph.D) Degree

A candidate who holds a Masters degree, with a minimum CGPA of 3.50 on a 5-point scale or an average of 60%, which includes coursework and research thesis in a relevant Engineering discipline, from a recognized university may be admitted provided the university matriculation requirement is satisfied.

Completion of program

Each department shall specify all additional prerequisites for completion of the program.

Graduation Requirements

(a) Postgraduate Diploma (PGD)

To qualify for the award of Postgraduate Diploma, a candidate must have been unitized with at least **64 Credit Units** of compulsory courses which include the project report.

(b) M.Eng. Requirements

A minimum of 31 Units comprising 24 Units of Coursework, 1 unit of Seminar and 6 Units of Research.

(c) M.Phil. Requirements

A minimum of 36 Units comprising 24 Units of Coursework, 3 unit of Seminar and 9 Units of Research.

(d) Ph.D Requirements

For Ph.D programs, candidates shall be required to have taken the core/compulsory courses prescribed for the M.Sc./M.Eng., as prerequisites. This is in addition to the minimum 21 units which include research and seminars prescribed for the Ph.D.

Mandatory Duration of Programs

A uniform duration for the program for all universities, making allowance for minor individual university variation shall be adopted as follows:

(a) **Postgraduate Diploma Program**

i. Full-time: Minimum of four (4) semesters and a maximum of six (6) semesters.

ii. Part-time: Minimum of six (6) semesters and a maximum of eight (8) semesters.

iii.

(b) **Master's Degree Program**

i. Full-time: A minimum of three (3) semesters and a maximum of six (6) semesters

ii. Part-time: A minimum of four (4) semesters and a maximum of eight (8) semesters.

(c) **Ph.D Program**

i. Full-time: A minimum of six (6) semesters and a maximum of twelve 12 semesters.
ii. Part-time: A minimum of eight (8) semesters and a maximum of sixteen (16) semesters.

Staffing Requirements

Teachers of postgraduate courses, except the PGD, should normally be holders of a Ph.D, provided that those who teach Ph.D courses are of the rank of at least Senior Lecturer.

Requirements for Student Supervision

Subject to individual University peculiarities, requirements for supervision of postgraduate students shall be as follows:

(a) At least one supervisor for each postgraduate student on the masters and the PGD and at least two (2) for the Ph.D program shall be appointed.

(b) All lecturers qualified to teach postgraduate courses and who are not registered postgraduate students shall be eligible to supervise PGD and Masters Programs. For the Ph.D, supervisors must be of a rank not lower than senior lecturer and must not be registered postgraduate students.

(c) A supervisor shall guide a student in his/her studies and the department shall keep a record of the candidate's progress and submit a regular progress report through the Dean to the Board of Postgraduate Studies.

(d) A supervisor may be changed where and when necessary subject to the approval of the board of Postgraduate Studies.

(e) Where a student does part or all his required courses in another institution, the external supervisor shall only be required to submit a written report on the candidate at the end of the program. Such a supervisor shall not normally be required to participate in the oral examination of the candidate.

Examinations

Course Work

(a) For all postgraduate coursework, the minimum pass score shall be 50%; continuous assessment shall constitute not less than 30% of the examination for each course;

(b) Any student who fails in any course, shall repeat such a course; and

(c) Any student whose Cumulative Grade Point Average (CGPA) falls below 2.50 at the end of 2 consecutive Semesters shall be required to withdraw from the program.

Thesis or Dissertation

A panel of examiners shall be composed to orally assess a thesis or dissertation according to individual University regulations, but the examination shall at least be guided by the following:

a) **Postgraduate Diploma Project Report:** An external examiner shall read and grade the report. The final grade for the project report shall be the average of the separate grades of an internal assessment process and the external examiner's assessment.

b) **Master Thesis:** The minimum composition of the examination panel shall comprise:
   i. External Examiner;
   ii. Head of Department;

iii. Supervisor;
iv. Co-supervisor (if any); or at least one other member of the Department (if no co-supervisor); and.
v. One member appointed by the Postgraduate School.

Note that all masters degree programmes shall be subject to external examination and moderation.

c) **Ph.D Thesis:** The minimum composition of the examination panel shall comprise:
i. External Examiner;
ii. Head of Department who must be a Ph.D holder;
iii. Supervisor;
iv. Co-supervisor;
v. One other member of the Department who is not below the rank of a Senior lecturer or an academic staff from a related Department within the Faculty who must be a Ph.D holder; and
vi. A representative of the Board of the School of Postgraduate (PG) Studies.

Academic Standards

Academic Regulations

(a) Academic Session

An academic session consists of two semesters. Each semester normally comprises 15 weeks of teaching and two weeks of examinations.

(b) Modular System

All engineering programs shall be run on a modular system, commonly referred to as Course Unit system. All courses should therefore be sub-divided into more or less self-sufficient and

logically consistent packages that are taught within a semester and examined at the end of that particular semester. Unit weights should be attached to each course.

(c) Definition of Units or Unit:

Units are loads attached to a course. One Unit load is equivalent to one hour per week per semester of 15 weeks of lectures or two hours of tutorials or three hours per week of term paper work or laboratory practical per semester of 15 weeks.

Program Requirements

(a) **Registration Procedure**

Students shall normally complete registration for courses for the semester not later than two weeks after the start of the semester. A student cannot withdraw from a course after a third of it has been delivered without permission, according to the regulations of the University. A student who withdraws after this time or who fails to sit for the final examination without reasons acceptable to the Senate shall be deemed to have failed that course.

(b) **Student Academic Status**

A student's academic status shall be determined on the basis of his/her performance at the end of the semester examinations.

(c) **Good Standing and Probation**

To be in good standing, a student must in each semester have a Cumulative Grade Point Average (CGPA) of not less than 2.50. A Student who is not in good academic standing shall be deemed to be on Probation.

(d) **Transfer**

Students who transfer from other universities shall be unitized with only those courses deemed relevant to the programs, which they have already passed prior to their transfer. Such students shall however be required to meet the minimum number of sessions he/she has spent in the Faculty; provided that the student shall satisfy the residency requirements of the University. Students who transfer for any approved reason shall be unitized with those Units passed that are within the curriculum. Appropriate decisions on transfer cases shall be subjected to the approval of Senate on the recommendation of the Faculty. If anyone is on probation for 2 consecutive semesters, he/she shall be required to withdraw from the program.

(e) **Withdrawal**

A candidate whose CGPA is below 2.50 at the end of 2 consecutive Semesters shall be required to withdraw from the University.

Attendance

In order to be eligible for examination in a particular taught course, a student shall have attended a minimum of 75% of the total periods of formal instructions delivered for the course.

Course Evaluation

Attainment Levels

In engineering program, assessment of students' should be based on a combination of performance in some or all of the following areas:

(i) Examinations;
(ii) Continuous assessments;
(iii) Oral presentations and Seminars and problem solving exercises;
(iv) Assignments;
(v) Group project works; and
(vi) Thesis/Dissertations.

Continuous Assessment

Continuous assessment shall be done through essays, tests, term papers, tutorial exercises, quizzes and home works. Scores from continuous assessment shall constitute at least 30% of the final marks for courses which are primarily theoretical.

External Examiner System

The external examiner system shall be used in the final year of the graduate program to assess final year courses and projects, and to certify the overall performance of the graduating students, as well as the quality of facilities and teaching.

General Course Requirements

Courses specified for engineering disciplines are just suggestions of common courses in the various fields of engineering. Each Department (or University) offering listed program is free to add as many optional or required courses as it deems fit.

(a) Ph.D Requirements

For Ph.D programs, candidates shall be required to have taken the core/compulsory courses prescribed for the M.Sc./M.Eng., as prerequisites. This is in addition to the minimum 21 units which include research and seminars prescribed for the Ph.D.

(b) M.Eng.Requirements

A minimum of 31 Units comprising 24 Units of Coursework, 1 unit of Seminar and 6 Units of Research.

(c)M.Phil. Requirements

A minimum of 36 Units comprising 24 Units of Coursework, 3 unit of Seminar and 9 Units of Research.

Application for Graduation

You are required to submit an Application for Graduation to the Office of the Registrar within the deadlines stated on the academic calendar. Application forms are available online www.aun.edu.ng/registrar/forms.

Only after an application has been received will the academic degree audit will be processed. Candidates will be notified by the Office of the Registrar if additional information is needed and/or discrepancies are found via AUN e-mail. Students who fail to satisfy all degree requirements must reapply for graduation in a future semester (adhering to all guidelines stated above).

Names on Diploma

The name and order of names that appears on a student's diploma will be consistent with the name and order of names that appears in the student's file upon admission and is corroborated by a passport or valid identity card and/or a birth certificate.

Diploma Replacement

If an original AUN diploma is destroyed or lost, a duplicate may be ordered from the Registrar's Office. The Duplicate Diploma Request Form must be filled by the alumni; and any evidence that the original diploma was lost, stolen or destroyed must be attached to the Request Form (e.g., police report, fire department report). If the original diploma is damaged, the Duplicate Diploma Request Form must be submitted to the Registrar's Office with the damaged diploma attached. The reverse side of the duplicate diploma will be stamped with the words, "Duplicate issued on MM/DD/YY to replace lost/destroyed original diploma." In order to receive this duplicate, alumni must fill a Diploma Request Form, online www.aun.edu.ng/registrar/forms.

Academic Records

The Office of the Registrar provides these services: creating, maintaining and transmitting academic records; scheduling classrooms; course registration; evaluating transfer credit; auditing degree

progress and completion; verifying enrolment/degree completion; and issuing academic transcripts and diplomas.

Student Records

A file is maintained for each student who registers at American University of Nigeria. After an applicant is matriculated, his/her record is maintained by the Office of the Registrar. Additional files may be kept by the Academic Advising Office and/or a student's individual School/Department, however, the primary source of academic information will be housed in the Office of the Registrar. The purpose of the official student record is to document the student's academic career/history. Students have the following rights regarding their education records: The rights

1) to have access to their education records,
2) to consent to release their records to a third party and
3) to seek amendment of information on the record, if the student demonstrates an inaccuracy.

In order to view their academic records, students must submit a Student Record Request form to the Office of the Registrar. After submitting the form, students will be invited to the Office of the Registrar via AUN e-mail within 10-15 business days to view their file. All files and the information in the files must remain in the Office of the Registrar during viewing.

Any alteration or misuse of official student records and/or an attempt to alter or misuse them, will result in immediate dismissal of any student or employee involved. The University reserves the right to initiate legal proceedings as it sees fit in instances of misuse, alteration and/or fraud. Upon graduation, or if a student leaves the University, his or her files are sealed and archived at AUN.

Confidentiality of Student Records

A student's personal information will only be shared with any other person within the University and/or with an external person or agency with the express consent of the student via a signed Consent form (available in the Office of the Registrar). Confidential information will be shared on a 'need to know' basis. The following are exceptions in which prior consent from the student is not required to release confidential information:

- Unless the student expressly requests restriction of its release, Directory information can be shared without prior consent. This includes the student's name, address, telephone number, major, dates of attendance and degrees/awards received.
- In case of imminent and serious threat to the safety or health of the student and/or others.
- Where disclosure of the information is legally mandated.
- To prevent a criminal act.
- Where the information is disclosed to University officials who have a legitimate educational interest in the records.
- Where the information is disclosed to third parties in accordance with national and/or University regulations governing the release of such information.

Transcripts

Students and alumni may obtain transcripts of their academic history from the Office of the Registrar. A request for transcript must be initiated by the student only as requests from individuals other than the student will not be honored. After submitting a processing fee and verification of payment receipt by the Bursar, students can request their transcript in writing (email to registrar@aun.edu.ng) using their AUN e-mail accounts or go online for details:

http://www.aun.edu.ng/academics/registrar/students/101-transcripts

Once the request has been made and payment has been received, it may take between 5-10 business days for processing.

A notation will be made on all AUN transcripts confirming that English is the official medium of communication and instruction for all courses taught at AUN.

The University will not issue a transcript that reflects only a part of the student's record, nor will it make copies of transcripts on file from other colleges and universities.

A notation will be made on all AUN transcripts confirming that English is the official medium of communication and instruction for all courses taught at AUN.

Verification of Enrolment/Degree

On request, the Office of the Registrar can provide a letter verifying enrolment/degree completion at the University. When applying for scholarships and/or submitting employment applications, this verification certifies that the student is/was enrolled. A request for enrolment verification must be student initiated and made via e-mail to registrar@aun.edu.ng and it will take 5-10 business days to process.

A notation will be made on all verification confirming that English is the official medium of communication and instruction for all courses taught at AUN.

Academic Regulations

Academic Forgiveness

This policy is reserved for special circumstances where a student may require extra support that is beyond the current policies stated. Forgiveness may apply to any academic matter as it relates to the student. This may include course requirements, grade, grade point average, graduation, credits and others. A request for Academic Forgiveness must be made in writing to the person involved immediately after the event. The final Academic Forgiveness approval comes from the Provost.

Academic Integrity

The university is committed to academic honesty and integrity and has developed procedures to deal with instances of academic dishonesty. Students are responsible for the honest completion and representation of their work. Students are expected to act ethically in pursuit of higher learning and to avoid types of behaviors that impair effective assessment. Academic dishonesty is prohibited in all programs of the university.

Academic Misconduct Subject to Disciplinary Action

Academic misconduct is an act in which a student:

(a) Seeks to claim credit for the work or efforts of another without authorization or citation;

(b) Uses unauthorized materials or fabricated data in any academic exercise;

(c) Forges or falsifies academic documents or records;

(d) Intentionally impedes or damages the academic work of others;

(e) Engages in conduct aimed at making false representation of a student's academic performance; or

(f) Assists other students in any of these acts

Possible Disciplinary Sanctions

The following are the disciplinary sanctions that may be imposed by an instructor for academic misconduct:

(a) An oral or written notice of misconduct;

(b) An assignment to repeat the work, to be graded on its merits;

(c) A lower or failing grade on the particular assignment or test;

(d) A lower grade in the course;

(e) A failing grade in the course;

(f) A non-deletable failing grade in the course;

(g) Suspension from the University;

(h) Expulsion from the university.

Any class related infractions are initially managed by the instructor, however, the instructor may present the infraction to the Judiciary Affairs committee for review and impose consequences.

Admission to Classes

Students will not be admitted to classes unless they have registered and their name appears on the official class roster.

Auditing Courses

A student may audit a course with the permission of the instructor. Final approval from Academic Advising and the Dean must also be gained. Audit tuition/fees apply and registration is completed through the Office of the Registrar. Auditing is on a non-participating basis unless other arrangements are made between the instructor and the student. The audited course will not count towards degree requirements and a final grade of 'AU' will be assigned to the transcript.

Concentration

A Concentration is a list of specified courses within an area of disciplinary or interdisciplinary study, which is completed on an optional basis and is noted on the academic transcript. A Concentration provides students the opportunity to develop in-depth knowledge representing a sub-specialization or emphasis within the core discipline or major. A concentration includes a minimum of 12 semester hours and a maximum of 21 semester hours of specialized course work with no less than 50% of the concentration credits upper level credits. The requirements and the curriculum for a concentration are determined by the academic School offering the concentration.

*Concentrations must be pursued and completed concurrently with a degree program.

Course Add/Drop

Students enrolled in courses have the duration of the Add/Drop period to change course selections. The Add/Drop period will run for two weeks, 10 business days, after the Fall and Spring semesters begin. For the Summer Session, the Add/Drop period will run for 3-4 business days. No changes to registration can be made after the end of Add/Drop. Faculty reserves the rights to deny admittance to a course if that course has met more than twice.

Course Withdrawal

After the end of Add/Drop, students are able to withdraw from courses if they choose not to continue or if they are unable to continue (i.e. due to personal issues or if they are forced to leave AUN due to suspension or dismissal). If a student withdraws from a course they will be held financially liable for the course based on the withdrawal tuition refund schedule. **There will be no refund of housing or meal plans for students who withdraw from courses**.

If a student withdraws from a course during Week 2 through Week 6 of the Fall and Spring semesters (refer to the Academic Calendar for the Summer session) a final grade of 'W' will be input on the student's academic record. After the sixth week of class the student will earn a 'WP' (Withdrawal Pass) or 'WF' (Withdrawal Fail) based on their academic performance in the course, as determined by the faculty member teaching the course. Withdrawals are not accepted after the last day of classes. A 'WP' is not accepted during the last two weeks of the Fall and Spring semesters or the last week of the Summer session.

In order to withdraw from courses, students must notify Academic Advising and their professor of their intent to withdraw from the course by completing a Course Withdrawal Form.
Note: the student's discontinuing attendance in class and/or notifying an instructor of a status change does not constitute an official action.

Declaration/Change of Major
Students are strongly encouraged to consult with Academic Advising prior to making changes to their academic record. A Declaration of Major and Change Major forms are available in the Office of the Registrar. Students may also declare Minors through the Office of the Registrar.

Double Counting for School of Engineering
Double Counting refers to instances when a course taken to fulfill one requirement counts simultaneously toward a major, minor, concentration or a prerequisite. (Anywhere in the catalog indicated ''GENED/CORE'' is for double counting).

Enrollment/Course Registration
Enrolled students receive registration information/instructions via their AUN e-mail accounts each semester. Students who fail to register for courses during Registration or Late Registration (the first week of classes) will not be eligible to take courses during that semester. New students enroll in courses during Orientation (an event held prior to the first day of the classes in the fall and spring semesters). All students are mandated to meet with Academic Advising prior to registration.
Note: Course prerequisites and/or Class Restrictions are strictly enforced.

Enrolment/Early Registration & Registration

Students enroll in courses and, where applicable, the connected sections during the registration period prior to the beginning of classes each semester or during early registration. The early registration period is provided in the second half of each semester (or after the midterm) for enrolled students to select courses for the next semester. Upon resumption, students enrolling for the first time register for courses during an orientation period. This takes place before classes begin, and; previously enrolled students may make changes to their schedules at this time. At the American University of Nigeria, a course is an individual subject a student enrolls in; and it may be offered in multiple sections, and at different times during the week.

Examinations

The semester does not officially end until the last examinations are completed. Final examinations must be taken as scheduled by the Office of the Registrar.

Grades

Grades (midterm and final) are assigned based upon the student's performance in courses. Students are required to check their official grades and academic standing via the University Self-Service Portal, after release by the Office of the Registrar.

Grading System

At the end of each semester, faculty assign letter grades based upon the student's performance in courses. The grades listed below are calculated in the grade point average. Grades assigned at AUN equate the following performance levels:

Grades

A	(95-100%)
A-	(90-94%)

B+ (87-89%)
B (84-86%)
B- (80-83%)
C+ (75-79%)
C (70-74%)
D (60-69%)
F (0-59%)

A- to A Truly outstanding work that demonstrates an excellent command of the subject.

B- to B+ Work that represents a good command of the subject and is beyond usual expectations for the course.

C to C+ Work that represents a command of the subject and meets expectations. C is the minimum pass level for all Major and Minor courses (including concentrations). C is also the minimum pass level for WRI 101 and WRI 102.

D Work considered at a minimal passing level, but demonstrates significant gaps in knowledge and falls short of expectations.

F Work that demonstrates substantial shortcomings in knowledge and/or is insufficient in quality to warrant awarding credit for the course.

F* Judicial Sanction

WF (Withdrawal Fail) At the time of withdrawal, the student had failing grade. A student must obtain a Course Withdrawal Form. If the approval is granted, the transcript will indicate that the student withdrew with a failing grade (WF). Withdrawals are not accepted after the last day of classes for each semester.

Grading Scale (4.0):

The following are the grading scales used in AUN's 4-point grading system

A	4.0	A-	3.7	B+	3.3 B	3.0
B-	2.7	C+	2.3			
C	2.0	D	1.0	F	0.0	
F*	0.0	WF	0.0 (F)			

The grade point average (GPA) is determined by dividing the total grade points by the total number of course credits for which the student has been enrolled.

The GPA includes only those courses taken for conventional grades (A-F) and WF. Final grades that will not be calculated into the student GPA are as follows:

AU Audit - Students may audit courses with the approval of the Chair, advisor and Dean. Permission from the instructor must also be gained. Audit tuition/fees apply and registration is completed through the Office of the Registrar. Auditing is on a non-participating basis unless other arrangements are made between the instructor and student.

AW Administrative Withdrawal - Course and/or semester withdrawal for documented Medical or Judicial (i.e. Suspension, University Dismissal) reasons.

IP In Progress - Current course work, final grade pending/ to be assigned.

I Incomplete - given to a student who, due to extenuating circumstances (i.e. confirmed illness, death of family member), is unable to complete the course requirements. The student has six weeks into the subsequent semester (includes the Summer session) to complete the course work. If the work is not completed within the six weeks and a final grade (A-F) is not submitted to the Office of the Registrar by the instructor, the incomplete grade is dropped and the grade of 'F' is automatically assigned.

TR Transfer - Approved transfer credit. Transfer credits accepted from other institutions are included in the total number of credits applicable to degree requirements, but grades earned

in these courses are not used when computing the GPA (see the 'Transfer of Credit' section for more information).

W Withdrawal - students may withdraw from a course without GPA penalty, during Weeks 2 through 6, of the Fall and Spring semesters. A student must obtain a Course Withdrawal Form. If approved, a final grade of 'W' will be assigned to the transcript.

WP Withdrawal Pass - students may withdraw from a course without GPA penalty, after Week 6, but before the last two weeks, of the Fall and Spring semesters. A student must obtain a Course Withdrawal Form. If the approval is granted, the transcript will indicate that the student withdrew with a passing grade (WP).

Any grade below C is not accepted for major or minor credit. Any grade below D does not satisfy general education requirements – exception WRI 101 and WRI 102. Students will be required to retake any course if the grade earned does not satisfy the requirement. Students are required to take courses for a letter grade (A-F) in order to earn credit towards degree requirements.

Regarding Pass and Fail (P/F) grades, a grade of P indicates a quality of performance no less than C (2.00) on the grading scale outlined above. Performance below this level is reported as 'F'. If the course is remedial, grades of 'P' and 'F' are not included in the credit hours required for graduation and the student's GPA is not affected positively or negatively. However, if the course is taken for credit the grade of 'F' will negatively impact the students GPA.

Change of Final Grade

Once reported, a final grade cannot be changed except to remove a grade of '**I'** (Incomplete) or to correct a grade recorded in error. To remove a final grade recorded incorrectly, the faculty member must complete a Change of Grade form indicating that an error was made; the request must include supporting documentation. The form requires the signature/approval of the Dean.

Grade Appeal

Recognizing, however, that the evaluation of student performance is based upon the professional judgment of instructors, and notwithstanding the exceptions noted at the end of this policy, appeals will not be considered unless based upon one or more of the following factors:

- An error was made in grade computation.
- Standards different from the documented departmental, school, or university policies were used in assigning the grade.
- In determining the grade, it is evident that the instructor departed substantially from his or her previously articulated, written standards, without notifying the affected student(s).

If a student feels that s/he has been assigned an inaccurate grade due to any or a combination of the factors stated above, the student should first approach the course instructor in writing within 30 calendar days immediately after the final grade has been published, with a request to review the grade.

The instructor has two weeks to review the request and provide a written decision to the student with express reasons justifying the grade or acknowledging the mistake. If the instructor detects an error, s/he should submit a duly completed and signed Change of Grade form to the Office of the Registrar. If the student has a concern after the instructor has reviewed the grade calculation, the student may appeal further to the chair of the department as it relates to the program. The appeal to the chair must be in writing and initiated within 10 working days of the instructor's feedback based on the student's grievance.

The department chair will review the case and reach a determination in consultation with the student and the instructor within two weeks. After this process is completed, the only grounds for further appeal would be that the appeal process was not conducted as described above. That appeal should be directed to the dean of the school that offers the course. An appeal to the Academic Review Committee must be made via e-mail with supporting documentation attached by the parties involved.

Individual graded assignments that contribute to a final course grade are not subject to appeal unless it can be established that the grade for the individual assignment was given for one of the three impermissible reasons cited above, and resulted in an unfair final grade.

Finality of Appeal

There shall be no further appeal from the decision of the grade appeal committee except for procedural errors. No appeals from these decisions are allowable to the president or to the Board of Directors.

Repeating a Course

Students have the option to repeat courses to improve their academic performances. No student with a D or an F grade in any major/minor credit bearing course is permitted to repeat the course more than thrice . If the student is unsuccessful after the third attempt, the student will no longer be able to pursue the same degree at AUN. A student who wishes to repeat a course with a passing grade may do so but may only do the same course a total of three times.

Grade Replacement

AUN students have the option to repeat courses to try to improve their academic performance. If the student successfully repeats the exact course, this grade, whether it is a higher grade or not, replaces the original grade in the calculation of the student's GPA. The original grade remains on the transcript, as well as the recent grade; only the most recent grade is used in grade point calculations. The student earns the credit hours for the course only once upon passing the course. The repeated course counts in the student's load for the semester in which it is taken.

If a course is repeated, each attempt, including the final grade, is entered separately on the permanent academic record. Unless specifically indicated otherwise, only one successful attempt of a course is counted toward fulfillment of graduation credit requirements.

Incomplete Grade

The grade of Incomplete may be given to a student who, due to extenuating circumstances (i.e. documented and confirmed illness, death of family member), is unable to complete the course

requirements. An '**I**' may be given only if the student is receiving a passing grade at the time the request is made. Arrangements for an incomplete must be made prior to the end of the course and the incomplete form must be filled out by the faculty member in its entirety and submitted to the Office of the Registrar prior to the last day of classes for the semester. The incomplete form requires a full explanation of the remaining coursework and the submission deadlines. If a student receives an 'I', s/he has six weeks into the subsequent semester (includes the Summer session) to complete the course work. If the work is not completed within the six weeks and a final grade is not submitted to the Office of the Registrar by the instructor, the incomplete grade is dropped and the grade of 'F' is automatically assigned. No grade of 'I' will be recognized by the Office of the Registrar without proper documentation. A 'W' (withdrawal) may not be given to remove a grade of 'I'. An 'I' may not stand as a permanent grade.

Course Substitution

Program chairs may suggest course substitutions in a student's Program of Study based on the student's previous academic records and experiences. Substitute courses should have similar content to those specified in the degree requirements. In some instances, more advanced content could be substituted. Substitutions do not reduce the number of credits required for the degree and must be recorded on the student's Program of Study.

Students may fulfill certain requirements with courses outside the curriculum listings. This provides limited flexibility when required courses are unavailable, or when new "special topics" courses are created by other departments and are relevant to the intentions of the requirement. In all cases, proposed substitutions excluding General Education courses must be approved by the Chair and DEAN.

Students may apply for one course substitution within their Major program all course substitution application for major requirements must initially be reviewed by the Academic Advisor.

Waiving Requirements

Waiving requirements is defined as satisfying degree or program requirements by means other than those specified in the Academic Catalog. Current AUN student may petition to be waived from course requirements based on previous coursework. Course(s) waived does not reduce the number of credits

required to graduate. Student must complete a Request for Course Waiver Form and provide requesting documents with the form to the office of Registrar. Student may be asked to demonstrate their proficiency in the course(s) to be waived. The decision to grant a waiver is at the discretion of the school's Chair and Dean.

Deferral/Leave of Absence

Undergraduate students who must interrupt their studies for any reason must submit a request for deferral/leave of absence prior to their departure from campus to the office of the Registrar. Submitting a deferral/Leave of Absence' form (with the required signatures) ensures that students will be able to return to AUN without reapplying for readmission. Students are able to take a leave or defer for one or two regular semesters (Fall and Spring) of deferral/leave before resuming their studies. If a student is unable to return after two consecutive semesters of leave, including the Summer Session, the student will be removed from enrolment (in-active) at AUN and will be required to reapply to resume studies. The leave becomes void if the student attends any domestic or foreign collegiate institutions during the period of leave without prior written approval from the Registrar. In such instances, students must complete a 'Permit to Study' form prior to study abroad in order to transfer credits to AUN (See the 'Permit to Study' section for more information).

Medical Withdrawal Policy

When a student discontinues attending courses due to medical reasons, in certain cases, it may be possible for that student to receive a pro-rated refund of tuition. If a student is hospitalized due to an emergency (which renders him/her unable to withdraw from courses) the Registrar can process an approved retroactive Medical Withdrawal based on the last date that the student attended class. In order to receive this pro-rated refund of tuition, the student must submit a Course Withdrawal form to the Office of the Registrar with evidence of his/her hospitalization (to be verified by the AUN Director of Health and Wellness). The form will indicate the student's last date of attendance by each instructor. If the petition is approved and provided that the retroactive withdrawal falls within the tuition cancellation period (based on the administrative withdrawal chart – see the Tuition and Fees section), the student's account will be credited with their tuition refund (housing and meal plans are not refundable). All medical withdrawal petitions will be reviewed by Academic Advising, the Registrar, AUN Clinic and the Dean of Students. If approved, a final grade of AW will be assigned to the transcript.

Readmission to AUN

A student whose studies at the University are interrupted for any reason for a period of two or more semesters (excluding the Summer session) or a student who Withdrew from the University is required to submit a formal application for readmission, with a reapplication fee to the Office of the Registrar (registrar@aun.edu.ng). All prior balances must be cleared for a readmission application to be considered. The application and supporting documentation for readmission must be received at least one month before classes resume in the semester that the student wishes to attend. The only exception to the readmission policy is when written authorization is given for a leave of absence or to study at another collegiate institution. This authorization must be obtained prior to the interruption of study.

A student who is readmitted is subject to the academic requirements and regulations in effect at the time of readmission.

Payment of Fees

Students must attend the section of the course for which they are registered. No instructor may authorize a student to shift from one section of the course to another without following official Add/Drop procedures. Students are responsible for registering on time and for the correct courses. Students may not attend classes they are not enrolled in and will not receive credit for these courses. Students may not register or add courses retroactively. Students will receive the "F" grade if they stop attending classes without officially dropping the course.

Late Course Registration

A period of Late Registration occurs at the beginning of each semester. Students who unavoidably arrive late to campus and/or are physically unable to participate during the regular registration period may register during the first week of classes, on a space-available basis. After five complete days of classes (refer to the Academic Calendar for the Summer session), students will no longer be able to register for courses and must wait until the following semester. A late registration fee of 30,000 Naira may be applied when students miss the regular registration period and seek to enroll during Late Registration - the first week of classes.

Academic Performance and Standing

Academic Integrity Code

The central commitment of AUN is to develop thoughtful and responsible human beings with the highest moral and ethical standards, within the context of a very diverse yet collaborative academic environment. This commitment is founded on the following core values of the University:

- Tolerance and understanding among national, ethnic, and religious groups;
- Freedom of Expression; and
- Non-discrimination in the admission and employment processes with regard to gender, age, religion, nationality, ethnicity, physical ability, political affiliation, or personal relationships.

Excellence and Integrity Are The Core Principles That Guide Us

This Academic Integrity Code is designed to benefit and assist the AUN community in forming the highest standards of ethics and morals among its members. It is designed to foster the University's commitment to excellence and equality, while affirming the shared values that make community life possible. Students with alleged violations of the Academic Integrity Code should contact the Office of the Dean of their respective program to receive further information on disciplinary procedures (See Appendix B for the full text of The Academic Integrity Code).

Academic Performance Policy

A student who fails to maintain the academic average required by the university and/or fails to make satisfactory academic progress towards completion of degree requirements is subject to probation, suspension and/or dismissal. All students of the American University of Nigeria are required to meet baseline academic standards in order to continue with their studies. The minimum satisfactory standard of achievement is a cumulative grade point average (CPGA) of 2.0.

Continued Enrolment

Continued enrolment at AUN depends upon an undergraduate student's ability to maintain satisfactory academic progress towards attaining a degree. The university measures this ability by the

student's cumulative grade point average. To assist students in maintaining satisfactory progress, AUN has adopted academic standards designed to provide early identification of students who are experiencing academic difficulty and to provide timely intervention through academic support programs.

Regulations regarding academic probation, restriction, suspension, and dismissal are designed to provide close supervision of the academic progress of AUN students. At the end of each semester, student records will be reviewed and sanctions will be imposed. A change in students' academic status can occur following any semester when the student's cumulative GPA falls below 2.0. Students under academic sanction are subject to restrictions with respect to academic course load as determined by the Director of Academic Advising and Retention.

Each student's transcript will be evaluated at the end of each academic semester. Students liable for academic sanction will receive written notification and the notice will stipulate the terms of the sanction. Parents/Guardians of students, who have signed the consent form, will also be notified of the actions imposed on their child/ward. The following are academic designations that can be imposed:

Good Standing

Undergraduate students who maintain a cumulative grade point (CGPA) average of at least 2.0 are considered to be in academic good standing and are eligible for continued enrolment at AUN.

Student Code of Conduct

Preamble

The central commitment of the American University of Nigeria (AUN) is to develop thoughtful and responsible human beings with the highest moral and ethical standards, within the context of a very diverse yet collaborative academic environment. This commitment is founded on the following core values of the University: Tolerance and understanding among national, ethnic, and religious groups; Freedom of Expression; Non-discrimination in the admission and employment processes with regard

to gender, age, religion, nationality, ethnicity, physical ability, political affiliation, or personal relationships. Excellence and integrity are the core principles that guide us.

This Student Code of Conduct is designed to benefit and assist the AUN community in forming the highest standards of ethics and morals among its students population and it is not in any way designed to either conform or conflict with any civil or criminal justice system of Nigeria. It is designed to foster the University's commitment to excellence and equity, while affirming the shared values that make community life possible. Students with alleged violations of the Student Conduct Code should contact the Office of judicial affairs to receive further information on disciplinary procedures.

I. Authority for Student Discipline

Ultimate authority for all University policies is vested in the Board of Trustees of the American University of Nigeria. Nonacademic disciplinary authority has been delegated by the President to the Dean of Students to implement student conduct policies and take all necessary and appropriate action(s) to protect the safety and well-being of all members of the American University of Nigeria community.

In practice, the resolution of nonacademic disciplinary cases may involve an array of the University administrators, committees of students, staff, and faculty. Such resolutions or decisions are forwarded to the Dean of Students as recommendations. Students are expected to assume positions of responsibility in the University judicial system in order to contribute their skills and insights to the resolution of disciplinary cases. The University reserves the right to amend this Student Conduct Code at any time according to the established procedures.

II. Responsibilities and Rights

Every student has a duty to read, understand and abide by the rules and regulations of the University. Ignorance of a rule or regulation will not be an acceptable defense. Students accused of disciplinary violations are entitled to the following procedural protections:

1. To be informed of the charges against them;

2. To request an informal resolution of the case;
3. To be allowed reasonable time to prepare a defense;
4. To hear and respond to evidence upon which a charge is based;
5. To call relevant witnesses and question the witnesses who testify in Code violation proceedings;
6. To be assured of confidentiality according to the terms of the University policy on confidentiality;
7. To request that any person conducting a disciplinary conference, or serving as a Conduct Council member or Hearing Administrator, be disqualified on the grounds of personal bias;
8. To be provided with an opportunity to review these rights before any disciplinary conference or hearing;
9. To be considered not responsible for the charges until found responsible by a preponderance of evidence; and
10. To have reasonable access to the case file prior to and during the disciplinary conference or hearing.

III. Jurisdiction

The Student Code of Conduct is the University's policy for nonacademic conduct offenses and applies to all students, student groups, and student organizations at AUN. The University retains jurisdiction over alleged infractions that occur during a student's matriculation or attendance at the University, including Fall, Spring, and Summer breaks and periods of leave of absence from the University. Therefore, a hearing may be scheduled after a student has completed a program, withdrawn, or graduated from the University.

Generally, the University will take disciplinary action for on-campus infractions of the Code. However, the University may take disciplinary action for off-campus infractions of the Code, when a student's behavior threatens or endangers the safety and well-being of the University community; when a student is the subject of a violation of local, state, or federal law; or when, in the judgment of the University officials, a student's alleged misconduct has a negative effect on the University's pursuit of its mission or on the well-being of the greater community.

IV. Violations of Laws and Regulations of the University

Students may be accountable both to civil authorities and to the University for acts that constitute violations of law and of this Code. The University reserves the right to initiate disciplinary proceedings where the conduct of the student is unbecoming of a fit and proper person worthy of the University's degree recommendation.

V. Definitions

A. *"Aggravated violation''* — a violation that resulted, or could have resulted, in significant damage to persons or property or which otherwise posed a substantial threat to the stability and continuance of normal University, or University-sponsored, activities.

B. *"Consent''* — words, or acts of conduct, indicating a freely given agreement to have sexual intercourse or to participate in sexual activities. Sexual contact will be considered ‑without consent, if no clear consent, verbal or nonverbal, is given; if inflicted through force, threat of force, or coercion; or if inflicted upon a person who is unconscious or who otherwise reasonably appears to be without the mental or physical capacity to consent.

C. *"Disciplinary Conference''* — a forum in which a hearing officer meets with a student to adjudicate an alleged violation of the Code.

D. *"Disciplinary Hearing''* — a forum in which a panel of the Conduct Council meets with a student to adjudicate an alleged violation of the Code.

E. *"Disorderly''* — conduct which a reasonable person under similar circumstances should be expected to know would disturb the peace.

F. *"Group''* — persons who are associated with each other, but who have not complied with University requirements for recognition as an organization.

G. *"Harassment''* — a form of discrimination consisting of physical or verbal behavior that:

(i) is directed at an individual because of the individual's age, ancestry, color, disability or handicap, national origin, race, religious creed, sex, sexual orientation, gender identity or other status; and

(ii) is sufficiently severe or pervasive so as to substantially interfere with the individual's employment, education or access to University programs, activities and opportunities.

H. ''*Hearing Administrator''* – a staff member who conducts disciplinary hearings as set Fourth in section XV of this Code.

I. *"Hearing Officer''* — a staff member who conducts disciplinary conferences as set Fourth in Sections XIV of this Code.

J. *"Jurisdiction''* – the ability to hear and decide a case.

K. *"Institution"* and *"University''* — American University of Nigeria and all of its undergraduate and graduate departments and programs.

L. *"Organization''* — an association of persons that has met University requirements for formal recognition.

M. *"Preponderance of evidence''* — a measure of proof that a reasonable person would accept as more likely than not that a fact is true or an incident occurred.

N. *"Sexual violence''* — any act of sexual intercourse or sexual penetration of any orifice of the body with a body part or other object that takes place against a person's will or without consent or that is accompanied by coercion or the threat of bodily harm. [Also see –consent].

O. *"Reckless''* — conduct which a reasonable person under similar circumstances should be expected to know would create a substantial risk of harm to person(s) or property or which would otherwise be likely to result in interference with normal University or University sponsored activities.

P. *"Relevant''* — related to the charges at hand. Relevant information may be excluded by a hearing officer or administrator during a disciplinary conference or hearing if it is unfairly prejudicial.

Q. *"Sexual harassment''* — unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature when: submission to such conduct is made explicitly or implicitly a term or condition of a person's employment or academic advancement; submission to or rejection of such conduct by a person is used as the basis for employment decisions or academic decisions affecting such a person; or such conduct has the purpose or effect of unreasonably interfering with a person's work or academic performance or creating an intimidating, hostile, or offensive working or academic environment. [Also see Sexual Discrimination and Harassment Policy]

R. *"Stalking''* — repeated and unwanted contact directed at any person, including contact by electronic means or by proxy, or the credible threat of repeated contact with the intent to place a reasonable person in fear for his or her safety or the safety of his or her family or close acquaintances.

S. *"University Premises''* — buildings and grounds owned, leased, operated, controlled, or supervised by the University.

T. ''*University Sponsored Activity*'' — any activity, on or off University premises, that is specifically initiated or supervised by the University.

U. *"Weapon''* — firearms, fireworks, explosives, metal knuckles, knives, or any other instrument designed, used or intended to be used to inflict injury to person or property.
V. *"No Contest''* - where the respondent neither admits nor disputes charges. Serving as an alternative to pleading guilty or not guilty.

VI. Prohibited Conduct

This Code is not written with the specificity of a criminal statute, nor is it intended to cover every instance of potentially prohibited conduct. American University of Nigeria expects its students,

wherever they are, to adhere to high standards of honor and good citizenship and to conduct themselves in a responsible manner that brings credit to themselves and the University.

Attempting to commit; aiding, abetting or inciting others to engage in any prohibited conduct is punishable under this Code and may be considered as serious as engaging in the violation itself. Retaliating against anyone who reports an alleged violation of the Code, a witness or participant in any Code proceeding or investigation is also prohibited.

The following misconduct is subject to disciplinary action:

A. Physical Abuse/Endangerment of a Person: Includes but is not limited to physical assault causing bodily injury or harm, conduct which threatens or endangers the health or safety of any person(s), facilitating or participating in any mental or physical activity that creates a reasonable apprehension of harm.

B. Sexual Misconduct: Prostitution, engaging in lewd or indecent conduct and all forms of nonconsensual sexual activity including sexual violence; and sexual abuse such as unwanted sexual touching or fondling.

C. Harassment or Stalking: See Definitions' section above.

D. Weapons: Using, possessing, distributing or manufacturing a material or device offensive or likely to be used to cause injury to another. No person shall possess, use or carry any weapon, ammunition or explosive unless specifically authorized by the University.

E. Safety Hazards: Unless explicitly authorized by the University any possession, use, carrying, manufacturing and/or distribution of fireworks on University property is forbidden. Tampering/interfering with fire or other safety equipment or setting unauthorized fires is also prohibited.

F. Property Offences: Stealing of property or services; knowingly possessing stolen property; willful or reckless destruction or defacement of property of the University or members of the University community;

G. Unauthorized Entry or Use: Entry, attempt to enter, or remaining without authority or permission in any University office, residence hall room, University sponsored event, or University premises; unauthorized use/abuse of University computer equipment, networks, systems, services, corporate name, logo, or symbols.

H. Alcohol/Drugs/Substance Abuse: Violation of University policies pertaining to substance abuse, use, possession, manufacturing, sale or distribution of any controlled substance, alcohol, illegal drug and/or illegal drug paraphernalia. It is also a violation for a student to be in the presence of any person(s) engaging in substance abuse, use of illegal drugs or alcohol on University premises contrary to established policies.

I. Providing False Information: Knowingly providing false statements about a Code violation or during a University investigation/proceeding; intentionally providing or causing to be initiated any false report, warning, or threat of fire, explosion, or other emergency.

J. Fraud/Forgery: In University matters not covered by the Academic Integrity Code – dishonesty; misrepresentation; fraud; forgery; or knowingly using false information, documents, or instruments of identification. This includes but is not limited to falsifying residence hall contracts, stealing another's identity, forging a permit and misuse of official forms and meal tickets.

K. Disrupting University Activities: Intentionally or recklessly interfering with normal University or University sponsored activities, including but not limited to studying, teaching (including class sessions or office hours), research, University administration; or fire, police, or emergency services.

L. Unruly Conduct: Disorderly conduct including participating in a riot or interfering with the rights of others.

M. Failure to Comply: Willfully failing to comply with the directions of University officials, including public safety personnel or housing staff members who act in performance of their duties; violating the terms of any disciplinary sanction imposed in accordance with this Code.

N. Violations of University Regulations: Violation of other published nonacademic University regulations or policies including but not limited to gambling or gaming unbecoming of a University student; policies related to discrimination and discriminatory harassment, computer use, the residence halls, hazing, bullying, unauthorized use of vehicles, littering, and amplification of sound.

O. Violations of Law: Violation of local, state, or federal law that substantially affects the University's mission or interest.

VII. Standards of Classroom Behavior

Primary responsibility for managing the classroom environment rests with the faculty. Students who engage in any prohibited or unlawful acts that result in disruption of a class may be directed by the faculty member to leave the class for the remainder of the class period. Longer suspensions from class or dismissal on disciplinary grounds for prohibited conduct under section VI of this Code may include interim suspension, as set Fourth in Section IX. All other violations under section VI of this Code must be preceded by a disciplinary conference or hearing, as set Fourth in Sections XIV and XV of this Code.

Academic dishonesty allegations are processed in accordance with procedures set Fourth in the Academic Integrity Code. Students could be subject to both the Student Code of Conduct and the Academic Integrity Code in cases where there is a combination of alleged violations of academic and nonacademic regulations. Where there is any conflicts whether procedurally or otherwise, the Director of Judicial Affairs will put up a recommendation to both the DSA and Academic VP or those in charge.

VIII. Student Groups and Organizations

Student groups and organizations may be charged with violations of this Code, as described below:

A. A student group or organization and its officers or members may be held collectively and individually responsible when violations of this Code by those associated with the group or organization have received the consent or encouragement of the group or organization or of the group‘s or organization‘s leaders or officers.

B. The officers or leaders or any identifiable spokesperson for a student group or organization may be ordered by the Dean of Students to take appropriate action designed to prevent or end violations of this Code by the group or organization. Failure to make reasonable efforts to comply with the Dean‘s order shall be considered a violation of this Code, both by the officers, leaders, or spokespersons for the group or organization and by the group or organization itself.

C. Sanctions for group or organization misconduct may include revocation or denial of registration or recognition, as well as other appropriate sanctions.

D. Student organizations, may appoint panels or boards to mediate disputes and enforce association bylaws. Decisions or recommendations by such panels or boards do not constitute official action by the University.

IX. Interim Suspension

The Dean of Students or his/her designee may suspend a student from the University for an interim period, pending disciplinary or criminal proceedings or a proceeding investigation or medical evaluation regarding the behavior relevant to such proceedings. The interim suspension will be effective immediately without prior notice whenever there is evidence that continued presence of the student at the University poses a substantial and immediate threat to him or herself, to others, or to the stability and continuance of normal University functions. Interim suspension excludes students from University premises and other privileges or activities. A student suspended on an interim basis could be given a prompt opportunity to appear personally before the Dean of Students or designee in order to discuss the following issues only:

(a) the reliability of the information concerning the student's conduct, including the matter of identity;

(b) whether the conduct and surrounding circumstances reasonably indicate that the continued presence of the student on University premises poses a substantial and immediate threat to him or herself, to others, or to the stability and continuance of normal University functions.

X. Conduct Council

The Conduct Council will consist of students, faculty, and staff: students to be chosen by the Student Government Association; faculty to be chosen by the Faculty Senate or academic VP/Provost, and staff to be chosen by the Residence Hall Association or staff council. In addition, students, faculty, and staff may apply to become members of the Conduct Council by contacting their respective constituent units. The Dean of Students or his/her designee is responsible for training and providing administrative support to the Council. Among other duties, members of the Conduct Council will sit on hearing panels designed to resolve allegations referred for a hearing in accordance with Section XV of this Code.

A. The Conduct Council shall comprise of five (5) persons: one (1) student, two (2) faculty members, and two (2) staff members.

B. At the request of the Dean of Students or his/her designee, an *ad hoc* hearing panel of the Conduct Council may be established (selected from the existing Conduct Council or *bona fide* members of the AUN community) whenever a five-person hearing panel cannot be constituted, or is otherwise unable to hear a case. An *ad hoc* Conduct Council hearing panel may be composed of a minimum of three persons: one (1) faculty member, one (1) student member, and one (1) staff member of the Conduct Council (or bona fide members of the AUN community.)

C. The Conduct Council, or its *ad hoc* equivalent, shall have the power to render a decision by a simple majority, and the Chair or the Hearing Administrator, following reasonable deliberations, shall, on behalf of the panel, pronounce appropriate sanctions (sentence) as prescribed, or set Fourth in the

—Offences and Sanctions Guidelines in certain circumstance, the Director of Judicial affairs or designee shall break a tie where such exist.

D. Members of the Conduct Council who are charged with any violation of this Code, other University policies, or a criminal offense may be temporarily suspended from their positions by the Dean of Students while charges against them are pending. Members found responsible for any such violation or offense may be disqualified from any further participation in the University discipline system. Additional grounds and procedures for removal may be established by the Dean of Students.

XI. Advisors

At their own discretion, complainants and respondents may be advised by an AUN student, faculty, or staff member. The role of advisors is limited to consultation. While advisors may be present at disciplinary conferences or hearings, they may not address hearing bodies, speak in disciplinary proceedings, or question witnesses. Because the purpose of this disciplinary process is to provide a fair review of alleged violations of this Code rather than a formal legal proceeding, participation of persons acting as legal counsel is not permitted

XII. Standards of Due Process

Students who may be subject to dismissal, suspension, or removal from the University housing will be referred to the Director of Judicial Affairs and will be responsible for their off-campus necessitates including ticket back home. The Director, in consultation with the Dean of Students, may determine the case at first instance or refer it to a disciplinary hearing, as specified in Section XV of this Code. Students who may be subject to lesser sanctions for nonacademic misconduct will be referred to a disciplinary conference, as set Fourth in Section XIV of this Code. Formal rules of evidence will not be applied, nor will deviations from prescribed procedures necessarily invalidate a decision, unless significant prejudice to a student respondent or the University may result.

XIII. Procedures for Case Resolution

A. Mediation is encouraged as an alternative means to resolve some disciplinary cases. The Dean of Students will determine if mediation is appropriate. The Dean, at his or her discretion, may decline

to process a complaint until the parties in a nonacademic misconduct case make a reasonable attempt to achieve a mediated settlement. To be binding in a disciplinary case, any mediated settlement must be approved by the Dean of Students. If mediation fails, the case will be forwarded for a disciplinary conference.

B. Any AUN student, faculty, or staff member may refer a student, student group, or organization suspected of violating this Code to the Director of Judicial Affairs. Those referring cases are normally expected to serve as the complainant and to present relevant evidence in hearings or disciplinary conferences. The complainant may request the assistance of an advisor, as set Fourth in Section XI of this Code. A written complaint must be filed with the Director of Judicial Affairs within 15 days (excluding weekends, official University holidays, Fall and Spring breaks) of the occurrence or discovery of the alleged infraction(s). Complainants filing cases after the 15- day filing period may request in writing an extension of the filing period from the Director of Judicial Affairs. Requests for waivers of the filing period may be made up to one major semester (Fall or Spring) after the date of discovery of the alleged incident. In such cases, the Director will evaluate whether a reasonable person might be justified in filing after the 15-day period due to the nature of the charges alleged. The deadline for filing a case will also be extended if there is an alleged violation of the University's discrimination and discriminatory harassment policy, sexual discrimination and harassment policy, whistleblower policy, or a Conduct Code violation involving rape, sexual assault, or stalking. In such cases, the complainant will have one semester from the date of discovery within which to file a complaint as set Fourth in this Student Code of Conduct.

C. The Director of Judicial Affairs will conduct a preliminary review to determine whether the alleged misconduct, if proved, might result in dismissal, suspension, or removal from University housing. Students, who may be subject to removal from University housing, suspension, or dismissal, will have their case determined by the Director of Judicial Affairs who will then make recommendation to the Dean of Students, unless the Director refers the case to a Conduct Council panel. Students who are unlikely to be subject to removal from University housing, suspension, or dismissal will be referred to a disciplinary conference or a disciplinary hearing with a hearing officer (either the Director of Judicial Affairs or his/her designee), as set Fourth in Section XIV of this Code.

D. Students referred for a disciplinary hearing by the Director of Judicial Affairs may elect to have their cases resolved in a disciplinary conference in accordance with Section XIV of this Code. Such an election must be in writing, affirming that the student is aware a hearing is being waived. The full range of sanctions may be imposed, including removal from the University housing, suspension, or dismissal from the University. Both the findings and the sanctions determined by the hearing officer will be regarded as recommendations to the President or his/her designee in the case of removal from University housing, suspension, or dismissal.

E. Hearing panel members, complainants, and respondents will have the right to question relevant witnesses who testify at disciplinary hearings.

F. The University may withhold awarding a diploma or degree otherwise earned until the completion of the process as set Fourth in this Code, including the completion of all sanctions imposed, if any. Withholding of a diploma or degree means the withholding of a diploma or degree otherwise earned for a defined period of time or until the completion of assigned sanctions.

XIV. Procedures for Disciplinary Conferences (Minor offences)

Students accused of nonacademic offenses that will likely result in penalties less than removal from the University housing, suspension, or dismissal could be subject to a disciplinary conference with a hearing officer. The Director of Judicial Affairs or designee will serve as the hearing officer and conduct the disciplinary conference. Any party may challenge a hearing officer on the ground of personal bias. The hearing officer may be disqualified by the Dean of Students.

The hearing officer will make inquiries into evidence if necessary to ensure a just outcome of the case. Respondents who fail to appear after proper notice will be deemed to have pled no contest to the charges pending against them. Nonetheless, the complainant will be required to file a case that meets the standard of a preponderance of evidence.

In complex cases, the Director of Judicial Affairs, at his or her discretion, may refer the case to a disciplinary conference board. Such Conference board members, as opposed to the Conduct Council,

will be selected by the Dean of Students. The board will consist of one hearing officer and two Conduct Council members, including at least one student.

Decisions of the disciplinary conference board are determined by majority vote and are final. The Dean of Students will review all disciplinary conference decisions to ensure their procedural integrity and consistency with the outcomes of prior disciplinary cases. In cases of minor violations where the Dean of Students serves as the hearing officer, the President or his/her designee will conduct the review.

The following procedural protections are provided to respondents in disciplinary conferences:

A. written notice of the specific charges at least three business days prior to the scheduled conference with additional time at the discretion of the Director of Judicial Affairs;

B. reasonable access to the case file prior to and during the conference;

C. an opportunity to respond to the evidence;

D. a right to be accompanied by an advisor, as provided in Section XI of this Code

XV. Procedures for Disciplinary Hearings (Major offences)

The Director of Judicial Affairs will consult the Dean of Students before deciding any disciplinary hearing case or referring such case to a Conduct Council panel. In cases before the Conduct Council:
A. The Dean of Students or designee may participate in hearing panel deliberations and discussions of the Conduct Council but cannot vote. The Council Chair is responsible for final decisions on all procedural issues and may modify hearing procedures, if necessary, to ensure a fair and expedient administration of the hearing.

B. The Director of Judicial Affairs shall serve respondents notice of the hearing date and the specific charges against them at least five business days in advance of the hearing. Respondents will be

accorded reasonable access to the case file, which will be retained in the office of the Director of Judicial Affairs.

C. Respondents who fail to appear after proper notice will be deemed to have pled no contest to the charges pending against them. Nonetheless, the complainant will be required to present a case that meets the standard of a preponderance of evidence.

D. All hearings are closed to the public. The Director of Judicial may allow certain required persons to attend a hearing.

E. The hearing administrator will exercise control over the proceedings to avoid needless consumption of time and to achieve orderly completion of the hearing. Any person -including the respondent- who disrupts a hearing may be excluded by the hearing administrator.

F. The University will make audio recordings of hearings. A transcript of the hearing will be provided, upon written request by the respondent, who must pay for the cost of the transcript service.

G. Any party may challenge a panel member or the hearing administrator on the grounds of personal bias. Hearing panel members may be disqualified by the hearing administrator. A hearing administrator may be disqualified by a majority vote of the members of the hearing panel. Votes will be taken by secret ballot.

H. Witnesses will be asked to affirm that their testimony is truthful and may be subject to charges of violating this Code by intentionally providing false information to the University.
I. Witnesses, other than the complainant and the respondent, will be excluded from the hearing except when providing testimony to the hearing panel. All parties, the witnesses, and the public will be excluded during panel deliberations, which will not be recorded or transcribed.

J. The charges against the respondent must be established by a preponderance of evidence.

K. Formal rules of evidence will not be applicable in disciplinary proceedings conducted pursuant to this Code. The hearing administrator will abide by the rules of confidentiality and privilege, but will admit all other matters into evidence which are relevant. The respondent may challenge the relevance of evidence. Irrelevant or unduly repetitious evidence may be excluded by the hearing administrator.

L. Complainants and respondents will be accorded an opportunity to ask relevant questions of witnesses who testify at the hearing.

M. Affidavits will be admitted into evidence only if signed by the affiant and witnessed by the Dean of Students or his/her designee.

N. A determination of responsibility will be followed by a supplemental proceeding in which either party may submit relevant evidence or make relevant statements concerning the appropriate sanction to be imposed. The past disciplinary record of the respondent will be supplied to the panel only during the supplementary proceeding.

O. Any determination of responsibility by majority vote of the hearing panel will be supported by written findings, which will be placed in the case file and made available to the student respondent before a final decision is rendered by the Dean of Students.

P. All members of the conduct council are bound by confidentiality before hearings and after the proceedings.

XVI. Sanctions

Significant mitigating or aggravating factors will be considered when sanctions are imposed, including the present demeanor and past disciplinary record of the offender, the nature of the offense, and the severity of any damage, injury, or harm resulting from it. Repeated or aggravated violations of any part of this Code may also result in relocation or removal from University housing, suspension, or dismissal. Sanctions which may be imposed in accordance with this Code include, but are not limited to:

A. "Apology Letter" – a written admission of guilt requesting forgiveness from the complainant or offended party. A copy of the letter will be kept in the case file.

B. "Warning"—notice, oral or written, that continuation or repetition of prohibited conduct may be cause for additional disciplinary action.

C. "Censure"—a written reprimand for violation of specified regulations, including a warning that continuation or repetition of prohibited conduct may be cause for additional disciplinary action.

D. "Alcohol/Drug/Substance Abuse Education Program" – requirement to complete a University or University approved education program on alcohol/drug/substance abuse. Students sanctioned under this heading will be required to pay for all attendant costs.

E. "Disciplinary Probation"—status assigned for a designated period of time, during which any other violation of the Code may result in removal from University housing, suspension, or dismissal from the University. Students on disciplinary probation may not hold or run for any elected or appointed positions. Additional conditions appropriate to the violation may be imposed.

F. "Restitution"—repayment of the direct cost to the University for damages resulting from a violation of this Code.

G. "Relocation in University Housing"—administrative reassignment to a different residence hall and/or room.

H. "Removal from University Housing"—denial of housing privileges.

I. "Suspension"—exclusion from University premises and other privileges or activities for a specified period as set Fourth in the suspension notice. This action will be permanently recorded on the student's academic transcript.

J. "Expulsion"—permanent termination of student status and exclusion from University premises, privileges, and activities. This action will be permanently recorded on the student's academic transcript.

K. "Revocation of Degree"— rescinding a student's degree awarded by the University.

L. "Other Sanctions"—other sanctions may be imposed instead of or in addition to those specified in sections (A) through (K) of this section. Service or research projects may be assigned.

Sanctions by the code of conduct council are to be considered as recommendations to the Dean of Students and are not final.

XVII. Appeals

First instance disciplinary hearing decisions of the Conduct Council are appealable to the appeal board while disciplinary conference decisions are to the Dean of Students who may refer the appeal to the Conduct Council. All appeals shall be in keeping with the following provisions:

A. The appeals to the appeal board/panel must be in writing and delivered to judicial affairs to be processed for the appeal board's hearing within seven business days after the notice of removal from the University housing, suspension, or dismissal is delivered to the address on record for the student in the Office of the Registrar.

B. Appeals will be reviewed by an appellate board of the Conduct Council to determine their viability. The appellate board will consist of one student, one faculty member, and one staff member selected from the Conduct Council. In appeal cases from Conduct Council decisions the appellate panel will be constituted of members who did not serve on the original hearing panel. The appellate board will meet as soon as possible after the appeal is received.

C. The appellate panel will determine viability based on whether there is new information that significantly alters the finding of fact, evidence of prejudicial deprivation of rights or improper procedure, or excessive sanctions. Only when deemed viable will the appeal be forwarded to the

Conduct Council or the Dean of Students, as the case may be, for review. Decisions of the appellate board about the viability of the appeal are determined by majority vote and are final.

D. The appellate panel may deny the request for appeal and affirm the original findings or grant the request for appeal and forward its recommendations to the Dean of Students or his/her designee. Appeals are not meant to provide a second hearing of the case. All appeals will be decided based on the report filed by the hearing officer and the appellate board, the respondent's written statement, and any written response or memoranda prepared by University officials. All written materials considered by the appellate board and the Dean of Students or his/her designee will be subject to inspection by the respondent. The respondent may request an opportunity to discuss the written materials in person with the Dean or his/her designee. Appeal decisions rendered by the Conduct Council or the Dean of Students or his/her designee are final.

E. The following standards will apply when appeals are deemed viable:

1. Sanctions may be reduced only if found to be substantially disproportionate to the offense.

2. Cases may be remanded for rehearing only if:

(a) The rights deprived, specified procedural errors or errors in interpretation of the University regulations were so substantial as to deny the student a fair hearing; or

(b) New and significant evidence becomes available that could not have been discovered by a properly diligent student before or during the original hearing.

F. The imposition of sanctions will be deferred while an appeal is pending, unless, in the discretion of the Dean of Students or his/her designee, the continued presence of the student in the residence halls or on the campus poses a substantial threat to him or herself, to others, or to the stability and continuance of normal University functions.

XVIII. Disciplinary Records

Except as noted below, disciplinary records are maintained by Office of the Judicial Affairs for seven years from the date of the letter providing notice of final disciplinary action. Records for a student who is suspended, dismissed, or who withdraws with a disciplinary case pending are maintained indefinitely. Evidence collected for cases shall also form part of disciplinary records. The university reserves the right to confiscate any student item(s) that is/are associated with a reported matter for

Graduate Degree Programs In Telecommunications Engineering

Telecommunications Engineering involves the design, construction, installation, operation and maintenance of telecommunication systems, components or processes to meet desired needs while considering economic, environmental, social, ethical and sustainability constraints. The program incorporates strong elements of electrical and electronics engineering. It allows graduates to address a wide range of applications, which require in depth knowledge of electronics, modern computer technologies, and software and information systems. Consequently, the program is designed to expose students to telecommunications systems encompassing both hardware and software needed by professional engineers in telecommunications systems. The early introduction to scientific and engineering foundation of Computing, Electronics, Physics and Mathematics prepares the ground for introduction to the specialized telecommunications engineering courses including telecommunications systems modelling, computer networks, voice telecommunications and emerging technologies including 3G video phones, high speed domestic broadband and network security. Relevant technologies include: complex electronic switching systems, transmission systems from copper wires to optical fiber, satellites, cellular networks, Internet Protocol networks and digital television; digital representation of audio, video and other multimedia; and the control, design and analysis of massive communications networks.

Graduate students can select one of the following programs:

- **Postgraduate Diploma (PGD): Telecommunications Engineering**

- **M.Eng and Ph.D Programs: Telecommunications Engineering**
  Some Some common specialization areas in Telecommunications Engineering are:
  (i) Internet Engineering (ii) Mobile & Personal Communication (iii) Cryptology

Completion of program

Each department shall specify all additional prerequisites for completion of the program.

Graduation Requirements

(a) Postgraduate Diploma (PGD)

To qualify for the award of Postgraduate Diploma, a candidate must have been unitized with at least **64 Credit Units** of compulsory courses which include the project report.

(b) M.Eng. Requirements

A minimum of 31 Units comprising 24 Units of Coursework, 1 unit of Seminar and 6 Units of Research.

(c) M.Phil. Requirements

A minimum of 36 Units comprising 24 Units of Coursework, 3 unit of Seminar and 9 Units of Research.

(d) Ph.D Requirements

For Ph.D programs, candidates shall be required to have taken the core/compulsory courses prescribed for the M.Sc./M.Eng., as prerequisites. This is in addition to the minimum 21 units which include research and seminars prescribed for the Ph.D.

Course Outline

Postgraduate Diploma (PGD): Telecommunications Engineering Course

YEAR 1 FIRST SEMESTER (19 CREDITS)			Telecommunications Engineering	
Course Code		**Course Title - Prerequisite**	**Credit Hours**	**Requirement**
GET 610	-	Engineering Mathematics I	3	CORE
EEE 610	-	Numerical Methods & Computer Programming	3	CORE
EEE 611	-	Circuit Theory I	3	CORE
EEE 612	-	Electrical/Electronics Engineering Materials	3	CORE
EEE 615	-	Engineering Economics	2	CORE
EEE 616	-	EM Fields and Waves	3	CORE
GET 612	-	Engineering Drawing	2	CORE

YEAR 1 SECOND SEMESTER (19 CREDITS)			Telecommunications Engineering	
Course Code		**Course Title - Prerequisite**	**Credit Hours**	**Requirement**
GET 620	-	Engineering Mathematics II	2	CORE
EEE 620	-	Electrical Power Principles	3	CORE
EEE 621	-	Circuit Theory II	3	CORE
EEE 622	-	Electrical/Electronics Measurements and Instrumentation	3	CORE
EEE 623	-	Digital Electronics	3	CORE
EEE 624	-	Electronic Devices and Systems	3	CORE
GET 621	-	Technical Report Writing	2	CORE

TOTAL NO OF CREDITS: ***38***

YEAR 2 THIRD SEMESTER (19 CREDITS)			Telecommunications Engineering	
Course Code		**Course Title - Prerequisite**	**Credit Hours**	**Requirement**
EEE 710	-	Control Systems Engineering I	3	CORE
EEE 711	-	Power Systems Engineering	3	CORE
EEE 712	-	Communication Principles	3	CORE
EEE 713	-	Electrical Machines	3	CORE
EEE 790	-	Project I	3	CORE
EEE 714	-	Reliability Engineering	2	CORE
GET 710	-	The Engineer in Society	2	CORE

YEAR 2 FOURTH SEMESTER (15 CREDITS)			Telecommunications Engineering	
Course Code		**Course Title - Prerequisite**	**Credit Hours**	**Requirement**
EEE 720	-	Control Systems Engineering II	3	CORE
GET 720	-	Cyber Law, Management, Entrepreneurship	3	CORE
EEE 791	-	Project II	3	CORE
EEE 721	-	Power Electronics	3	CORE
EEE 722	-	Digital Signal Processing	3	CORE

TOTAL NO OF CREDITS: ***34***

PGD - ELECTIVE COURSES **Telecommunications Engineering**

Course Code		Course Title - Prerequisite	Credit Hours	Requirement
EEE 723	-	Microcomputer Hardware and Software Techniques	3	ELECTIVE
EEE 724	-	High Voltage and Switchgear Engineering	2	ELECTIVE
EEE 725	-	Communications Systems	3	ELECTIVE
EEE 726	-	Microwave Engineering	3	ELECTIVE
EEE 727	-	Energy Systems	2	ELECTIVE
EEE 728	-	Solid State Electronics	3	ELECTIVE
GET 721	-	Data Communications	2	ELECTIVE
GET 722	-	Statistical Method	2	ELECTIVE

M.Eng and Ph.D Programs: Telecommunications Engineering

Some common specialization areas in Telecommunications Engineering are:
(i) Internet Engineering (ii) Mobile & Personal Communication (iii) Cryptology

M.Eng and Ph.D Programs **Telecommunications Engineering**

Course Code		Course Title - Prerequisite	Credit Hours	Requirement
GET 810	-	Advanced Engineering Mathematics	3	CORE
GET 811	-	Advanced Research & Development Techniques	3	CORE
CPE 834	-	Internet Engineering	3	CORE
EEE 821	-	Advanced Signal Processing	3	CORE
TEE 810	-	Mobile & Personal Communication	3	CORE
GET 720	-	Cyber Law, Management, Entrepreneurship	2	CORE
TEE 811	-	Communication Policies and Standards	3	CORE
TEE 890	-	Project	6	CORE

M.Eng and Ph.D Programs – ELECTIVE COURSES **Telecommunications Engineering**

Course Code		Course Title - Prerequisite	Credit Hours	Requirement
TEE 820	-	Satellite Communication	3	ELECTIVE
TEE 821	-	Network Security and Management	3	ELECTIVE
EEE 724	-	Microwave Engineering	3	ELECTIVE
TEE 822	-	Optical Communication	3	ELECTIVE
TEE 823	-	Telecommunication Database	3	ELECTIVE
TEE 824	-	Antenna Design	3	ELECTIVE
TEE 825	-	Radio Propagation & Fading	3	ELECTIVE
EEE 840	-	Alternate Energy Sources	3	ELECTIVE
CPE 832	-	Cryptology and computer security	3	ELECTIVE
CPE 833	-	Artificial Intelligence based systems	3	ELECTIVE
CPE 836	-	Software Development In Telecommunication	3	ELECTIVE
CPE 837	-	Cryptology Principles And Applications	3	ELECTIVE
CPE 838	-	Internet Programming	3	ELECTIVE
CPE 839	-	Multimedia Technology & Programming	3	ELECTIVE
GET 723	-	Engineering Project Management	3	ELECTIVE

COURSE SYNOPSES

GENERAL COMMON COURSES TO ALL PGD PROGRAMS

EEE 610 Numerical Methods and Computer Programming (3 Units)

Gaussian elimination, Gauss-Seidel methods and Newton-Raphson Heraton methods of solving linear equations. Forward and backward difference tables, central difference formula, Finite difference solution to partial differential equations. Solutions of ordinary differential equations (1st and 2nd order) using Runge-Kutta method. Flow charting, Algorithms, input and output, Basic, Fotran and Modern languages. Computer software analysis, Highway/Transportation, geotechnical, Hydraulics/Hydrology problems and Construction Management.

GET 610 Engineering mathematics I (3 Units)

Review of matrix operation including inversion, Eigen values, Eigen vectors and Canonical transformations and application. Three dimensional vector representations, vector calculus, gradient, divergence and curl line, surface and volume integrals, laplacian operations. Green's, Stoke's and Divergence theorems and applications. Ordinary and partial differential equations, applications and physical problems. Complex variables, numerical analysis, special functions and integral, problem formulation, simple method of solution.

GET 620 Engineering Mathematics II (2 Units)

Complex variables; function, deviation, language series, Taylor series, Cauchy theorem, Cauchy formula, Cauchy integrals. Analytical functions, singular points, Residual problems, conformal problems and mapping. Special functions; Gamma, Delta, Beta and error functions. Fourier integral, Fourier transforms for solving partial differential equations.

GET 621 Technical Report Writing **(2 Units)**

Role of technical reports in engineering projects. Fundamental principles of technical writing. Format of different types of reports – outlines, purpose and scope, technical discussion details, role of appendix, function of figures, tables and illustration. Literature search, reference (citing and listing). Nature of recommendations and conclusions. Guides of writing memoranda, business letters. Oral presentation of technical reports. (One or two term papers to be prepared on assigned work).

GET 710 Engineer-in-Society **(2 unit)**

Philosophy of Science, History of Engineering and Technology. Safety in engineering and introduction to risky analysis. The role of engineers in nation building. Invited lectures from Professionals.

GET 720 Cyber Law, Management and Entrepreneurship **(3 Units)**

Principles of Management, Industrial group and organisational behaviour, Motivation, Industrial Law, Legislation on wages, Trademarks and patents, Laws of contract and sales of goods. Liability for industrial injuries , Industrial relations, Trade Unions, employer Associations, Wages bargaining and the role of the State, Relevant topics on entrepreneurship designed by the National Universities commission for Nigerian Universities. Technology Creativity Innovation and commercialization: Entrepreneurship Overview: Establishing & Financing new venture: Marketing and product strategy: Business and technology strategy: Case studies on important technology-based companies E-Commerce: Principles of doing business on the Internet. Advertisements on the Internet. Simulation and using Internet as showroom. Marketing on the Internet. Technical support via Internet. Basic law: Contract law. Cyber law. Cooperative bargaining, conflict resolution. Entrepreneurship case studies:

GET 721 Statistical Methods **(2 Units)**

Descriptive Statistics: Central tendencies and dispersion. Elementary probability theory, conditional probability, Baye's theorem, probability distributions and applications. Elementary theories of sampling and estimation. Test of hypothesis and significance. Curve fitting, Linear and Multiple regression analysis; Linear correlation, analysis of variance, time series analysis. Statistical quality control for mean, standard deviation, range, number of defects etc., sampling number, stochastic processes.

POSTGRADUATE DIPLOMA (PGD)

EEE 611 Circuit Theory I **(3 Units)**

Elementary signals. Dynamic circuit behaviour, oscillations. First and second order systems. Laplace and Fourier transforms. Time and frequency domain solutions of circuit equations. Stability. Transfer function concepts. Applications of network theorems. Single-phase and three-phase circuits. Two-port network analysis. Introduction to computer-aided analysis.

EEE 612 Electrical/Electronics Engineering Materials **(3 Units)**

Review of Atomic Theory. Electronics configuration of engineering materials. Band-bond theory of solid semiconductor devices. Dielectric and Magnetic materials. Masers and Lasers. Superconductivity; Magnetic alloys; ferrites. Optics.

EEE 615 Engineering Economics **(2 Units)**

Break-even analysis. Time value of money. Interest ratios (P/F, P/A, P/G, etc). Evaluation single alternative (PW, AW, FW, IRR, etc). Decision making Among Alternatives (PW, AW, FW, IRR, etc). Equal lives and Unequal Lives. Depreciation methods.

EEE 616 Electromagnetic Fields and Waves **(3 Units)**

Review of electromagnetic laws in integral form: Gauss' Law, Ampere's and Faraday's laws. Electrostatic fields due to distribution of charge, magnetic fields in and around current – carrying

conductors. Time varying magnetic and electric fields. Conduction and displacement currents. Maxwell's equations. Poynting vector, energy propagation, and boundary conditions.

EEE 620 Electrical Power Principles (3 Units)

Generation: Sources of Energy (thermal, hydro, nuclear, solar, wind, etc) Economics of Power supply (Tariffs, Load curves, Power factor correction, etc). Power generation, Transmission and Distribution. Corona. Types of cables. Insulators. System protection. Performance charts.

EEE 621 Circuit Theory II (3 Units)

Laplace and Fourier transforms revisited. Application of Laplace transform to transient analysis of RLC circuits. Non-sinusoidal periodic waveforms. Non-periodic signals. Different methods of network synthesis including Cauer, Foster, Long Division method, partial fractions, etc. Conditions for Realizability. Synthesis of non-linear resistive circuits. Computer applications in the analysis and synthesis of linear and non-linear circuits.

EEE 622 Electrical/Electronics Measurements and Instrumentation (3 Units)

Principles of measurements: Measurement accuracy. Terminology. Signals, Potentiometers, and bridges. Instrument types: Voltage, current, power, energy, and resistance measurements. Electronic and electrical instruments. The cathode ray tube (CRO). Transducers; magnetic effects measurements. Data recording; Spectrum analyzers.

EEE 623 Digital Electronics **(3 Units)**

Review of Boolean Algebra and Logic Circuits Simplifications; Flip-flops. Counters, Registers, Memory Devices. Semiconductor Technologies: MSI, LSI, etc. Interfaces. Digital converters, e.g. ADC, DAC, series/parallel converters, etc. Microprocessors. Digital Test and Maintenance Equipment.

EEE 624 Electronic Devices and Systems **(3 Units)**

Diode Circuits. Analysis of Single stage Amplifier circuits. Multistage Amplifiers. Oscillators. Power Supply Circuits. Wave-shaping circuits. Integrated Circuits (ICs). OP Circuits.

EEE 710 Control Systems Engineering I **(3 Units)**

Open and closed loop systems. Modeling of Physical systems. Dynamic equations of electrical, mechanical, thermal and fluid flow systems. Transfer functions of control system components. System response and classification. Stability. Nyquist, Bode, Root Locus Analysis. Systems specifications and introduction to design.

EEE 712 Communications Principles **(3 Units)**

A general communications system including source, transmission channel, and destination. Analogue Modulation systems. AM, FM, Phase Modulation. Pulse Modulation: PAM, PWM, PPM, PCM. Introduction to Digital Modulation Techniques. Bandwidth considerations. Devices and systems for communications.

EEE 713 Electrical Machines **(3 Units)**

Electromechanical Energy Conversion systems. DC machines, Transformers. Synchronous and Induction machines. The machine as a generator and as a motor. Analysis of electromagnetic torque.

EEE 714 Reliability Engineering **(2 Units)**

Reliability concepts. Elementary Reliability Theory. Measures of reliability Failure Time Distribution Models. Exponential, Weibull model). Fault tree analysis (FTA)). Failure Mode, Effect and Criticality, Analysis. Reliability growth. Maintainability and Availability.

EEE 720 Control Systems Engineering II **(3 Units)**

Analogue computers. State space representation of control systems. Stability of linear and non-linear systems. Linearization of non-linear systems. Describing functions. Sampled data systems. Digital control.

EEE 721 Power Electronics **(3 Units)**

Controlled rectifiers. Converters. Switching characteristics of diodes, transistors, and t-resistors. Analysis of circuits using transistors as switches, power control circuits, characteristics of switching transformers, ac-dc converters. Power semiconductor devices protection. Waveform synthesis.

EEE 722 Digital Signal Processing **(3 Units)**

Basic concepts and areas of applications. Discrete-time signals and systems; linearity, shift-invariance, causality, stability, convolutional sum and frequency response. Response. Review of sampling theory

and Z-transform digital system realization Finite-impulse response (FIR) and infinite-impulse response (IIR) filter design. Discrete Fourier Transform (DFT) and Fost Fourier Transform (FFT).

EEE 723 Microcomputer Hardware and Software Techniques (3 Units)

Elements of digital computer design; control unit, programming, bus organization and addressing schemes, microprocessor, system architecture, bus control, instruction execution and addressing modes. Machine codes, assembly language and high level language programming, microprocessor interfacing: input/output technique, interrupt systems and direct memory access; interfacing to analogue systems and application to D/A and A/D converters. System development tools: simulators, EPROM programming assemblers and loaders. Microprocessor and microcomputers Operating Systems and compilers. Microprocessor applications.

EEE 724 High Voltage and Switch Gear Engineering (2 Units)

Methods of generation and measurement of high voltages. Type and tests on switchgears. Mechanisms of dielectric breakdown in gases, liquids and solids. Protection against over voltages. Switchgear construction. Oil switches. Air blast, SF6, Vacuum circuit breakers.

EEE 725 Communication Systems (3 Units)

Telephony: Antennas and wave propagation mode. Radar systems. Satellite communication systems. Broadcasting systems (analogue and digital). Introduction to Wireless Communication Systems. Regulations. Telecommunication systems planning.

EEE 726 Microwave Communications **(3 Units)**

Microwave Devices: Overview of performance characteristics and applications. Microwave Diodes. Microwave bipolar transistors, hetero junction bipolar transistors, Field Effect Transistors. Transferred Electron Devices. Avalanche Transit-Time Devices. Microwave tubes. Applications in microwave circuits. Network Analysis: Transmission Line Equations and Solutions, Smith Chart, ABCD Matrix, S-Parameter Matrix, Signal Flow Graphs. Impedance Transformation and Matching Impedance Measurements, Single-stub Matching, Double-stub Matching, Triple-Stub Matching, Impedance Matching with Lumped Elements, Waveguide Reactive Elements, Quarter-wave Transformer, Binomial Transformer, Chebyshev Transformer, Tapered Transmission Lines Waveguide and Coaxial Components: Rectangular, bends and twists, ridge, fin Line, terminations, attenuators, phase shifters, Circular Polarizers. Coaxial-to- Waveguide Transitions. Baluns. Stripline Circuits: Substrate materials, stripline, micro strip, terminations, attenuators, couplers, power dividers, isolators, resonators, filters. Power Measurements: Introduction, Types of Power Measurements, Sensors, Meters, Specifications

EEE 727 Energy Systems **(2 Units)**

Global energy assessment. Primary and secondary energy sources. Renewable and non-renewable energy resources. Energy needs of the country. Energy conversion techniques. Energy conservation. Energy management and auditing. Cost of energy.

EEE 728 Solid State Electronics **(2 Units)**

Physics and properties of semiconductors including high field effect, carrier injection and semiconductor surface phenomena. Devices Technology: bulk and epitaxial material growth and impurity control. Metal-semiconductor interface properties, stability, and methods of characterization. Controlled and surface-controlled devices.

EEE 790 Project I & EEE 791 Project II **(6 Units)**

Project titles are to be selected from an approved list of suitable topics. The actual work is to be carried out under the supervision of a member of academic staff. The standard of work must demonstrate the ability of the student to undertake independent work at a professional level of competence. Each student is required to give a project defense seminar his/her work.

GET 721 Data Communications **(3 Units)**

Introduction to Data communication systems: Digital signals and characters, data signals, band rate, serial and parallel data transmission. Networks and Network topology. Baseband Analysis, Modulated carrier signals (ASK, PSK, QPSK, FSK, MSK, GMSK, etc). Coherent and non-coherent detection of binary signals. Error rate comparison. OSI model and functions of the layers. TCT/IP model and functions of the layers. Network management; Telecommunication Network Management. International Standards.

GET 722 Computer Programming **(3 Units)**

Flow-Charting and Algorithm formulation, Coding with (C++, Visual Basic). High Level Languages (e.g. C++, Linux, visual Basic). Applications to Solution of Engineering Problems.

GET 723 Engineering Project Management **(3 Units)**

Management principles. Project management definition and constraints. Project life cycle. Project planning and scheduling. Project management tools. Critical Path method, CPM: principles, computation, and applications. Project Evaluation & Review Technique, PERT: principles, computation, and applications. Linear programming and application in CPM/PERT. Gannt's chart and applications. Contract law and bidding.

M.Eng and Ph.D Programs: Telecommunications Engineering

Some common specialization areas in Telecommunications Engineering are:
(i) Internet Engineering (ii) Mobile & Personal Communication (iii) Cryptology

CPE 834 Internet Engineering **(3 Units)**

Internet Technology: Communication Networks: Narrowband ISDN: ISDN standards, interfaces and functions. ISDN services. Frame Relay and Broadband ISDN: Background; Protocols and services. B-ISDN standards, services and architecture; SOH. A TM networks. Cellular Networks: Overview, standards, network architecture. (OFDM), wavelength division multiplexing (WDM), Optical Code division multiple-access (OCDMA), subcarrier multiplexing (SCM); WDM components: WDM multi/demultiplexers, addand drop multiplexers (ADM), star couplers, Optical cross-connects, wavelength converters; performance analysis of multi-channel systems. Crosstalk. WDM systems. Free space Optical Links: Atmospheric optical channel, effects of atmosphere on optical beams, on direct detection receivers, heterodyning over atmospheric channel, optical inter satellite links. Optical Networks: Topology, WDM networks. Optical LAN, WAN. Broadcast and select optical networks. Wavelength routed optical networks. Future Trends in Optical Fibre Communications.

CPE 835 Software Development in Telecommunication **(2 Units)**

Telecommunication software development: Introduction. Examples of life cycles (V life cycle, Y life cycle, spiral life cycle, etc. Methods and tools for: requirement capture, analysis, specification, architecture, design and development. Finite state machines: the SDL language. Programming: Overview of programming languages (C, C++, Java) in telecommunication. Real-time programming. Programming for embedded systems. Performance and memory management. Configuration

management. interfaces definition: Problem overview. Transparency of distribution. Distributed 00: the COREA solution, the Java solution. Interface specification in TMN. System tests: Unit tests. Software integration tests. Hardware integration tests. Embedded software tests. Performance and conformance tests. Testing of 00 software. CASE to test: Attols, Insure, Hindsight, etc.

CPE 836 Multimedia Technology **(3 Units)**

Multimedia and supporting technologies: Multimedia definitions, multimedia services, trends of market, issues of multimedia information circulation, communication technologies, LAN technologies, personal computer technologies, internet home appliance technologies, future multimedia services. Basic technologies of multimedia information circulation: E-mail, common gateway interface between WWW and database, java, active X, virtual reality modeling language, push type service provision. Application technologies of multimedia information: Circulation directory, community of interest platform, fusion of internet and existing telecommunication technologies, computer telephony integration security and transaction, electronic data exchange, agent communication. Network configuration of the information superhighway, SONET, SDH, ATM copper access network, CATV access network, wireless access network, fiber access network. Video communication technologies in multimedia: Video coding standards, rate control, TV conference, quality of service transfer of pre-recorded video. Architecture and algorithms for controlled quality of service: Programmable quality by ATM network, QOS routing, traffic performance of multimedia services, quality measurement method, quality evaluation method, traffic control. Multimedia protocols: Protocol over ATM networks, object oriented transport protocol, synchronization protocol.

EEE 726 Microwave Communications **(3 Units)**

Microwave Devices: Overview of performance characteristics and applications. Microwave Diodes. Microwave bipolar transistors, hetero junction bipolar transistors, Field Effect Transistors. Transferred Electron Devices. Avalanche Transit-Time Devices. Microwave tubes. Applications in microwave

circuits. Network Analysis: Transmission Line Equations and Solutions, Smith Chart, ABCD Matrix, S-Parameter Matrix, Signal Flow Graphs. Impedance Transformation and Matching Impedance Measurements, Single-stub Matching, Double-stub Matching, Triple-Stub Matching, Impedance Matching with Lumped Elements, Waveguide Reactive Elements, Quarter-wave Transformer, Binomial Transformer, Chebyshev Transformer, Tapered Transmission Lines Waveguide and Coaxial Components: Rectangular, bends and twists, ridge, fin Line, terminations, attenuators, phase shifters, Circular Polarizers. Coaxial-to- Waveguide Transitions. Baluns. Stripline Circuits: Substrate materials, stripline, micro strip, terminations, attenuators, couplers, power dividers, isolators, resonators, filters. Power Measurements: Introduction, Types of Power Measurements, Sensors, Meters, Specifications.

EEE 815 Modern Control Theory **(3 Units)**

Brief history and comparison of classical control with modern control. Revision of linear algebra in control theory: Matrix operations, types of matrix, elementary operations, rank, determinant, inverse, transpose. Eigenvalues-distinct, repeated, complex and their eigenvectors, diagonalisation of matrix. Computation and applications of eigenvalues and eigenvectors. State space description of dynamic systems, linear system response, transfer function matrix. Analysis of linear system, stability, observability, and controllability. Smith McMillan form. Optimal Control: Linear regulator problem, linear quadratic methods, state regulation, state estimation, Ricatti equations. Dynamic programming, Calculus of variation, Pontragin principle. Kalman Filter & Extended Kalman Filter: State space model, state estimation, applications. Digital control system: Ztransforms, transfer functions, Difference state space models, stability, Jury test, linear regulator design.

EEE 821 Advanced Digital Signal Processing **(3 Units)**

Review of fundamentals of DSP: Discrete-time signals and systems, sampling and reconstruction, Z-transform, transform analysis of linear time-invariant systems, structures for discrete -time systems, Fourier analysis of signals using DFT, FFT. Digital filters: Digital and analog filtering, Filter specifications,

Magnitude and phase responses, IIR and FIR filters, Design of IIR and FIR filters; Rational parametric models of random signals, Autoregressive models, Yule-Walker equations, Levinson-Durbin algorithm, Lattice filters, Schur algorithm. Adaptive FIR filters, Error-performance surface, Steepest-descent algorithm, LMS algorithm, Convergence properties, Gradient adaptive lattice filter, Method of least squares, Recursive least squares algorithm, Applications in telecommunications, image processing, video compression, audio system, etc. DSP Hardware: Fixed point and floating point DSP, merits, demerits, and applications.

GET 720 Cyber Law, Management and Entrepreneurship (3 Units)

Principles of Management, Industrial group and organisational behaviour, Motivation, Industrial Law, Legislation on wages, Trademarks and patents, Laws of contract and sales of goods. Liability for industrial injuries , Industrial relations, Trade Unions, employer Associations, Wages bargaining and the role of the State, Relevant topics on entrepreneurship designed by the National Universities commission for Nigerian Universities. Technology Creativity Innovation and commercialization: Entrepreneurship Overview: Establishing & Financing new venture: Marketing and product strategy: Business and technology strategy: Case studies on important technology-based companies E-Commerce: Principles of doing business on the Internet. Advertisements on the Internet. Simulation and using Internet as showroom. Marketing on the Internet. Technical support via Internet. Basic law: Contract law. Cyber law. Cooperative bargaining, conflict resolution. Entrepreneurship case studies:

GET 723 Engineering Project Management (2 Units)

Management principles. Project management definition and constraints. Project life cycle. Project planning and scheduling. Project management tools. Critical Path method, CPM: principles, computation, and applications. Project Evaluation & Review Technique, PERT: principles, computation, and applications. Linear programming and application in CPM/PERT. Gannt's chart and applications. Contract law and bidding.

GET 810 Advanced Engineering Mathematics (3 Units)

Revision of linear algebra, ordinary differential equation, and laplace, fourier, and z-transforms. Complex variable, analysis, and applications. Fast computational methods for linear algebra and integral transform algorithms. Short time fourier transform and applications, Wavelet transform. Green's function, Bessel functions, gamma function. Euler transform. Metric spaces, and algebraic structure. Linear spaces: Bannch and Hilbert spaces; operators in Hilbert spaces. Singular value decomposition vs eigenvalue decomposition and applications. Graph theory and applications. Residue number system and applications. Numerical methods in solving engineering problems.

GET 811 Advanced Research & Development Techniques (3 Units)

Introduction: Definition of research, characteristics of research, types of research, research process, research as a way of thinking, application of research. IT Impacts: The 'automate' imperative and the 'informate' imperative in the emergence of a new research and development tool. The Research Proposal. The Introduction. The Problem. The Objective of the Study. The Hypothesis to be Tested. The Study Design. The Setting. Measurement Procedures. Sampling. Analysis of Data. Structure of the Report. Problems and Limitations. Work Schedule. Formulating a Research Problem: Reviewing the literature. Formulating a Research Problem. Identifying Variables. Constructing Hypothesis. Conceptualizing a research Design: The Research Design. Selecting a Study Design. Constructing an Instrument for data collection and Sampling: Selecting a Method for Data Collection.

GET 812 Computational Intelligence Techniques (3 Units)

Fuzzy logic control: Linguistic variables, fuzzy sets and operators, knowledge rules, system analysis, design and implementation, applications of fuzzy logic in control system. Neural Network: Introduction to mathematical analysis of neural network and learning rules, applications of neural network to control systems. Genetic algorithm and applications to control system. Introduction to

robotic kinematic.

GET 813 Digital Video Broadcasting: Technology, Standards, and Regulations (3 Credits)

To provides an overview of Digital television (DTV) technology, standards, and regulation with an emphasis on the development of the standards generated by the European Project for digital video broadcasting (DVB). In addition, to compares the various DVB standards for cable, satellite, and terrestrial transmission and describes European, American, and Japanese regulations. The course will also cover the evolution from Analogue to Digital Switch Over (ASO).

TEE 810 Mobile & Personal Communications (3 Units)

Introductory Concepts: Overview of digital communication and radio communication characteristics; Cellular concepts and frequency reuse; Cellular geometry; Co-channel interference and frequency planning; Signal quality, traffic capacity and cell sizing; hand-offs and mobility management; cell splitting; other forms of wireless communication. Signal Impairments and Countermeasures: Path losses; Multipath propagation; Delay spread and ISI; Fading characteristics; Far-near and shadowing effects; Adaptive detection for processing severely distorted signals; Source and channel coding; Diversity techniques; Co-channel interference reduction techniques; Directional antennas; Sectored cells; Adaptive antennas. Cellular Systems:

TEE 812 Wireless Communications (3 Units)

Wireless LAN. Modem technologies, xDSL, cable modem. IP over different networks and internetworking. Internet Applications Model: Applications models: Remote login (TELNET, Rlogin), File transfer and access (FTP, TFTP, NFS), Electronic Mail (SMTP, POP, IMAP, MIME), World wide web (HTTP), Voice and Video over IP (RTP), Internet management (SNMP). Streaming technologies. W AP (Wireless Application Protocol). Internet Security and Electronic Commerce Technology: Internet

security and firewall design (IP sec). Encryption standards. Electronic cash and transaction models. Internet business models and technology development.

TEE 820 Satellite Communications (3 Units)

Elements of satellite communications: Satellite frequency bands, transmission and multiplexing schemes, trans-multiplexing, multiple access schemes. Communication satellites: Satellite orbit, laws governing satellite motion, satellite paths, geostationary satellites, non-geostationary constellations, satellite subsystems, launching of geostationary satellites. Earth stations: Earth station antennas: types of antennas, antenna gain, pointing loss, gain-noise temperature ratio, effective isotropic radiated power (EIRP); high power amplifiers; low noise amplifiers; up and down converters: conversion process, polarization hopping, redundancy configurations; earth station monitoring and control. Satellite link design: Basic link analysis, attenuation, sources of interference, carrier to noise and interference ratio, system availability, frequency reuse, link budget, link design. Multiple access techniques: FDMA

TEE 821 Network Security & Management (3 Units)

Network security: Cryptographic Techniques: Security Protocols: General security architectural concepts, transport layer security protocol, network layer security protocol, IEEE LAN security protocol, OSI upper layers architectural overview, upper layers security model, security exchanges. Directory Systems Security Network management: Fault management; Performance management process, accomplishing performance management, reporting performance information. Accounting management; Network Management Protocols.

TEE 822 Optical Communications **(3 Units)**

Introduction: Basic optical communications, generations, merits and limitations of optical fiber communications. Optical Fibre: Geometry, wave propagation, dispersion, nonlinear effects, loss characteristics. Optical Receivers: Block diagram, P-I-N and Avalanche photodiode receivers, noise, sensitivity, bit error rate performance analysis, and design. Coherent Light wave Systems: Principles of coherent and non-coherent detection. ASK,PSK,FSK,PPM,DPSK modulation formats. Synchronous and Asynchronous demodulation. Bit error rate performance analysis. Performance degradation due to laser phase noise, group velocity dispersion, self-phase modulation, polarization mode dispersion, relative intensity noise, effect of timing jitter. Doped fibre amplifiers, Brillouin amplifiers, Fiber Raman amplifiers; Amplifier noise; Amplifier gain characteristics; Amplifier performance analysis; Optical time division multiplexing (OTDM).

TEE 823 Telecommunication Database **(2 Units)**

Introduction: Database in telecommunication systems. The Switch example. Constraints on a Switch database (size, real-time aspects, security, etc). Database environment: Traditional file based systems, database approach, roles in database environment, the history of database systems, advantage and disadvantage of database systems The three level ANSI-AP AC architecture, database languages, data models and conceptual modeling, functions of a DBMS, concepts of a DBMS, multi-user DBMS architecture, data dictionary. Relational Databases: Database trends in telecommunication: Real-time database, Multimedia database, WWW servers and database, 3D image handling in database, multimedia and existing RDBMS. Standardization trends

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School of Engineering Faculty

LIST OF ACADEMIC STAFF

S/N	NAME OF ACADEMIC STAFF	AREA OF SPECIALIZ.	DISCIPLINE	QUALIFICATION	RANK
1.	Dr. Abubakar Sadiq Hussaini	Telecomm. Engineering	Telecomm. Engineering	PhD	Dean & Associate/Reader
2.	Dr. Adewale James	Mathematics	Mathematics	PhD	Associate/Reader
3.	Dr. Ahmad M. Aliyu	Mathematics	Mathematics	PhD	Associate/Reader
4.	Dr. Charles Nche	Computer Engineering	Computer Engineering	PhD	Asst. P./S. Lecturer
5.	Dr. Olusegun Ogundapo	Elect/Elect Engineering	Elect/Elect Engineering	PhD	Asst. P./S. Lecturer
6.	Dr. Adamu Salihu Girei	Chemical Engineering	Chemical Engineering	PhD	Asst. P./S. Lecturer
7.	Dr. Munzali Ahmed Abana	Elect/Elect Engineering	Elect/Elect Engineering	PhD	Asst. P./S. Lecturer

8.	Dr. Sirajdin Olagoke Adeshina	Computer Engineering	Computer Engineering	PhD	Asst. P./S. Lecturer
9.	Dr. Muhammad Aminu	Elect/Elect Engineering	Elect/Elect Engineering	PhD	Asst. P./S. Lecturer
10.	Dr. Abdulhameed U. Abubakar	Civil Engineering	Civil Engineering	PhD	Asst. P./S. Lecturer
11.	Dr. Matthew Luka	Telecomm. Engineering	Telecomm. Engineering	PhD	Asst. P./S. Lecturer
12.	Dr. Osho Ajayi	Mathematics	Mathematics	PhD	Asst. P./S. Lecturer
13.	Mr. Abbey Chukwuma	Physics	Physics	PhD	Asst. P./S. Lecturer
14.	Engr. Hassan Ahmed Saddiq	Chemical Engineering	Chemical Engineering	PhD	Asst. P./S. Lecturer
15.	Abubakar Audu	Computer Engineering	Computer Engineering	MSc	Instructor
16.	Engr. Musa Askira Abubakar	Chemical Engineering	Chemical Engineering	MSc	Instructor
17.	Engr. Francis Michael Kwende	Chemical Engineering	Chemical Engineering	MSc	Instructor

School of Engineering Staff

LIST OF SUPPORT STAFF

S/N	NAME OF SUPPORT STAFF	AREA OF SPECIALIZ.	DISCIPLINE	QUALIFICATION	RANK
1.	Mr. Cosmas Izu Chigbo	Electrical/Elect Engineering	Electrical/Elect Engineering	BSc	Lab Tech.
2.	Mr. Saidu Sanusi	Mechanical Engineering	Mechanical Engineering	BSc	Lab Tech.
3.	Mr. Anas Audi	Telecoms. Engineering	Telecoms. Engineering	BSc	Lab Tech.
4.	Ms. Rosemary Nkannebe	Chemical Engineering	Chemical Engineering	BSc	Lab Tech.
5.	Mr. Ibrahim Sarkiyayi Shehu	Electrical/Elect Engineering	Electrical/Elect Engineering	BSc	Lab Tech.
6.	MS. Sibo Febel	Economics	Economics	BSc	Admin Staff
7.	Mr. Bitrus Emmanuel Adamu	Public Administration	Public Administration	HND	Admin Staff