



SURAT KEPUTUSAN REKTOR UNIVERSITAS SAMPOERNA
DECREE OF THE RECTOR OF SAMPOERNA UNIVERSITY

NOMOR: 006/R/SK/RO-mak/II/2022

NUMBER: 006/R/SK/RO-mak/II/2022

TENTANG
CONCERNING

RENCANA TEKNOLOGI INFORMASI UNIVERSITAS SAMPOERNA
INFORMATION TECHNOLOGY PLAN SAMPOERNA UNIVERSITY

REKTOR UNIVERSITAS SAMPOERNA,
THE RECTOR OF SAMPOERNA UNIVERSITY,

Menimbang
Considering

- : a. Bahwa sebagai institusi Pendidikan tinggi, Universitas Sampoerna telah merencanakan pengembangan kampus di bidang teknologi informasi sebagai bagian dari rencana strategi operasional;

Whereas as a higher education institution, Sampoerna University has planned to develop the campus in information technology as part of its operational strategic plan;

- b. Bahwa Dewan Universitas Sampoerna telah menyetujui Rencana Teknologi Informasi Universitas Sampoerna pada Rapat Dewan Universitas Sampoerna pada tanggal 11 Februari 2022;

Whereas the University Council of Sampoerna University has approved the Information Technology Policy in University Council Meeting on 11 February 2022;

- c. Bahwa berdasarkan pertimbangan sebagaimana dimaksud pada huruf a dan b perlu ditetapkan Surat Keputusan Rektor.

Whereas based on the considerations as referred to in letter a and b must be stipulated in a Rector's Decree.

Mengingat
In view of

- : 1. Undang-Undang Nomor 12 Tahun 2012 tentang Pendidikan Tinggi (Lembaran Negara Republik Indonesia Tahun 2012 Nomor 158, Tambahan Lembaran Negara Republik Indonesia Nomor 5336);

Law Number 12 of 2012 on Higher Education (Statute Book of 2012 No. 158, Supplement No. 5336);

2. Peraturan Pemerintah Nomor 4 Tahun 2014 tentang Penyelenggaraan Pendidikan Tinggi dan Pengelolaan Perguruan Tinggi (Lembaran Negara Republik Indonesia Tahun 2014 Nomor 16, Tambahan Lembaran Negara Republik Indonesia Nomor 5500);

Government Regulation Number 4 of 2014 on Organization and Governance of Higher Education (Statute Book of 2014 No. 16, Supplement No. 5500);

3. Peraturan Presiden nomor 8 tahun 2012, tentang Kerangka Kualifikasi Nasional Indonesia (Lembaran Negara Republik Indonesia tahun 2012 Nomor 24);

Presidential Regulation number 8 of 2012, concerning the Indonesian National Qualifications Framework (State Gazette of the Republic of Indonesia of 2012 Number 24);

4. Peraturan Menteri Pendidikan dan Kebudayaan No 3 Tahun 2020 tentang Standar Nasional Pendidikan Tinggi;

Regulation of the Minister of Education and Culture No 3 of 2020 National Standard of Higher Education;

5. Keputusan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor 66/E/O/2013 tanggal 15 Maret 2013 tentang Izin Pendirian Universitas Siswa Bangsa Internasional *juncto* Keputusan Menteri Riset, Teknologi, dan Pendidikan Tinggi Republik Indonesia Nomor 122/KPT/I/2016 tanggal 10 Maret 2016 tentang Perubahan Nama Universitas Siswa Bangsa Internasional di Kota Jakarta Selatan menjadi Universitas Sampoerna di Kota Jakarta Selatan;

Decision of the Minister of National Education and Culture of the Republic of Indonesia Nomor 66/E/O/2013 dated March 15, 2013 on License for Establishing Universitas Siswa Bangsa Internasional juncto Decision of the Minister of Research, Technology, and Higher Education of the Republic of Indonesia Number 122/KPT/I/2016 dated March 10, 2016 concerning the Change of Name of the International Student Nations University in South Jakarta City to Sampoerna University in South Jakarta City;



**SAMPOERNA
UNIVERSITY**

6. Surat Keputusan Pengangkatan Rektor Universitas Sampoerna Nomor: 106/PSF-BOARD/11/21 tanggal 1 November 2021;

Decree on the Appointment of the Rector of Sampoerna University Number: 106/PSF-BOARD/11/21 dated November 1, 2021;

**M E M U T U S K A N:
D E C I D E D**

Menetapkan
To enact : SURAT KEPUTUSAN REKTOR UNIVERSITAS SAMPOERNA TENTANG RENCANA TEKNOLOGI INFORMASI UNIVERSITAS SAMPOERNA, SEBAGAI BERIKUT:

DECREE OF THE RECTOR OF SAMPOERNA UNIVERSITY CONCERNING INFORMATION TECHNOLOGY PLAN OF SAMPOERNA UNIVERSITY, AS FOLLOWS:

Kesatu
Firstly : Menyetujui Rencana Teknologi Informasi Universitas Sampoerna sebagaimana terlampir dalam Lampiran 1 Surat Keputusan ini.


Approved Information Technology Plan of Sampoerna University as attached in Attachment 1 of this Decree.

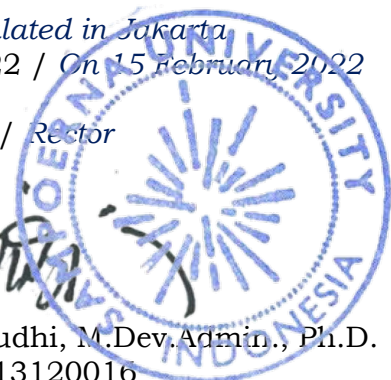
Kedua
Secondly : Surat Keputusan ini berlaku sejak tanggal ditetapkan. Apabila di kemudian hari terdapat perubahan dan/atau hal-hal yang belum diatur, maka akan dilakukan perbaikan sebagaimana mestinya.

This Decree is valid from the stipulation date. If there are matters that are not provided in this Decree, it shall be added, amended, and stipulated accordingly.

Ditetapkan di Jakarta / *Stipulated in Jakarta*
Pada tanggal 15 Februari 2022 / *On 15 February 2022*

Rektor / *Rector*


Drs. Wahdi Salasi April Yudhi, M.Dev.Admin., Ph.D.
NIDK 8813120016



Tembusan:

Copy:

1. Para Wakil Rektor, Universitas Sampoerna;
Vice Rectors, Sampoerna University;
2. Para Dekan, Universitas Sampoerna;
Deans, Sampoerna University;
3. Para Ketua Program Studi, Universitas Sampoerna;
Heads of Study Programs, Sampoerna University;
4. Para Manajer, Universitas Sampoerna.
Managers, Sampoerna University.
5. Para Kepala Unit, Universitas Sampoerna.
Head of Units, Sampoerna University.



Lampiran 1

ATTACHMENT I

**SURAT KEPUTUSAN REKTOR UNIVERSITAS SAMPOERNA
*DECREE OF THE RECTOR OF UNIVERSITAS SAMPOERNA***

NOMOR: 006/R/SK/RO-mak/II/2022

NUMBER: 006/R/SK/RO-mak/II/2022



**INFORMATION TECHNOLOGY
MASTER PLAN
2021**

October 2021
Rev 1.3

TABLE OF CONTENTS

I. Executive Summary	3
Overview	3
II. Introduction	4
Mission Statement.....	4
Vision Statement	4
SWOT Analysis	5
SWOT Analysis (continued)	6
Objectives of Technology Master Plan	7
Objectives of Technology Master Plan (continued).....	8
Aligning IT Goals with Institutional Mission	10
III. Planning Assumptions	11
Planning Assumptions (continued)	12
Planning Assumptions (continued)	13
IV. Strategies.....	14
1. Student Services.....	14
2. Academic Systems.....	14
3. Library Services	15
4. Enrollment Services	16
5. Research and Community Services	16
6. University Governance/Institution Management	16
7. University Back-Office Function (Bursary, HR, Finance)	16
8. Administrative/Supporting Systems	16
9. Discovery and Training.....	17
10. Fiscal	17
V. IT Goals and Objectives	19
Overview	19
IT Goals and Objectives	20
VI. Strategic Objectives	21
Strategic Objectives 2021.....	22
Strategic Objectives 2021 (continued).....	24
Strategic Objectives 2021 (continued).....	28
VII. Target IT architecture	30
VIII. Appendix.....	31
A. Committees and Councils.....	31

I. Executive Summary

Overview

The Technology Master Plan (TMP) is intended to integrate with all institutional planning as well as integrate into the Strategic Plan and the Facilities Master Plan. Information Technology (IT) is an integrated function of the University, and it is important that the TMP embody this integration and allow for an evaluative component.

In Indonesia, Information Technology services have often been viewed from a fragmented perspective in higher education. Previously there was a segment of IT that was viewed as the technical staff that focused on evaluation, purchasing, implementation, and support of academic and instructional technologies. This included classroom technology, computer labs, libraries, and learning resource centers. This area was considered a distinct technology segment that was self-contained and isolated from many other critical technologies and systems.

At SU, other technologies and systems include the administrative systems that support student recruitment and online admission, student registration, manage class schedules, maintain student information, grades and academic history, provide library services and online information literacy, and support student services such as counseling, advising, and alumni data management. The administrative system also covers research and community service activities such as managing research grants, proposal evaluation, and online journal publication. Additional administrative systems include procure to pay system, human resources and payroll processing system, general affairs system, legal management system, management reporting and government mandated reporting. All these systems need to be understood as a whole with an emphasis on integration with academic and instructional technologies at SU.

While a fragmented view of technology gives a relatively clear division of management and staff duties, it makes it difficult or impossible to have a complete picture of the University's position and success in meeting its mission. There are critical systems and data in both the instructional and administrative environments but the connection between these two environments is a work in progress. Both areas suffer from a lack of integrated data that could better serve students, faculty, staff, and administrators, and hence, allow a holistic vision of the University's ability and needs in relation to instruction and learning. Services to students are more difficult to deliver without the centralization of all student data. As a result, data has to be entered several times into disconnected systems with a high probability of incorrect data or data that was out of sync between the different systems.

It is clear that technology, and more importantly, data has been imbedded in disparate systems throughout the University. Diverse technologies have entered into the University from many paths and sometimes in unexpected ways. It is now obvious that a consolidated strategy to implement and manage technology across the University is required to use technology successfully and, as important, to leverage success from the ever-growing investment the University is making in technology. Technology and related ongoing support and costs have to be viewed as a whole to manage the University responsibly from a fiscal perspective and ensure the required primary focus on instruction and learning.

II. Introduction

Mission Statement

The Information Technology (IT) team provides service and support to the students, faculty, and staff of Sampoerna University by providing leadership in the implementation, integration, application, delivery, and support of information and instructional technologies. The IT team is committed to efficiently and effectively managing communication, academic and administrative computing, network services, web services, and related information resources that support and enhance teaching, learning, research, and community service at the University. The IT support team is supported by shared services provided by the Sampoerna Schools System. These shared services allow us to leverage multiple, enterprise-level technologies and additional technical expertise.

Vision Statement

In order to fulfill its mission, IT is committed to the following responsibilities:

- To provide technology resources to support student learning programs and services and improve institutional effectiveness
- To deliver prompt, courteous service to all clients
- To support IT planning at the institutional level and provide leadership, partnership, and support to all units within the University to ensure the appropriate implementation and application of technology
- To collegially establish, communicate and enforce standards for the use and delivery of information and educational technology
- To maintain the mechanisms for appropriate information technology access, security, availability, and integrity
- To manage the physical infrastructure in support of IT, assuring the reliability and availability to meet current and future requirements
- To identify, implement, and manage institutional databases as a University resource
- To evaluate and enhance the effectiveness of IT resources including human, physical, and financial resources
- To research and evaluate emerging technologies and to implement and integrate new technology as approved by University leadership
- To educate and train the University community in the use and application of information technology resources through consultation and instruction
- To focus on current and evolving communication technologies to enhance communications with students, faculty and the community while supporting the University commitment to excellence in student learning
- To maintain an open dialogue with campus faculty, academic and student services to ensure full support for student learning and support of the University in fulfilling the stated mission.
- To continue to work with all other campus groups on planning for IT requirements throughout all levels of the University through both formal and informal processes
- To support educational technology to provide faculty more flexibility in the method of delivery of instruction and instructional material

SWOT Analysis

Strengths

- A dedicated and skilled staff committed to providing outstanding service and support to the University's students, faculty, and staff
- A commitment by University Senior Management to provide the latest technology for faculty
- Academic programs that promote information technology literacy
- A strong vision to be a premier University in Indonesia that is a leader in teaching, learning, programs, and service.
- A commitment to provide access to high-quality education, focusing on student success within a climate of integrity and respect
- A goal of consistently exceeding the expectations of our students, staff, and community
- Effective at creating partnerships
- Resourceful and efficient by utilizing shared services from Sampoerna Schools System
- Shared governance
- Fiber Optic based infrastructure with redundant internet connection through two different internet providers and different links to optimize network availability
- Canvas (Instructure) as Learning Management System
- Enterprise Resource Planning (Procure to Pay System), Customer Relationship Management (CRM System), and related supporting technologies and services
- Rapid and modular development methodology in the process of development and customization of applications.
- Cloud based server implementations that are easier to scale out
- Implementation of IP based telephony to support cost efficient communication

Weaknesses

- Overall staff size needs to be aligned with campus growth and evolving business processes that may change due to technology implementations
- Investment in technology requires increasingly limited fiscal resources for acquisition and, more importantly, on-going maintenance and support
- Recruitment and retention of qualified technical staff
- Provide infrastructure and support for the multitude of WIFI enabled devices on campus and surrounding areas
- As a developing country, Indonesia has high-cost internet bandwidth
- Sometimes, it is difficult to align technology investment with revenue streams related to the size of the student body vs implementation cost.
- Limited support after normal business hours due to limited financial and staff resources

SWOT Analysis (continued)

Opportunities

- New ways to deliver instruction are continually and rapidly evolving
- Continued ability to reach students in many ways other than the traditional classroom setting
- Student and faculty access to information and learning materials from on and off campus using computers, hand-held devices, and other technologies to support them anytime/anywhere
- Online/Hybrid delivery will require new methods of delivering student support services remotely
- New methods of communication among the campus constituents will raise issues of access, security, and privacy
- Expand student learning experience – provide infrastructure
- Anywhere/anytime systems
- Provide additional technology solutions and resources through Cloud computing
- Desktop virtualization for staff and faculty computing
- Cloud technology growth such as SaaS (Software as a Service), PaaS (Platform as a Service) and IaaS (Infrastructure as a Service) will speed up technology deployment

Threats

- Ability to recruit and retain technically skilled staff
- Government regulations
- Environmental hazards
- Computer malware
- Security issues from phishing schemes
- Security breaches and hacks
- Increase in the number of computing devices to be supported

Objectives of Technology Master Plan

In order to accomplish the mission of Sampoerna University and the major goals outlined in the University's Strategic Plan, Sampoerna University requires a comprehensive plan for information and instructional technology. A major goal of this plan is for SU to continue to be a leader in the use of information technology in higher education. This is important in supporting the mission of the University and also important to the commitment for SU to be recognized as Indonesia's most forward-looking university. Guiding our work to develop a Technology Master Plan are the following:

Sampoerna University Mission

Sampoerna University aims to provide students affordable access to education that meets the highest international standards. Sampoerna University offers a curriculum unique in Indonesia built around an American general education core, successfully preparing students for credential completion at Sampoerna University, or for recognized transfer abroad. We also provide a full spectrum of cocurricular and pre-professional opportunities that ensure student success, preparing leaders for a global society.

Pillars (Goals) of the SU Strategic Plan

- *Reimagine and Maintain the Core Curriculum*
- *Create an Institution Of and For our Students*
- *Build Toward the Future of Indonesia*
- *Provide a Model for Tomorrow's University Today*

This plan will not just be a plan for the Information Technology team but rather a plan for information and educational technology for the entire University. It is the result of a months-long exercise whereby IT engaged all units within the University to understand their current and future needs. It has also followed the University's shared governance process with the Committee on Administration leading the effort to finalize the Technology Master Plan. Just as the development of this plan involved all areas of the University, full implementation will require the participation and involvement of the entire University.

It is recognized that technology requires significant ongoing expenditures and, as such, must be managed with care and viewed within the context of other critical University needs. When appropriate, shared services from Sampoerna Schools System can be leveraged to provide greater performance, effectiveness, and efficiency. The major focus of this plan is on the design, development, and application of information and educational technology in support of teaching and learning, research, community service and the conduct of University business.

Objectives of Technology Master Plan (continued)

Information Technology is a fundamental part of Sampoerna University and all its constituents. Given the importance of technology in teaching and learning it is a requirement that careful planning and analysis related to the overall cost of technology be conducted on an ongoing basis. This includes not only one time purchase costs but also maintenance, on-going replacement, and support costs (including training), that must be built into the budgeting process of the University. This applies to all components of technology:

- Desktop, laptop computers and related peripheral equipment for faculty, staff, and students
- Classroom presentation equipment
- Enterprise Resource Planning (procure to pay system) and all related support technology and systems
- Customer Relationship Management software subscription
- Academic Support software subscription, such as Adobe, Matlab, Office tools
- Learning management system, and academic system
- Library information system and related technologies
- Server, network, and telecommunication system and technology
- Email (messaging) system and office automation software
- Other distributed systems (e.g., lab technology, etc.)

A related issue, which also has fiscal implications, is our ability to recruit and retain the technical staff needed to support information and educational technology in academic and administrative departments. It is important to recognize that the information and educational technology function depends upon the skills of technical staff, and that those skills are in high demand locally and nationally.

Therefore, ongoing investment in technology is a critical requirement for SU to continue to supply exemplary programs and services to its students, faculty, staff and community constituents. However, such investments in technology must be accompanied by appropriate investments in related technology training and professional development opportunities. In fact, SU must have a strong commitment and requirement for professional development in support of all campus technologies. In some cases, the appropriate required training will be done as a partnership between IT and specific units (e.g., CETL, QAIR, GA, etc.) The following training and professional development activities are highlighted and included as an action item in this master plan:

- Classroom technology and learning management systems for use in online or hybrid teaching environments
- Administrative Systems to manage all areas of the University's business processing
- Collection of critical data and use of this data for reporting and support of business management decisions
- Staff productivity using personal computer technology tools such as Microsoft 365 and the opportunity to learn new advanced software functionality
- IDE and Content Management System to support web content updates
- A wide variety of communication tools – email, instant messaging, and streaming

video

- Data analysis and visualization to help university decision making
- Network and data security to protect university environment and its data
- IT governance to manage policy, procedure, working instruction, and compliance

The Sampoerna University Technology Master Plan advocates and supports the University's ongoing investment of resources and funding for technology training and professional development. The University must adhere to this commitment and ensure coordinated planning in this regard for current and emerging campus technologies.

Sampoerna University continues to build a foundation for a 'state-of-the-art' infrastructure for many years. This infrastructure is critical not only to support current, emerging, and future technology for instruction and learning but also is required for support of administrative systems, facilities systems and day to day operations of the University. Sound fiscal planning will be required to assure the maintenance of this infrastructure at 'state-of-the-art' levels. The related fiscal planning should include ongoing investment and life-cycle replacement University-wide throughout all academic and administrative divisions and departments.

Aligning IT Goals with Institutional Mission

In order for this Information Technology Master Plan to be an effective tool for directing the acquisition and use of information technology for the institution, it must be aligned with the overall planning efforts of Sampoerna University. In addition, SU and the Sampoerna Schools System have opportunities for shared services that must also be part of the alignment.

The Technology Master Plan is aligned with the overall mission and planning goals of the University through a Comprehensive Planning Process (see Figure 1-1). This plan specifically integrates with the Strategic Plan.

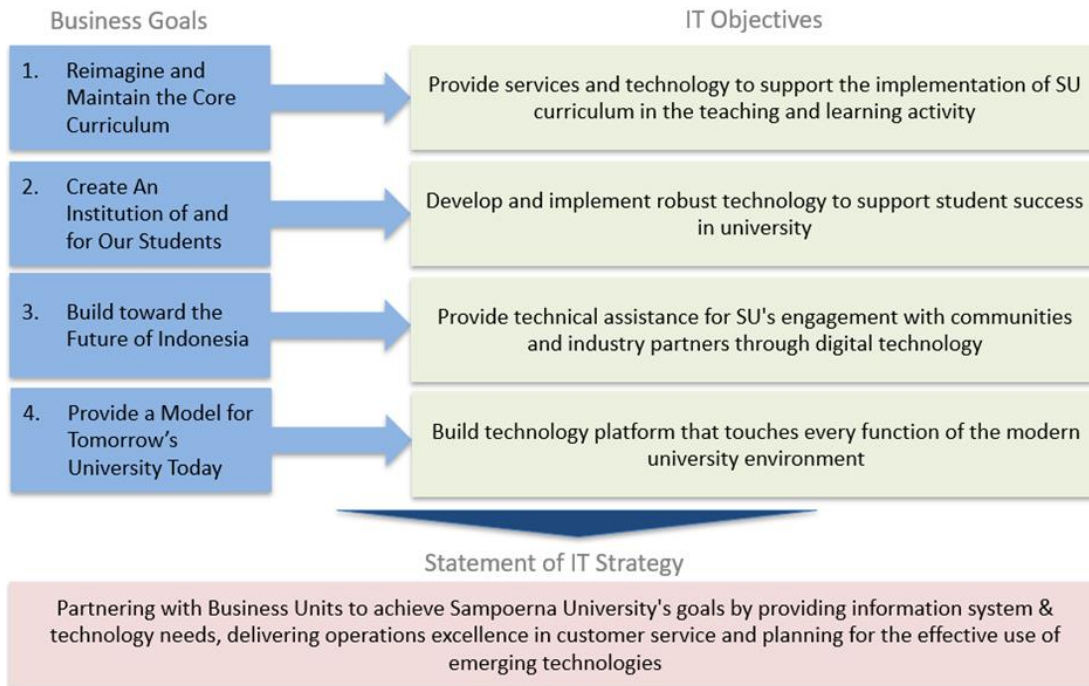


Figure 1-1 Integration of Technology Master Plan into University Integrated Planning

III. Planning Assumptions

A. General

- Integrate services for students and faculty such as ARIS, ACADIS, CANVAS LMS, HR System, Tuition Fee Management (SPS), electronic payment and all related enterprise technologies
- Increased single sign-on features to access these services
- Increased usage of email, mobile technology, and advanced communications such as online meeting (video conference) and IP telephony
- Online services such as admission, academic portal, learning management system, alumni management and career center, library system and online information literacy, etc. will require that the technology infrastructure stay up-to-date and expand as required
- Separate data information warehouses will need to be integrated into a centralized database system to reduce information redundancy and increase the accuracy of the information
- Technology refresh of computers and software based on a 3-to-5-year schedule as appropriate and reasonable based on available funding
- Implementation of systems to support applications for students and faculty requires proper IT infrastructure
- Possible use of outside hosted ("cloud") systems for applications as is appropriate and cost-effective
- The use of shared services, as applicable, should be a priority in the planning and budgeting process

B. Students

- Increased enrollment will increase the need for technology efficiency and effectiveness
- Total Enrollment Summary Projections. The University plans to continue moderate FTE growth as it expands programs
 - University's enrollment plan includes growing FTE's by approximately 6-8% per annum
- Any addition to facilities space and staff will require that IT infrastructure is able to meet those needs
- Current and future enrollment requires additional hours of IT support

C. Academic (Teaching/Learning)

- Smart classroom technologies rely increasingly on access to networks
- The need of hybrid learning technology implementation to take advantage of instructional best practices
- Expand SU IT Help Desk support to align with Instructional needs. This will require additional funds for staffing

Planning Assumptions (continued)

D. Administrative

- Any new planned new facilities as a result of enrollment growth will require new IT infrastructure. This assumption is based on a review of the draft of the Facilities Master Plan.
- Planned remodels will require new IT infrastructure.
- Ongoing implementation and integration of Enterprise Resource Planning (Procure to Pay System) and related systems
- A new document imaging storage system is required by Admissions and Academic Registry
- Integration between billing system to electronic payment and academic system is needed by bursary and students
- IT will be required to implement and support a more immediate and responsive mass emergency notification system for life threatening emergency situations. This can also be used for non-emergency issues such as campus and building closures. A completed system will include web, phone, cell, and e-mail notifications.

E. Fiscal

- Modest increases in funding for IT are projected over the next five years. This includes additional funding for technology, infrastructure, information system, training, and staff.

Planning Assumptions (continued)

F. Information Technology

- Transformation from system with data silos to an integrated system
- Enterprise Resource Planning– On an ongoing basis, power Users will be trained to support and train individual departments on applications
- Canvas (LMS) – Champions will be trained by CETL to support and train faculty at the academic unit level
- Integration will accelerate to upgrade existing academic system covering online admission, student registration, student services, degree plan management, class scheduling, student pathway tracking and monitoring, and faculty services
- As the University grows, there will be additional demand for increased technology and technology support services
- Dashboard development and data analysis are needed to support university decision making
- Significant staff training/development is required on an ongoing basis
- Ongoing analysis and changes to existing business processes is critical
- Future methods to provide services will be via the campus portal to specifically target campus/community populations with communications and relevant content
- Increased demand for new and emerging technologies will require increased data storage, expanded server and network capacity, guaranteed data security and protection, and skilled manpower to handle it
- Ongoing infrastructure/network upgrades must be scheduled/completed
- By 2022, the IT Department will need 1 additional full-time staff as junior applications support
- By 2024, it is estimated that an additional 2 full-time IT staff will be required to provide extended student support
- By 2026, 1 additional full-time IT staff as information system developer will be needed
- Shared services from the Sampoerna Schools System will continue to provide critical infrastructure and services, especially in the areas of network and security, telecommunication, server and data center
- Campus wide non lab computer refresh has been in place for a number of years. Based on available funding, the technology plan allows for restoration or refresh

IV. Strategies

1. Student Services

- Improve University-wide communications capabilities through the use of integrated, web-based systems
- Online counseling
- Tutoring management
- Need to ensure ongoing technology training for existing staff and ensure that technology awareness and use is part of the new hire process
- Develop key metrics to measure how well technology is being delivered
- Increased use of Learning Management System to support all instruction
- Automated self-service and counselor assisted educational planning, degree audit and 'what if' planning for student success
- Expand the use of technologies for mobile devices by developing mobile apps version to integrate academic content and student support services such as attendance and performance monitoring, news and university announcement, scholarship update, event, or workshop update
- Provide system to support university in managing alumni and industry partnership to bridge graduate student with the industry

2. Academic Systems

- Improve University-wide communication capabilities through use of an integrated, web-based system
- Faculty Web Services offering:
 - Access to On-line rosters
 - Students add/drops
 - Faculty schedule
 - Submission of grades
 - Academic assignment letter
 - Direct access for faculty to access their online classes and create "sandboxes" for course development in the LMS
 - Expanded features for faculty referral of students based on early alert, early progress: template language to refer students to interventions, customizable messages to students, and feedback loop to services referred
- Student Web Services offering:
 - Student Portal with single sign on to access class schedule, attendance, grade history, academic transcript, course taking plan, academic advising, and university news / announcement update
 - Learning Management System supporting rigorous online teaching and increased class offerings
 - Learning Management System supporting hybrid class offerings
- Academic Operation Web Services Offering:
 - Student data management
 - Degree plan and course ownership management
 - Class opening projection for every semester
 - Class scheduling

- Student attendance and grade management
- Producing report for internal and external use
- Gather student and faculty feedback on technology tools for teaching/learning for needs assessment and effectiveness assessment (accreditation)
- Just in Time (JIT) support for classrooms: problem solving to minimize equipment down time in classrooms, library, and labs. Have ready-to-go temporary computers for swapping out equipment that needs repair or service to minimize disruption of teaching/learning
- Support standardized faculty desktop configurations across the networks so that faculty can access their course content and materials irrespective of their classroom assignment (maximizes classroom utilization unless specialized classrooms are needed)
- Implement automatic availability of all courses into Canvas to maximize use of the LMS
- Direct assistance to students
- Direct, regular, on-going, involvement and communication with instructional leaders
- Determine team priorities by direct involvement and communication with faculty
- Feedback from meetings as part of IT on-going evaluation and assessment process
- Continue development of IT related standards documents
- Determine team priorities by direct involvement and communication with University leadership, faculty and staff
- Automatically generate and then push reports to users for routine statistics about course enrollment and other ongoing, routine data requirements. This data will be available to University leadership
- Implement hybrid classroom technology
- Implement virtual computer laboratory that can be accessed anytime and anywhere

3. Library Services

- Cloud-based library management system to allow faculty and students to discover and access resources from SU collections including books, articles, eBooks, films and DVDs, reserves, audiobooks, and periodicals
- Computers in adequate numbers in the library to ensure that students are able to access library resources, have up-to-date hardware to use all types of software to complete assignments
- Library security and self-borrowing technology
- Library event and workshop management including participant registration and its delivery
- Provide web-based system to support student self-service in group study rooms booking
- Provide digital signage to display library announcement and update
- Provide online information literacy portal and extended support using Omni-channel technology
- Provide an automated notification system to notify students of recently placed library holds to ensure that the student is aware of their

obligations to the library

- Printing service management for student
- Adequate WIFI coverage and capacity with enough bandwidth to support student owned smartphones, laptops, tablets, and other mobile devices to facilitate access to library resources

4. Enrollment Services

- Provide CRM software to track recruitment activities, manage campaigns and leads, track recruiting cycle
- Integrating online application portal to CRM software and admission back office
- Provide automated letter generation and automated notification to applicant for every admission step
- Support testing center in handling and conducting test activity including schedule management and test score recording
- Provide and manage testing center lab and its technology

5. Research and Community Services

- Provide system to support research grant offering, proposal evaluation, research progress reporting and monitoring
- Provide portal to manage online journal publication (OJS)
- Provide lab and its technology facility to support research activity

6. University Governance/Institution Management

- Provide university repository and online collaboration platform to manage documents and digital assets
- Provide dashboard to help the university in evaluating institutional effectiveness, and making strategic decisions
- Support the university in producing data reports to comply with national or international accreditation

7. University Back-Office Function (Bursary, HR, Finance)

- Provide a system to manage tuitionfee, billing generation, and payment receipt
- Integrating bursary to academic system as preliminary handling before student registration
- Enabling online payment channel
- Provide system to support employee data management, and produce some report such as teaching history, research history, training or professional development, and academic certification
- Managing faculty credential and its integration to academic system
- Support HR and Academic Operation to manage and monitor teaching load
- Provide a system to support the university in managing physical assets and available facilities

8. Administrative/Supporting Systems

- Assist Help Desk callers via online, phone, and onsite dispatch
- Expand operating hours for Help Desk support
- Desktop computing 3–5-year refresh cycle with standard configurations and ongoing maintenance and upgrades of hardware and software based

on available and appropriate funding

- Servers, Networks, and telecommunications devices installed, upgraded and maintained using standards and regular, ongoing maintenance of related critical hardware and software systems
- IT security maintained by using “best practices”, standards, auditing, use of a Disaster Recovery Plan and ongoing awareness of programs offered to campus staff and faculty
- Provide services to the University for the acquisition of technology and maintain involvement with institutional leadership and ongoing evaluations and assessments
- Construction support services include standards documents for development and maintenance of IT related areas, regular involvement with construction personnel and the knowledge that technology is a priority in the construction process
- Via the Committee on Administration, engage all University constituent groups in leveraging Enterprise Resource Planning and related technologies for staff efficiencies, student and faculty support and success
- Continue to partner with the Sampoerna Schools Systems to build capacity, capability and efficiency
- Improve University-wide user reporting functionality and capabilities
- Provide a robust data visualization software solution
- Update inventory of all software options to help match department needs with appropriate available software
- Provide best practices for universal design of computers and workstations for students with a list of equipment and software.

9. Discovery and Training

- Provide training in Enterprise Resource Planning (Procure to Pay System)
- Provide ongoing and relevant technology training to IT staff
- Provide online training modules available on demand for not only office software such as PowerPoint, Access, and Excel, but also specialized software including Adobe products, infographics, and data visualization
- Conduct periodic Discovery Sessions on “what’s new” focused on college goals and major initiatives
- Participate in “think tank” groups periodically such as the one that responded to presentations regarding a new LMS
- Conduct periodic In-House Discovery Sessions on what the college already owns or that IT already developed to maximize use of existing tools and reports before requesting/buying new ones.

10. Fiscal

- Manage ongoing technology expenditures
- Conscious budget planning and analysis related to the overall cost of technology will be conducted on an ongoing basis including one-time purchases, maintenance, replacement, and support costs
 - Desktops, laptops, and peripherals
 - Classroom presentation equipment
 - ERP and all related support systems

SU INFORMATION TECHNOLOGY MASTER PLAN 2021

- CRM and academic system
- LMS subscription
- Software subscription
- Server, network, and telecommunication for both of hardware and software
- Other distributed systems (e.g., EAS)
- Recruit and retain quality technical staff to maximize limited staffing budget.

V. IT Goals and Objectives

Overview

Historically, IT has divided its goals into “strategic” and “tactical” goals. Tactical goals are the short term, immediate requirements. Strategic goals are the long term, frequently on-going items like projects such as upgrading the network and providing wireless access, producing system enhancements, deploying an online learning management system and developing mobile apps which require significant resources to achieve.

With the advent of our comprehensive planning process, we are now able to better align our planning and work with the University’s Strategic Plan and other related planning documents. IT is actively involved in various committees, taskforces, and meetings around the University where impromptu suggestions are made, or future activities discussed which may establish a new goal or modify a priority so that support will be available when that activity takes place.

All of the goals and objectives within this plan fall within a three-to-five-year planning process. In addition, this plan will be reviewed each year by the University’s Committee on Administration to provide updates as the technology environment at the University evolves.

IT Goals and Objectives

1. To provide technology resources to support student learning programs and services and improve institutional effectiveness.
2. Deliver prompt, courteous service to all clients.
3. To support IT planning at the institutional level and provide leadership, partnership, and support to all units within the University to ensure the appropriate implementation and application of technology.
4. To collegially establish, communicate and enforce standards for the use and delivery of information and educational technology.
5. To maintain the mechanisms for appropriate information technology access, security, availability, and integrity.
6. To manage the physical infrastructure in support of IT, assuring the reliability and availability to meet current and future requirements.
7. To identify, implement, and manage institutional databases as a University resource.
8. To evaluate and enhance the effectiveness of IT resources including human, physical, and financial resources.
9. To research and evaluate emerging technologies and to implement and integrate new technology as approved by University leadership.
10. To educate and train the University community in the use and application of information technology resources through consultation and instruction.
11. To focus on current and evolving communication technologies to enhance communications with students, faculty and the community while supporting the University commitment to excellence in student learning.
12. To maintain an open dialogue with campus faculty, academic and student services to ensure full support for student learning and support of the University in fulfilling the stated mission.
13. To continue to work with all other campus groups on planning for IT requirements throughout all levels of the University through both formal and informal processes.
14. To support educational technology to provide faculty more flexibility in the method of delivery of instruction and instructional materials.

VI. Strategic Objectives

This matrix of strategic objectives is aligned to the College goals and is used to describe and measure the goals of the Technology Master Plan including the planned completion date and a current status. This will be used by the Information Technology staff and other campus personnel to measure the effectiveness of the plans goals. This is a “first pass” type template to ensure that strategic objectives are included, prioritized, and fully addressed.

Any Technology Plan involves an ongoing process. The goals and strategies set forth in this document require periodic review and assessment. It is the intention of Sampoerna University to incorporate review of the Technology Master Plan as part of the institution’s overall planning process and to align the information technology planning process with the institution’s other strategic and tactical planning processes.

SU INFORMATION TECHNOLOGY MASTER PLAN 2021

Strategic Objectives 2021

SU Goal	OBJECTIVE	PLAN	PLANNED COMPLETION DATE	STATUS/STATUS DATE
2C, 4B	STUDENT SERVICES: Improve University-wide communications capabilities	Enhance ACADIS portal to provide communication channel from the university to the student	December 2022	
2C, 4B	STUDENT SERVICES: Implement online counseling	Enhance existing counseling module in ACADIS portal	June 2023	
2C, 4B	STUDENT SERVICES: Develop Mobile App	Enhanced SU mobile app for students and lecturers	June 2022	The feature update is ongoing development
2C, 4B	STUDENT SERVICES: Tutoring management, SPAC advising on student registration, student pathway tracking	Develop new module in ACADIS to provide tutoring management, SPAC advising on student registration, student pathway tracking	June 2022	The development was completed at Spring 2021
4b	STUDENT SERVICES: Support student service in manage alumni data and its relationship with industry	Provide system to support university in managing alumni and industry partnership to bridge graduate student with the industry	June 2024	The first stage was implemented at Spring 2020
1D, 2C, 4B	ACADEMIC SYSTEMS: Improve integration of LMS with other Systems to support Curriculum Mapping and Data Visualization	Continuing development of macro analytics based on extracted data from Canvas LMS, ACADIS, and other related system using Power BI platform	June 2022	

SU INFORMATION TECHNOLOGY MASTER PLAN 2021

1D, 2C, 4B	ACADEMIC SYSTEMS: Enhance academic system to help academic operation in managing degree plan, course ownership, student registration preparation, and produce report	Develop new module in ACADIS to provide degree plan management, course data management, pre-registration activity such as course projection, class requirement	December 2021	Development was completed at Spring 2021; data entry process is ongoing by academic ops team
2C, 4B	ACADEMIC SYSTEMS: Increase communications and priority setting between IT and Faculty	Enhance direct, regular, on-going, involvement and communication with Instructional Leaders and use feedback from meetings as part of IT on-going Evaluation & Assessment Process	December 2022	
2C, 4B	Improve SIS (ACADIS) and its integration to other systems to produce comprehensive report that is required for by internal and external party such as DIKTI (Government Institution), foundation or financing service	Enhance ACADIS and its integration to other system to cover better management of student, data, course data, and lecturer data	December 2021	Development was completed at Spring2021, data entry process is ongoing by academic ops team

SU INFORMATION TECHNOLOGY MASTER PLAN 2021

Strategic Objectives 2021 (continued)

College Goal	OBJECTIVE	PLAN	PLANNED COMPLETION DATE	STATUS/STATUS DATE
2A, 4B	ENROLLMENT SERVICES: Provide Customer Relationship Management (CRM System) to manage all recruitment activities and all related data	Upgrade existing Customer Relationship Management (CRM System) to be higher education version to be better in managing all recruitment activities and its integration with admission system	June 2021	Upgrading to HEDA (Higher Education) version was completed at the beginning of Fall 2021
2A, 2C, 4B	ENROLLMENT SERVICES: Provide automated letter generation and notification that related with admission activity	Enhance existing admission system (ARIS) to provide automated letter generation and notification to applicant for every admission progress	December 2021	Ongoing development
2A, 2C, 4B	ENROLLMENT SERVICES: Support testing center in conducting and managing online test	Provide and manage testing center lab and its technology facility	June 2021	TC lab technology update was completed at the beginning of Fall 2021
2C, 4B	LIBRARY SERVICES: Implement cloud base library system to manage library collection, provide self-service library resources discovery, manage event and workshop, administer group study room booking	Upgrade existing library system with new technology to cover latest library services needs	December 2022	
2C, 4B	LIBRARY SERVICES: Provide an automated notification system to notify students of recently placed library holds to ensure that the student is aware of their obligations to the library	Develop notification module in the library system and its integration with academic system	June 2023	
2C, 4B	LIBRARY SERVICES: Upgrade library technology and facility	Upgrade library technology facility such as: self-borrowing device, library security gate, and digital	December 2025	

SU INFORMATION TECHNOLOGY MASTER PLAN 2021

		signage		
	LIBRARY SERVICES: Printing service management	Improve printing service management for student	June 2022	
2C, 4B	LIBRARY SERVICES: Upgrade library computer with latest computer hardware and software	Upgrade library computer with latest computer hardware and software to support student in accessing library resources	December 2024	
2C, 4B	LIBRARY SERVICES: Provide online information literacy portal and extended support using chatbot	Develop online information literacy portal, and deploys chat bot technology to provide extended library support	December 2023	
4B	RESEARCH & COMMUNITY SERVICES: Support the university in administering and managing research and community services activity	Enhance existing research management system (RMS) to support research grant offering, proposal evaluation, research progress reporting and monitoring	June 2024	
2C, 4B	RESEARCH & COMMUNITY SERVICES: Provide the university researchers a media to publish their online publication	Enhance and maximize the usage of existing online journal system (research portal) to manage online journal publication	December 2024	
4B	RESEARCH & COMMUNITY SERVICES: Provide laboratory and its technology for research activities	Provide and manage lab and its technology facility to support research activity	June 2023	
4B	UNIVERSITY GOVERNANCE / INSTITUTION MANAGEMENT: Provide university repository and online collaboration platform to manage centralize document or digital asset	Develop university repository and collaboration tools to manage centralize document or digital asset	December 2022	The first stage was developed at Fall 2021 with university governance manager
4B	UNIVERSITY GOVERNANCE / INSTITUTION MANAGEMENT: Provide	Develop dashboard to provide integrated data visualization to help	June 2023	Dashboard development to support IRQA was started at Fall 2020

SU INFORMATION TECHNOLOGY MASTER PLAN 2021

	dashboard to help the university in evaluating institutional effectiveness, and making strategic decision	the university in evaluating institutional effectiveness, and making strategic decision		
2C, 4B	UNIVERSITY BACK OFFICE: Support bursary in managing tuition fee, student payment, payment reminder, and finance report generation	Upgrade existing billing system to be better in managing the tuition fee, billing generation, payment receipt, and the reports	June 2022	
2C, 4B	UNIVERSITY BACK OFFICE: Integrating bursary to academic system as preliminary handling before student registration	Develop integration between ACADIS to Billing System	December 2022	
2C, 4B	UNIVERSITY BACK OFFICE: Provide easier and faster payment mechanism for student to pay tuition fee	Enable online payment channel that is integrated with billing system and academic system	December 2022	
2C, 4B	UNIVERSITY BACK OFFICE: Provide system to support employee data management, and produce some report such as teaching history, research history, training or professional development, and academic certification	Enhance existing AHRS to support employee data management and lecturer academic activities recording	December 2021	Features was deployed since at the beginning of Fall 2021.
4B	UNIVERSITY BACK OFFICE: Managing faculty credential and its integration to academic system	Enhance existing AHRS and its integration to academic system	December 2021	Features was deployed since at the beginning of Fall 2021.
4B	UNIVERSITY BACK OFFICE: Support HR and Academic Operation to manage and monitor teaching load	Develop new module in AHRS to manage teaching load and its integration to academic system	December 2023	
4B	UNIVERSITY BACK OFFICE: Support the university in managing all physical asset and available facility	Provide asset and facility management system to manage university physical asset and available facility	June 2023	
2C, 4B	ADMINISTRATIVE SYSTEMS: Network upgrades	Implement additional access point and upgrading network switch	December 2022	Partially replacement since Fall 2020

SU INFORMATION TECHNOLOGY MASTER PLAN 2021

		to improve network coverage and data transfer quality		
4B	ADMINISTRATIVE SYSTEMS: Improve IT Security	Upgrading network firewall and antivirus software	December 2022	

SU INFORMATION TECHNOLOGY MASTER PLAN 2021

Strategic Objectives 2021 (continued)

College Goal	OBJECTIVE	PLAN	PLANNED COMPLETION DATE	STATUS / DATE
4B	ADMINISTRATIVE SYSTEMS: Upgrading cloud technology to provide elastic server infrastructure	Migrating existing cloud technology to the latest technology to provide elastic server infrastructure	June 2022	
2C, 4B	ADMINISTRATIVE SYSTEMS: Implement virtual laboratory	Implement virtual computer laboratory that can be accessed anytime and anywhere	June 2025	
2C, 4B	ADMINISTRATIVE SYSTEMS: Implement hybrid classroom presentation and technology	Implement hybrid classroom presentation and technology to support hybrid learning model	December 2024	
2C, 4B	ADMINISTRATIVE SYSTEMS: Evaluate all infrastructure and technology implementation	Evaluate all infrastructure and technology implementation for the next phase of IT strategic plan	December 2025	
1D, 2C, 4B	ADMINISTRATIVE SYSTEMS: Document a standard desktop configuration to best support teaching and learning	Need policy document	December 2022	
4B	TRAINING: Enhance Enterprise Resource Planning (Procure to Pay System) staff skills	Enhance Enterprise Resource Planning (Procure to Pay System) training especially during onboarding	June 2022	

SU INFORMATION TECHNOLOGY MASTER PLAN 2021

4C	FISCAL: Under current fiscal environment as determined by President and University Council	Manage ongoing technology expenditures, recruit and retain quality technical staff, asses new projects based on priorities, ensure that appropriate technical resources required for successful Completion		
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VII. Target IT architecture

The following figure describes the target architecture of applications or information systems that align with the goals and objectives of Sampoerna University. Some applications will have support and resources provided by SSS. Specifically, SU will further develop a university management system as an academic core application. Integration and collaboration between applications will be built using web service protocols that are connected via a bridge, called Enterprise Service Bus (ESB).

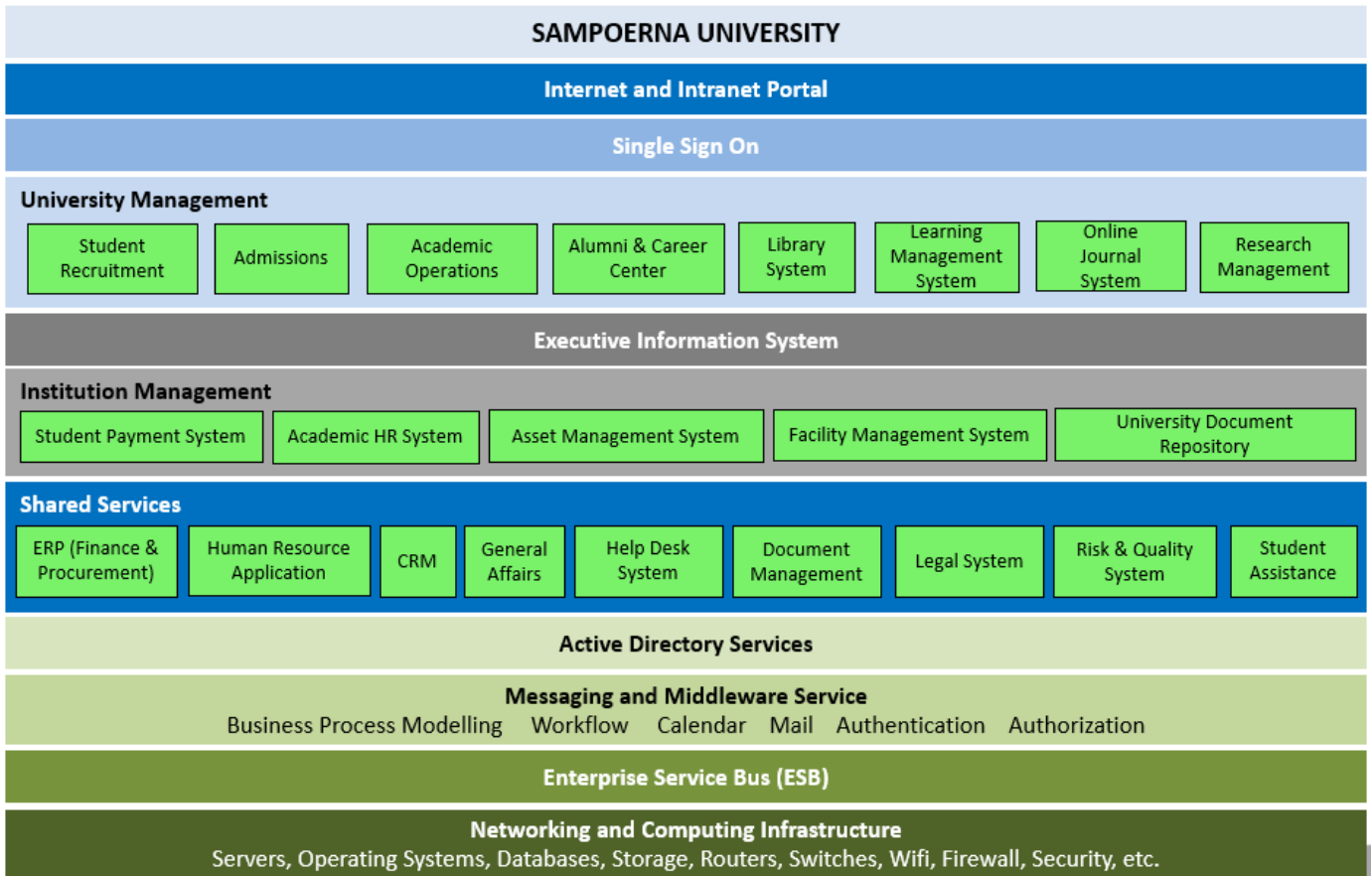


Figure 1-2 Target IT Architecture

VIII. Appendix

A. Committees and Councils

The following Committees and Councils have ongoing dialogue with IT regarding technology issues.

1. UNIVERSITY EXECUTIVE - provides the primary planning body for the University and a forum to review and recommend the direction and focus for the University consistent with the College's Mission, Vision, and Core Values.
2. COMMITTEE ON ADMINISTRATION – makes recommendations about administrative affairs, including Information Technology, and policies to the University Executive.
3. FACULTY COUNCILS – provides input and recommendations at the academic program level.