

DALEWARES ANTHEM

Dalewares Dalewares Dalewares forever more-or- more
God is our great foundation
We proclaimed His victory
So proud of Our Innovation
Our greatness's well
Assured
Dalewares Dalewares Dalewares
Forever more
Dalewares Dalewares Dalewares forever more-or- more
Building block of gree-at Nations

You raised my inspira-a-tion
You have steered this sleeping giant
To tread where others fell
Dalewares Dalewares Dalewares forever more
Dalewares Dalewares Dalewares forever more-or- more

You taught me how to conquer

Dalewares Dalewares Dalewares forever more
Dalewares Dalewares Dalewares forever more-ooooor-

WELCOME



Dalewares Institute of Technology is driven by the belief that development- national or international - is based on knowledge creation and management. And academic institutions have always been key agents in political, social, economic and technological development.

Since the advent of the Internet, the spread and management of knowledge have taken on a new meaning and globalization is very much the result thereof. Economic development, a major event in globalization, requires the participation of all of us – rich and poor, young and old, educated and uneducated. Thus, our pre-occupation with the upliftment and integration of all in our society by means of education and training, science and technology, research and development.

This explains why we have embarked on a path to continuously modernize the institution by making vast investments in the development of staff, curriculum, systems and infrastructure. The development, diversification and benchmarking of curricula against international standards – which entails new and higher qualifications – reflect the Polytechnic's commitment to national

development.

Indeed the state-of-the-art environment and new and innovative ways of teaching and learning, research and service speak to our goal to be a leading Institution. In a nutshell, this Institution is your gateway to opportunities all over the world in this millennium.

To all, I say: this is your time; seize the moment and make the best investment of your lifetime.

Mr. Segun O. Babalola

Rector

It is my belief that you will look upon your career development at the Dalewares Institute of Technology as gateway that will enrich you with knowledge and lead to your career destination in life. As staff of Dalewares Institute of Technology our goal is to work with students to create an educational environment into which you will continue to grow academically, socially and professional. This handbook contains the expected norm for each student. It is expected of each student to read the handbook carefully and fully understand these rules, policies and regulations. In addition, this student handbook is a reference guide for all

the students of the Dalewares Institute of Technology that will guide them throughout their academic experience. The final interpretation of all rules, policies and regulations shall be vested in the Institution Council. Ultimately, the academic journey is your own. However the Office of the Dean of Students will help you to reach your academic potential. We look forward to working with you and welcome you to the Dalewares Institute of Technology.



Dean of Student's

DALEWARES MISSION AND VISION

Dalewares Institute of Technology contributes to Nigerian Development by providing tertiary, technological, career-oriented education at internationally recognized standards. The main objective of our curricula is thus the practice, promotion and transfer of technology.

The instruction programmes are aimed at meeting the needs of industry, the driving force of the Nigerian economy. During the course of their study, technological knowledge, skills, values and attitudes are brought home to the students. The approach required for dealing successfully with the practice of the technological careers/industries/occupations involves excellence in the teaching of specific principles and approaches within a climate conducive to intellectual and social development, with greater emphasis on the application and ability to apply the practical outcomes of scientific principles in such a way that they may be of use to the particular technology/career/industry/occupation. With emphasis on the transfer of technology, the Polytechnic gives due regard to the professional human resource requirements of the country and those of the region and beyond. To this and other ends, the Institution strives to:

- ✍ Lead students to maturity to assume their economic and social responsibilities, including developing a sense of responsibility, a problem-solving approach, integrity and a humane attitude toward others
- ✍ Enable students both to acquire knowledge and to develop the skill of applying that knowledge in practical settings, prepare students for careers or professions by drawing on existing knowledge, technology and research results in close cooperation with those involved in particular careers or professions
- ✍ Be a center of higher learning and train high-level specialists in all areas necessary for national development, provide facilities appropriate to an academic institution of the highest quality available to all people likely to benefit from them regardless of race, color, gender, ethnic origin, religion, creed, social and economic status, and physical condition
- ✍ Promote the establishment of funding schemes in order to assist students who cannot afford course fees at the Dalewares Institute of Technology
- ✍ Safeguard and promote the principle of academic autonomy in order to provide the appropriate atmosphere and opportunities for scholars to pursue the development of their highest intellectual potential
- ✍ Serve as a repository for the preservation, development and articulation of Nigerian values and culture
- ✍ Undertake basic and applied research that will contribute to the social, economic, cultural and political development of Nigerian
- ✍ Encourage the advancement of science, technology and development serve both urban and rural communities, including providing extension services throughout the country to contribute to the improved function of the education system as a

whole promote national and international unity and understanding promote and defend a culture of excellence in the international community by encouraging criticism and engaging in regular self-evaluation and peer assessment

A significant part of the Polytechnic instructional programmes is, therefore, putting into practice the existing knowledge, technology, scientific results and the formulation of the practice of a particular segment of a career/industry. The fostering of technological thinking

on the part of Institution student is a continuing endeavor and therefore, their trademark.



Nigeria – State of the Country

It can be asserted that the economy of Nigeria is a youth economy as it is estimated that more than half of the Nigerian population are under the age of 30. No doubt, today's youth will become in a short decade tomorrow's parents, leaders and Labour force. However, the Nigerian youths are said to be confronted with poverty, unemployment, urbanization, lack of capacity and skills needed to move the economy forward. Poverty is very common. This is because the youth faces unemployment and lack of necessary productive skills to keep body and soul together. This reality leaves them without any meaningful means of sustainable livelihood.

The above employment economy will be undermined employment” (2004). How address the unemployment and inflation and depends on develop the

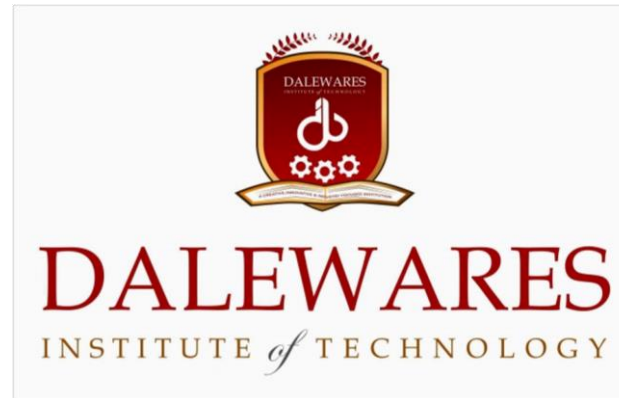


situation highlights is the life line of any “Human development definitely be grossly and impaired without (NEEDS document, soon Nigeria sets to problems of mass unemployment, low productivity, high poverty to a large extent how speedily it is able to millions of its labour

force into a knowledgeable and skilled people needed for the required change.

The current situation emphasizes the urgent need for a sustainable and effective skill acquisition and enterprise development strategy/programme in the country. The needs and importance of functional skill acquisition and enterprise centers can never be overstressed as the objectives are focused towards the preparation of human and material resources for future industrial growth and self-employment.

DALEWARES LOGO AND COLORS



THE CREST

Borrowed from the Ancient Greek and Roman Emperors
Emblem of office and crown Symbolizes Kingship, Excellency, Authority,
Professionalism and Dominion

THE LETTER D

Represent the capital letter D in the
Dalewares. Symbolizes Diligence, Dexterity, and Dignity

THE GEAR WHEAL

Symbolizes career in applied sciences and importance of technology,
innovation and industries in Nation Building.

THE BOOK

Symbolizes the word, wisdom knowledge and faith.

CO-OPERATE COLORS

Yellow, Wine, and White

Further reinforce the themes of commitment and education GOLDEN YELLOW stands for the guiding light, faith, Glory, constancy, and wisdom. WINE stands for Energy and strength to keep moving. WHITE stands for purity, truth, hope, and transparency

BRIEF HISTORY OF THE COLLEGE

Dalewares Institute of Technology was founded in 1996 but at the initial stage the institute was called Dalewares Training Institute, the institute was focused on training people on Printing and Branding Technology. The typical aim of the training institute is to equip people with the necessary skills to make them self employed

Dalewares Training Institute was transformed to a bigger, broader and better institute in 2008 when it was given accreditation by National Board for Technical Education and approved by the Federal Ministry of Education ,to run innovative courses in some programmes namely Software Technology, Hard ware Engineering, Multimedia Technology and Networking and system Security. Some other programmes are NVC in Computer Studies, Printing and Branding technology

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GOAL AND OBJECTIVES OF THE PROGRAMME

GOAL: The National Diploma programme is designed to produce diplomates capable of applying computer in various areas of computing.

Objectives: Diplomates of this programme should be able to:-

1. Operate
Computer
systems
2. Use various
Computer
packages
3. Maintain
hardware Solve
simple hardware
problems
4. Use various
programming
languages:
 - Visual BASIC
 - JAVA
 - C Programming
 - Unified Modelling Language (UML)
 - Hyper Text Mark-up Language vi. Use Internet vii. Set up Network
5. Set up and manage an enterprise

ENTRY REQUIREMENTS

The entry requirements into National Diploma Computer Science programme are as follows:-

- a) Five credit level passes in GCE “O” level, Senior Secondary School Certificate (SSCE), NECO and NABTEB at not more than two sittings.

The five subjects must include:

I. English Language, Mathematics, Physics and two other subjects chosen from the following: II. Economics, Geography,

III. Further Mathematics, Physics,
Chemistry, IV.

Biology/Agricultural Science.

V. A Pass in Physics is compulsory for

VI. Computer Science.

VII. And Relevant NTC/NBC & NVC Trades

Plus JAMB Examination as resolved by National Policy on Education.

- b) A pass in Computer Foundation Examination (CFE) of Computer Professionals Registration Council of Nigeria (CPN). The student must be prima fascia qualified as in (a) above.

CURRICULUM STRUCTURE

4.1 The curriculum of the ND programme consists of four main components.

These are:- i. General studies/Education

ii. Foundation courses

iii. Professional courses

iv. Supervised Industrial work experience scheme (SIWES).

The General Education component shall include courses in

English Language

Communication

Citizenship Education

Entrepreneurship

The General Education component shall account for not more than 15% of total contact hours for the programme.

Foundation Courses include courses in Mathematics, and Statistics etc. The number of hours will vary with the programmes and may account for about 10 –15% of the total contact hours.

Professional Courses are courses, which give the student the theory and practical skills he needs to practice his field of calling at the technical/technologists level.

Student Industrial Work Experience Scheme (SIWES) shall be taken during the long vacation following the end of the second semester of the first year. See details of SIWES at paragraph 8.0.

Curriculum structure

The structure of the programme courses of four semesters of classroom, laboratory and workshop activities in the college – and a period (3-4 months) of supervised industrial work experience scheme (SIWES). Each semester shall have 17 weeks duration made up as follows:-

15 contact weeks of teaching, i.e. recitation, practical exercises, quizzes, test, etc; and

2 weeks for examinations and registration. SIWES shall take place at the end of the second semester of the first year.

ACCREDITATION

Programme offered at the ND level shall be accredited by the NBTE before the diplomats can be awarded National Diploma certificate. Details about the process of accrediting a programme for the award of the ND is available from the Executive Secretary, National Board for Technical Education, P. M. B. 2239, Kaduna, Nigeria.

CONDITIONS FOR THE AWARD OF THE NATIONAL DIPLOMA

Institution offering accredited programme will award the National Diploma programme after passing the prescribed course work, examinations, diploma project and the supervised industrial work experience. Such candidates should have completed a minimum of between 72 and 80 semester credit units depending on the programme.

UNIFIED GRADING SYSTEM

The unified grading system to be applied in scoring all course work, examinations, project, etc is as stated on table below:

Marked Range	Letter Grade	WEIGHTING
75 and above	A	4.0
70 – 74	AB	3.5
65 – 69	B	3.25
60- 64	BC	3.0
55 – 59	C	2.75
50-54	CD	2.50
45 – 49	D	2.25
40-44	E	2.0
Below 40%	F	0.00

CLASSIFICATION OF DIPLOMAS

The final Cumulative Grade Point Average (CGPA) shall be determined (calculated) and applied to the classification of the National Diploma as follows:

Class (Level of Pass)	CGPA
Distinction	3.50 and Above
Upper Credit	3.00 – 3.49
Lower Credit	2.50 – 2.99
Pass	2.00 – 2.49
Fail	Below 2.00

GUIDANCE NOTES FOR TEACHERS TEACHING THE PROGRAMME

- 1 The new curriculum is drawn in unit courses. This is in keeping with the provisions of the National Policy on Education which stress the need to introduce the semester credit units which will enable a student who so wish to transfer the units already completed in an institution of similar standard from which he is transferring.
- 2 In designing the units, the principle of the modular system by product has been adopted; thus making each of the professional modules, when completed provides the diplomates with technician skills, which can be used for recognition as in self-employed or for employment purposes.
- 3 As the success of the credit unit system depends on the articulation of programmes between the institutions and industry, the curriculum content has been written in behavioural objectives, so that it is clear to all the expected performance of the student who successfully completed some of the courses or the diplomats of the programme. There is a slight departure in the presentation of the performance based curriculum which requires the conditions under which the performance are expected to be carried out and the criteria for the acceptable levels of performance. It is a deliberate attempt to further involve the staff of the department teaching the programme to write their own curriculum stating the conditions existing in their institution under which the performance can take place and to follow that with the criteria for determining an acceptable level of performance. The Academic Board of the institution may vet departmental submission on the final curriculum. Our aim is to continue to see to it that a solid internal evaluation system exists in each institution for ensuring minimum standard and quality of education in the programmes offered throughout the polytechnic system.
- 4 The teaching of the theory and practical work should, as much as possible, be integrated. Practical exercises, especially those in professional courses and laboratory work should not be taught in isolation from the theory. For each course, there should be a balance of theory to practice in the ratio of about 40:60.

GUIDELINES ON SIWES PROGRAMME

For the smooth operation of the SIWES, the following guidelines shall apply:

Responsibility for placement of Students

- a. Institutions offering the ND programme shall arrange to place the students in industry. By April 30 of each year, six copies of the master list showing where each student has been placed shall be submitted to the Executive Secretary, NBTE which shall, in turn, authenticate the list and forward it to the industrial Training Fund, Jos
- b. The Placement officers should discuss and agree with industries on the following:
 - I. A task inventory of what the students should be expected to experience during the period of attachment. It may be wise to adopt the one already approved for each field.
 - II. The industry-based supervisor of the students during the period, likewise the institution based supervisor.
 - III. The evaluation of the student during the period. It should be noted that the final grading of the student during the period of attachment should be weighted more on the evaluation by his industry-based supervisor.

Evaluation of Students during the SIWES

In the evaluation of the student, cognizance should be taken of the following items:

- a) Punctuality
- b) Attendance
- c) General attitude to work
- d) Respect for authority
- e) Interest in the field/technical area
- f) Technical competence as a potential technician in his field.

GRADING OF SIWES

To ensure uniformity of grading scales, the institution should ensure that the uniform grading of students' work which has been agreed to by all polytechnics is adopted.

The Institution based Supervisor

The institution-based supervisor should initial the log book during each visit. This will enable him/her to check and determine to what extent the objectives of the scheme are being met and to assist students having any problems regarding the specific given to them by their industry-based supervisor.

Frequency of visit

Institution should ensure that students placed on attachment are visited within one month of their placement. Other visits shall be arranged so that:

- I. There will be another visit six weeks after the first visit; and
- II. A final visit in the last month of the attachment.

Stipend for Students in SIWES

The rate of stipend payable shall be determined from time to time by the Federal Government after due consultation with the Federal Ministry of Education, the Industrial Training Fund and the NBTE.

SIWES As a component of the Curriculum

The completion of SIWES is important in the final determination of whether the student is successful in the programme or not. Failure in the SIWES is an indication that the student has not shown sufficient interest in the field or has no potential to become a skilled Technician in his/her field. The SIWES should be graded on a fail or pass basis. Where a student has satisfied all other requirements but failed SIWES, he may only be allowed to repeat another four months SIWES at his/her own expense

LIST OF CORE ACADEMIC/TEACHING STAFFS

S/N	Name of Staff	Qualifications with Dates and area of Specification	Current rank with Date
1.	Anjorin Ishaq O.	PhD Computer Science (In View) MSc Computer Science 2023 BSc Computer Science 2014 ND Computer Science 2003	Principal Lecturer/HOD
2.	Oni Olusegun	MIT 2012 BSc Computer Engr. 2005	Principal Lecturer/Assistant HOD
3.	Ajamu Olatunde James	MBA (In view) M. Engr. Engineering 2020 M. Process Engr. 2019 MSc Mechanical Engr. 2016 MSc Industrial and Product Engr. 2014 BSc System Engineering 2008 HND Computer Science 2011 OND Computer Science 2005	Principal Lecturer
4.	Olabisi Erinose	M.Sc Info Tech (in view) BSc Computer Science 2010 NCE Maths and Computer Science 2005	Senior Lecturer
5.	Onumaegbu Michael Chiemeziem	HND Computer Science 2021 ND Computer Science 2017 ND Computer Science 2014	Senior Lecturer
6.	Imogbore Victor Ohilebo	PhD Elect/Telecommunication Engr(in view) M.Eng Elect/ Telecommunication Engr 2007 B.Eng Elect/ Telecommunication Engr 2000	Senior Lecturer
7.	Chidozie Nsoedo	PhD Health Informaticss 2010 PGD Computer Graphics and virtual environment 2003 B.Engr Chemical Engr. 2001	Senior Lecturer
8.	Oyerinde Olugbenga Elisha	MSc Data Science (in View) PGD Data Science (in View)	Senior Lecturer

		BSc Computer Science 2007	
9.	Nelson Shedrack Nse	BSc Computer Science (in View) HND Elect Elect 2015 ND Computer Hardware Engr. 2011	Lecturer I
10.	Okorie Chibuzor C.	HND Computer Science 2018 ND Computer Science 2014	Lecturer II
11.	Odu Stella Smart	HND Computer Science 2019 ND Computer Science 2015	Lecturer III

CURRICULUM TABLE

YEAR I SEMESTER I

S/N	Course Code	Course Title	L	P	CU	CH	Prerequisite
1	COM 111	Introduction to computing	2	2	3	4	
2	COM 112	Introduction to Digital Electronics	2	2	3	4	
3	COM 113	Introduction to Programming	2	2	4	4	
4	COM 114	Statistics for Computing 1	2	0	2	2	
5	COM 115	Computer application packages I	2	2	3	4	
6	MTH 111	Logic and Linear Algebra	2	0	2	2	
7	GNS 101	Use of English I	2	0	2	2	

8	GNS 102	Citizenship Education I	2	2	4	4	
			16	10	23	26	

COMPUTER SCIENCE NATIONAL DIPLOMA

YEAR I SEMESTER 2

S/N	Course Code	Course Title	L	P	CU	CH	Prerequisite
1	COM 121	Programming using C Language	2	2	3	4	COM 113
2	COM 122	Introduction to Internet	1	2	3	3	COM 111
3	COM 123	Programming Language using Java I	2	2	3	4	
4	COM 124	Data structure and Algorithms	2	1	3	3	COM 113
5	COM 125	Introduction to Systems Analysis and Design	2	1	3	3	None
7	COM 126	PC Upgrade & Maintenance	1	3	3	4	None

8	GNS 128	Citizenship Education II	2	0	2	2	GNS 127
9	GNS 102	Communication in English	2	0	2	2	
10	EED 126	Practice of Entrepreneurship	2	0	2	2	
11	GNS 228	Research Methods	2	0	2	2	
			18	10	25	28	

COMPUTER SCIENCE NATIONAL DIPLOMA

YEAR II SEMESTER I

S/N	Course Code	Course Title	L	P	CU	CH	Prerequisite
1	COM 211	Programming Language using Java II	2	2	4	4	COM 113
2	COM 212	Introduction to systems Programming	1	1	2	2	COM 111
3	COM 213	Unified Modelling Language (UML)	2	2	3	4	COM 113
4	COM 214	Computer Systems Troubleshooting	1	2	3	3	COM 111
5	COM 215	Computer Application Packages II	2	2	3	4	COM 111

6	COM 216	Statistics for Computing II	2	0	2	2	COM 123
7	SIW 219	SIWES	0	4	4	4	None
8	GNS 201	Use of English II	2	0	2	2	None
9	EED 216	Practice of Entrepreneurship	2	0	2	2	GNS 101
			15	18	25	27	

**COMPUTER SCIENCE NATIONAL DIPLOMA
YEAR II SEMESTER 2**

S/N	Course Code	Course Title	L	P	CU	CH	Prerequisite
1	COM 221	Basic Computer Networking	1	3	3	4	COM 113,
2	COM 222	Seminar on Computer and Society	2	-	2	2	COM 111
3	COM 223	Basic Hardware Maintenance	1	2	2	3	None
4	COM 224	Management Information system	2	1	2	3	COM 112
5	COM 225	Web Technology	2	3	3	5	COM 111, 103

6	COM 226	File Organisation and Management	2	1	2	3	COM 111
7	GNS 204	Communication in English II	2	0	2	2	COM 122
8	COM 227	Project	2	4	6	6	COM 216
			12	13	20	25	

COURSE DESCRIPTION AND OBJECTIVES FOR THE SEMESTERS

COURSE: INTRODUCTION TO COMPUTING

Programme: (National Diploma) Computer Science	Course Code: COM 111	Contact Hours: 4
Course: Introduction to Computing	Semester: 1	Theoretical: 2 hours /week
Year: 1	Pre-requisite:	Practical: 2 hours /week
Goal: This course is designed to enable students to acquire a basic knowledge of computing		

General Objectives: On completion of this course the student, should be able to:

1.0 Understand the history, classification and impact of computers.

2.0 Understand the concept of computer hardware and software
3.0 Understand computer data processing systems.
4.0 Understand the procedures for computer and data preparation method.
5.0 Know security and safety procedures within a computer environment.
6.0 Know the concept of computer networks
7.0 Understand the use of the internet, its tools and resources

COURSE: INTRODUCTION TO DIGITAL ELECTRONICS

Programme: (National Diploma) Computer Science	Course Code: COM 112	Contact Hours: 4
Course: Introduction to Digital Electronics	Semester: 1	Theoretical: 2 hours /week
Year: 1	Pre-requisite: none	Practical: 2 hours /week
Goal: This course is designed to enable students to acquire basic knowledge of and skills in digital electronics		

General Objectives: On completion of this course, the students should be able to

- 1.0 Understand number system, codes and code conversion
- 2.0 Know the fundamental of Boolean algebra
- 3.0 Understand the logic gates, addition and subtraction operations in the computer
- 4.0 Understand small-scale Integrated Circuits
- 5.0 Understand the concept and methodology of sequential circuit design
- 6.0 Understand counter and Data transfer

COURSE: INTRODUCTION TO PROGRAMMING.

Programme: (National Diploma) Computer Science	Course Code: COM 113	Contact Hours: 4
Course: Introduction to Programming	Semester: 1	Theoretical: 2 hours /week
Year: 1	Pre-requisite:	Practical: 2 hours /week
Goal: This course is designed to enable students to acquire basic knowledge of programming		

General Objectives: On completion of this course the students should be able to:

- 1.0 Understand features of a good program.
- 2.0 Understand the concept of Algorithms and flowcharting.
- 3.0 Understand the principles of designing algorithms for common programming problem.
- 4.0 Understand General modular program design principles.
- 5.0 Understand the procedure in solving programming problems.
- 6.0 Understand the various levels of programming language.
- 7.0 Understand the concept of debugging and maintaining program.
- 8.0 Understand good programming practices.
- 9.0 Understand the concept of object oriented programming

COURSE: STATISTICS FOR COMPUTING 1

Programme: Computer Science (National Diploma)

Course Code: COM 114

Contact Hours: 3

Course Title: Statistics for Computing 1	Semester: 1	Theoretical: 2 hour /week
Year: 1	Pre-requisite:	Practical: 1 hour /week
Goal: This course is designed to enable students to acquire a basic knowledge of Statistics for Computing.		
<p>General Objectives: On completion of this course the diplomate, should be able to:</p> <ol style="list-style-type: none"> 1. Understand the concept of statistics, nature of statistical data, their types and uses 2. Understand the procedures for collection of statistical data 3. Understand the methods of data compilation 4. Understand the methods of data presentation 5. Understand the concept of set and set operations 6. Understand the concept of Permutations and Combination as used in probability 7. Understand the basic concept of probability 		

COURSE: COMPUTER APPLICATION PACKAGES 1

PROGRAMME: ND Computer Science		
COURSE: Computer Application Packages 1	COURSE CODE: COM 115	CONTACT HOURS: WEEKS HOURS
GOAL: This course is designed to introduce the student to basic computer packages.		
COURSE SPECIFICATION: THEORETICAL CONTENT		COURSE SPECIFICATION: PRACTICAL CONTENT

	<p>General Objectives: On completion of this course, the diplomate will be able to:</p> <ol style="list-style-type: none"> 1. Understand What are Application Packages, Apps and their functions 2. Understand Basic Typing Skills 3. Understand Word Processing Package and how to work with it. 4. Understand Spreadsheet Package and how to work with it. 5. Understand Presentation Package and how to use it. 6. Understand App Culture
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COURSE: PROGRAMMING USING C LANGUAGES

PROGRAMME: NATIONAL DIPLOMA(ND) COMPUTER SCIENCE			
COURSE: Programming Using C Language	Course Code: COM 121	Contact Hours:4 Hours/week	
GOAL: This course is designed to provide the students with knowledge of and skills in C Programming			
Year: 2 Semester: 1	Pre-requisite: COM 113	Theoretical:	2 hours /week
		Practical:	2 hours /week

GENERAL OBJECTIVES:

On completion of this course the student should be able to:

- 1.0 Understand Basic Concepts of C Programming Language
- 2.0 Understand Data types, Constants, Variables and programming procedure
- 3.0 Understand Storage Classes, Operators and Type Casting
- 4.0 Understand Standard Inputs and Output Operations
- 5.0 Understand Control Structures (Decision Making and Loops)
- 6.0 Understand the Functions and Scope Rules
- 7.0 Understand Arrays and Strings
- 8.0 Understand Pointer operations
- 9.0 Understand Structures and Union data types
- 10.0 Understand File Input/Output (I/O) Operations
- 11.0 Understand Preprocessors and Header Files

COURSE: INTRODUCTION TO INTERNET.

PROGRAMME: National Diploma in Computer Science		
COURSE: INTRODUCTION TO INTERNET	COURSE CODE: COM 122	HOURS: 2
COURSE SPECIFICATION: THEORETICAL CONTENT		COURSE SPECIFICATION: PRACTICAL CONTENT
GOAL: The course is to enable the student understand the fundamentals, uses and operations of the Internet		

General Objectives: On completion of this course, the student should be able to:

1. Know the meaning and historical background of Internet
2. Understand how to Navigate the Internet and Common Website Functionalities
3. Understand the Configuring Email Clients and Calendaring
4. Understand Social Media and Various Internet Communication Methods
5. Understand Online Conferencing and Streaming
6. Understand Digital Principles, Ethics, Skills and Citizenship
7. Know the challenges to Internet growth and penetration in Nigeria

Department/ Programme: Computer Science	Course Code: COM 123	Credit Hours: 6 hours/week
COURSE: PROGRAMMING LANGUAGE USING JAVA 1		Theoretical: 2 hours/week
GOALS: The course is designed to enable students acquire requisite knowledge of and skills in programming using Java.		
Year: 1 Semester: 2	Pre-requisite:	Practical: 4 hours /week

General Objectives: On completion of this course, the diplomat should be able to:

1. Understand Java programming Basics.
2. Understand Object-oriented programming with Java classes and Objects
3. Understand the general concept of expression in Java.
4. Understand the use of Conditional Statements in Java
5. Understand the use of iteration statements in Java.
6. Know how to write simple Java program for string and characters manipulation.

COURSE: DATA STRUCTURE AND ALGORITHMS

Department/ Programme: COMPUTER SCIENCE (ND)	Course Code: COM 124	Contact hours: 4 hours/ week
Subject/Course: DATA STRUCTURE AND ALGORITHMS		Theoretical: 2 hours/week
Year: One Semester: Two	Pre-requisite: COM 111	Practical: 2 hours /week
GOAL: The students are expected to analyse, design, apply and use data structures and algorithms to develop efficient program and communicate technical concepts and ideas.		

General Objectives: On completion of this course the student should be able to:

- 1.0 Understand concepts of data structure and tools.
- 2.0 Know tools for studying data structure: symbols, relations and graph.
- 3.0 Understand sets relations and string structure.
- 4.0 Know data life cycle representation, properties of ordered and occupancy.
- 5.0 Understand the properties of order and linear list.
- 6.0 Understand simple linked lists and algorithm complexity
- 7.0 Understand non-linear structures.
- 8.0 Understand different sorting and searching techniques

PROGRAMME: NATIONAL DIPLOMA (ND) COMPUTER SCIENCE	Course Code: COM 125	Contact Hours: 4
Course: Introduction to Systems Analysis and Design		Theoretical: 2 hours /week
Year: 1 Semester: 2	Pre-requisite:	Practical: 2 hours /week
Goal: This course is designed to enable students to acquire knowledge of and Skills in Systems Analysis and Design		

GENERAL OBJECTIVES:- On completion of this course the student should be able to

- 1.0 Understand the Basic Concepts of Systems
- 2.0 Understand the Stages of Systems Analysis and Design
- 3.0 Understand Feasibility Study and its Objectives
- 4.0 Understand the Process of Systems Analysis
- 5.0 Understand Systems Design
- 6.0 Understand Database Design
- 7.0 Understand Systems Development
- 8.0 Understand Systems Implementation
- 9.0 Understand Systems Evaluation
- 10.0 Understand Systems Maintenance

PROGRAMME: NATIONAL DIPLOMA (ND) COMPUTER SCIENCE			
COURSE: PC UPGRADE & MAINTENANCE	Course Code: COM 126	Contact Hours:4 Hours/week	
GOAL: The course provides the knowledge and skills to begin PC Upgrade & Maintenance			
Year: 1 Semester: 2	Pre-requisite:	Theoretical:	1 hours /week
		Practical:	3 hours /week
GENERAL OBJECTIVES:			
On completion of this course the student should be able to:			
1.0 Understand the concept of upgrading and maintenance for PC.			
2.0 Understand the limitation of a PC and scope for upgrading.			
3.0 Understand technical specifications for PC upgrading.			

Department/ Programme: Computer Science	Course Code: COM 211	Credit Hours: 6 hours/week	
Subject/Course: PROGRAMMING LANGUAGE USING JAVA 2		Theoretical: 2 hours/week	
GOALS: The course is designed to enable students acquire requisite knowledge of and skills in programming using Java.			
Year: 2	Semester: 1	Pre-requisite:	COM 123 Practical: 4 hours /week
General Objectives: On completion of this course, the students should be able to: <ul style="list-style-type: none"> 1.0 Understand Array and collection Processing in Java. 2.0 Understand Event driven programs. 3.0 Know the concept of inheritance, encapsulation and Polymorphism 4.0 Know how to use Java Servlet, and Java Server Pages (JSP) 5.0 Understand Database Access with JDBC 6.0 Understand the process of general enterprise solution using Java 			

COURSE: INTRODUCTION TO SYSTEM PROGRAMMING

Department/ Programme: Computer Science (ND)	Course Code: COM 212	Contact Hours : 5 hrs/week	
Subject/Course: Introduction To Systems Programming		Theoretical: 2hours/week	
GOALS: This course is designed to enable students acquire knowledge and skills in systems programming			
Year: II	Semester: I	Pre-requisite:	COM101 Practical: 3hours /week

General Objectives: On completion of this course the students should be able to:

- 1.0 Understand the general concepts of systems programming.
- 2.0 Understand Assembler and Assembly Processes
- 3.0 Understand the compilation process
- 4.0 Understand the use of utilities and libraries.
- 5.0 Understand the functions of Operating System
- 6.0 Understand Input/Output (I/O) device handlers

COURSE: UNIFIRD MODELLING LANGUAGE

Programme: National Diplôme (ND) Computer Science		
Course: Unified Modelling Language (UML)	Course Code: COM 213	Contact Hours: 4 hours/week
GOAL: This course is designed to provide the students with knowledge of and skills in Unified Modeling Language		
Year: 2 Semester: 1	Pre-requisite: COM 113	Theoretical: 2 hours /week Practical: 2 hours /week

GENERAL OBJECTIVES: On completion of this course the student should be able to:

- 1.0 Understand the Basic Concepts of Systems Modelling
- 2.0 Understand the Principles of Unified Modeling Language
- 3.0 Understand Object-oriented Modeling
- 4.0 Understand Conceptual Models
- 5.0 Understand Implementation Models
- 6.0 Understand Use Case Diagrams
- 7.0 Understand Activity Diagrams
- 8.0 Understand State Chart Diagrams
- 9.0 Understand Interaction Models
- 10.0 Understand System Model Conversion

Department/ Program: ND Computer Science	Course Code:	COM:214	Contact Hours: 5hours/week
Subject/Course: Computer Systems Troubleshooting I			Theoretical:1hours/week
Year: Two Semester: One	Pre-requisite:		Practicals: 4 hours /week

General Objectives:

The course Provides the knowledge and skills to begin to repair Hardware

1. Understand the process of Computer system fault diagnosis.
2. Understand computer system peripheral failures.
3. Understand virus protection utility failure and software diagnostic tools. 4.

Understand networks failure symptoms

Programme: Computer Science (National Diploma)	Course Code: COM 215	Contact Hours: 6 hours/week
Course: Computer Application Packages II		Theoretical: 2 hours /week
Year: 2 Semester: I	Pre-requisite: COM 123	Practical: 4 hours /week

Goal: This course is designed to enable the student to acquire a better understanding of standard computer packages.

General Objectives: On completion of this course, the diplomats will be able to:

1. Understand how to use common graphic application packages
2. Understand the process of Desktop Publishing
3. Understand the concepts in Computer Aided Design.
4. Understand Database Management System.

Programme: Computer Science (National Diploma)	Course Code: COM 216	Contact Hours: 3
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Course Title: Statistics for Computing II	Semester: 2	Theoretical: 2 hour /week
Year: 1	Pre-requisite:	Practical: 2 hour /week
Goal: This course is designed to enable students to acquire a basic knowledge of SPSS Package Tools		
General Objectives: On completion of this course the diplomate, should be able to:		
1.0 Understand the main facture of SPSS (Statistical Package for Social Science)		
2.0 Understand the use of SPSS Graphical User Interface (GUI) effectively		
3.0 Understand how to perform descriptive analyses with SPSS and Ms Excel ER		
4.0 Understand how to perform common parametric and non-parametric test		
5.0 Understand how to perform simple regression and multivariate analyses		

COURSE: BASIC COMPUTER NETWORKING

Programme: Computer Science (National Diploma)	Course Code: COM 221	Contact Hours: 3
Course Title: BASIC COMPUTER NETWORKING	Semester: 2	Theoretical: 2 hour /week
Year: 1	Pre-requisite:	Practical: 2 hour /week
Goal: This course is designed to equip students with the practical knowledge in computer networking.		
General Objectives: On completion of this course the diplomate, should be able to:		

- 1.0 Understand the basic Concepts of Computer Networking
- 2.0 Know the Hardware Components of Computer Networks and their Functions
- 3.0 Understand Network Planning and Design
- 4.0 Know the Different Types of Network Connections
- 5.0 Understand the Open System Interconnection (ISO) Model and the TCP/IP Model
- 6.0 Understand IP Address on Networks using IPv4
and IPv6
- 7.0 Understand Wireless Network Access

COURSE: COMPUTER SCIENCE

Department/ Programme: COMPUTER SCIENCE (ND)	Course Code:	COM 223	Credit Hours: 6 hours/week
Department/ Programme: Computer Sci	Course Code:	COM 223	Credit Hours: 5 hours/week
Subject/Course: Basic Hardware Maintenance			Theoretical: hours/week 2
GOALS: The course is designed to enable students acquire knowledge of and skills in Basic Hardware Maintenance			
Year: Two	Semester: Two	Pre-requisite:	COM 112
			Practical: hours /week 3

General Objectives: On completion of this course the student should be able to

- 1.0 Understand Basic laboratory practice and safety**
- 2.0 Understand the basic electric theory.**
- 3.0 Understand the function of circuit components.**
- 4.0 Understand basic general measuring equipments**
- 5.0 Understand integrated circuit and terminologies.**
- 6.0 Understand preventative maintenance of hardware components.**
- 7.0 Understand diagnostic techniques involved in corrective maintenance.**
- 8.0 Understand computer installation procedure.**

Programme: Computer Science (National Diploma)	Course Code: COM 224	Contact Hours: 4 hours/week
Course: Management Information Systems		Theoretical: 2 hours /week
Year: 2 Semester: 4	Pre-requisite: COM101	Practical: 2 hours /week

Goal: This course is designed to enable introduce students to management information systems **General**

Objectives: On completion of this course the diplomat should be able to:

1. Know different systems.
2. Understand systems theory.
3. Understand the concept of management information.
4. Know the features of management information systems (MIS)
5. Understand the concept of transaction processing.
6. Understand the concept of office automation.
7. Understand the different applications of MIS.
8. Understand the principles of decision making
9. Know the development cycle of an MIS
10. Understand the principles of project management.
11. Understand total systems

COURSE: WEB TECHNOLOGY

Programme: (National Diploma) Computer Science	Course Code: COM 225	Contact Hours: 4
Course: Web Technology	Semester: 2	Theoretical: 2 hours /week
Year: 2	Pre-requisite:	Practical: 2 hours /week
Goal: This course is designed to acquaint students with the basic technological tools needed to design web applications		

GENERAL OBJECTIVES: On completion of this course the student should be able to:

- 1.0 Know the fundamental concepts of World Wide Web (WWW).
- 2.0 Understand Hypertext Mark-up Language HTML
- 3.0 Understand scripting for HTML.
- 4.0 Understand Dynamic HTML (DHTML).
- 5.0 Understand Cascading Style Sheets (CSS).
- 6.0 Understand dynamic content.
- 7.0 Know web development tools.
- 8.0 Understand Multimedia.
- 9.0 Know Extensible Mark-up Language (XML).

COURSE; FILE MANAGEMENT AND ORGANISATION

Department/ Programme: Computer Science (ND)	Course Code: COM 226	Credit Hours: 3 Hours/week
Subject/Course: File Organisation and Management		Theoretical: 2ours/week
Year: 2 Semester: 2	Pre-requisite:	Practical: 1hours /week
GOAL: The students are expected to organize and manage data in file processing program from secondary storage		

General Objectives:

On completion of this course the student should be able to:

- 1.0 Know simple file organization concept
- 2.0 Understand the concept of file operations
- 3.0 Understand the basic storage devices and media
- 4.0 Understand different file access methods and the buffering techniques.
- 5.0 Understand file organizational structure and processing.
- 6.0 Know the process of file updating, protection and security.

GUILDELINEs FOR COURSEs SYSTEM AND INSTRUCTION

1. For the purpose of teaching and examination, the academic year is divided into two semester, each is approximately fifteen weeks.
2. Instruction shall be by courses and every proposed courses with an outline of contents must be presented to the National Board of Technical Education (NBTE) for approval
3. The unit of credit for a course is the credit unit (CU) ,one credit unit being when a class meets for one hour every week for one semester in a lecture or tutorial, or for three (3) hours every week in practical in the laboratory, workshop or fieldwork.
4. Each courses carries one (1) to three (3) credit units and its duration is normally one semester, except Final Year Project and Industrial Training

(Student Industrial Work Experience Scheme- SWIES)
5. For each courses, students shall be continuously assessed and examined at the end of the semester in which the course is given.

IMPORTANT NOTEs ON EXAMINATION AND ACADEMIC STANDING .

1. Candidates must attain a minimum of seventy-five (75) % of the lectures for the courses; examiners have the right to prevent defaulters from sitting for the examination when a students did not meet the seventy-five (75) % attendance.
2. Candidates must be ready to enter the examination hall ten minutes before the time the examination is due to start. Candidate who arrive more than half of an hour after an examination has started shall be admitted only at the discretion of the invigilator(s).
3. Candidate shall not leave the hall during the first half and the last quarter of an hour of the examination

4. Candidates must bring with them to the examination hall their own biro, pen , erasers and calculators
5. All rough work must be done in the answer booklets and crossed neatly throughout.
Communication between candidates is strictly forbidden
6. The only permissible way of attracting attention of the invigilator is by raising of hand
7. Candidate are to write legibly. Names are not to be written on the answer booklets. The answer to each question must be started on a separate page.
8. Attendance register is to be signed at the commencement of the examination and as each candidate hands in the scripts to the invigilator
9. Candidates must ensure that they have inserted at the appropriate places on the front cover of their booklets, their examination numbers and number of questions they answered.
10. Mobile phones either switched on, or off are not allowed in examination hall. Keep your mobile phones in the hostel. If you bring mobile phone to the examination hall, it would be seized. handbags of any sorts should be kept out of the examination hall.

IMPORTANT NOTES

PENALTIES AND SANCTION FOR EXAMINATION MISCONDUCT

Candidates are hereby informed that any students caught or implicated in any act of misconduct would automatically cease to continue with the examination until the case has been decided. The following prescribed penalties will be imposed on anyone caught committing the under listed acts of misconduct. **No plea will be entertained**

S/N	MISCONDUCT	PENALTY
1	Impersonation	Expulsion
2	Smuggling and Possession of answer script	Expulsion
3	Destruction of unauthorized materials	Expulsion
4	Attacking or threatening invigilators	Expulsion
5	Tendering unauthentic document	Expulsion
6	Failure to submit answer script	Rustication(two semester)
7	Copying from authorized material / Plagiarism	Rustication (two semester)
8	Aiding and abetting other to	Rustication (two semester)
9	Possession of written material	1 st timer Rustication (two semester) Recidivisit : Expulsion
10	Refusal to submit offending material	Rustication (two semester)
11	Collaborative copying	Rustication (two semester)
12	Refusal to complete Examination Misconduct forms	Rustication (two semester)
13	Unauthorized communication	1 st timer warning

		2 nd timer Rustication (one semester)
14	Disruptive Behaviour	1 st timer warning 2 nd timer Rustication (one semester)
15	Influencing Examination Official	1 st timer warning 2 nd timer Rustication (one semester)
16	Unauthorized changing position	1 st timer warning 2 nd timer Rustication (one semester)
17	Disobeying Examination Instruction	1 st timer warning 2 nd timer Rustication (one semester)
18	Possession of telephone(s) in the examination hall either in use or not.	Rustication (one semester)
19	Failure to appear before the Misconduct Panel	Suspension for 2 semester after which none appearance leads to expulsion
20	Other related acts of Examination not specifically stated	Penalty shall be determined based on the recommendation of Misconduct Panel

*Recidivism expulsion.

EXAMINATION MALPRACTICE REPORT FORM

DATE: _____

STUDENT SURNAME: _____ OTHER NAME _____

EXAMINATION COURSE TITLE: _____ EXAMINATION COURSE CODE: _____

STUDENT MATRIC NO: _____ TIME OF INCIDENT: _____

NAME OF INVIGILATOR: _____ DEPARTMENT: _____

TYPE OF EXAMINATION MALPRACTICE COMMITTEED:

EVIDENCE ATTACHED: _____ YES _____ NO IS THE STUDENT ATTACHED _____ YES
_____ NO

IF NO, IS IT EXPECTED TO FOLLOW IMMEDIATELY? _____ YES _____ NO

IS THERE ANY OTHER STUDENTS INVOLVED IN THIS OFFENCE COMMITTED DURING THE EXAMINATION PERIOD?

IF YES
STATE _____

NAME: _____ MATRIC NO: _____

STUDENT SIGNATURE: _____ INVIGILATOR SIGNATURE: _____

DATE: _____ DATE: _____