

Sunyani Technical University



December, 2020



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INTRODUCTION

1. Background

The Sunyani Technical University seeks to become a centre of excellence in the decades of the 2020s and beyond. In becoming a center of excellence, a befitting campus is needed for the Sunyani Technical University (STU). Following its conversion from Sunyani Polytechnic to Sunyani Technical University (STU) in 2016 through the Technical Universities Act, 2016 (Act 922) (as amended) it has become necessary for the University to upgrade its existing campus and infrastructure, which are currently still reflective of the polytechnic years. It is against this background that the Council Chairman, Ing. Dr. Kwame Agyeman Boakye, drawing from the powers conferred through the Statutes of the Sunvani Technical University, set up a Master Plan Committee to submit a report on 'The Technical University We Want to Be'. The overarching aim of the Master Plan therefore is to ensure that a (congenial) built environment is created and maintained to provide the framework for learning and research to make the STU a true center of excellence in technical and vocational education and training (TVET).

Indeed, well-planned campus environment has engaged academics and practitioners of the built environment across the world since time immemorial partly because a well-planned environment not only enhances coordination of work but also the quality of life of both staff and students. This report reflects work done by the Master Plan Committee set up by the Council Chairman following a meeting of members of the Executive Committee with the Chairman on Wednesday 6th May 2020.



Fig. 0.1: STU trains highly technical skilled personnel

Three key considerations, among others, that should drive the Master Plan are technology, talent attraction and location. In the current world order, technology has become the main fulcrum around which most development systems revolve in order to enhance efficiency and productivity. The University, therefore, seeks to make technology a backbone of the new campus that is to evolve from the Master Plan. Also, a key objective of any successful Master Plan is to ultimately lead to a campus environment that not only attracts the brightest and best students but indeed attracts and retains talented staff in the various disciplines offered by the University. Tied to the second objective is the need to consider geographic location and what that offers the campus. Our central location within Ghana makes us accessible to people across various parts of the country, particularly those from the northern parts of the country. Additionally, located in the forest belt of Ghana offers us advantages such as low cost of living which can be capitalised upon to enhance our attractiveness.

Among our objectives at STU, is the desire to position the University such that it becomes a centre of attraction for the best from Ghana, across Africa and even beyond. It is anticipated that, ultimately, the realisation of STU's Master Plan will help achieve these objectives. As a leading technical university in Ghana, the STU is committed to training highly skilled graduates and professionals to influence national development. As captured in the University's Strategic Plan (2020-2025) the University's mission is 'to provide career-focused higher education in engineering, science and technology-based disciplines, applied arts and related disciplines, emphasising practical-orientation and entrepreneurial development'. Its vision is also 'to be recognizeed as the preferred technical university in Ghana and Africa for raising the next generation of industry captains for national, regional and global transformations'. Following its conversion to a technical university, it has created a niche for itself in the discipline of Electrical and Electronics Engineering. That is the theme that is expected to permeate all the academic pursuits of STU. While the University seeks to become focused, renowned and a centre of excellence in the niche area, it will extend its practice of excellence to any other complementary discipline the University offers.

As noted, becoming a centre of excellence in line with the University's vision is, however, dependent on the quality of the university's built environment, among others. Therefore, across the University, and indeed beyond, there is a clamour for a campus that befits a leading technical university. It is against this background that this Committee is set up to explore the Technical University We Want to Be. This document, in our view, essentially constitutes the requirements for what the Master Plan must aim to achieve. In combination with others, it will form the information pack upon which invited consultants will be requested to submit proposals for a Master Plan for the Sunyani Technical University.

The membership of the committee, is as follows:

1. Dr. Alexander Eduful (Director of Works), Chairman

2.Dr. Samuel Asuamah Yeboah

(Dean, Faculty of Business and Management Studies), Member

3. Dr. Soya E. Kpamma

(Dean, Faculty of Built Environment and Applied Arts), Member 4. Dr. Jones Lewis Arthur

(Dean, Faculty of Applied Science and Technology), Member

5. Dr. Samuel Wiafe (Dean, Faculty of Engineering), Member

6. Dr. J. S. Korantwi-Barimah (Pro-VC), Co-opted Member

7. Mrs. Cynthia Gyamfi Adu-Gyamfi (Dean of Students), Member

8. Dr. Stephen Okyere-Boateng (Deputy Registrar, Research and Development), Member.

9. Mr. Frank Kofi Owusu Debrah (Head of Planning Unit), Member/Secretary

2. Terms of Reference

The Terms of Reference (TOR), as contained in the appointment letter issued by the Vice-Chancellor is outlined below:

1. To develop a master plan for "The Technical University We Want to Be" consistent with the:

i. Act and Statutes establishing the institution

ii. Components of the institution and their functions

iii. Academic, administrative and municipal services parts of the institution iv. Inter-relations part of the institution

v. Activities of the university, including industrial and international partnerships

vi. Interface with government

vii. Role of the institution in the nation and the local area

viii. Leadership in sustainability issues

ix. Institutional sustainability

2. Any other relevant measures as may be deemed appropriate.

3. Scope of Work

Members of the committee, after reviewing the TOR and reflecting on discussions at the meeting that led to the establishment of the Committee, agreed that the Committee's task was not to develop a physical master plan as the first item on the TOR appears to suggest. However, the Committee was tasked to generate functional requirements and needs of the University which aims to become an academic centre of excellence. These requirements will then become a major guide in the preparation of a physical master plan that will support innovation, and position the University to attract quality staff, talented students, partnerships and funding.

4. Methodology

Following receipt of the appointment letter on Wednesday 13th May 2020, the Committee held its first meeting on Tuesday, 19th May 2020, and agreed to meet every Tuesday thereafter.

The meetings mainly involved brainstorming sessions in which each of the component areas in the TOR was explored to give an understanding of the various areas to highlight. Documents such as the Technical Universities Act, as well as the Statutes and Strategic Plan of STU provided the basic guidelines in the work of the Committee. The Committee further referred to other documents, such as master plans of other tertiary institutions. Some members of the University community were also consulted to obtain insight and data on some issues.

An initial readout was given to the University Council on 19th June 2020. Subsequently, presentations were made to Management, the Academic Board and the Student Representative Council (SRC). The comments received have been considered in this final document.

5. Recommendations of the Committee

The recommendations are presented under five (5) broad component areas, which are derived from the TOR, each constituting a section under which sub-components are presented. A sixth section is dedicated to discussing key success factors.



Fig. 0.2: Component Areas

The sections are as follows:

1. Academic, Research and Administrative Facilities

- a. Faculties
- b. Research Centres
- c. Library
- d. International Office
- e. Administrative Block
- f. Industry and Alumni Networks
- g. Leadership in Sustainability (e.g., management buyin, capacity building, attitudinal change, adopting sustainability lifestyle, etc.)

2. Commercial and Transport Facilities

- a. Commercial area
- b. Transport services
- c. System Sustainability (sustain and maintain the infrastructure)

3. Residential and Recreational Facilities

- a. Staff Residential Village
- b. On-campus Accommodation
- c. Students Accommodation
- d. Staff Club House
- e. Sports Facilities
- f. Functional Sustainability

4. Environment, Health and Safety

- a. Environmental preservation and landscaping
- b. Open spaces and greenery
- c. Energy
- d. Water Supply
- e. Sanitation
- f. University Hospital
- g. Security
- h. Environmental Sustainability

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5. Art and Culture

- a. Center for Advancement of Indigenous Knowledge
- b. University Museum
- c. Sonodwae Fashion Show
- d. Religious Facilities.
- f. University Basic School
- g. Institutional Sustainability

6. Key Success Factors of the Master Plan

- a. Financing the Master Plan
- b. Commitment of leadership
- c. Human resource development

PART I: CURRENT SITUATION

1.0 Introduction

This section presents a brief description of the current state of the University, particularly, the physical infrastructure and their spatial configurations. Areas covered include the description of the location and topography of the university's main campus which is the focus of the master plan, laboratories, workshops and related facilities; residential facilities, conference facilities, library; basic education; and recreational facilities, transport network, health and sanitation facilities; and other facilities supporting teaching, learning, research and provision of community services to the university and wider community.

1.1 Location and Topography of the Main Campus of the University

Sunyani Technical University is geographically located on a 64-acre land that shares boundaries with the Sunyani-Kumasi Highway, diametrically opposite to the Bono Region's House of Chiefs' Regional Office, to the North-East; Sunyani Secondary School to the South-East; Sunyani Municipal Waste Site to the South-West; and the Sunyani Inner Ring Road to the North-West.

The Waterloo River is the lowest point and central part of the campus and divides the entire campus into two-halves. The northern/old site bears the old/main campus, including the main Administration Block, Block A, the Djang-Fordjour HCIM Block, Stores/Development Office Block, the Auditorium, School Park, the Accountancy Block, the E-Block, the Tano and Busia Halls and the ITTU Block.



STU in wider environment context

The southern/new site, also known as the Waterloo area, contains the Block F and G classrooms, the GETFund Hostel, the Vice-Chancellor's unoccupied residence and the ongoing Science Park Complex. It is anticipated that most of the new structures to be proposed, especially the new hostels, will be located at the Waterloo side of the campus where there is a vast available land for new development.

1.2 Academic, Research and Related Facilities.

Currently, there are four faculties with fifteen teaching departments scattered across the campus in an uncoordinated and unplanned manner, and most importantly, without adequate office spaces for teaching and administrative staff. The staff therefore work in overcrowded environment.

Faculty	Departments
Engineering (FE)	1. Department of Civil Engineering
	2. Department of Electrical and Electronics
	Engineering
	3. Department of Mechanical Engineering
	with Materials Engineering Section

The existing faculties and departments are:

Applied Science and	1. Department of Pharmaceutical Sciences
Technology (FAST)	2. Department of Hospitality and Tourism
	3. Department of General Agriculture
	4. Department of Computer Science
Built Environment	1. Department of Building Technology
and Applied Arts	2. Department of Visual and Industrial Arts
(FBEAA)	3. Department of Wood Technology
Business and	1. Department of Accountancy
Business and Management Studies	 Department of Accountancy Department of Marketing
Business and Management Studies (FBMS)	 Department of Accountancy Department of Marketing Department of Secretaryship and
Business and Management Studies (FBMS)	 Department of Accountancy Department of Marketing Department of Secretaryship and Management Studies
Business and Management Studies (FBMS)	 Department of Accountancy Department of Marketing Department of Secretaryship and Management Studies Department of Purchasing and Supply
Business and Management Studies (FBMS)	 Department of Accountancy Department of Marketing Department of Secretaryship and Management Studies Department of Purchasing and Supply Department of Communication Studies
Business and Management Studies (FBMS)	 Department of Accountancy Department of Marketing Department of Secretaryship and Management Studies Department of Purchasing and Supply Department of Communication Studies with Modern Language Section
Business and Management Studies (FBMS)	 Department of Accountancy Department of Marketing Department of Secretaryship and Management Studies Department of Purchasing and Supply Department of Communication Studies with Modern Language Section

These faculties share teaching and office spaces in about seven buildings: the one storey Kwasi Oppong Conference Centre Block, the Mechanical Engineering Block, Accountancy Blocks A and B, the completed half of the ground floor of the Science Park Building, Waterloo blocks D and E, the Science Block and the Computer Science building. These blocks are structurally sound, but their combined capacity for space is woefully inadequate to meet the university's current demand for teaching and office space, even for the student population of approximately 6000 and about 540 staff. Currently, the number of lecturers with offices allocated to them in the University is less than 20% of the existing faculty strength.



Prof. Djang-Fordjour Block has lecture rooms, computer laboratory, entrepreneurship hub, restaurant and offices

1.3 Laboratories and Workshops

Further on, the University has a number of on-campus laboratories, workshops and conference halls to facilitate teaching, learning, research and innovation. These include Electrical and Electronic amatrol laboratory on the ground floor of the Science Park building, the science laboratories at the Science Lab building, the mechanical engineering and wood technology workshops at the Mechanical Engineering Block and the former ITTU Block, the fashion studio at the VIA Department, the building technology laboratory and the HCIM Workshop in the old HCIM Block.

Besides these, the university also has some computer laboratories and an ICT Directorate that manages the university's computers and web system located on the first floor of the Science Laboratory Building, adjacent to the University Library. Apart from the university's central computer laboratory at the Computer Science Department, the Secretaryship and Management

Studies Department has a computer laboratory located on the first floor of the main administration block. There is also a computer laboratory for the Faculty of Engineering located on the ground floor of the Prof. K. T. Djang-Fourdjour block.

1.4 The University Library

The university's central library (E. K. Agyei Library) is located in between the Science Laboratory Block and the poultry farm. The Waterloo river runs just behind the library. The basement of the library block housed EPP Bookshop. The library has a reference and online resources sections, and currently has a total holding capacity of 12,671 books and related materials. The total sitting capacity of the library is estimated at 360 persons. Beyond the university's central library, there is no other functional faculty or departmental library to serve the specific needs of faculties and departments.

1.5 Conference Facilities

The University has two halls for conference and public events; The Nsiah-Gyabaah Auditorium and the Kwasi Oppong Conference Hall. These two halls are used for in-house events such as congregations, matriculation, research conferences, statutory and ad-hoc committee meetings, student's functions, as well as rental to the public for private and public events.

1.5.1 Kwasi Oppong Conference Hall

The Kwasi Oppong Conference Hall is located on the ground floor of Block A and is diametrically opposite to the main Administration Block, has a seating capacity of 80.



Inauguration of Faculty Advisory Boards at the Kwasi Oppong Conference Hall

1.5.2 Prof. K. Nsiah-Gyabaah Auditorium

The Nsiah-Gyabaah Auditorium is adjacent to the Sunyani-Kumasi Highway, and closer to Gate 3 near the Sunyani Magazine Junction. It has a seating capacity of 1,000. Management has recently retrofitted the auditorium with new single removal seats, installed tower air-conditioners, and relayed the floor material on the platform among other improvements.



Matriculation ceremony for fresh students at the Prof. K. Nsiah-Gyabaah Auditorium

The University's current first year enrolment is 2,000 and this is expected to rise to 3,000 based on the strategies put in place by Management to increase enrolment. Since the maximum capacity of the existing Auditorium is 1000, it implies that matriculation and congregation ceremonies cannot be conducted in the Auditorium in the existing mode, especially if held in-person rather than virtually. The University has been resorting to holding these ceremonies in an open space under rented canopies.

1.6 Administration Block

The University has an administration block which is located in a singlestorey block. The block was a former classroom block and still houses a computer lab and a typing pool for the Department of Secretaryship and Management Studies and other departmental offices on the first floor. On the same first floor is the main Accounts Department of the University including the Offices of the Director of Finance, the Ag. Deputy Director of Finance, Payroll Officer, Final Accounts Officer and other Units Accounting Officers. On the ground floor of the building are the Council Chamber, Vice-Chancellor's Secretariat, which measures some 8m square with a 4mx8m VC's Secretary's Office. The ground floor also houses the Pro Vice-Chancellor's Office (4mx8m), the Pro Vice-Chancellor's Secretary's Office, the Registrar's Secretariat which includes a 4mx8m Registrar's Main Office as well as Registrar's Secretary's Office, the Examination Office, the General Administration, the Office of the Deputy Registrar in charge of Academic Affairs, the Office of the Deputy Registrar in charge of Human Resources (HR), the Office of the Senior Assistant Registrar in charge of Administration, the PRO's Office and the Telephone Exchange Office. This block is woefully dysfunctional for its purpose. For this reason, other key professional and administrative offices are located away from the main administrative block. The Directorates of Works and Physical Development and Procurement are housed in a two-storey small sized building about 100metres from the main administration block, whilst the Directorates of Internal Audit; Quality Assurance and Academic Planning are housed in two separate buildings about same distance from the main administration block.

1.7 Residential Facilities

1.7.1 Students' Accommodation

There are Six (6) Halls of Residence for students of the University. Five of these halls, with a total bed capacity of 1,120, were constructed by the University and are managed directly by the University Management Committee. The sixth hall, an on-going project, with a current bed capacity of 100, is an initiative of the Students' Representative Council (SRC) and, as such, it is managed by the SRC. Thus, the total bed capacity of all the six hostels on campus is 1,220. However, the current student population of the University stands at approximately 6,000. This implies that, over 4,500 of students of STU live in private accommodations outside the University campus. This deficit of student accommodation will be worsened by the addition of the Free SHS graduates enrolling at the University. The Vice-Chancellor's vision, in line with the new strategic plan of the Institution, aims to increase student enrolment from the current 6,000 to 10,000 in the next four years. Thus, a critical consideration for new students' accommodation is a must for the Institution. It is envisaged that the University should be able to provide hostel accommodation for at least 50% of its student population in the medium to long term.

1.7.2 Staff Accommodation

Currently, the University has a number of bungalows for its staff at the main campus. There are a total of twenty-three 2-bedroom and 3-bedrrom apartments in **9** semi-detached and detached bungalows that house various officers, including some key officers and essential service providers as duty posts, whilst the rest are for faculty and staff who qualify to apply based on the University's Residence Policy in place. There are also 6 other off-campus 2-bedroom apartments in 3 semi-detached bungalows located at Sunyani Tonsuom Estate which are also occupied by the staff of the University. As it is, only a handful of staff have access to the university accommodation (less than 20%) due to the limited number of the existing bungalows. A major challenge arises when new senior members are recruited from outside the Sunyani Township, especially key officers or critical essential service providers from outside the Bono Region.

There is also a one-storey 5 bedroom with an outhouse Vice-Chancellor's residence located at the Waterloo section of the university's main campus. However, the building has been rendered unsafe for occupation due to the presence of Volta River Authority's 450 KVA high tension electricity pylons that run almost overhead of the building exposing it to radiation. The Vice-Chancellor thus stays at his private residence and commutes daily to work.

1.8 University Hospital

The University has a health facility with the status of a clinic. The clinic operates from 8.00 am till 7.00 pm on weekdays to serve the staff and students of the University, as well as the general public in the Sunyani Municipality and its environs.



STU Clinic

The clinic operates from a purposely constructed single-storey building located beside the main Administration Block of the University. It has an open lobby which serves as O.P.D., an extension of which serves as records area with an injection room attached. It has two rooms for Doctor's Consulting Services, one room for the Administrator's Office, one room with partition as Pharmacy and Store, one room with an inner partition as Laboratory, one room as Revenue Office, one room as Midwife's Office and three rooms as wards with total bed capacity of 10. The services provided by the University Clinic have grown tremendously in the past two years as the general public within the Sunyani Municipality and the adjoining communities have come to realize the quality of health service delivery at the facility. Recently, a medical doctor has been recruited to superintend the management of the clinic. There are qualified nurses and auxiliary staff mostly assigned to the clinic by the Ghana Health Service.

1.9 University Basic School

Currently, the university has no functional basic school to serve the needs of staff and the wider university community, including the adjoining residential, industrial and commercial areas such as Magazine. However, the university's alumni association is constructing a 4-unit classroom block along the road leading to Waterloo area and close to the central library for use as pre-school to at least cater for the babies of nursing mothers among staff and also for those in the surrounding areas. The building has been roofed.

1.10 Recreational Facilities

The university partakes in a number of sporting disciplines at national and sub-regional (West Africa) levels and has a strong history of performance and recognition in some of the disciplines including football, basketball, and athletics. However, the facilities available need major upgrading to reflect current standards within the sporting industry. Other facilities including a gym and swimming pool are not available and will have to be provided anew.

1.10.1 The Football Pitch

The University has a football pitch located behind the Prof. K. Nsiah-Gyabaah Auditorium, and next to the Busia Hall. The pitch has a flat topography but becomes waterlogged during the rainy season, probably, due to poor drainage. It is also poorly fenced to protect it from being used as thoroughfares and other abuses.

1.10.2 Basketball Court

There is a basketball court adjacent to the Accountancy block, and close to the football pitch and Busia Hall. It has enough space around it to cater for additional courts, including courts for other disciplines.

1.10.3 Tennis and Volleyball Court

This is a combined facility located right between Blocks D and E which are lecture rooms buildings. The court has a pavilion for seating, and it is sometimes used for various functions. It is only one court, adaptable for use for lawn tennis and volleyball, and possibly, badminton. The location is a major constraint to use during active academic periods.

1.11 Access and Road Network

The university has four main entry and exit gates. Three of the gates are located at the frontage along the Sunyani-Kumasi highway, and the fourth is located at the teaching area in Waterloo, along the Adomako-Jubilee Park section of the Sunyani inner ring road. In terms of fencing, only the frontage and parts of the boundary with Sunyani Senior High School (SUSEC) and State Transport Company (STC) are fenced. The rest of the university's boundary is open, resulting in encroachment on the university's land.

For the road network, the campus is fairly served with good surfaced roads. The Nana Nkrawie Bosoma II Road connects the university from the Gate 1 through to Waterloo. Part of this road, from the one storey staff apartment block down to Waterloo is dusty. The remaining roads, including the ring road that encircles the administration block, Prof. Djang-Fordjour block and all other buildings in-between these two blocks within the campus are asphalted with drains. In total, there are about 7km of roads within the campus, of which only about 50% are tarred.

1.12 Utility Services

Two basic utility services are covered here. These are electricity and water supply.

1.12.1 Electricity Supply

The university is served with hydro electric energy supply by the Volta River Authority/Northern Electricity Distribution Company (VRA/NEDCO) from the national grid. In addition, the university has its own three-phase diesel powered generating plant with an installed capacity of 275KVA (220kilowatt) with RPM rating of 1500. This is mainly for use in times of outages of supply from the national grid supply.

1.12.2 Water Supply

The university is served with treated water supply from the Abesim Water Treatment Headworks by the Ghana Water Company Limited (GWSC). Beyond this, the university has an overhead tank with a capacity of about 168m³ and five mechanized boreholes to sustain regular clean water supply to the university community.

1.13 Waste Management

The university has, as yet, no waste management treatment site and so it sends waste to the municipality's dump site. Just on the southern boundary side of the campus, there is a waste dump site owned by the municipal assembly. This creates a lot of environmental nuisance for the campus.

PART II: THE "TO-BE" STATE

OVERVIEW

Part II lays out our vision for the University. It outlines, in detail, the "Tobe" state we aspire, both in spatial and non-spatial terms. We hope these, and others, will help project the STU as a leading technical university in Ghana and beyond. Part II is therefore divided into six sections, as follows:

- Section One is dedicated to Academic, Research and Administration Facilities Section Two deals with Commercial and Transport Facilities
- o Section Three takes a look at Residential and Recreational Facilities
- o Section Four talks about Environment, Health and Safety
- Section Five looks at Art, Culture and the City
- $\circ~$ Section Six deals with Key Success Factors to achieve the master plan.

SECTION ONE

ACADEMIC, RESEARCH AND ADMINISTRATIVE FACILITIES

1.0 Introduction

Academic, Research and Administrative (ARA) facilities represent the core infrastructure in any academic campus. In view of the fact that the work environment has impact on productivity, excellent ARA facilities have a strong correlation with output. It is therefore expected that the ARA facilities to be developed within the Master Plan will engender high performance in staff, visiting researchers, students and other users.

Furthermore, given our vision of training highly skilled personnel to drive the national development agenda, STU seeks to deepen its universityindustry relation such that students will be equipped with industrial experience even before graduation. The Master Plan should therefore take cognisance of this by creating space to deepen such inter-relationship.

Relatedly, given the limited space of the present campus, a judicious use of land is expected so that the campus can achieve more with the limited land available. Finally, an important question has to do with how the university sustains these ARA facilities after developing them. The Committee finds the answer in a need to show 'leadership in sustainability'.

This section outlines the various ARA and related facilities we envisage in the new campus with a view on both medium and long terms. The section is divided into four parts. The first part is devoted to the ARA facilities while the second focuses on university-industry relationship. Part Three focuses on land-use and building form and the last part is sustainability.



Fig 1.1: Masterplan of Washington University, St. Louis, MO (Source: Google)

a) ARA Facilities

1.1 Academic Facilities

These include lecture rooms, research centers and institutes, libraries, laboratories and workshops, offices for teaching and research staff, study spaces, conference rooms, etc.

The Master Plan ought to attempt to cluster related programmes and activities around faculties and schools for ease of coordination, supervision and identification.

It is envisioned that the number of faculties would, over the next ten to fifteen years, increase to about thirteen (13) as new study programmes are introduced. The probable faculties to grow out of the existing faculties¹ are:

¹ See Appendix 2 for list of anticipated faculties and related departments

a. Faculty of Built Environment and Applied Arts

- Visual and Industrial Art
- Built Environment
 - Wood Construction and Technology

b. Faculty of Engineering

•

- · Mechanical and Materials Engineering
 - Civil, Geoinformatics and Environmental Safety Engineering
- Electrical and Electronics, Telecommunication and Biomedical Engineering

c. Faculty of Applied Science and Technology

- Applied Science
- · Agriculture
- Food Science and Technology
- · Medical and Biomedical Sciences
- · Computer Science

d. Faculty of Business and Management Studies

- · Faculty of Applied Social Sciences and Humanities
- . School of Business

This notwithstanding, the Master Plan should have a long-term vision of expanding academic programs beyond these thirteen (13) faculties.

1.2 Centre for Research, Invention, Innovation and Technology Transfer

The Committee recommends that a Centre for Innovation and Technology Transfer must be incorporated into the Master Plan layout. This is key to interface and engage industry within the city, region and national levels in relation to dissemination, transfer and commercial uptake by policymakers and industry players.

1.3 Centre for Renewable Energy Research

With this Centre, our emphasis is to explore how we use our niche area to collaborate with others in the energy sector. More broadly, though, the Master Plan must provide space for the establishment an interdisciplinary Center for Renewable Energy Research. More specifically, the Center will be primarily responsible for collaboration with actors in the energy sector to study and promote knowledge generation and sharing through the creation of scholarly platforms and network, post-graduate education and training, policy advocacy and community engagement. Since energy and natural resources also fall within the core mission of our sister institution, University of Energy and Natural Resources (UENR), our vision here will be to collaborate with UENR for joint research. Among others, this will also offer the STU opportunity to define a focus that is in tandem with our niche including, in particular, exploring the link between area, electrical/electronic engineering and renewable energy.

1.4 University Central Library

There is a need to upgrade and expand the University's library infrastructure and services to promote greater access and support for teaching, learning, and research and development. In this vein, the library should make provision for e-library infrastructure that will expand the capacity of the library both in terms of resources and reach as well as position it as one of the best libraries in the West African sub-region.

1.5 International Office

Across the globe, leading universities use internationalisation as a major tool to increase a university's revenue and to project and expand the impact of their universities to the world. Indeed, the number of international students has become one of the metrics in measuring a university's impact by university ranking organisations.

Against this background, STU anticipates an expanded international centre building complex is needed to spearhead the university's internationalisation drive and to provide language training, counselling and other critical support services for integrating and enhancing the learning and livability experience of international students, visiting scholars, faculty and staff and broadening the international scope of our own students.

1.6 Student Union Building

To enhance student welfare and academic progress, the Master Plan must make provision for a well-functioning student union building. This building could serve the purpose of student union debates, student-organised talk shows and other academic and non-academic engagements within and beyond the University.

1.7 Administrative facilities

An 'all-inclusive' administrative block at a suitable location is recommended to replace the existing administrative block. It is the opinion of the committee that the existing block is completely dysfunctional and severely inadequate for its purpose. For instance, currently the registry, finance department and the Pro Vice-Chancellor and Vice Chancellor's offices are all located in this structure which also doubles as classroom. As such, some of these departments lack adequate offices.

1.8 Alumni Network

The Master Plan is expected to provide space for mobilisation and effective administration of the alumni of the university. The proposition is to use branding and networking to project and connect the University to its past students across the country and elsewhere and provide space for their active engagement with the university and the alumni themselves.

b. University-Industry Relations

The Master Plan must provide for an enhanced office space for the industrial relations office to accommodate organisational restructuring and expansion of the functions and responsibilities of the office to actively support the vision of the center of excellence.

In this regard, the key functions of the office must not only be to spearhead the facilitation of industrial training and internship for students and staff, but also organisation of career and employment related fairs. For instance, such career and employment fairs could target industries and other employment agencies who would view the STU fair as a fertile ground for recruitment of young and new talents for their various establishments. Additionally, other functions to be handled by this office include providing

Additionally, other functions to be handled by this office include providing career counselling and advisory services to students as well as creating a

platform for active engagement of faculties with industry for programme development and skills training.

Preferably, the restructuring should result in the creation of a Directorate of University-Industry Relations, with Industrial Relations and Career Counselling and Advisory Services Units.

c) Land-use and Building Form

The Committee recommends that the Master Plan should have a land-use plan with use segregation (a type of Euclidean zoning) where identifiable uses are clustered together. It is believed that such a land-use plan would lead to more organised physical development, therefore, minimising conflicts and enhancing efficiency of the campus.

Given the spatial constraints of the current university campus, particularly, the erection of electricity pylons across much of the space and the available size thereof, vertical building forms with a minimum of four (4) and a maximum of seven (7) floors would be ideal to maximise density.

d) Leadership in Sustainability

To realise and maintain the aforementioned facilities, we believe that 'leadership in sustainability' should be key. While leadership in sustainability may mean several things, the committee construes it to mean a system that ensures the ARA and related facilities as well as universityindustry relations continues to improve and drive the vision of the University. Such a system could be in the form of policies, particularly, from university management, tailored towards aspects such as capacity building, attitudinal change and culture of maintenance.

Leadership in sustainability should reflect:

a. Top management buy-in

In the first place, the Committee believes there should be a strong commitment of the University management to the implementation of the Master Plan. Concurrently or coming on the heels of implementation is a need to enact policies to drive change and ensure that all parts of the Master Plan play their functions accordingly.

b. Capacity building

Following from a) above, there is a need to focus on capacity building of staff, and to some degree students, to effectively handle change and be responsive to challenging and changing situations, including changing to adopt lifestyles that ensures the University becomes a true center of excellence.

c. Attitudinal Change

Promotion of attitudinal change among staff and students towards a culture of prudence, excellence and industry.

d. Maintenance Culture

With attitudinal change, a need for a strong maintenance culture should be inculcated in everyone associated with STU as part of the organisational culture, values and norms. This, hopefully, will help to preserve and protect, even to improve on systems provided for within the Master Plan.

Conclusion

To conclude this section, these academic and administrative facilities, in sum, epitomise what we deem to be the main backbone of the academicadministrative axis of the Master Plan. We recognise that these may not be exhaustive and therefore invite consultants to explore further additional (academic, research and administrative) facilities to drive the STU to become a true centre of excellence. Related to these, there are also other supporting facilities such as commercial and transport facilities to enhance a well-functioning campus which we consider in the next section.

SECTION TWO COMMERCIAL AND TRANSPORT FACILITIES

2.0 Introduction

A well-functioning university campus needs other ancillary and supporting facilities such as commercial and transport systems. Due to the inherent potential of commercial and transport systems to generate revenue, the Committee intends to consider these facilities as both income generating entities for the University and as municipal services. As such, the Master Plan should handle these in a way that addresses service provision, as viable income generating entities and self-sustaining. We believe these will enhance system sustainability construed as fulfilling conditions of desirability, viability and functionality over a long term.

2.1 Commercial area

The Master Plan must have adequate provision for banking and financial services, mini markets, restaurants and eateries, secretarial services, bookshops and other relevant commercial provisions to facilitate convenience, access and local economic development. The location of these facilities should be such that they will not interfere with academic and research activities. Again, location must provide access to the general public.

2.2 Transport system

It is also recommended that the University sets up and provides an efficient transport system for staff and students for convenience, security, public service and revenue generation. The principal mode of delivering this could be a public-private partnership (PPP) where the system also serves the public. Students and staff could board at a rebate price. In this sense, the circulation network within the Master Plan must provide for convenient pick-up and drop-off points, and minimise vehicular distractions, particularly around teaching and research facilities.

Again, in order to enhance livability of the campus, the design of the transport circulation system must make allowance for the use of non-carbon emission transport options such as bicycles and also provide for pedestrian walkways and other road/street furniture.

2.3 System Sustainability

The commercial and transport systems need to fulfil attributes such as desirability (for users), viability (to stakeholders/owners) and functionality (internal to the systems as well as to users). On that basis, the systems to be developed, as part of the Master Plan, should be run and managed in a way that ensures they continue to deliver the service expected of them and return on investment made in them. This involves enacting workable policies, developing management and organisational structures, targeted periodic investments, engaging stakeholders on a continuous basis to explore ways to increase their desirability, viability and functionality.

SECTION THREE

RESIDENTIAL AND RECREATIONAL FACILITIES

3.0 Introduction

Residential and recreational facilities are almost indispensable in today's academic environment. It has been argued that the quality of one's living environment has effect on his/her productivity. Needless to say, also, recreational programs have important positive impact on people's wellbeing. Well-designed residential and recreational facilities also engender solidarity and community spirit, both of which could have positive quality of life outcomes. On that basis, the Master Plan should address questions related to residential accommodation for both staff and students as well as recreation in a way that enhances users' quality of life and increase their productivity. Beyond that, it is also important for the Master Plan to address aspect of functional sustainability.

3.1 Staff Residential Village and On-Campus Accommodation

A staff village is to be developed outside the university campus due to limited space on the current campus. However, on-campus residential accommodation must be provided for essential staff including senior members, senior staff and junior staff as may be determined by the University (Refer to the Vice Chancellor's new Concept Design Master Plan document for additional information). The staff village must also include a guesthouse and provision for other communal facilities including a school that will be part of the University Basic School.

3.2 Students Accommodation

Additional students' accommodation with varied design concepts targeted at Ghanaian and foreign students, undergraduate and graduate students and others must be provided for in the Master Plan in which each of them should make a provision for a Junior Common Room (JCR).

3.3 Staff Club House and Sports Facilities

The committee is of the opinion that there should be two kinds of recreational facilities. The first is a multi-purpose all-inclusive clubhouse for staff and students. This should have a bar and restaurant, gym, tennis court, badminton, swimming pool, and other complementary facilities.

The second is a sports facilities complex for students. This should include pitches and courts for all the traditional sport disciplines that the University regularly partakes in; here in Ghana and elsewhere in other countries. Such sports include football, tennis, volleyball, basketball, athletics, and any other so determined by the university.

3.4 Functional Sustainability

The master plan should address questions of functional sustainability where accommodation, recreational and other facilities are planned, designed and produced in a way that takes into consideration the changing needs both of current and future users. As such, the plan should factor in the need to avoid functional obsolescence in which projects tend to outlive their usefulness shortly after their implementation. On that score, consultants will be expected to demonstrate how they have addressed this issue of functional sustainability in their proposals.

SECTION FOUR

ENVIRONMENT, HEALTH AND SAFETY

4.0 Introduction

The role of environment, health and safety has been enshrined in the nation's labour and other laws. Working environments should not only protect human life but also should have promise for their safety. These need to be manifested in the planning and design, and ultimately the operationalisation of the Master Plan. The Master Plan, therefore, needs to give serious consideration to these issues so that the needed talents (students and staff) will be attracted to want to live and work or study at STU. Thus, creation of nature conservation areas, lawns and other greeneries, pavements, security, energy and water usage, sanitation, health care, among others, are very important components that need to feature prominently in the new campus to evolve from the Master Plan. Related to this, the issues of aesthetics and environmental sustainability should be given prominent focus in the designing and planning of the Master Plan.

4.1 Promote Creation of Nature Conservation Areas, Greeneries and Open Spaces

The Master Plan should integrate green spaces into the physical layout of the campus for environmental conservation, aesthetics and health benefits. Particularly, flora and fauna around the stream which runs through the campus should be enhanced with more planted trees and landscaping. The greenery should also consider agriculture and food production through the adoption of innovative techniques including hydroponics.

4.2 Promote Walkability and Livability of the campus

The pattern of lawns must have effective connections to avoid abuse of lawns by people. The Master Plan is therefore expected to make it possible for staff, faculty, students, visitors and any other person who either resides, works and visits the campus to feel welcome, be connected to nature and have access to resources and support services necessary for functional living, productive learning, teaching and research experience, and aesthetic appeal.

4.3. Energy Generation, Distribution and Usage.

The Master Plan must explore renewable energy including solar energy by way of a solar farm or rooftop installations. The spatial needs and implications thereof should be anticipated by the Master Plan.

Further, the university should adopt a policy of progressively shifting to the use of such renewable energies, particularly solar energy as well as the adoption of energy-saving technologies. The Master Plan should therefore explore how to make such a policy practicably achievable within a reasonable time frame.

4.4. Water Treatment and Supply

The Master Plan should also consider a university-based water supply system that maximises available water facilities on campus. In particular, solar-powered boreholes are expected to become the main source of water supply on campus. Additionally, rain harvesting must be exploited for watering and wastewater must be treated and reused for appropriate purposes.

4.5 Sanitation

The Master Plan should provide for both a centralised and localised liquid waste management system. The localised system should be used for domestic facilities such as residential houses for staff on campus and the centralised for all other facilities.

Solid waste should be separated and managed appropriately. Inorganic and material waste should be managed by way of incineration while organic waste is managed largely through composting for farm manure.

On the issue of the refuse dump site behind the GETFund Hostel, the Committee proposes that:

- Management and SRC should push for further engagement with the Sunyani Municipal Assembly to relocate the site.
- Council and Management should engage the Ministries of Sanitation and Local Government beyond the Sunyani Municipal Assembly.
- The Master Plan should consider the construction of an incinerator with the capacity to handle the daily tons of solid

waste generated within the city and the University. A medium-sized incinerator which can treat up to 10 tons of waste per day is recommended.

4.6 University Hospital

The Master Plan should make provision for expansion of the existing clinic to the status of a University Hospital. The Committee takes a view that this expansion should be done in a way that will enhance academic work of the health-related disciplines the University offers. In Ghana, recently there has been a shift towards construction of teaching hospitals on university campuses. The University of Ghana hospital is a case in point. For STU, given our niche area in electrical and electronics engineering, the development and construction of a University Hospital should be done with the possibility of leading in the development of medical electronics, among others.

For discussion on the University hospital, the committee invited the Physician Assistant at the STU clinic to help members understand the details relating to functional departments and units within a hospital. The required functional units and departments, among others, include clinical units, allied health, diagnostics (e.g. radiology), pharmacy, theatre, wards, accident and emergency centre, ear, nose and throat (ENT), child and maternal health, and other supporting or ancillary facilities. These are needed to expand and elevate the current clinic to the status of a University hospital (with capacity in key aspects of medical practice) for teaching and providing health services to the University community and the general public.

It is recommended that the hospital focuses on Biomedical and Diagnostics specialisation as a niche area. This niche area takes cognisance of both the current and the likely new programmes to be introduced by the University in the coming years, the healthcare services delivery and the functional role of the Regional and Municipal Hospitals in the future.

4.7 Security

The Committee proposes that security in and around the University should be strengthened and that the following should be considered by the Master Plan.

- The layout should adopt the concept of defensible space. That is, in addition to making spaces created to be personalised by users and hence protected, the design and position of structures should also generally be open to avoid, as much as possible, the creation of 'no man's land' and obscure places that could invite criminal intent and other social vices.
- Provide a police post
- Resource and rebrand the University's security department by recruiting energetic young men and women, provide modern communication equipment, and regular training of personnel.
- Provide access control equipment at the entrance of buildings and the University. In that regard, students and staff ID cards should be upgraded to make it possible to swap at access control points.
- Install closed-circuit television (CCTV) cameras as well as hidden cameras around the University campus.
- Provide adequate security lighting along streets and around buildings.
- Provide security booths at vantage points
- Provide locational maps at vantage points, as part of the features of the new campus master plan, to help in orientation for users and visitors, and also as a form of street furniture.

4.8 Environmental Sustainability

Responding to requirements of the appointing letter relating to 'leadership in sustainability issues' and 'institutional sustainability', the Committee believes that the key areas to demonstrate sustainability must include, in particular, environmental sustainability to help contribute to reducing climate change. And, in the twenty-first century, one of the topical issues relate to climate change and, as such, all over the world, there is a push for environmentally sustainable systems, including reduction on (fossil fuel) energy consumption, reliance on renewable energy options, reducing automobile transportation that relies on fossil fuel but promoting biking and walkability, reducing water consumption through the use of smart technologies, promoting the use of recycling and re-use of resources, etc., to help stem the pace of climate change.

Given the leadership role most universities, including STU, represent to the larger society, the Committee believes it would be important to assert STU's leadership role in championing these environmentally sustainable systems. In particular, such systems should be adopted and used in both existing and new buildings. Indeed, the Committee recommends that STU takes a policy position in systematic adoption of environmentally sustainable systems not only in buildings but in the use of resources, generally. On that basis, consultants will be invited to explore sustainable designs (Fig. 4.1) in their proposals.



Fig. 4.1: Campus Design Concepts: Sustainable Designs (Source: Lafarge Holcim Foundation)

SECTION FIVE ART, CULTURE AND THE CITY

5.0 Introduction

As an institution, we want to exploit the opportunities embedded in our geographic and cultural locations. We believe these can aid in branding and projecting the University, even beyond Ghana. To that extent, the question of identity or what makes us unique and could project the institution are as crucial as the academic programmes offered. As such, we expect the Master Plan to explore very deeply aspects related to arts, culture and the city and how these may be connected as branding symbols to project the institution. Among those we identify include a museum, the "sonodwae" show, and deepening our inter-relationship with the city. We also recommend a center for the advancement of indigenous knowledge as well as the role of religious groupings on campus and the establishment of university basic schools. Finally, it is equally important to consider institutional sustainability.

5.1 University Museum

The Committee takes the view that the Master Plan must make provision for the construction of a University museum for preservation and exhibition of research and development outputs, capture the University's historic moments, and tell the achievement and heights of the University. The museum should also serve the city and wider region(s) by collaborating with traditional authorities and other indigenous entities to capture, display and preserve the historical artifacts and narratives that speak to the city and region's evolution and development.

5.2 Sonodwae Fashion Show

The Master Plan should support the growth and the elevation of the annual Sonodwae fashion event organised by the Department of Visual and Industrial Art to become a recognised fashion event open to the participation of the fashion and the creative industry in the city, region and the country. An auditorium or a theatre design that shows sensitivities, as well as speaks to the history behind the name Sonodwae, from which the (corrupted name version) 'Sunyani' emanates will be a welcome proposal indeed.

5.3 Inter-relationship with the City

The Committee is of the view that there is a need for a strong linkage with the city and the wider environment of the university. This, in the opinion of the Committee, should include:

a. Collaboration with city managers and policymakers to undertake research that will feed into the planning and management of the city. This will promote a mutually beneficial relationship with the city.

b. Making students' research output relevant to the needs of the city and same made available to city managers and policymakers for decisionmaking.

c. Getting staff to provide community services to the city through committee representations and such other considerations.

d. Incorporating the history and culture of the city, as previously noted, and the wider region into the architectural design of the buildings of the University.

Furthermore, our location in Sunyani, a city in Ghana's middle belt offers an opportunity to be able to attract students from both the northern and southern parts of the country. As noted, this geographical location should be emphasized in the Master Plan document and used as part of branding the University. Of course, located in the middle belt, which is noted as the country's breadbasket, with its attendant low cost of food and generally low cost of living are characteristics needed to be projected to attract students and staff. Again, the rich cultural heritage of the various ethnic groups and network of historical and tourist attractions should be packaged to positively contribute to the University's brand targeted at foreign students, researchers and other scholars.

5.4 Center for the Advancement of Indigenous Knowledge

The Master Plan should consider the establishment of a Center for the Advancement of Indigenous Knowledge to spearhead research and projects to explore and advance indigenous knowledge, practices and innovations in areas of agriculture, construction, engineering, fashion and clothing, traditional health practices and medication, history and many other related matters.

5.5 Religious Facilities

The Master Plan is also expected to make room for the construction of religious facilities to serve the spiritual needs of the university community and the public as well. The concept of shared facilities by like-manner religious groups must be promoted to optimise available space and building designs must be such that it reduces noise pollution.

5.6 University Basic School

The Master Plan must provide space for the establishment of Sunyani Technical University Basic School to be managed by the University. The school must have sections for crèche, nursery, and kindergarten to be located at the University's campus, and primary and junior high to be located at the university's staff village. The model of operation must be determined after a study to be conducted by a committee on the operation of similar basic schools by higher institutions in the country to inform the final decision.

5.7 Institutional Sustainability

Institutional sustainability should reflect:

a. Accessibility and Diversity

Taking cognisance that academic institutions today represent 'public spaces/spheres' and thus providing access to a diverse category of people including, in particular, the physically challenged, the Master Plan should enhance and promote accessibility to the physically challenged. This accessibility should be both with respect to buildings and services. This will, of course, enhance the University's appeal to these people some of whom are very talented indeed. With that, the diversity of the STU campus will be enhanced. This is of utmost importance given the passage of the disability law, Act 715, in 2006.

On that score, the University management could institute a policy of admitting a certain percentage or number of persons with disability into its various programmes. With such a policy, a window of opportunity could be created to secure funding from developmental and governmental agencies.

b. Procurement

There is a need to benchmark sustainability in procurement and other operational practices across the University. By this, the Committee anticipates that there should be a policy where procurement in the University includes a certain minimum percentage of goods and services that are 'green-rated' or have low carbon-footprints.

c. Paperless Communication Media

Progressive adoption of paperless communication media and storage as a means of eliminating wastage of paper use as well as reducing the carbon footprints of the University on the environment.

SECTION SIX

KEY SUCCESS FACTORS OF THE MASTER PLAN

6.0 Introduction

The Committee believes that the development and successful implementation of the Master Plan, among others policy decisions and actions, is critical to the realisation of the University we want to be. In this regard, the success factors to the implementation of the Master Plan are indicated here, beneath.

6.1 Financing of the Master Plan

The successful development and implementation of the Master Plan is heavily dependent on the ability of the University to mobilise financial resources, internally and externally to finance the Master Plan.

Consequently, the Committee proposes the following options for consideration as part of the strategies for financing the Master Plan.

- a. Building the capacity of staff to write and win research grants. This brings in crucial resource holders and resources some of which go into infrastructure and post-graduate studies beyond the research component.
- b. Capitalise on the strong industrial and academia capital of members of the Faculty Boards to reach out to resource holders in various sectors.
- c. Build strong collaboration with public and private sector partners, internally and externally.
- d. Work to improve the revenue generation through internal production units and possibly, establish additional viable ones to generate more internally generated fund (IGF).
- e. The University must use its resources to explore capital market financing to support the realisation of 'The University We Want to Be'

6.2 Commitment of leadership

There must be a resolute commitment at all levels of leadership of the University to the implementation of the Master Plan. This is crucial because resource mobilization, allocation, and managerial prudence are key reserve functions of leadership. Therefore, demonstrating clear direction and support to the implementation of the Master plan will drive the university community and send an inviting signal to other resource holders to partner and collaborate with the University.

6.3 Human Resource Development

Key to the vision of the University becoming a center of excellence, is the quality of human resources available to the University. A culture of excellence is driven by continuous development of the human resource base with respect to new recruitments, and training and retraining of existing faculty and staff. Therefore, the infrastructural development and magnificence envisaged by the Master Plan must be complemented by well-trained, resourceful, highly skilled, innovative and technology-minded workforce. They should be able to adapt to change situations, exhibit professionalism in work culture and attitudes in the environment of a thriving university.

CONCLUSION

The foregoing are the key considerations the Committee identified in the 'Technical University We Want to Be'. We recognise however that not all aspects of the Master Plan, as presented, have spatial and/or physical dimension and as such several of the components, as explored, may not all be translated and interpreted in spatio-physical terms. As such, the Committee advises management to invite consultants to explore, besides, such non-spatial aspects that would tend to enhance the University's inter-connections and thereby help project the University to become a true center of excellence.

APPENDIX I: PROPOSED FUTURE FACULTIES AND DEPARTMENTS

Fa	culty	Departments
	FACULTY OF BUILT ENVIRONM	ENT AND APPLIED ARTS (FBEAA)
a)	Faculty of Built Environment	i. Department of Construction Technology and Management
		ii. Department of Building Science and Services
		iii. Department of Interior Design and Architectural Technology
		iv. Department of Real Estate and Facilities Management
		v. Department of Physical Planning and Landscape Design
b)	Faculty of Visual and Industrial Art	i. Department of Fashion Design and Technology
		ii. Department of Textiles
		iii. Department of Ceramics Technology and Sculpture
		iv. Department of Graphic Design and Painting
		v. Department of Publishing Studies
		vi. Department of Metal Technology
c)	Faculty of Wood Construction and product development	i. Department of Timber Construction and joinery
		ii. Department of Department of
		iii. Department of Furniture design
		iv. Department of Wood Science
		v. Department of Bamboo Research
		and innovation Centre
	FACULTY OF EN	GINEERING (FoE)
d)	Mechanical and Materials	i. Department of Mechanical
	Engineering	Engineering

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		ii. Department of Agricultural
		Engineering
		iii. Department of Materials
		Engineering
		iv. Department of Industrial Welding
		and Metallurgical Engineering
		v. Department of Sustainable Energy
		and Systems Engineering
e)	Electrical and Electronics	i. Department of Electrical and
	Engineering	Electronics Engineering
		ii. Department of Biomedical
		Engineering
		iii. Department of Photonics
		Engineering
		iv. Department of Communication and
		Electronics Engineering
		v. Department of Computer and
	· · · · ·	Electronics Engineering
f)	Civil and Geoinformatics	i. Department of Civil Engineering
	Engineering	
		ii. Department of Environmental and
		Safety Engineering
		III. Department of Geoinformatics
		Engineering
		iv Department of Geology and Geo
		technical Engineering
	FACULTY OF APPLIED SCIEN	ICE AND TECHNOLOGY (FAST)
g)	Faculty of Applied science	i. Department of Mathematics
		ii. Department of Environmental
		Science
h)	Faculty of Agriculture	i. Department of Agricultural
		Mechanization
		ii. Department of General Agriculture
		iii. Department of Environment
		iv. Department of Horticulture

		v. Department of Animal Science
		vi. Department of Veterinary Sciences
i)	Faculty of Food Science and	i. Department of Food Science
	Technology	ii. Department of Hospitality
		Management
		iii. Department of Tourism
j)	Faculty of Medical and	i. Department of Pharmaceutical
	Biomedical Sciences	Sciences
		ii. Department of Medical Laboratory Science
		iii. Department of Diagnostic Sciences
		iv. Department of Medical Sciences
k)	Faculty of Computer Sciences	i. Department of Information
		Communication Technology
		ii. Department of Computer sciences
	FACULTY OF BUSINESS AND	MANAGEMENT SCIENCE (FBMS)
1)	Faculty of Applied Social	i. Department of African Studies
	Sciences & Humanities	ii Department of English &
		Communication Studies
		iii. Department of Geography and
		Rural Development
		iv. Department of History & Political
		Studies
		v. Department of Law
		vi. Department of Psychology
		vii. Department of Religious Studies
		vii. Department of Sociology & Social Work
m)	School of Business	i. Department of Accountancy
		ii. Department of Banking

iii. Department of Banking and
Finance
iv. Department of Business
Administration
v. Department of Entrepreneurship
vi. Department of Economics
vii. Department of Insurance Studies
viii. Department of Finance
ix. Department of Finance &
Accounting
x. Department of Finance & Economics
xi. Department of Financial
Management
xii. Department of Health Services
Management
xiii. Department of Human Resource
Management
xiv. Department of Information
Management & Information System
xv. Department of Management
Studies
xvi. Department of Marketing
xvii. Department of Procurement &
Supply Chain Management
xviii. Department of Professional
Studies
xix. Department of Public
Administration
xx. Department of Engineering
Management

xxi. Department of Secretaryship studies
xxii. Department of Secretaryship & Management science

THE BROAD COMPONENT	THE	COMPONENT AR	LEAS PRESEN	тер вү тне	COMMITTEE IN	RELATION TO	THE TERMS O	F REFERENC	E
AREAS	Components of the	Academic, Administrative	Inter- relations	Acts and Statutes of	Industrial and International	Interface with	Role of the institution in	Leadership in sustainability	Institutional sustainability
	institution	and Municipal	part of the	the	partnerships	government	the nation	issues	1
	and meir functions	Services	IIISUUUUU	nonunsui			and the local area		
Academic,									
Research and									
Administrative									
Facilities									
Commercial									
and Transport									
Residential									
and									
Recreational									
Facilities									
Environment,									
Health and									
Safety									
Art and									
Culture									
Sustainability									

MATRIX OF THE WORK DONE BY THE COMMITTEE

APPENDIX 2:

Sunyani Technical University Master Plan

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