



**AHMADU BELLO UNIVERSITY**

**ZARIA, NIGERIA**

**IMPLEMENTATION PLAN FOR THE TEACHING AND LEARNING POLICY**

**JANUARY, 2023**

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## **FOREWORD**

Ahmadu Bello University emphasises commitment to excellence in teaching and learning. However, this must be guided by a properly developed policy document. The recently approved Teaching and Learning Policy (TLP) requires systematic implementation plan for successful accomplishment of the policy statements.

The Directorate of Academic Planning and Monitoring (DAPM) has therefore developed an Implementation Plan for the TLP with a view to ensuring that the policy statements are fully implemented. The TLP Implementation Plan reflects the University's commitment towards creating an enabling environment for adoption of the Online and Blended Teaching and Learning (OBTL). Core aspirations of the University include facilitating successful transition to the OBTL mode.

I greatly appreciate the role played by the Directorate of Academic Planning and Monitoring and the University Committee on Developing the Implementation Plan for the TLP. I urge members of the University community to not only digest the contents of this important TLP Implementation Plan document, but to also adhere to its provisions in order to make our teaching and learning activities world-class. This will ensure that Ahmadu Bello University takes its rightful place among leading universities in producing competent graduates that shall facilitate solving the myriad problems in our societies.

Thank you.

**Professor Kabiru Bala**

Vice Chancellor

20<sup>th</sup> December, 2022

## **PREFACE**

The development of the Teaching and Learning Policy (TLP) for the University has become necessary considering the dynamic nature of teaching and learning in the 21<sup>st</sup> Century. This is also in tandem with the current realities in many world class universities across the globe.

The developed Implementation Plan contains strategies aimed at implementing the Teaching and Learning Policy statements. In addition, it contains critical issues such as roles and responsibilities of different stakeholders, quality assurance framework, code of conduct/ethics and funding sources. I strongly believe that the policy document will strengthen the teaching and learning activities across the university.

I must thank the Vice-Chancellor for the support extended to the Directorate throughout the development of the TLP Implementation Plan process. I also acknowledge efforts of the University Committee on Developing the Implementation Plan for the TLP. Furthermore, I thank all staff of the University that have contributed towards the development of the Implementation Plan.

Thank you.

**Professor Bello Mukhtar**

Director,

Directorate of Academic Planning and Monitoring

20<sup>th</sup> December, 2022

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## **ACRONYMS AND THEIR MEANINGS**

ABU – Ahmadu Bello University

ABUCONS – ABU Consultancy Services Ltd

ACENPEE- African Centre of Excellence on New Pedagogies in Engineering Education

ACENTDFB- African Centre of Excellence for Neglected Tropical Diseases and Forensic Bio-Technology

CA - Continuous Assessment

CBN – Central Bank of Nigeria

CERT – Centre for Energy Research and Training

CO - Course Objectives

CoL - Commonwealth of Learning

COVID-19 - Coronavirus Disease 2019

DAC – Division of Agricultural Colleges

DAPM – Directorate of Academic Planning and Monitoring

DLC – Distance Learning Center

DUA – Directorate of University Advancement

DVC – Deputy Vice Chancellor

FME – Federal Ministry of Education

FMF – Federal Ministry of Finance



HOD – Head of Department

IAICT – Iya Abubakar Institute for Information and Computer Technology

IAR – Institute for Agricultural Research

ICHEI – International Center for Higher Education Innovation

IDRT – Institute for Development, Research and Training

IIOE – International Institute of Online Education

ICT - Information and Communication Technology

KPI - Key Performance Indicator

KYA - Know Your Audience

LMS - Learning Management System(s)

NAERLS – National Agricultural Extension and Research Liaison Services

NAPRI – National Animal Production and Research Institute

NCC – Nigerian Communications Commission

NITDA – National Information Technology Development Agency

NNPCL – Nigerian National Petroleum Company Limited

NUC – National Universities Commission

OBTL -Online and Blended Teaching and Learning

OER – Open Educational Resources

PTDF – Petroleum Technology Development Fund

QA – Quality Assurance

SLO – Students Learning Outcome(s)

SPGS – School of Postgraduate Studies

UL – University Librarian

VC – Vice Chancellor

## **1.0 INTRODUCTION**

### **1.1 Preamble**

As stated in its recently approved Teaching and Learning policy, Ahmadu Bello University seeks to use the latest modern information and communication technologies (ICT) in delivering course contents and student assessments. This is based on the Online and Blended Teaching and Learning (OBTL) approach. The recent adaptation of ICT in teaching and learning is a very important example of leveraging modern tools for improved students' learning outcomes. The digital world is undoubtedly fast penetrating the education and skills domain, with technology smartly and steadily being used to deliver knowledge and skills in new and innovative ways. The necessity of using OBTL approach was evidenced during the COVID-19 pandemic in 2019/2020. As the restrictions of social distancing were imposed, many institutions of higher learning relied heavily on alternative delivery methods to continue to teach and deliver services. It has been shown that OBTL approach is very effective in content delivery, interactions with learners and assessments of learning outcomes.

This document presents an outline on the implementation of the Teaching and Learning policy with emphasis on OBTL, based on international best practices. It is expected that this will support both lecturers and students in a manner that will raise the quality of teaching and learning standards and influence how students engage with new ideas and attitudes that support their learning. It shows the expectations of teachers conduct both online, in classrooms and outside the classrooms. It is believed that appropriate use of OBTL will improve teaching/learning, bring equal opportunity, improve access, engender equity and diversity in the students' learning experiences. It will help the university to ensure the highest possible achievement and development of each individual student based on his/her unique needs using the student-centred approach.

### **1.2 Objectives of the Implementation Plan for the Teaching and Learning Policy**

The objectives of the implementation phase of OBTL policy at ABU are to:

- a. create awareness and build capacity
- b. provide the implementation strategies

- c. identify roles and responsibilities of stakeholders in the implementation
- d. provide the facilities and support services for effective implementation
- e. provide Quality Assurance framework for the implementation
- f. develop the code of conduct/Ethics for the implementation
- g. identify various sources of funding for the implementation

## **2.0 IMPLEMENTATION STRATEGIES FOR THE KEY POLICY STATEMENTS**

These include Objectives, Strategies, Deliverables, Unit (s) Responsible for the Implementation, Timeline (short, medium and long terms), Cost and KPIs. The implementation strategies for some of the objectives, which include creating awareness and advocacy programmes, capacity building, training of staff and students are shown in Table 1.

**Table 1: Awareness, Advocacy and Capacity Building for Implementation of the OBTL**

<b>Objectives</b>	<b>Strategy</b>	<b>Deliverables</b>	<b>Unit Responsible for implementation</b>	<b>Timeline (short/ medium/ long terms)</b>	<b>KPIs</b>	<b>Cost (N)</b>
1. Create awareness and Advocacy.	Organise and conduct workshops/ seminars/webinars, to achieve at least 90% awareness.	Evidence of workshops and seminars/webinars, jingle, fliers, websites, etc.	DAPM, SPGS, IAIICT, Public Affairs, Deans/Directors, HODs, Student Union	Short Term (1 <sup>st</sup> December, 2022 – 31 <sup>st</sup> January, 2023)	Achieve 80% awareness	Based on 18 faculties 18*60,000=1,080,000 Add 10% for Resource Persons Subtotal = 1,188,000

<p>2. Capacity building for designing, developing and delivery of OBTL course contents.</p>	<p>Organize and conduct trainings to develop capacity of staff:</p> <p>2.1. On OBTL content development</p> <p>2.2. On creation of course files and digital content</p> <p>2.3. Conduct training for students on OBTL</p>	<p>Evidence of:</p> <p>1. Trainings and availability of reviewed curriculum</p> <p>2. Developed OBTL content</p> <p>3. Student training on OBTL content.</p>	<p>DAPM, DLC, Faculties, Departments, SPGS, IAICT, IIOE</p>	<p>Short Term - January - December, 2023)</p> <p>Medium Term - by December 2025</p> <p>Long Term - by December 2027</p>	<p>Achieve 30% in the short term,</p> <p>60% in the medium term</p> <p>90% in the long term.</p>	<p>2.1</p> <p>18*50,000 = 900,000</p> <p>10% for Resource Persons = 90,000</p> <p>2.2</p> <p>225,000/course</p> <p>2.3</p> <p>18*30,000 = 540,000</p> <p>10% for Resource Persons =54,000</p> <p>Subtotal=</p> <p>1,584,000 +</p> <p>225,000/course</p>
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**Note:** It was agreed that DAPM may use all GENS and other relevant courses available at DLC as starting resources for implementation of OBTL at ABU.

## 2.1 Creation of Course File and Digital Content Development

At the end of each semester a course file that contains details for each course shall be prepared by the respective course lecturers. A Course File contains the following documents:

- a. Cover Page
- b. Timetable
- c. Vision and Mission of ABU
- d. Vision and Mission of Programme or Department
- e. List of Students Learning Outcomes (SLO) and Departmental/Programme Educational Objective
- f. Course Title and Short Course Description along with Recommended Books
- g. Teacher's Office Hours for Students.
- h. Weekly topic-wise Course Detail.
- i. Course Specification (core, required, elective, its prerequisite, etc)
- j. A copy of the Course Syllabus
- k. Course Objectives (CO)
- l. Mapping of COs with SLO
- m. Lecture Schedule
- n. Detailed Notes
- o. Examination and continuous assessment (CA) question papers and their solutions
- p. Student performance in examination and CA & Result Analysis
- q. Evidence of identification of weak and Bright students and Action taken
- r. Books, References, Journals, websites and E-links to digital content
- s. Student List
- t. Group-Wise students list for discussion topic (where applicable)
- u. Course-End Student evaluation of the course
- v. Identification of gaps for overall course & Proposed actions

Digital content development is defined as a process of generating topic presentation ideas that appeal to the audience and then developing written and/or visual content to appropriately deliver those topics. It is about using the lecturer's expertise and pedagogical skills to deliver effective content for learners.

Five basic steps to digital content development are:

- a. Set the teaching goal – i.e. decide what impact you want your content to have
- b. Know your Audience (KYA)
- c. Decide and refine your content delivery strategy
- d. Write it down
- e. Implement it.

## **2.2 Provision of Adequate ICT Facilities and Conducive Environment for Teaching and Learning**

To allow for free exchange of ideas, thoughts and skills among the teachers and learners to achieve the expected educational goals, a setting which considers the physical, psychological, social, and cultural needs of all the learners shall be provided. To this end, the University management shall:

- a. ensure adequate functionality of the available ICT facilities, (e.g digital centre in all faculties, )
- b. revamp and ensure functional internet access in all departments and classroom. See Annex 2
- c. make internet/intranet available at strategic areas of each faculty or identified locations within the campus and student hostels. See Annex 2.
- d. ensure that the intranet of the University is functional at all times.
- e. ensure adequate bandwidth
- f. adopt an institutional LMS and online teaching tools
- g. ensure adequate power supply and expansion of existing facilities
- h. ensure availability of computing devices for all stakeholders

## **2.3 Staff and Students Support**

Technical, Financial and academic support shall be provided on an ongoing basis as required.

This shall include:

- a. Deployment of skilled staff (physically or online) to each faculty to provide assistance to staff and students when needed



- b. Collaboration with student bodies especially groups focused on IT Skills eg. Google student ambassadors on how to improve the digital skills of students
- c. Empowering and mandating IAICT to conduct regular skills gap assessment and provide such trainings to the university community
- d. Exploring a private public loan scheme for staff and student to acquire digital tools

This is broken down further as shown in Table 2.

**Table 2: Support for conducive learning**

<b>S/N</b>	<b>Staff/Student Support</b>	<b>Strategies</b>	<b>Deliverables</b>	<b>Unit Responsible for Implementation</b>	<b>Timeline</b>
2.3.1	Staff Support	Provision of Laptops (hire purchase)	Evidence of laptops supplied	University Management, Bursary, DUA & DAPM.	Continuous (in batches)
		Provision of call and Service centre Enlisting online staff capacity building	Availability of at least 1 call and service centre in each faculty	IAIICT, HODs	Immediate

2.3.2	Students Support	<p>Provision of Grant, Student loan scheme, Scholarship, other forms of financial assistance.</p> <p>Provision of Counselling and administrative services for students.</p> <p>Provision of call and service call centre</p>		<p>Student affairs division to identify and profile students in conjunction with student unions; then advise the Federal and State Scholarship Boards, Education Bank, and Alumni.</p> <p>Identify Alumni and friends of the University willing to invest on cost recovery</p> <p>Counselling and Human Development Centre</p> <p>Student Affairs Division and IAICT</p>	<p>Continuous</p> <p>Continuous</p> <p>Immediate</p>
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## **2.4 Phase-wise Implementation of the Policy**

Target migration of at least 80% of all current programmes in the allotted five year (5) period.

Five year (5) phased deployment plan:

- 1 Year 1 will involve all consenting and digital ready programmes, departments, faculties, centres (of excellence). An uptake of at least 10% is expected, subsequently a cumulative figure of certain percentages every year for the next 4 years.
- 2 Year 2: 25 % compliance with the OBTL policy
- Year 3: 45% compliance with the OBTL policy
- 4 Year 4: 70% compliance with the OBTL policy
- 5 Year 5: 80% compliance with the OBTL policy

## **2.5 Incentives for the OBTL migration**

Promoting blended learning through policy-making and establishing incentive schemes:

1. The University shall enact a policy to award the best blended learning courses and teaching staff with certifications of recognition, prioritisation for training/workshops (such as digital course development programmes of IIOE) available and/or monetary incentives as personal income.
2. Priority attention shall be given to departments with the most OBTL compliant courses via: deployment of ICT infrastructure, limited license of tools/software and other pedagogical tools.
3. Training (Local/abroad) by the University or partners shall be provided only for staff and administrators compliant in OBTL implementation
4. Specifying the adoption of an on-line component in a course as a criterion for the promotion of faculty members and/or a performance indicator in their annual performance reviews.

## **3.0 QUALITY ASSURANCE FRAMEWORK**

The OBTL QA framework shall be subsumed under the current University QA framework in terms of structure, function and personnel within the umbrella of the NUC requirement of input,

processing and output while keeping in tune with global practices. To ensure success of the OBTL, the CoL quality assurance framework is adapted to the university context.

### **3.1 ICT Facilities Upgrade and Maintenance**

- a) Information Technology auditing shall be performed on a regular basis to evaluate the controls to protect the university information technology infrastructure, applications, data use and management, policies, procedures and operational processes against recognized standards or established policies.
- b) Learning Management Systems (LMS) to be used for delivering resources online, managing students and courses shall be defined by the University.
- c) Only University approved LMS shall be used for OBTL.
- d) The selection of LMS shall be informed by available infrastructure and learner access.
- e) The chosen LSM shall have wide functionalities for classroom management. It should support text, multimedia content, embedded assessments, and interactivity.
- f) The University shall ensure that approved LMS are user-friendly, always up to date, available, safe, secure and accessible by all users at all times.
- g) The University shall provide support to staff and students on the use of all approved LMS
- h) The selected ICT and LMS support completion of activities that enhance the learning outcomes.
- i) The LMS provides an option to download resources for offline consumption.
- j) The selected LMS or course media should be compatible with various browsers, devices including mobile devices.
- k) The University shall provide Web conferencing facilities to be used in blended learning as an online counterpart to classroom-based tutorials, seminars or any synchronous (real-time) learning activity, such as collaborative, project-based work.
- l) The selected Web conferencing facility should support advanced features that can mimic certain classroom activities, such as polling or breakout groups.
- m) The University shall ensure availability of adequate bandwidth to handle the traffic required for the blended learning.

- n) The University shall ensure that the data-centre is fully functional at all times to guarantee all-year availability.
- o) Outdated Network switches at the data-centre, distribution and end-user sites devices that have reached their end of life shall be replaced.
- p) The University shall ensure that all offices, classes, and laboratories are connected to the university network.
- q) Critical ICT infrastructure at each level must have back-up since failure can have a severe impact on OBTL.
- r) Adequate power backup shall be provided for network and computing infrastructure at the data-centre, distribution stations, end-user station and laboratories.
- s) Adequate security plan to protect the network, LMS, and learning contents shall be put in place at all times.
- t) Alternative backup, either online or onsite of the data-centre as well as a disaster recovery plan shall be put in place to ensure continuity of OBTL in the advent of a disaster.

### **3.2 Content Development**

- a) Learning outcomes of each course shall be clearly defined.
- b) Level of learning outcomes shall be aligned to relevant learning frameworks (e.g., Bloom's taxonomy).
- c) Use descriptive text and media that promote a good understanding of the subject matter.
- d) Develop content that promotes interaction amongst students (e.g., peer coaching) and with the instructor.
- e) The requirements for the number of study hours must conform to NUC standards.
- f) The Head of Department shall ensure that the course content is accurate, up-to-date and relevant to societal needs.
- g) The Head of Department shall ensure that the content meets the institutional and transfer credit requirements.
- h) The references must be reliable (i.e., proper information, active links), relevant and up-to-date.
- i) The materials must be properly cited, referenced and free of plagiarism

- j) The Head of Department shall ensure that the materials have been copy edited for accuracy, typographic errors, format, style, content and workable links by the instructor.
- k) Instructors shall ensure that the presentation of course content is logical (e.g., sequential, well-paced).
- l) The course structure shall be flexible, allowing for easy updating of content in units, activities, assignments and learning materials.
- m) The Head of Department shall ensure that the course structure includes links to library research databases, and accessible links to LMS and related websites.
- n) Ensure that the course is properly licensed.
- o) Ensure that the course structure and content meets institutional guidelines or is consistent relative to formatting / templates, etc.
- p) The course structure shall enable a good mix of learning resources and instructors
- q) There are instructions on how learners should engage with a blended learning course and what proportions of the course are online and face-to-face.
- r) There is sufficient indication of where materials are to be used online and in face-to-face settings.
- s) The course has clearly defined instructions for learners to satisfy the course requirements (e.g., tasks, assignments) as well as the learning outcomes of the course.

### **3.3 Course Structure**

The Head of Department shall ensure that:

- a) Learners shall be exposed to a variety of learning activities.
- b) There shall be learning activities designed to engage students in critical thinking
- c) Learning activities / instructional materials shall be linked to learning outcomes.
- d) Only instructional materials that contribute to the achievement of the stated learning outcomes shall be selected.
- e) Use active learning strategies that engage the student and promote the achievement of the stated learning outcomes.

- f) Use learning activities that provide opportunities for interaction (student–student, student–instructor, and with materials / technology) that support active learning.
- g) Ensure that media is thoughtfully integrated in the course (i.e., short videos, variety of interactive features etc).
- h) Tutors shall be adequately trained and qualified to facilitate the OBTL.
- i) Students are provided with orientation to the online components of the course and registration facilities.
- j) There are clear instructions on how and when students should expect feedback.

### **3.4 Assessment Rubrics**

- a) Learners are provided with information on how they will be assessed in the course.
- b) Marking guides for papers and examinations are provided.
- c) Assessment measures should include formative and summative assessments.
- d) Assessment tools for self-evaluation and feedback should be provided.
- e) Selected assessment tools should be able to measure mastery of learning outcomes

### **3.5 Monitoring and Evaluation**

- a) The Departmental, Faculty and Central QA committees shall perform the same functions as for the face-to-face mode
- b) Ensure that the course is being subjected to quality assurance processes with at least the same rigour as a face-to-face course.
- c) Plans / schedules are in place for online courses to be reviewed to ensure that the provider keeps pace with changes in technology and content.
- d) Course evaluation should be enabled for learners to provide feedback on the blended learning experience, including the course content.
- e) LMS should have provision for random checks by administrators with oversight responsibilities (Heads of Departments, Deans of Faculties, Vice chancellor etc.)
- f) Use of CoL rubric to evaluate the level of achievement of learning outcomes



#### **4.0 ROLES/RESPONSIBILITIES OF STAKEHOLDERS**

Table 3 shows assigned responsibilities to the stakeholders.

**Table 3: Roles and responsibilities of stakeholders**

<b>Group of Stakeholders</b>	<b>Constituents of Stakeholders</b>	<b>Role/Responsibility of stakeholders</b>	<b>Deliverables/ KPIs</b>	<b>Duration/ Periodic Implementation Plan</b>
<b>1.0 Internal Stakeholders</b> 1.1 Council	Chairman and Council members	<ul style="list-style-type: none"> <li>- To approve policies.</li> <li>- To set up a monitoring team to review and evaluate progress periodically.</li> </ul>	<ul style="list-style-type: none"> <li>- Quarterly and annual reports on level of implementation and compliance</li> </ul>	<ul style="list-style-type: none"> <li>-Quarterly</li> <li>-Annually</li> </ul>
1.2 University Senate	Vice chancellor DVCs, Deans, Directors, HODs, Professors, UL, Registrar, Bursar, Congregation representatives	<ul style="list-style-type: none"> <li>- Recommend OBTL policies and Standards to the Council</li> <li>- Ensure monitoring of implementation and compliance</li> </ul>	<ul style="list-style-type: none"> <li>- Published OBTL policy (Hard and Soft Copies)</li> <li>- Evidence of wide circulation among staff and students</li> <li>- Documented reports from faculties on compliance and implementation every semester</li> <li>- Evidence of reward for compliance and sanction for non-compliance.</li> </ul>	At least: <ul style="list-style-type: none"> <li>-10% level of compliance targeted in 1<sup>st</sup> academic session</li> <li>-25% level of compliance targeted by 2<sup>nd</sup> academic session</li> <li>-45% by 3<sup>rd</sup> academic session.</li> <li>-70% compliance by 4<sup>th</sup> academic session</li> <li>-80% compliance in 5<sup>th</sup> academic session</li> </ul>
1.3 Central Administration	VC, DVCs, Registrar, Bursar, University Librarian	<b>VC/ DVCs:</b> <ul style="list-style-type: none"> <li>- Formulation of OBTL policies and standards for Senate approval</li> <li>- Provide guidelines for OBTL implementation across the University for Senate approval</li> <li>- Initiate discussions with collaborative partners for support</li> <li>- Conduct continuous staff capacity development</li> </ul>	<ul style="list-style-type: none"> <li>- Comprehensive baseline assessment of existing infrastructure</li> <li>- Draft OBTL policy</li> <li>- availability of development plan for OBTL</li> <li>- Availability of firmed</li> </ul>	<ul style="list-style-type: none"> <li>-Short term plan (1 year)</li> <li>-Medium term (3 years)</li> <li>-Long term Plan(5 years)</li> </ul>

		<ul style="list-style-type: none"> <li>- Source for funding for the implementation of the policies</li> <li>- Communicate with all other relevant stakeholders on the essence of OBTL to encourage ownership by staff and students</li> <li>- Design appropriate framework for regular evaluation, update and review of the OBTL policy</li> <li>- Provide appropriate and sufficient infrastructure for OBTL deployment.</li> <li>- Liaise with appropriate authorities to facilitate partnerships with relevant bodies to provide resources/services that will promote and enrich online learning</li> <li>- Promote the safe, responsible, and ethical use of facilities and technologies for OBTL</li> <li>- Provide guidelines for rewards and sanctions</li> <li>- Ensure differently abled students are catered for in planning the delivery of OBTL</li> </ul> <p style="text-align: center;"><b>Bursar:</b></p> <ul style="list-style-type: none"> <li>- Review existing resources required for take off</li> <li>- Identify key cost drivers of proposed activities</li> <li>- Assess potential funding sources and cost transfer</li> </ul>	<ul style="list-style-type: none"> <li>programmes for laptop and accessories acquisitions for staff and students</li> <li>- Funding and timelines for regular staff training</li> <li>- Established medium for seamless flow of information through Learning Management Systems (LMS)</li> <li>-Current licences and subscription for all relevant electronic materials</li> <li>-Availability of template for reporting the progress, successes and challenges of OBTL implementation issued to all departments, faculties, colleges and institutes</li> <li>-Availability of OBTL legal document.</li> </ul>	
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		<ul style="list-style-type: none"> <li>- Provide a financial plan for short term, Mid-term and long term with clear proposed sources of funding</li> <li style="padding-left: 20px;"><b>Registrar:</b></li> <li>-Prepare, document and issue guidelines, datelines, procedures for implementation</li> <li>- Issue template for reporting the progress, successes and challenges of OBTL implementation by departments, faculties, colleges and institutes</li> <li>- Be responsible for all legal issues concerning OBTL</li> <li style="padding-left: 20px;"><b>University Librarian:</b></li> <li>- Identify relevant online materials journal, soft books, periodicals, data base</li> <li>- Constant review of the currency of the periodicals including subscriptions</li> </ul>		
1.4 Directorates	DAPM, Public Affairs, DLC, IA-IICT, DUA	<ul style="list-style-type: none"> <li>- Identify generic and function specific skills requirements and gaps</li> <li>-Ensure seamless buy-in of the OBTL Projects by all stakeholders</li> <li>-Provide information on existing gaps in the bandwidth, technical skills, hardware and software on the campus.</li> <li>- Interphase with teachers, learners and managers of OBTL to develop strategy for delivering on mandate</li> </ul>	<ul style="list-style-type: none"> <li>- Availability of reports of compliance, established rules, and regulations</li> <li>- Availability of stable and wide network of internet services on campus</li> <li>- Evidence of total buy-in of all Stakeholders</li> <li>- Approved training programmes</li> </ul>	Continuous

		<ul style="list-style-type: none"> <li>- Provide technical advice and support to students, academics and management to ensure easy access to appropriate infrastructure</li> <li>- Organise relevant trainings for academics and students on requisite skills for OBTL</li> <li>- Communicate with internet service providers to improve the quality of service where necessary</li> <li>- Provision of privileges to HODs, Deans, Directors on the LMS to monitor use, compliance with OBTL policy.</li> </ul>		
1.5 Faculties	Deans	<ul style="list-style-type: none"> <li>- Ensure continuous operation of the OBTL programme through provision of necessary facilitations to the departments</li> <li>- Chair faculty committee on OBTL/QA with all HODs and departmental OBTL/QA Coordinator as members.</li> <li>- Engage HODs with clear directives on expected goals</li> <li>- Ensure scheduled regular training for the departments are conducted</li> </ul>	<ul style="list-style-type: none"> <li>- Availability of minutes of faculty OBTL monitoring Committee</li> <li>- Compliance reports on year-to-year target achievements</li> <li>- Availability of shared departmental training programmes</li> </ul>	<ul style="list-style-type: none"> <li>-Continuous</li> <li>-Yearly reports</li> </ul>
1.6 Departments	H.O.Ds	<ul style="list-style-type: none"> <li>- Appoint QA coordinator</li> <li>- Ensure each course has a digital course file</li> <li>- Create blended course content development team</li> <li>- Ensure the implementation of training plans for the department.</li> </ul>	<ul style="list-style-type: none"> <li>- Existence of QA Coordinators for each department</li> <li>- Existence of digital course file</li> <li>- Existence of course content development team</li> <li>- Existence of operational training plan for the department</li> </ul>	<ul style="list-style-type: none"> <li>At least:</li> <li>-10% level of compliance targeted in 1<sup>st</sup> academic session</li> <li>-25% level of compliance targeted by 2<sup>nd</sup> academic session</li> </ul>

		- Ensure appropriate resources required are available	- Resources deployed to departments	-45% by 3 <sup>rd</sup> academic session. -70% compliance by 4 <sup>th</sup> academic session 80% compliance in 5 <sup>th</sup> academic session
1.7 Staff	Academics	- Ensure implementation of blended learning curricular - Collaborate with the IAIICT team to develop the relevant skills to deliver OBTL - Mentor and guide other academics on OBTL delivery - Facilitate easy transition and subsequent continuous learning.	-Operational blended learning curricular -Evidence of improved deliveries across the department -Improved university ranking -Evidence of improved student performance	Continuous
1.8 Students		- Provide feedback on the progress, success and challenges of OBTL usage - Actively engaged in collaborative learning opportunities with peers - Collaborate and communicate with appropriate management - Comply with laid down standards to optimise blended learning	- Evidence of improved learning and skills - Improved academic performance and skills development	Continuous
<b>2.0 External Stakeholders</b> 2.1 Ministries Department and Agencies (MDAs)	FME, FMCDE, FMF, NUC, NCC, NITDA	- Provide national guideline for OBTL for tertiary education in Nigeria - Provide infrastructural support for OBTL - Facilitate cost effective acquisition of devices subsidised for online learning	- Gazetted national guidelines for OBTL - Availability of periodic infrastructure requirements - Firmed contract herein with equipment vendors	Continuous

2.2 Collaborative Partners	MIT, IIOE, ICHEI, CBN, PTDF, ACENPEE, ACENTDFB, Private Telecommunications Companies, NNPC, etc.	<ul style="list-style-type: none"> <li>- Provide support in the design and delivery of suitable content</li> <li>- Provide technical advice on infrastructural need</li> <li>- Provide grants and support for continuous implementation of OBTL</li> <li>- Support training of staff</li> <li>- Facilitate access to ICT- based teaching and learning facilities with access to international repositories of journals, e-books, etc.</li> <li>- Provide dedicated user support centers on campus to support online learning</li> </ul>	<ul style="list-style-type: none"> <li>- Well-designed programmes</li> <li>- Availability of adequate infrastructure for hybrid learning</li> <li>- Current licences and subscription for all relevant electronic materials</li> <li>- Increased number of trained staff</li> </ul>	
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## **5.0 CODE OF CONDUCT/ETHICS**

### **5.1 Online Live Sessions Participation Etiquette**

#### **5.1.1 Staff**

- a) Online facilitation shall closely match the face to face teaching, providing high quality, well sequenced activity.
- b) Students and staff shall follow the University code of conduct at all times while conducting OBTL
- c) Lecturers shall ensure students experience leads to similar outcomes regardless of the mode of delivery
- d) Lecturers/e-tutors shall ensure students are muted online/offline where appropriate to ensure clarity and ease of communication
- e) Lecturers/e-tutors shall respond to questions from students within appropriate time frame

#### **5.1.2 Students**

- a) Students shall actively engage in online activities by attending all scheduled classes on time, participating in class discussions and responding to questions, submitting assessment.
- b) Students shall adhere to the university rules and regulations during online sessions as updated from time to time.
- c) Students shall take responsibility for finding and accessing work that has been uploaded to the LMS on time.
- d) Students shall follow instructions such as turn cameras off, mute speakers, 'raise my hand' to speak, and only use the 'chat' function to communicate etc.
- e) Staff and students shall use appropriate language while communicating during online session
- f) Student shall not submit plagiarised work for evaluation



## **5.2 Staff Privacy, Security and General Data Protection Regulation Compliance**

- a) Handling of staff and student data shall be in adherence to the Nigeria Data Protection Regulation.
- b) The University shall ensure privacy and safety of staff and student data at all times
- c) Personal information data shall not be shared or disclosed to third parties without authorization.
- d) The University shall ensure that staff and students' rights to confidentiality are respected
- e) Lecturers/e-tutors shall ensure their camera and other recording devices are turned off where necessary to protect privacy

## 6.0 FUNDING

Annual funding sources for the different activities are shown in Table 4 (Details are in Annex 4).

**Table 4: Funding sources for the different activities**

<b>FUNDING SOURCES</b>	<b>DESCRIPTION</b>	<b>Amount (₦)</b>
1.0 Internally Generated Revenue	1.1 Student ICT Fees	150,000,000.00
	1.2 ICT levy for staff	20,000,000.00
2.0 External Source	TETFund interventions	50,000,000.00
	Deposit Money Banks (Loans)	50,000,000.00
3.0 Expected Support Sources/Partnerships	MDAs (NCC, NITDA, etc.)	100,000,000.00
	NGOs	50,000,000.00
	Alumni	30,000,000.00
	Philanthropists	50,000,000.00
	<b>Total</b>	<b>500,000,000.00</b>

## ANNEXES

### ANNEX 1: NETWORK COVERAGE AND STATUS

<b>ABU BUSINESS SCHOOL</b>			
<b>S/N</b>	<b>Department</b>	<b>Comments</b>	<b>Connection Status</b>
1	Accounting		
2	Actuarial Science and Insurance		
3	Banking and Finance		
4	Business Administration		
5	Economics	No power Backup	Network is up and running.
6	Marketing		

### COLLEGE OF MEDICAL SCIENCES

<b>S/N</b>	<b>Faculty</b>	<b>Comments</b>	<b>Connection Status</b>
1	Allied Health Sciences + Tudun Wada		

2	Basic Clinical Sciences	Some few Fibre issues	Network up and running
3	Basic Sciences	No power backup	
4	Clinical Sciences	Some few fibre issues	
5	Dentistry		
<b>FACULTY OF ADMINISTRATION</b>			
<b>S/N</b>	<b>Department</b>	<b>Comment</b>	<b>Connection Status</b>
1	Dean's office, faculty of administration	Faulty access switch. Faulty power backup all the batteries are dead.	No network connectivity since 2019.
2	Accounting	Faulty power backup all the batteries are dead. All the switches are working.	Network is up and running.
3	Business Administration	Faulty power backup all the batteries are dead. All the switches are working.	Network is up and running.

4	Local Government and Development Studies	Faulty aggregate switch Faulty power backup all the batteries are dead.	No network connectivity since 2020.
5	Public Administration	Faulty power backup all the batteries are dead. All the switches are working.	Network is up and running.
<b>FACULTY OF AGRICULTURE</b>			
<b>S/N</b>	<b>Department</b>	<b>Comments</b>	<b>Connection Status</b>
1	Agric. Economics	No power Backup	Network is up and running.
3	Agric. Extension	No power Backup	Network is up and running.
3	Agric. Library	No power Backup	Network is up and running.
4	Agronomy	No power Backup	Network is up and running.
5	Animal Science	No power Backup	Network is up and running.

6	Crop Protection	No power Backup	Network is up and running.
7	Estate	No power Backup	Network is up and running.
8	Faculty of Agric. Digital Centre	No power Backup	Network is up and running.
9	Plant Science	No power Backup	Network is up and running.
10	Seed Unit IAR	Has not been Integrated to the University Network	Not connected
12	Soil Science	No power Backup	Network is up and running.
<b>FACULTY OF ARTS</b>			
<b>S/N</b>	<b>Department</b>	<b>Comment</b>	<b>Connection Status</b>
1	Dean Office	No power Backup	Network is up and running.
2	ABUCONS		Network is up and running.

3	Arabic	No power Backup	Network is up and running.
4	Archaeology	No power Backup	Network is up and running.
5	English	No power Backup	Network is up and running.
6	French & African language	No power Backup	Network is up and running.
7	Hausa	No power Backup	Network is up and running.
8	History	No power Backup	Network is up and running.
9	Lecture Theatre	No power Backup	Network is up and running.
10	Theatre & Performing Arts	No power Backup	Network is up and running.

**FACULTY OF EDUCATION**

<b>S/N</b>	<b>Departments</b>	<b>Comments</b>	<b>Connection Status</b>
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1	Faculty Office	No Power Backup	Network is up and running.
2	Art & Social Education	No Power Backup	Network is up and running.
3	Art & Social Science Education	No Power Backup	Network is up and running.
4	Guidance & Counselling (Samaru)	No Power Backup	Network is up and running.
5	Home Economics Education	No Power Backup	Network is up and running.
6	Human Kinetics and Health Education	No Power Backup	Network is up and running.
7	Library & information Science	No Power Backup	Network is up and running.
8	Psychology & counselling	No Power Backup	Network is up and running.
9	Science Education	No Power Backup	Network is up and running.



10	Social Studies Education	No Power Backup	Network is up and running.
11	Vocational & Technical Education	No Power Backup	Network is up and running.

**FACULTY OF ENGINEERING**

<b>S/N</b>	<b>Department</b>	<b>Comments</b>	<b>Connection Status</b>
1	Faculty Office Engineering	Still waiting for funds from Management	Not Connected (Budget approved by the VC)
2	Agricultural and Bio-Resource engineering	No power Backup	Network is up and running.
3	Chemical Engineering	No power Backup	Network is up and running.
4	Civil Engineering	No power Backup	Network is up and running.
5	Computer Engineering		
6	Electrical Engineering	The main Distribution power backup is not working	Network is up and running.

7	Electronics and Telecommunication Engineering		
8	Mechanical Engineering	No power Backup	Network is up and running.
9	Metallurgical & Materials Engineering	No power Backup	Network is up and running.
10	Polymer and Textile Engineering	No power Backup	Network is up and running.
11	Water Resources and Environmental Engineering	No power Backup	Network is up and running.
<b>FACULTY OF ENVIRONMENTAL DESIGN</b>			
<b>S/N</b>	<b>Department</b>	<b>Comments</b>	<b>Status</b>
1	Faculty Office	No power Backup	Network is up and running.
2	Architecture	No power Backup	Network is up and running.
3	Building	No power Backup	Network is up and running.

4	Fine Art	No power Backup	Network is up and running.
5	Industrial Design	No power Backup	Network is up and running.
6	Quantity Survey	No power Backup	Network is up and running.
7	Urban & Regional Planning	No power Backup	Network is up and running.
<b>Faculty of Law</b>			
<b>S/N</b>	<b>Department</b>	<b>Comments</b>	<b>Status</b>
1.	Faculty Office	All the access/aggregate switches are working	Only the Distribution Switch is Working
2	Civil Law		

3	Islamic Law		
4	Private Law		
5	Public Law		

#### FACULTY OF LIFE SCIENCES

S/N	Departments	Comments	Connection Status
1	Faculty Office	Awaiting funding to commence work	Not Connected (Budget approved by the VC)
2	Biology	Distribution power backup faulty	Network is up and running.
3	Biochemistry	No power backup	Connected
4	Botany		
5	Microbiology	No power backup	Connected
6	Zoology		

### FACULTY OF PHARMACY

<b>S/N</b>	<b>Department</b>	<b>Comments</b>	<b>Connection Status</b>
1	Faculty Office		
2	Clinical Pharmacy	No power Backup	Network is up and Running
3	Pharmaceutic and Industrial Pharmacy		
4	Pharmaceutical and Medicinal Chemistry		
5	Pharmaceutical Microbiology		
6	Pharmacognosy and Drug Development		
7	Pharmacology and Therapeutics		

### FACULTY OF PHYSICAL SCIENCES

<b>S/N</b>	<b>Departments</b>	<b>Comments</b>	<b>Connection Status</b>
1	Faculty Office		Not Connected

2	Chemistry	No Power Backup	Network is up and running.
3	Computer Science	No Power Backup	Network is up and running.
4	Geography	Fibre cut along mathematics route	Connection issues
5	Geology	No Power Backup	Network is up and running.
6	Mathematics	No Power Backup	Network is up and running.
7	Physics	No Power Backup	Network is up and running.
8	Statistics	No Power Backup	Network is up and running.

#### FACULTY OF SOCIAL SCIENCE

S/N	Department	Comments	Status
1	Faculty Office	No power Backup	Network is up and running.

2	Mass Communication	No power Backup	Network is up and running.
3	Political Science	No power Backup	Network is up and running.
4	Sociology	No power Backup	Network is up and running.

**FACULTY OF VETERINARY MEDICINE**

<b>S/N</b>	<b>Department</b>	<b>Comments</b>	<b>Status</b>
1	Faculty Office		
2	Theriogenology and Animal Production		
3	Vet. Anatomy		
4	Vet. Medicine		
5	Vet. Microbiology		
6	Vet. Parasitology and Entomology		
7	Vet. Pathology		
8	Vet. Pharmacology and Toxicology		
9	Vet. Physiology		

10	Vet. Public Health and Preventive Medicine		
11	Vet. Surgery and Radiology		
12	Veterinary Teaching Hospital		

### Senate Building

			<b>Connection Status</b>
1	Senate		Connected
<b>INSTITUTES AND CENTRES</b>			
<b>S/N</b>	<b>Institute or Centre</b>	<b>Comment</b>	<b>Connection Status</b>
1	CBN Centre of Excellence for Economics and Finance		
2	CERT		



3	CILS	All the access/aggregates witches are working	Network is up and running.
4	DAC	Only the Director's Office is connected.	Network is up and running.
5	Education		
6	IAIICT		
7	IDRT		
8	IAR	No Power Backup and Expansion Needed	Network is up and running.
9	NAERLS	No Power Backup and Expansion Needed	Network is up and running.

10	NAPRI	No power backup	Network is up and Running
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**ABU Phase II**

	All buildings	the project for networking Phase 2 is currently ongoing and is expected to be completed in February	
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**ANNEX 2: APPROXIMATE COST OF ICT UPGRADE**

S/N	FACULTY	LOCATION/DEPARTMENT	CATEGORISATION		REQUIREMENTS	QTY
			UNDERSERVED	UNSERVED		
1	Arts		Yes		Additional Switch: Cisco C9200L-24P-4X-A + Cisco DNA Advance, 24-port, 3 Year Term License  Wireless: Mikrotik Metal 2SHPn 400MHz Atheros, 1.6W  2.4/5GHz 802.11g/n RoS, with 16dbi Omni Antenna +	6
		Arabic				
		English				
		Frenc				
		History				
		Archaeology				
		TheatrePerforming Arts				
		Nigerian & African				
		Dean's Office				
		Philosoph				
	Abdullahi Smith Lecture Theatre					7
						1

					Installation accessories	
					Power Backup: Prag 3.5KVA Pure Wave Inverter-48V, 12V/200AH AGM/Su-Kam /Luminous/mercury Inverter Battery (x4)	
					SUB TOTAL	
2	Education				Additional Switch: Cisco C9200L-24P-4X-A + Cisco DNA Advance, 24-port, 3 Year Term License	4

	Library			9
	Science			
	Arts			
	Physical And Health			
	Psycholog	Yes	Wireless: Mikrotik	1
	Business		Metal 2SHPn	
	Social		400MHz Atheros,	
	Vocational and Tech.		1.6W	
	Block of Ten Offices			
	Exams Office		2.4/5GHz	1
	Curriculum& Pedagogy		802.11g/n RoS,	
			with 16dbi Omni	
			Antenna +	
			Installation	
			accessories	
			Power Backup: Prag	
			3.5KVA Pure Wave	
			Inverter-48V,	
			12V/200AH	
			AGM/Su-Kam	
			/Luminous/mercury	

					<p>Inverter Battery (x4)</p> <p>Power Backup: Prag 2KVA Pure Wave Inverter-24V,  12V/200AH AGM/Su-Kam /Luminous/mercury Inverter Battery (x2)</p>	
					SUB TOTAL	
3	Social Science	Economics			<p>Additional Switch: Cisco C9200L-24P- 4X-A + Cisco DNA</p>	4

Political	Yes		Advance, 24-port, 3 Year Term License	7
Sociology				
Mass				
International				
Dean's Office				
TETFund Building			Wireless: Mikrotik Metal 2SHPn 400MHz Atheros, 1.6W  2.4/5GHz 802.11g/n RoS, with 16dbi Omni Antenna + Installation accessories	1

					Power Backup: Prag 3.5KVA Pure Wave Inverter-48V,  12V/200AH AGM/Su-Kam /Luminous/mercury Inverter Battery (x4)	
		New Sociology Building		Yes	Fibre Connectivity/LAN/ WLAN/Power Backup	LOT
		Mass Communication (ICSA)				
					SUB TOTAL	

			CATEGORISATION	REQUIREMENTS		
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S/ N	FACULTY	LOCATION/DEPARTMENT	UNDERSERVED	UNSERVED		QTY	ESTIMATED COST
4	Science	Biological Science	Yes		Additional Switch: Cisco C9200L-24P-4X-A + Cisco DNA	11	51,571,520.00
		Chemistry			Advance, 24-port, 3 Year Term License	26	3,564,600.00
		Geography			Wireless: Mikrotik Metal 2SHPn 400MHz Atheros, 1.6W	1	3,957,800.00
		Geology			2.4/5GHz 802.11g/n RoS, with 16dbi Omni Antenna + Installation accessories		
		Physics			Power Backup (Science Distr.): Prag 7.5KVA	1	
		Maths & Computer Science					
		Microbiology					
		Textile Science and Technology					

				<p>Pure Wave Inverter-24V, 12V/200AH AGM/Su-Kam</p> <p>/Luminous/mercury Inverter Battery (x10) + Prag 20KVA Stabilizer</p> <p>Power Backup(Textile Science): Prag 2KVA Pure Wave</p> <p>Inverter-24V, 12V/200AH AGM/Su-Kam</p> <p>/Luminous/mercury Inverter Battery (x2)</p>		415,000.00
		Biochemistry		LAN/WLAN Expansion	LOT	452303.25
				SUB TOTAL		59,961,223.25

5	Agriculture	Agronomy
		Soil Science
		Crop Protection
		Agric Engineering

	Additional Switch: Cisco C9200L-24P-4X-A + Cisco DNA Advance, 24-port, 3 Year Term License	10	46,883,200.00
	Wireless: Mikrotik Metal 2SHPn 400MHz Atheros, 1.6W 2.4/5GHz 802.11g/n RoS, with 16dbi Omni Antenna + installation accessories	6	822,600.00
	Power Backup: Prag 3.5KVA Pure Wave Inverter-48V, 12V/200AH AGM/Su-Kam /Luminous/mercury Inverter Battery (x4)	2	1,688,200.00
		1	415,000.00

					Power Backup: Prag 2KVA Pure Wave Inverter-24V,  12V/200AH AGM/Su- Kam /Luminous/mercury Inverter Battery (x2)		
		Agricultural Economics			Fibre/LAN/WLAN/Pow er Backup	LOT	1,245,050.00
		IAR					2,650,950.00
		Soil Science Lab					1,818,050.00
		New Lecture/Conference Center (IAR)					1,028,400.00
					SUB TOTAL		56,551,450.0 0

6	Medicine - Shika	Microbiology/ Haematology/Immunology	Yes		Additional Switch: Cisco C9200L-24P-4X-A + Cisco DNA	7	32,818,240.00
		Radiology			Advance, 24-port, 3 Year Term License	10	1,371,000.00
		Pediatrics			Wireless: Mikrotik Metal 2SHPn 400MHz	2	1,688,200.00
		Pathology			Atheros, 1.6W		
		Surgery			2.4/5GHz 802.11g/n RoS, with 16dbi Omni Antenna + Installation accessories		
		Anesthesia			Power Backup: Prag 3.5KVA Pure Wave Inverter-24V,	1,741,150.00	
		Medicine			12V/200AH AGM/Su-Kam /Luminous/mercury Inverter Battery (x4)		

		Psychiatric		Yes	Fibre/LAN/WLAN		
					SUB TOTAL		37,618,590.00

7	Medicine – Samaru	Dean’s Office			Additional Switch: Cisco C9200L-24P-4X-A + Cisco DNA Advance, 24-port, 3 Year Term License	2	9,376,640.00
		Community Medicine					
		Anatomy Physiology	Yes		Wireless: Mikrotik Metal 2SHPn 400MHz Atheros, 1.6W  2.4/5GHz 802.11g/n RoS, with 16dbi Omni Antenna + Installation accessories  Power Backup: Prag 3.5KVA Pure Wave Inverter-48V,	6	822,600.00

		Nursing Sciences			12V/200AH AGM/Su-Kam /Luminous/mercury Inverter Battery (x4)	1	844,100.00
		Umar Shehu Lecture Theatre		Yes	Fibre Connectivity/LAN/W LAN	LOT	606,050.00
					SUB TOTAL		11,649,390.00
S/ N	FACULTY	LOCATION/DEPARMENT	CATEGORISATION		REQUIREMENTS	QTY	ESTIMATED COST
			UNDERSERVED	UNSERVED			
8	Environmental					5	23,441,600.00

Design	Architecture	Yes		Additional Switch:	11	1,508,100.00
	Building			Cisco C9200L-24P-		
	URP			4X-A + Cisco DNA		
	Industrial					
	Fine Arts			Advance, 24-port, 3		
	Quantity			Year Term License	1	844,100.00
	Glass					
	Dean's Office					
CAD Lab			Wireless: Mikrotik Metal 2SHPn 400MHz Atheros, 1.6W 2.4/5GHz 802.11g/n RoS, with 16dbi Omni Antenna + Installation accessories  Power Backup: Prag 3.5KVA Pure Wave Inverter-48V,  12V/200AH AGM/Su- Kam  /Luminous/mercury Inverter Battery (x4)			



					Fibre Connectivity/LAN/Wireless	LOT	1,390,450.00	
		Geomatic			Fibre Connectivity/LAN/WLAN	LOT	1,670,550.00	
					SUB TOTAL		28,854,800.00	
9	Engineering		Yes		Additional Switch: Cisco C9200L-24P-4X-A + Cisco DNA Advance, 24-port, 3 Year Term License	7	32,818,240.00	
		Electrical and Computer Mechanical				11	1,508,100.00	
		Water Resources and Env.						
		Civil Eng'g						
		Metallurgical Eng'g				Wireless: Mikrotik Metal 2SHPn 400MHz	1	1,111,100.00
		Chemical				Atheros, 1.6W 2.4/5GHz 802.11g/n RoS, with 16dbi Omni		
		Shell Chair (New Building)						

				<p>Antenna + Installation accessories</p> <p>Power Backup: Prag 3.5KVA Pure Wave Inverter-48V,</p> <p>12V/200AH AGM/Su-Kam</p> <p>/Luminous/mercury Inverter</p> <p>Battery (x4) + 10KVA Prag Stabilizer</p>		
				<p>Fibre Connectivity/LAN/W LAN</p>	LOT	1,686,050.00
				SUB TOTAL		37,123,490.00

10		Old Building (North Gate)			Additional Switch: Cisco C9200L-24P-4X-A + Cisco DNA	5	23,441,600.00
	Pharmaceutical Sciences	New Faculty Building	Yes		Wireless: Mikrotik Metal 2SHPn 400MHz Atheros, 1.6W  2.4/5GHz 802.11g/n RoS, with 16dbi Omni Antenna + Installation accessories	5  2	685,500.00  2,222,200.00
					Power Backup: Prag 3.5KVA Pure Wave Inverter-48V,  12V/200AH AGM/Su-Kam  /Luminous/mercury		

					Inverter Battery (x2) + Prag 10KVA Stabilizer		
		Danbaba Suntai Lecture Theatre		Yes	Fibre Connectivity/LAN/W LAN	LOT	2,016,050.00
					SUB TOTAL		28,365,350.00

11	Veterinary Medicine	Faculty Complex			Additional Switch: Cisco C9200L-24P- 4X-A + Cisco DNA	8	37,506,560.00
			Yes		Advance, 24-port, 3 Year Term License	8	1,096,800.00
					Wireless: Mikrotik Metal 2SHPn 400MHz Atheros, 1.6W	1	1,111,100.00

					<p>2.4/5GHz 802.11g/n RoS, with 16dbi Omni Antenna + Installation accessories</p> <p>Power Backup: Prag 3.5KVA Pure Wave Inverter-48V,  12V/200AH AGM/Su- Kam /Luminous/mercury Inverter</p> <p>Battery (x4) + Prag 10KVA Stabilizer</p>		
		Large Animal Section		Yes	Fibre Connectivity/LAN/W LAN	LO T	826,550.00
		New PG Block					1,343,050.00
		Veterinary Teaching Hospital					3,462,650.00

					SUB TOTAL		45,346,710.00
12	Law	Commercial Public Law Private Law Civil Law Shari'a New  New Theatre and Moot Court	Yes		Additional Switch: Cisco C9200L-24P-4X-A + Cisco DNA Advance, 24-port, 3 Year Term License	6	28,129,920.00
						8	1,096,800.00
					Wireless: Mikrotik Metal 2SHPn 400MHz Atheros, 1.6W	1	1,111,100.00
					2.4/5GHz 802.11g/n RoS, with 16dbi Omni Antenna + Installation accessories		

					Power Backup: Prag 3.5KVA Pure Wave Inverter-48V,  12V/200AH AGM/Su- Kam /Luminous/mercury Inverter  Battery (x4) + Prag 10KVA Stabilizer		
					SUB TOTAL		30,377,820.00
S/ N	Institute/Centre/ Others	LOCATION/DEPARTMENT	CATEGORISATION		REQUIREMENTS	QTY	ESTIMATED COST
			UNDERSERVED	UNSERVED			
13	Administration	Public Admin			Additional Switch: Cisco C9200L-24P-4X-A + Cisco DNA	8	37,506,560.00

Business Admin

Advance, 24-port, 3  
Year Term License

Local Govt. & Dev. Studies	Yes		Wireless: Mikrotik Metal 2SHPn 8	1,096,800.00
Accounting			400MHz Atheros, 1.6W	4,444,400.00
			2.4/5GHz 802.11g/n RoS, with 16dbi Omni Antenna + Installation accessories	
			Power Backup: Prag 3.5KVA Pure Wave Inverter-48V,  12V/200AH AGM/Su-Kam /Luminous/mercury Inverter  Battery (x4) + Prag 10KVA Stabilizer	
Counselling and Human Development (Samaru & Kongo)			Wireless: Mikrotik Metal 2SHPn 2 400MHz Atheros, 1.6W	274,200.00



			2.4/5GHz 802.11g/n RoS, with 16dbi Omni Antenna + Installation accessories		
Institute of Administration (Director's Complex)			Wireless: Mikrotik Metal 2SHPn 400MHz Atheros, 1.6W 2.4/5GHz 802.11g/n RoS, with 16dbi Omni Antenna +	2	274,200.00
			Installation accessories + Cisco 24-SB-Switch SF300 PoE	1	195,000.00
			Power Backup: Prag 7.5KVA Pure Wave Inverter-24V, 12V/200AH AGM/Su-Kam /Luminous/mercury Inverter Battery (x10) + Prag 20KVA Stabilizer	1	3,957,800.00
PG School; Kongo			Fibre connectivity and LAN	LOT	953,300.00
SHELL Petroleum Computer Lab	Yes		WLAN	LOT	137,100.00

		Multi Purpose Hall (Acctng. & Bus. Admin.)			Fibre Connectivity/LAN/WLAN	LOT	1,100,900.00
					SUB TOTAL		49,940,260.00

14	Senate Building	Senate Building Complex	Yes		Additional Switch: Cisco C9200L-24P-4X-A + Cisco DNA	3	14,064,960.00
					Advance, 24-port, 3 Year Term License	4	548,400.00
					Wireless: Mikrotik Metal 2SHPn 400MHz Atheros, 1.6W 2.4/5GHz 802.11g/n RoS, with 16dbi Omni Antenna +	1	3,358,800.00
					Installation accessories + Cisco 24-SB-Switch SF300 PoE		

					Power Backup (Science Distr.): Prag 7.5KVA Pure Wave  Inverter-24V, 12V/200AH AGM/Su- Kam  /Luminous/mercury Inverter Battery (x10)		
					SUB TOTAL		17,972,160.00
15	Essential Services	Sick Bay Samaru	Yes		Fiber connectivity/LAN/WLAN	LOT	548,400.00
		Sick Bay Kongo					500,400.00
		Central Stores Samaru		Yes			1,630,250.00
		Fire Service Kongo					430,600.00
		PP & MS Kongo					1,565,150.00
		Security Office Kongo	Yes				527,100.00

Fire Service Samaru		
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430,600.00
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		Water Works Main Campus		Yes		3,326,450.00	
		Bulk Metering Unit Samaru					927,750.00
		Procurement Unit					1,375,850.00
		Horticulture Audit (ABUMC Samaru)					1,421,750.00
					SUB TOTAL	12,684,300.00	
S/ N	STUDENT AREAS/ RESIDENTIAL AREA	LOCATION/HOSTELS/STAFF HOUSING	CATEGORISATION		REQUIREMENTS	QTY	ESTIMATED COST
			UNDERSERVED	UNSERVED			
16	SAMARU	Ribadu/Alex				4	1,634,750.00

		Amina				4	1,247,574.00
		Suleiman	Yes			4	1,634,750.00
		Yar'Adua (Safe)			Fibre Connectivity/WLAN/Power Backup	2	689,200.00
		Danfodio				4	1,462,200.00
		ICSA/Ramat		Yes		4	1,612,250.00
					SUB TOTAL		8,280,724.00
	Kongo	Hostel 1 & 2	Yes		WLAN/Power Backup	4	963,400.00
		Sardauna Bedde				4	1,158,400.00
		PG Male				2	689,200.00
		PG Female				2	689,200.00
		Hostel 3		Yes		3	1,325,100.00

		Ali Aliku			Fibre Connectivity/WLAN/Power Backup	4	1,462,200.00
					SUB TOTAL		6,287,500.00
	ABUTH Shika	Female	Yes		Fibre Connectivity/WLAN/ Power Backup	2	689,200.00
		Male				3	1,692,650.00
					SUB TOTAL		2,381,850.00
	Staff Housing	AREA A		Yes	Fibre Connectivity/WLAN/Power Backup	10	30,020,000.00
		AREA BZ				6	18,012,000.00
		KONGO				6	18,012,000.00
					SUB TOTAL		66,044,000.00

	Phase II Fiber Connection	Fiber cable spanning from the University Data center to the current buildings at the Phase 2		Yes	48core Steel Reinforced Cable / HDPE for Connection from Data Centre to Buildings in Phase II	8000	10,800,000.00
					Hand Holes / Route Markers/ Doom	20	1,700,000.00
					WLAN/LAN/Power Backup	lot	11,800,000.00
					SUB TOTAL		24,300,000.00
	Distributions Power Backup	All 18 Distributions and Access Aggregates at different locations of the University.	Yes		Power Backup: Prag 3.5KVA Pure Wave Inverter-48V, 12V/230AH Turbular/Su-Kam /Luminous/mercury	18	26,766,000.00

					Inverter			
					Battery (x4)			
					SUB TOTAL		26,766,000.00	
	TOTAL:							601,644,747.25
	7.5% VAT							45,123,356.04
	GRAND TOTAL :							646,768,103.29



## **ANNEX 3: THE QUALITY ASSURANCE RUBRIC FOR BLENDED LEARNING**

### **The Quality Assurance Rubric for Blended Learning**

The Quality Assurance Rubric for Blended Learning is for institutions, their faculty or individuals who are interested in designing and developing blended learning courses of good quality. The intent is for the Rubric to be used iteratively, that is, as a formative and summative quality assurance tool.

### **Instructions**

The Rubric can be utilised from planning to implementation for a given blended learning course. The qualifiers serve as checks to verify whether a certain quality element has been met, and the feedback enables resources to be shared to validate the qualifier more fully.

A description of qualifiers (to inform each quality element) and supporting feedback are offered below:

### **Qualifiers**

- **Fully Met:** The quality element has been fully met. No more testing, refinement, updating, etc. is required. Fill in “Evidence of Quality Element Fully Met” in the corresponding row.
- **Partially Met:** The quality element is in progress. Testing is underway, and some updating has been carried out.
- **Not Met:** No implementation has been carried out.
- **Not Applicable:** The quality element is not applicable (or relevant).

### **Feedback**

- **Evidence of Quality Element Fully Met:** If the “Fully Met” box is checked, provide an example, details or link(s) to demonstrate the quality element has been fully met.
- **Improvement Needed:** If you do not check “Fully Met,” please offer input on where improvement is needed to move the quality element to “Fully Met.”

**Please check “√” the appropriate box under “Qualifiers” and include input under each relevant box under “Feedback.**

Please check “√” the appropriate box under “Qualifiers” and include input under each relevant box under “Feedback.”

Category		Qualifiers			Feedback			
		Quality Element	Fully Met	Part. Met	Not Met	N/A	Evidence of Quality Element Fully Met	Improvement Needed
<b>1. Navigation / Orientation</b> (e.g., the course site is well organised, and it is easy to navigate from the course home page to the course units, links, forums, etc.)	a)	There are instructions on how to navigate the course site.						
	b)	There are instructions on how learners should engage with a blended learning course and what proportions of the course are online and face-to-face.						
	c)	Where feasible, materials open in the course site rather than as pop-up windows, etc. (i.e., separate Word docs).						

	d)	There is a breadcrumb trail at the top of a given page for easy navigation through the course site.							
	e)	There is sufficient indication of where materials are to be used online and in face-to-face settings.							
	f)	There is a help option to support learners with FAQs, etc.							
Category		Qualifiers				Feedback			
		Quality Element	Fully Met	Part. Met	Not Met	N/A	Evidence of Quality Element Fully Met	Improvement Needed	
<b>2. Content</b> (e.g., learners can	a)	Learning outcomes are clearly defined against academic / workplace standards.							

engage with content and peers; expectations are clear)	b)	Level of learning outcomes is aligned to relevant learning framework (e.g., Bloom's taxonomy).						
	c)	The descriptive text and media promote a good understanding of the subject matter.						
	d)	The content promotes interaction amongst students (e.g., peer coaching) and with the instructor.						
	e)	The requirements for the number of study hours, as per the regulatory authority, are met.						
	f)	The course level is identified (i.e., introductory or upper level, prerequisites required).						
	g)	The course content is accurate, up-to-date and relevant to the labour / market needs.						
	h)	The content meets the institutional and transfer credit requirements.						
	i)	The references are reliable (i.e., proper information, active links), relevant and up-to-date.						

	j)	The materials are properly cited and referenced and free of plagiarism.							
	k)	The materials have been copy edited for accuracy, typographic errors, format, style, content and workable links.							
Category			Qualifiers					Feedback	
			Quality Element	Fully Met	Part. Met	Not Met	N/A	Evidence of Quality Element Fully Met	Improvement Needed
<b>3. Instructional Design</b> (e.g., the content is pedagogically sound)	a)	Learners are exposed to a variety of learning activities.							
	b)	Learning activities / instructional materials are linked to learning outcomes.							
	c)	Instructional materials contribute to the achievement of the stated learning outcomes.							

	d)	Active learning strategies are used that engage the student and promote the achievement of the stated learning outcomes.						
	e)	Learning activities provide opportunities for interaction (student–student, student–instructor, and with materials / technology) that support active learning.						
	g)	Media is thoughtfully integrated in the course (i.e., short videos, variety of interactive features).						
	h)	The LMS is learner friendly (e.g., minimal clicks, minimal external links or documents to access, as is feasible).						
	i)	There are learning activities designed to engage students in critical thinking.						

Category		Qualifiers					Feedback	
		Quality Element	Fully Met	Part. Met	Not Met	N/A	Evidence of Quality Element Fully Met	Improvement Needed
<b>4. Course Structure</b> (e.g., the course has been properly conceptualised to reflect good practices in organisation, presentation and aesthetics)	a)	The presentation is logical (e.g., sequential, well-paced).						
	b)	The course structure is flexible, allowing for easy updating of content in units, activities, assignments and learning materials.						
	c)	The course structure includes links to library research databases, and accessible links to LMS and related websites.						

	d)	The course is properly licensed as OER, where feasible.						
	e)	The course meets institutional guidelines or is consistent relative to formatting / templates, etc.						
	f)	The course structure enables a good mix of learning resources and faculty support.						
Category		Quality Element	Qualifiers				Feedback	
			Fully Met	Part. Met	Not Met	N/A	Evidence of Quality Element Fully Met	Improvement Needed
<b>5. Student Support</b> (e.g., students have timely and sufficient access to support in face-to-face and online modes)	a)	The course has clearly defined instructions for learners to satisfy the course requirements (e.g., tasks, assignments) as well as the learning outcomes of the course.						



	b)	Tutors are adequately trained and qualified to facilitate the blended course.						
	c)	Students are provided with orientation to the online components of the course and registration facilities.						
	d)	There are clear instructions on how and when students should expect feedback (e.g., within three days).						
<b>6. Technology / Media</b> (e.g., appropriate technology has been selected, references are available for students to retrieve resources)	a)	The selection of technological tools (e.g., LMS, email, mobile applications) has been carefully considered in terms of infrastructure and learner access.						
	b)	The selected technologies support completion of activities that enhance the learning outcomes.						
	c)	The LMS provides an option to download resources for offline consumption (e.g., as pdf files).						
	d)	The technology enables learners to communicate and collaborate.						

	e)	The course site is device / browser agnostic (i.e., operational on mobile devices, multiple browsers).						
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Category		Quality Element	Qualifiers			Feedback		
			Fully Met	Part. Met	Not Met	N/A	Evidence of Quality Element Fully Met	Improvement Needed
<b>7. Assessment</b> (e.g., assessment procedures are clear and accessible, regularly conducted, and in various formats)	a)	Learners are provided with information on how they will be assessed in the course.						
	b)	Marking guides for papers and examinations are provided.						
	c)	Assessment measures include formative and summative assessments.						

	d)	Assessment tools can facilitate selfevaluation or feedback (e.g., answers are provided for quizzes).						
<b>8. Quality Assurance and Evaluation</b> (e.g., quality assurance has been implemented thoroughly in design, and plans are in place for continuous quality assurance)	e)	Assessment tools measure mastery of learning outcomes.						
	a)	The course has been / is being subjected to quality assurance processes and with the same rigour as a face-to-face course.						
	b)	Plans / schedules are in place for online courses to be reviewed to ensure that the provider keeps pace with changes in technology and content.						
	c)	Course evaluation is enabled for learners to provide feedback on the blended learning experience, including the course content.						

**Name of Course/Programme:**

**Date:**

**Name of Institution:**

**Reviewer's name:**

**Summary of Strengths and Areas for Improvement (please add page(s) as necessary)**

**Strengths identified:**

**Areas for improvement identified:**

**Using the Rubric (please add page(s) as necessary)**

**Comments / Feedback:**

#### **ANNEX 4: BASIS FOR THE EXPECTED FUNDING**

Previous years payments on ICT fees by students, TETFund Interventions and other supports from donor agencies, private companies and philanthropists.

## **GLOSSARY**

**Conducive learning environment** - setting (physical and emotional) which allows for a free exchange of ideas, thoughts and skills among the teachers and learners. It should contain features that involve all five senses and provoke thinking, open-ended outcomes, and creativity.

**ICT Facilities** - all devices, facilities, systems and services including, but not limited to, network infrastructure, ICT Devices, software, websites, web applications or services and any device, system or service which may become available in the future which is provided as part of the ICT service.

**LMS** - Learning Management System (LMS) is an integrated software used for monitoring students' learning through creating, delivering, tracking and reporting educational courses and outcomes.

**Long-term** – Period or time frame from 0 to 12 months (1 year) of onset of implementation

**Mid-term** – Period or time frame less than 36 months (3 years) of onset of implementation

**OBTL** - Online and Blended Teaching and Learning (OBTL) is defined as a mixture of online and in-person delivery where the online portion effectively replaces some of the face-to-face contact time rather than supplementing it. It is an approach to education that combines online educational materials and opportunities for interacting online with traditional place-based classroom methods. Blended learning (also known as hybrid learning) requires the physical presence of both teacher and students.

**OER** – Open Educational Resources (accessible to the public).

**Short-term** - Period or time frame up to than 60 months (5 years) of onset of implementation

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