BOARD FOR TECHNICAL EDUCATION

NATIONAL INNOVATION DIPLOMA (NID)

IN

COMPUTER SOFTWARE ENGINEERING

CURRICULUM AND COURSE SPECIFICATIONS

2019

Produced by the National Board for Technical Education (NBTE)

Plot B, Bida Road, P.M.B. 2239, Kaduna Nigeria.

PROGRAMME GOAL

The National Innovation Diploma programme is designed to produce skilled software technicians who should be able to solve a wide range of problems by the systematic development and evaluation of large, high quality software systems.

OBJECTIVE OF THE PROGRAMME

A product of NID in Computer Software Engineering should be able to:

- Develop and maintain software
- Detect technical faults in a Computer installation
- Design and test software to optimise its production and support
- Design and run efficient programmes in a wide spectrum of fields, and in various languages
- Install a computer system
- Produce large, high quality software systems
- Advise on the installation of Computer facilities
- Carry out routine (preventive) maintenance of Computer facilities
- Work with a team on a project
- Become an employer of labour in a self-owned enterprise.

ENTRY REQUIREMENTS

NATIONAL INNOVATION DIPLOMA IN COMPUTER SOFTWARE ENGINEERING

The entry requirements into National Innovation Diploma in Computer Software Engineering programme include any of the following:-

a) Five (5) credit level passes in GCE “O” level or Senior Secondary School Certificate (SSCE) at not more than two sittings. The five subjects must include Mathematics, Physics, Chemistry, English language and any other subject.

b) National Vocational Certificate (NVC, Final) in Computer Studies from an approved Vocational Enterprise Institution (VEI).

CURRICULUM

The curriculum of NID in Computer Software Engineering programme consists of four main components. These are:-

I. **General courses** II. **Foundation courses**

III. **Professional/Core courses**

IV. **Supervised Industrial Attachment**.

The General Studies component shall include courses in

English Language and Communication

NATIONAL INNOVATION DIPLOMA IN COMPUTER SOFTWARE ENGINEERING

CURRICULUM TABLE

YEAR I SEMESTER I

COURSE CODE	COURSE TITLE	L	T	P	CU	CH	Prerequisite
CSE 101	Computers Systems	1	0	2	3	3	
CSE 111	Introduction to Programming	2	0	2	4	4	
CSE 121	Basic Digital Systems	1	0	3	4	4	
CSE 131	Internet and World Wide Web	1	0	3	4	4	
CSE 141	Computer Application Packages 1	1	0	4	5	5	
CSE 151	File Organization and Management	1	0	2	3	3	
MTH 101	Logic and Linear Algebra	2	1	0	3	3	
STT 101	Introduction to Statistics	2	0	0	2	2	
GNS 101	English Language and Communication I	2	0	0	2	2	
TOTAL		**13**	**1**	**16**	**30**	**30**	

YEAR I SEMESTER II

COURSE CODE	COURSE TITLE	L	T	P	CU	CH	Prerequisite
CSE 102	Data Structures and Algorithm	1	0	1	2	2	
CSE 112	PC Upgrade and Maintenance	1	0	3	4	4	
CSE 122	Computer System Troubleshooting	1	0	3	4	4	
CSE 132	Computer and Society	2	0	1	3	3	
CSE 142	Basic Hardware Maintenance	1	0	3	4	4	
CSE 152	System Analysis and Design	1	0	2	3	3	
CSE 162	Students Industrial Attachment	0	0	4	4	4	
MTH 102	Calculus	2	1	0	3	3	
GNS 111	English Language and Communication II	1	1	0	2	2	GNS 101
TOTAL		**9**	**2**	**17**	**29**	**29**	

KEY

L: Lecture

T: Tutorial

P: Practical

CU: Credit Unit

CH: Contact Hour (per week)

YEAR II SEMESTER I

COURSE CODE	COURSE TITLE	L	T	P	CU	CH	Prerequisite
CSE 201	Programming Concepts	1	0	3	4	4	
CSE 211	Computer Programming using VB.NET	1	0	3	4	4	
CSE 221	System Programming Concept (C, C++)	1	0	4	5	5	
CSE 231	Computer Application Packages II	1	0	4	5	5	
CSE 241	Structured Query Language I	1	0	4	5	5	
CSE 251	Relational Data Base Management Systems (RDBMS) I	1	0	4	5	5	
ENT 201	Entrepreneurship Development	1	0	1	2	2	
TOTAL		**7**	**0**	**23**	**30**	**30**	

YEAR II SEMESTER II

COURSE CODE	COURSE TITLE	L	T	P	CU	CH	Prerequisite
CSE 202	Scientific Programming Language using Object Oriented JAVA	1	0	4	5	5	
CSE 212	Management Information System	1	0	3	4	4	
CSE 222	Structured Query Language II	1	0	3	4	4	SEN 241
CSE 232	Relational Data Base Management Systems (RDBMS) II	1	0	3	4	4	SEN 251
CSE 242	Software Project Management	1	0	3	4	4	
CSE 252	Project	0	0	4	4	4	
TOTAL		**5**	**0**	**20**	**25**	**25**	

KEY

L: Lecture

T: Tutorial

P: Practical

CU: Credit Unit

CH: Contact Hour (per week)