

**CEAT DEANSHIP
A VISION-MISSION STATEMENT**

“Reengineering CEAT to be a globally recognized and competitive engineering institution”

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With the CEAT’s vision of “Excellence in engineering education, research and extension; committed to progressive transformation and global relevance of Philippine Agriculture and Industry”, anchored on the “future proofing of UPLB”,

My **vision** is to “**Reengineer CEAT**” to become a:

C – Comprehensive

E – Engineering Institution for sustainable

A – Agro-industrial development responsive to global

T– Trends and innovations in Engineering Education, Research, Development and Extension

My mission is to ensure that the **enabling environment** for the University and the College of Engineering’s major functions of Instruction, RDE and Public Service shall have seamless integration in the “reengineering of CEAT.” Hence, it shall strike a more delicate balance between People, Academic Programs, RDE Programs, Public Service Initiatives, and Infrastructure development to achieve its full potential. Stronger linkages and collaborations with the various industries and other stakeholders in addressing national and global concerns shall ensure CEAT’s goals in producing quality engineering graduates needed in the agricultural and industrial development of the country; advancing the frontier of knowledge in engineering and generate technologies in support of the agro-industrial thrusts of the country, and promote the utilization of useful technologies by the intended end-users and the private sector.

Our Strategic Plans:

People (Students, Teaching and Non- Teaching Staff, Administrative and Support Staff, Alumni and other Stakeholders)

Students:

I believe that the **lifeblood** of the University is its **PEOPLE**. First and foremost are the students. They should be provided with conducive, appropriate, and flexible learning environment to easily adapt to the challenges brought about by natural calamities and events which threaten to impede learning. One of the most important issues to be addressed is the Digital Divide which hinders knowledge creation and quality education. With a host of current and new challenges looming in the horizon like the current pandemic situation, the only way forward is to gather and synthesize the golden lessons learned from the remote, blended, and flexible learning support systems that we have initialized. Constantly improving and prioritizing these new

learning modalities shall ensure excellent CEAT graduates who are responsive to the human resource needs of the country and as future leaders in the agro-industrial development arena. We shall continuously develop and upgrade our learning modules and course packs with more comprehensive, and timely content for remote, adaptive, and blended learning to facilitate quality and excellent education. A committee represented by all the academic degree granting and service units shall be created within CEAT to ensure that these learning materials are appropriate and merit knowledge generation and are more responsive to the student's learning needs.

Student development and welfare shall be strengthened by continuously addressing the issues and gaps in the academic performance of engineering students. It shall help achieve higher graduation rate in the BS, MS and PhD programs. Provision of scholarships, grants and loan programs to financially challenged CEAT students shall be continuously implemented in active collaboration with the CEAT Alumni and industry partners for additional financial support. The ERDT program will also be continuously implemented to support our commitment to produce a critical mass of human resource for the advancement of S & T in the country.

We will create a TEAM (New Administration) who are open minded and compassionate to listen to the issues and concerns of the students. The students will be continuously represented in the CEAT administration for open communication to resolve issues and concerns for a better learning-living environment.

Teaching and Non-teaching Staff

I also believe that teaching and non-teaching staff have equally important roles in the University. A continuous manpower development program (MDP) for each of the degree granting units, service unit and even the RDE units of the College shall be designed for staff professional growth and continuing professional development. A more focused MPD on the niche and growth areas of their academic base-units and RDE units shall be reengineered to upgrade their expertise and competence. This shall be achieved through local and foreign scholarships and through existing exchange programs with UPLB partner universities.

As the College is envisioned to grow and become a more comprehensive and globally recognized institution in the next 3 to 6 years, additional manpower will be needed. Hiring of additional Teaching and Non-teaching Staff shall be done with the institution of new Engineering program offerings of CEAT. This shall fill the gap with the needed Teaching and Non-teaching Staff for the new programs.

A strong mentoring system shall enhance and propel the learning process of our junior teaching and non-teaching staff. A mechanism for the exchange of experiential lifelong learning between senior faculty and staff shall be in place. This ensures the faster exchange and downloading of best practices which could serve as models for the junior staff to follow. More common activities for both senior and junior staff shall be designed for this purpose.

Administrative and Support Staff

Professional growth for administrative staff shall also be in place. Our work as faculty and researchers are done faster with empowered administrative staff. A reengineering of a manpower development scheme for administrative staff will level up their knowledge and skills to perform their work more effectively and efficiently. Training, skills development, and short

program courses will be designed for their professional growth and shall go hand in hand with the growth of the College.

Alumni and Industry partners

The Alumni and the industries are our development partners. Hence, a strong industry linkage locally and internationally shall be established which would be beneficial to both parties. We shall establish collaborative undertakings particularly in the promotion, diffusion, and utilization of our products (technologies) and our human resource (graduates). At the start of the line, we need the support of our alumni and industry partners to hone and support our students through financial assistance, on-the-job training, industry immersions, engineering industry research collaborations, mentoring programs, and job placements, among others. And at the end of the line, the industries will benefit from our excellent students and the technologies generated which shall contribute to agro-industrial development.

Health is wealth. I believe that a sound body will amplify a sound mind. We shall promote safety and wellness for the CEAT constituents through individual or common wellness activities not only for healthy bodies to function and deliver excellent services but also to promote camaraderie among our constituents for harmonious existence.

I believe that nobody should be left out as we ascend to the next level...

Academic Programs:

To be a **Comprehensive, Globally Recognized and Competitive Engineering Institution**, a strong academic program should be in place.

BSc Degree Programs:

With the initial offering of the **BS Mechanical Engineering Program** this 2021, we shall ensure that resource provisions for the manpower, institutional and infrastructural support systems will be established in the next 3-6 years. Manpower complement should first be addressed with the minimum facilities and laboratories required for the offering of the BMSE Program. The existing CEAT facilities and laboratories will be initially identified and shared without penalizing other programs using these facilities. We will seek financial support from our industry partners, the alumni, and other stakeholders in collaboration with the UPLB Administration in “future proofing” this program. We will design and develop the BSME program to be a top performing program in the years to come.

Institution of the **BS Materials Engineering** program to serve as a springboard for the **Department of Engineering Science (DES)** to be a degree granting unit of CEAT. Manpower development of DES in the past years was focused in Materials Engineering. However, they remained as a service unit offering the Engineering Science Courses of CEAT since the unit’s establishment in 1983. The DES faculty members depend on teaching credit loads and minimal research and extension involvement in vying for faculty promotion. Hence, they need support for developing and strengthening their capabilities in instruction, research development and extension and in public service in their field of expertise.

The **BS Materials Engineering** program shall focus on materials from **Natural Resources** and products and byproducts from **Agriculture**. It shall complement UPLB as leader in the field of Agriculture. The contribution of engineering in this field of specialization shall

differentiate the BS Materials Engineering program of CEAT from the other institutions that offer similar programs. An Adhoc Committee will be created for this purpose to be led by DES and the College Secretary's Office.

As a National Leader in Engineering Education, CEAT degree programs shall strive for recognition by the Commission on Higher Education as "Centers of Excellence or Centers of Developments (COEs/CODs)". We will continually work for the compliance of all the degree programs to maintain CEAT's stature as a National University for Engineering Education.

To be a globally recognized as a competitive institution, I believe that the CEAT academic programs should be subjected to and conform with global accreditations such as the AUN-QA and Washington Accord. The BSABE and BSChE programs are already Quality Assured by the AUN-QA system. We support and will work on the other CEAT baccalaureate degree programs' (CE, EE, IE and later on ME) QA certification in the coming years. Moreover, the BSABE program could activate its application to the Washington Accord which is the highest accreditation for an Engineering Education program. Together with the BSChE program, we will prepare for this international accreditation. We will ensure that all support systems for local and international accreditations of all the BS engineering programs will be realized.

Graduate Programs:

In the next 3 to 6 years, the institution of CEAT Graduate Programs will be one of the priorities of the New CEAT Administration to contribute to the role of UP as a "**Graduate University.**"

The review and OBE-dization of the **Master of Science and Doctor of Philosophy in Agricultural Engineering (Agricultural and Bio-Process Engineering, Agricultural Machinery and Power Engineering and Land and Water Resources Engineering) Programs** shall be undertaken immediately to conform with the ascent of the Institute of Agricultural Engineering to Agricultural and Biosystems Engineering and to conform with the policies, standards and guidelines for graduate programs (CHED-CMO 15 s. 2019). As a National University and Center of Excellence in Agricultural Engineering, the IABE Graduate Programs should also conform with the policies and standards to be globally aligned. The **Master of Science in Chemical Engineering program** shall likewise be reviewed and aligned with policies and standards in support to the Center of Development in Chemical Engineering. This will also pave the way for the institution of the **Doctor of Philosophy in Chemical Engineering.**

The institution of the **MS Agricultural and Biosystems Engineering (Farm structures), MS Electrical Engineering, MS Civil Engineering and MS Industrial Engineering** is in response to the need of higher-level learnings from each specific field. This shall produce graduates with specialized professional practice having the initiative, creativity, substantial degree of independence, and leadership in multi/inter-disciplinary fields.

The institution of **MS ABE-Farm Structures** (e.g. farm stead, storage houses, processing centers, etc.) is very crucial as the need of higher-level learnings in this field is needed for the Agricultural Mechanization Program of the government through RA 10601 or the Agricultural and Fisheries Mechanization Law of 2013 and RA 11203 or the Agricultural Tariffication Law of 2019.

The institution of **MS EE and MS CE** programs which are currently under collaboration program offering with UP Diliman will be reengineered to be a standalone and completely independent offering in UPLB. These programs will be the growth points of EE and CE. Initial explorations shall also be done for the institution of the **MS IE** program.

The CEAT Graduate Programs **delivery and modality shall be revolutionized**. Repackaging of the offering of Graduate Programs shall be reengineered to consider **weekend classes** and **online classes** to increase graduate student intake and output rate from the different graduate degree programs. This will cater to the needs of those who are employed and have limited time to enroll on a full-time basis but want to pursue higher learning. We shall **pilot this scheme** with the **IABE's graduate programs**. Since we have already acquired experiences in remote, blended, and flexible learning methods, we shall build up on these experiences and resources in conducting online classes for this purpose.

RDE Programs:

To contribute in the role of UP as a **National Research University**, we shall encourage and support each CEAT teaching and non-teaching staff in the conduct of research, development and extension activities to strengthen their instruction capabilities in support of the instruction function of the College.

We shall support the **Center for Agri-Fisheries and Biosystems Mechanization (BIOMECH)** and the **Agricultural Machinery Testing and Evaluation Center (AMTEC)** in fulfilling their functions as stipulated in RA 10601 or the AFMech Law of 2013. BIOMECH is tasked to lead and coordinate the agri-fishery mechanization RDE program of all HEIs in the country (Article 3 Sec 8 and Rule 8.3) while AMTEC is tasked as the premier testing center of agricultural machineries in the country (Article 6 Sec. 27). Both institutions are under CEAT.

BIOMECH, as a research institution, shall promote multidisciplinary and interdisciplinary projects among CEAT units/faculty anchored on BIOMECH RDE thrusts. BIOMECH shall continue to support instruction. We will encourage CEAT junior faculty to engage in RDE and public service activities to enhance their capability and confidence in conducting RDE activities where BIOMECH can play as an incubator of RDE projects. We will engineer and strengthen Senior-Junior Faculty Mentorship in RDE activities under the auspices of BIOMECH. On the other hand, we will also revisit the core research projects of BIOMECH. We will design a plan to increase core-based project outputs and encourage proactivity and responsiveness in producing machinery and technologies based on its RDE thrusts and demand of the agricultural sector and the mechanization industry. We will also strengthen the role of BIOMECH as Alternate Philippine representative to the UN-ESCAP Center for Sustainable Agricultural Mechanization (CSAM) for international collaborations and possible RDE project undertakings.

We shall encourage the participation and collaboration of CEAT faculty and researchers in the different UPLB research undertakings. The "Project Lightning" soon to be implemented in UPLB involves the piloting of high-speed internet through electrical transmission lines for distribution and access. This shall serve as a good venue for research collaboration, where our engineers could play a vital role in the project. This will not only enhance their research capabilities but support their instruction capabilities as well.

AMTEC as extension and public service institution, shall be supported in its role as stipulated in the AFMech Law. One of the most pressing problems of AMTEC is the tenurial status of its staff. Only one administrative staff is permanent, the others are on casual status and non-government workers. To sustainably perform its role as premier testing center, we will continuously support the request for item positions, particularly test engineers who are crucial in performing and delivering the needed services. We will also design a plan to involve the IABE faculty as Professional Development Associates (PDAs) in the testing activities of AMTEC to compliment the manpower requirement for testing. Further, we shall sustainably seek support from our alumni, industry partners and the government in collaboration with UPLB Administration to raise AMTEC's standards by upgrading its testing equipment and facilities.

For our externally funded research projects, we will continuously support our teaching and non-teaching staff in their research endeavors with our external funding institutions. We will strengthen the local and international RDE collaborations through externally funded projects to generate income for augmenting the manpower requirement of the College. We will device responsive feedback mechanisms among staff and faculty researchers on issues and concerns for a more conducive working-living environment.

Public Service Initiatives

Our strength is in our teaching and non-teaching engineers. We shall continuously support UPLB by involving them as PDAs in the various engineering projects of the university. Moreover, we will strengthen our extension and public service through technical assistance, non-degree short courses, training and pilot area development.

Moreover, our **SERVICE LABORATORIES (Innovationeering Lab, SIBOL FabLab, Instrumentation Lab, Innovative Engineering Materials (INEM) Lab, etc)** will be put in sustainable use for instruction, research, development, extension, and income generation. These laboratories shall serve as venues for collaborative undertakings mutually beneficial with our partner industries for agro-industrial development.

We shall also explore collaborative activities with our SUC partners in the Region to reinforce their instruction and RDE capabilities. As a National University, I believe that we should help these SUCs to hasten their capabilities in offering the different engineering courses and increase their graduation rate and board exam performance through short training programs for faculty development and collaborative conduct of board exam review classes. There are about 9 SUCs in Region IV-A offering the different engineering programs which we can initiate collaboration. As a trailblazer in the ABE profession, we can replicate and juxtapose our system with the other engineering professions.

For our products, we shall accelerate the development and promotion of engineering technologies to various CEAT stakeholders/clientele. We shall device a venue where we can promote our technologies and research outputs through the conduct of online webinars and international conferences as the Host. In terms of RDE activities, we shall exponentially increase our research outputs and international presence through publication in prestigious journals and patent/utility model applications for the generated technologies. We shall also support the accreditation of our own **Philippine Journal for Agricultural and Biosystems (PJABE)** to the

Clarivate Analytics (Web of Science). We shall design a scheme to ensure the continuous development and production of articles for publication in the PJABE and provisions of the necessary resources to sustainably publish the journal on time in compliance with the requirements.

INFRASTRUCTURE DEVELOPMENT:

Infrastructure Development shall be reengineered to establish a conducive learning-living environment. First, infrastructural support for ICT should be identified and established in CEAT for the blended and flexible learning. To realize this, support from the alumni, the various industry partners and the administration shall be enabled. A dedicated infrastructure for knowledge exchange, sharing and management built upon engineering principles shall be established to provide access and utilization of students including the teaching and non-teaching staff for a wider scope. The infrastructure blueprint shall be crafted by CEAT and UPLB ICT experts, while the financial requirements shall be worked out by the New CEAT Administration in coordination with the UPLB Administration.

Continuous improvement of the existing facilities and buildings shall also be addressed (e.g. conference rooms for hosting large classes) and other amenities that would promote learning-working-living environment. Other CEAT infrastructure development projects such as the EE building Phase II, ME Building and state-of-the-art Engineering Shop among others, shall be continuously worked out with our UPLB Administration and the National Government for support. We shall also seek our Alumni and Industry Partners' support to realize these projects.

“Design is not just what it looks like and feels like. Design is how it works.”

-Steve Jobs

All hopes are not lost. As a premier engineering institution, we shall serve as a beacon of hope—the light at the end of a tunnel. Despite being pounded by a deadly pandemic, series of natural calamities, and events, we strive to find solutions and innovations in CEAT. Our contributions to the body of knowledge and vast array of data can help the government on its road to national recovery. By tapping into the human resource component of CEAT, the government can gain access from some of the best analytical minds the country has ever produced. Should this fall in the proper scheme of things, it shall be a win-win situation for CEAT and the National Government as both institutions can support each other's needs. The former to provide the needed engineering expertise, and the latter, the appropriate resources to enhance the New Administration's vision and mission to contribute to national development. Hence, CEAT shall aim to continuously show its RELEVANCE by providing sound solutions especially in these trying times.

As I aspire to be the first woman to lead CEAT, I shall always be guided by the Father Almighty for my intentions and actions toward achieving the five pillars of CEAT. I shall serve and lead the PEOPLE with my very BEST, with compassion and understanding. We shall move as one, act as one— oneCEAT— with Honor and Excellence, for a future-proofed CEAT!