



## TIRSO A. RONQUILLO, Ph. D.

ASEAN ENGINEER

Professional Electronics Engineer

President, Batangas State University

President, Philippine Association of  
State Universities and Colleges (PASUC)

### QUALIFICATIONS

A Professional Electronics Engineer recognized as an ASEAN Engineer and a reputable professor in the fields of electronics, communications, instrumentation and control, mechatronics engineering and management. A full-fledged Professor accredited by the Philippine Association of State Universities and Colleges. An accreditor of the Philippine Technological Council - Engineering Accreditation Commission, and an active member of the American Society for Engineering Education and the Australasian Association for Engineering Education. Possesses a strong background on Washington Accord outcomes-based accreditation and quality assurance in engineering education. Recipient of distinguished awards in professional career, public service, and academic distinctions including travel grants to present high impact researches in international conferences. Research interests include automation and control, alarm and security system, digital signal processing, competitiveness, outcome-based education and quality assurance, management and supervision of higher education institutions. Presented research papers in Japan, Korea, Australia and the United States.

### SIGNIFICANT POSITIONS HELD

**President, Philippine Association of  
State Universities and Colleges**

December 14, 2017 – present

Shall be the chief executive officer of PASUC; Preside during the General Assembly, PASUC Board and PASUC Advisory meetings; The recommending authority for all office and administrative personnel of PASUC; Issues PASUC Memoranda and or Advisories consistent to the policies, plans, programs, projects and activities of PASUC; Represents PASUC to meetings and invitations of various government agencies and private partners; and Perform such other duties and function necessary and proper under the premises.

**Significant accomplishments:** Spearheaded the allocation of budget in the GAA 2020 for some universities and colleges which has zero budget from NEP 2020; Initiated/Lobbied for the insertion of additional budget in ICT Modernization for select universities in the GAA 2020. Initiated/Lobbied for the request and allocation of funding for the NBC 461 Cycle 7A implementation and promotions of the teaching staff of State Universities and Colleges and initiated the request for immediate implementation of Cycle 7A with effectivity of July 2019; Spearheaded the revision and submission of Revised Organization and Staffing standards for State Universities and Colleges (ROSSSS) in collaboration with different government agencies concerned such as CHED, DBM and CSC and active participation in the TWG; Initiated the composition and submission of PASUC position papers regarding the Impending Implementation of the CSC-COA-DBM Joint Circular No. 1, s. 2017 dated 15 June 2017 Re: Rules and Regulations Governing Contract of Service and Job Order Workers in the Government and regarding CSC-COA-DBM Joint Circular

No. 1 s. 2018 dated 09 November 2018 Re: Amendment to the CSC-COA-DBM Joint Circular No. 1, s. 2017. Spearheaded the successful launching of the SUCs innovation programs through Platform for Innovating SUCs for Industry 4.0 (PISI); Embarked on a joint effort in continuing to address the emerging challenges, launched the PASUC-PAASE PARTNERSHIP: DASHBOARD ON REAL-TIME DEMAND OF PERSONAL PROTECTIVE EQUIPMENT (PPE) IN UNDERSERVED COVID-19 HOSPITALS AND OTHER FACILITIES IN THE COUNTRY. Spearheaded the successful launching of the Compendium of SUC Research and Extension Initiatives during the COVID-19 pandemic through the "Innovating As We Heal As One: Philippine State Universities and Colleges Responses to the COVID-19 Pandemic". Worked with CHED and DBM for the approval and release of the 2016 SUC Levelling Results. Actively working with CHED on the crafting of the IRR for various legislations like RA 11180 and RA 11396 and the revision of the IRR for RA 8292. Actively representing the SUCs in various meetings, hearings and fora.

**President, Batangas State University**

July 17, 2014 – present

Provides strategic leadership in planning, development, and implementation of all programs and projects for the attainment of the vision of the University. Assumes a lead role in initiating innovative programs in instruction, research and development, community service, external linkages and resources management in order to provide quality services to all stakeholders of the university.

**Significant accomplishments:** Created a more conducive learning environment through massive infrastructure development in all campuses, completing at least 69 projects amounting to over P813 million; Increased the number of accredited programs in all colleges, including the international accreditation for engineering, and information technology programs through the Accrediting Board for Engineering and Technology (ABET) –Engineering Accreditation Commission (EAC) and - Computing Accreditation Commission (CAC) respectively, a first among Philippine state universities; Achievement of the Center of Excellence recognition in Electronics Engineering, and Center of Development in Electrical Engineering, Mechanical Engineering, Development Communication and Teacher Education; Increased research grants received from different funding agencies; Facilitated the registration of intellectual properties /patents of the completed research of students and faculty; Provided a wider access to quality education by providing scholarships such as Socialized Tuition Fee and other programs; Increased university assets to P4.12 billion in 2017, and operating budget to P2.37 billion in 2018; Improved faculty profile by developing a pragmatic faculty development program; Increased number of international linkages and partnerships with foreign universities toward facilitating faculty and students exchange programs; Implemented innovative extension programs by applying science and technology solutions; Establishment of research centers in various fields, including the Center for Technopreneurship and Innovation (CTI), and Verde Island Passage Center for Oceanographic Research and Aquatic Life Sciences (VIP CORALS); Achievement of three (3) Stars in the Quacquarelli Symonds (QS) Stars University Rating and thus listed in the QS Top Universities; Development and Offering of 24 Emerging Academic Programs in Engineering and Allied Fields; Establishment of the university's Center for Transformative Learning (CenTraL); Development of the first Knowledge, Innovation and Science Technology (KIST) Park in the country which was proclaimed as Special Economic Zone through Presidential Proclamation No. 947, S. 2020.

**Vice President for Research, Development and Extension**

September 2012 – July 16, 2014

*Batangas State University*

Provides strategic direction and supervision in the conceptualization, planning, development, implementation, and dissemination of research and extension projects in the University. Assumes a lead role in initiating and evaluating research and development activities and extension collaborations.

**Significant accomplishments:** Spearheaded the conduct of first International Research Conference on the Innovations in Engineering, Science and Technology (IRCIEST 2013); facilitated the revisions of the Research, Development and Extension Manuals incorporating incentives for faculty and employee researchers who presented and published their outputs in regional, national and international fora; facilitated the transfer of technology resulting from high impact researches conducted by students and faculty to qualified beneficiaries; requested for the procurement of advanced research equipment for science and technology, plagiarism detection software, and patent search software as tools in producing high quality research outputs; promoted the conduct of researches employing electronic control and automation in agriculture and disaster preparedness and response in support of the DOST's smarter Philippines program; advanced research based extension programs and activities in order to comprehensively assess the needs of the marginalized members of the community.

**Vice President for Academic Affairs**

April 2011 – September 2012

*Batangas State University*

Spearheads the formulation of academic policies and plans pertaining to the efficient management of educational programs of the University. Implements, monitors and evaluates the academic programs to ensure adherence to the requirements of the Commission on Higher Education. Assists the Deans and Department Chairpersons of different colleges in ensuring their readiness for accreditation.

**Significant accomplishments:** Initiated the library automation and security systems, and requested for the procurement of online and print journals; spearheaded the structuring of the University's Faculty Development Program; facilitated the preparations for outcomes based engineering education vis-à-vis formation of Industry Advisory Committee; conceptualized and facilitated the development of the College Admission Test for incoming freshmen and transferees; creation of the committee for the advancement of Physics instruction and successful upgrading of Physics laboratories; spearheaded the review of engineering curriculum adopting calculus-based Physics; proposed and facilitated the development of standardized grading system in the university.

**Executive Director, Gov. Pablo Borbon Campus II**

June 2009 – May 2011

*Batangas State University*

Responsible for the overall planning, development and operations of activities and programs of the campus. Formulates and implements campus objectives, and development programs in consonance with the University's vision and mission through effective and efficient management of campus resources.

**Significant accomplishments:** Conceptualized and sourced out funds for the construction of faculty lounge; initiated the campus landscaping through externally solicited funds from generous alumni employed locally and internationally, including private organizations; proposed and supervised the development of campus Material Recovery Facility that resulted to efficient waste management in the campus.

**Dean, College of Engineering Architecture, Fine Arts  
and Computing Sciences, Batangas State University**

June 2009 – May 2011

Facilitates academic and administrative matters necessary for the smooth operations of the college. Provides direction in the evaluation of academic programs offered in the college for continuous quality assurance. Conceptualizes the development of academic infrastructure in the college and the initiates the procurement of various technical and laboratory software and equipment.

**Significant accomplishments:** Conceptualized, designed and rehabilitated the Mechanical Engineering, Civil Engineering, Electrical Engineering, Industrial Engineering, and Unit Operations Laboratories; requested the procurement of various laboratory equipment and apparatuses; designed and requested the materials for the renovation of conference / accreditation room of the college.

**Department Chairman - Electronics, Instrumentation & Control, Mechatronics Engineering Department, Batangas State University** June 2003 – May 2009

Reviews departmental plans, programs and projects to ensure responsiveness to industry needs and adherence to accepted standards. Responsible for the efficient and productive operations of the department. Seeks for opportunities for continuous professional development, research activities and extension services for faculty members under the department.

**Significant accomplishments:** Conceptualized and designed the renovation of the mechatronics, instrumentation, and electronics engineering laboratories and requested for the procurement of materials and equipment necessary for the upgrade of those laboratories; facilitated the establishment of electronic library; promoted the transfer of electronic-based technologies to industry recipients, which were developed as outputs of faculty and student researches in the department.

## EDUCATION

*Graduate Studies:*

**Doctor of Philosophy in Management (2012)**  
Akamai University, Hawaii, USA

**Doctor of Philosophy in Electrical Engineering (Units)**  
University of the Philippines, Diliman

**Master of Science in Electronics and Communications Engineering (2003)**  
De La Salle University, Taft Ave., Manila

*College :* **Bachelor of Science in Electronics and Communications Engineering (1995)**  
Batangas State University (formerly PBMIT), Batangas City

## HONORS, AWARDS and CITATIONS

- **Special Recognition, Group Category for Team SIGAW (Solar-Powered Isotropic Generator of Acoustic Wave), GAWAD KALASAG National Awards for Excellence in Disaster Risk Reduction Management and Humanitarian Assistance, December 2018**
- **Special Recognition, GAWAD KALASAG National Awards for Excellence in Disaster Risk Reduction Management and Humanitarian Assistance, June 2017**
- **Distinguished Public Servant, Rotary Club of Bauan, 2017**
- **1<sup>st</sup> Place Winner in Science and Technology Competition in Industry and Energy Research and Development, Region IV-A, May 2014**
- **Golden Ilang-Ilang Award, April 2016**
- **Most Outstanding Electronics Engineer in the Field of Academe, Nov. 2013**
- **Conferred as ASEAN Engineer, December 2012**
- **Service Award, October 2011**
- **Presidential Award of Recognition, March 2011**
- **Conferred as Full- Fledged Professor, February 2011**
- **Outstanding Faculty of the Year - 2005**
- **With Distinction, MSECE, De La Salle University - 2003**

- **ECE Board Topnotcher (20<sup>th</sup> Placer)**, November 1995
- **Cum Laude**, BSECE, PBMIT - 1995
- **Outstanding Alumni Award**, BSECE, PBMIT - 1995
- **Don Pablo Borbon Award**, BSECE, PBMIT - 1995
- **Valedictorian**, Paharang Barangay High School, 1990

#### **OTHER DESIGNATIONS /ADMINISTRATIVE ASSIGNMENTS**

1. **Regional Chairperson, Southern Tagalog Regional Association of State Universities and Colleges, Inc.**, March 2017-March 2018
2. **Chairman, Philippine Association of State Universities and Colleges, Region IV-A**  
March 2015 - March 2018
3. **Chairman, Sectoral Committee on Social Development (SCSD) of the Regional Development Council, Region IV-A**, 2016 - Present
4. **President, Alay Lakad Foundation Inc.**, October 2017 - Present
5. **Member, Provincial Sectoral Committee on Economic Development**,  
May 2017 - Present
6. **General Conference Chair: International Research Conference on Innovations In Engineering, Science and Technology (IRCIEST 2013)**  
Batangas State University, November 27-29, 2013
7. **Member, Regional Quality Assessment Team (RQAT)**  
**Commission on Higher Education Region IV-A (CALABARZON)** - August 24, 2010
8. **Chairman of the University Book Writing Committee** - June 4, 2009
9. **Director, Review Center and Assistant Director, Engineering Review Center**  
November 6, 2006 to May 21, 2009
10. **Board of Director in the Institute of Electronics Engineers of the Philippines-CALABARZON (IECEP-CALABARZON)** September 21, 2008
11. **OIC Associate Dean, General Engineering** - June 11, 2007
12. **Department Chairman of ECE/ICE/MEXE Department: AY 2003-2004 to AY 2006-2007**

#### **MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS**

1. American Society for Engineering Education (ASEE)
2. Australasian Association for Engineering Education (AAEE)
3. Institute of Electrical and Electronics Engineers (IEEE)
4. IEEE Control Systems Society
5. IEEE Education Society
6. Philippine Association for the Advancement of Science and Technology (PHILAAST)



7. Philippine Society of Public Administrators (PSPA)
8. Australasian Association for Engineering Education (AAEE)
9. Institute of Electronics Engineers of the Philippines, Inc. (IECEP)
10. Philippine Technological Council - Engineering Accreditation Commission
11. PTC - Registry of Program Evaluators (*founding member*)
12. Mathematical Society of the Philippines
13. State Universities and Colleges Financial Executives (SUCFINEX)
14. CHED Regional Quality Assessment Team (RQAT)
15. Mechatronics and Robotics Society of the Philippines (MRSP)
16. Philippine Instrumentation and Control Society
17. Batangas Province Sectoral Committee on Economic Development
18. Regional Development Council-Sectoral Committee on Social Development (SCSD)
19. Southern Tagalog Regional Association of State Universities and Colleges (STRASUC)

#### **INTERNATIONAL SEMINARS AND TRAININGS ATTENDED**

1. **USA Study Visit for the CHED - IDIG Funded project: Establishment of South Luzon Hub for Technopreneurship and Innovation (TechHub)**  
United States of America, November 3-19, 2018
2. **Advancing CDIO Framework: Study Visit to Singapore Polytechnic for Leaders of CHED, PASUC and SUCs**  
Singapore Polytechnic, Singapore, August 30-31, 2017
3. **Democratic Governance in the Vortex of Change**, 2017 PSA International Conference, Waterfront Cebu City Hotel, Lahug, Cebu City, May 11-12, 2017
4. **Presidential Leadership Program (PLP) International Study Visit**  
National Graduate Institute for Policy Studies, Japan, January 23-27, 2017
5. **International Conference, The Continuing Search for Good Governance, Patterns, Practices and Prospects: Higher Education Institutions as Catalysts for Decentralization and Democratization for Development**,  
Vigan City, Ilocos Sur, July 4, 2015
6. **ASEAN Quality Assurance Network Seminar**, Manila, September 2, 2015
7. **Advantage of the Integration of Engineering Services for Least Developed ASEAN Member Countries** Cambodia, *December 16-18, 2012*
8. **International Electronics Conference & Exposition Philippines nad 62<sup>nd</sup> IECEP Annual General membership Meeting**, Philippine Trade Training Center, Pasay City, November 24, 2012
9. **Regional Integration in Asia Course (Development Executive Program)**  
Asian Institute of Management - Center for Development Management

- Makati City, Philippines *November 16-17, 2012*
10. **First Regional Assembly of United Nations Academic Impact**  
Manuel S. Enverga, Lucena City, February 24, 2012
  11. **EDS International Residential Advanced Management Program**  
EDS Business School, Penang, Malaysia, *March 12-18, 2011*
  12. **AEESEAP Workshop- Seminar on Washington Accord Accreditation: International Accreditation of Engineering Programs for the Global Engineer**  
SEAMEO Innotech, Quezon City, Philippines, May 20-21, 2010
  13. **Executive Management Programme on The Management and Development of a Modern Higher Education Institution**  
Nanyang Polytechnic, Singapore, March 22 - April 1, 2010
  14. **International Conference on Mechatronics Technologies**  
Waterfront, Cebu City, October 22, 2009.
  15. **Executive Development Seminar**  
*Gov. Pablo Borbon Campus I, Batangas City, May 12-14, 2008*
    - i. Financial Management
    - ii. Organizational Behavior and Leadership
  16. **Executive Development Training in Malaysia, May 2008**
    - i. Professional CEO Program
    - ii. Creating World Class Company (The Toyota Way)
    - iii. Industrial Visit to Advance Micro Devices
    - iv. Lateral Marketing Strategies
    - v. Supply Chain & Logistics Strategies
  17. **Seminar-Workshop on The ASEAN Perspective on Human Resource Capacity Building in Engineering**  
Waterfront Hotel, Cebu City, November 30, 2007
  18. **25<sup>th</sup> Conference of the ASEAN Federation of Engineering Organizations (CAFEO) Engineering, Energy and the Environment: Ensuring Survival for Future Generations**  
Waterfront Hotel & Casino, Cebu City, Philippines, November 27-29, 2007
  19. **Motion Control Training**, Mycon Technology (Singapore) Pte Ltd., April 21-22, 2005
  20. **Sensorics Training** in Erbach Germany, *October 2003*

#### INTERNATIONAL UNIVERSITIES VISITED FOR BENCHMARKING

1. University of California Berkley, California, USA, *November 2018*
2. Stanford University, California, USA, *November 2018*
3. University of California Merced, California, USA, *November 2018*
4. University of California Sta. Cruz, California, USA, *November 2018*
5. Sta. Clara State University, California, USA, *November 2018*
6. North Carolina Sate University, North Carolina, USA, *November 2018*

7. Shanghai University of Electric Power, Shanghai, People's Republic of China, *October 2018*
8. National Kaohsiung University of Applied Sciences, Taiwan, *September 2017*
9. National Sun Yat-Sen University, Taiwan, *September 2017*
10. Rajamangala University of Technology Thanyaburi, Thailand, *April 2017*
11. University of New South Wales, Australia, *December 2012*
12. Swinburne University of Technology, Australia, *December 2012*
13. MacQuarie University, Australia, *December 2012*
14. University of Technology Sydney, Australia, *December 2012*
15. University of Sydney, Australia, *December 2012*
16. Nanyang Polytechnic, Singapore, *March 2010*
17. Osaka Prefecture University, Japan *August 2009*
18. Tokyo Institute of Technology, Japan *August 2009*
19. University of Tokyo, Japan *August 2009*
20. Georgetown University, Washington DC USA *June 2008*
21. American Heritage University, USA *June 2008*
22. Princeton University, New Jersey, USA *May 2008*
23. Stanford University, San Francisco California, USA *May 2008*
24. University of Southern California, USA *May 2008*
25. University of California Los Angeles, USA *May 2008*
26. Pukyong National University, Busan Korea, *December 2005*

## PUBLICATIONS

1. **Technopreneurship as an Outcomes-Based Educational Tool Applied in Some Engineering and Computing Science Programme**  
*Albertson D. Amante, Tirso A. Ronquillo*  
Australasian Journal of Engineering Education, Volume 22, Issue 1, July 12, 2017  
Print ISSN: 2205 - 4952, Online ISSN: 1325 - 4340
2. **A Note on Useless Communication Channels and Directed Graphs**  
*Emmanuel A. Gonzales, Tirso A. Ronquillo*  
International Journal of Pure and Applied Mathematics  
Academic Publications, Ltd., ISSN 1311-8080
3. **Implementing Outcomes-Based in Electronics Engineering of Batangas State University: Motivations, Challenges and Processes**  
*Divina Gracia D. Ronquillo, Tirso A. Ronquillo*  
IEEE Xplore Digital Library, DOI:10.1109/TALE.2014.7062579
4. **Design and Development of Autotransformer Motor Starter for Induced Draft Fan of Batangas Sugar Central Inc.**  
*Rhobert E. Alvarez, Tirso A. Ronquillo*  
Journal of Energy Technologies and Policy, Vol.3, No. 11, 2013, SSN: 2224-3232
5. **Analysis of Competitiveness of Batangas State University College of Engineering Using Porter's Five Competitive Forces Model**  
*Tirso A. Ronquillo*  
Proceedings of Australasian Association for Engineering Education (AAEE) Annual Conference, ISBN: 9780987177230, Copyright: AAEE, 2012
6. **Vibration Severity Classification of Motors using Gabor Expansion**  
*Tirso A. Ronquillo*  
Book of Abstracts of the Philippine-American Academy of Science and Engineering:  
ISSN 1908 - 5907, 2007



7. **Design and Development of a Microcontroller Based Irrigation System**  
*Tirso A. Ronquillo, Shyryl S. Care, Dennis D. Magnaye, Donald B. Gerez*  
Book of Abstracts of the Philippine-American Academy of Science and Engineering,  
ISSN 1908 – 5907, July 2009
8. **“Response Analysis of Proportional-Integral-Derivative (PID) Speed Controller for Some Direct Current Shunt Motors”**  
*Tirso A. Ronquillo*  
Research Journal SY 2009-2010 Vol.3  
Published by: Batangas State University Graduate School, ISSN 1908 – 9821
9. **Cryptographic Algorithm for Digital Colored Video Using Pixel To-ASCII Character Conversion Technique**  
*Tirso A. Ronquillo, Bernard I. Lago, Luther King C. Leona, Christian Villamonte*  
Research Journal SY 2008-2009 Vol.2  
Published by: Batangas State University Graduate School, ISSN 1908 – 9821

### RESEARCH PRESENTATIONS

1. **Tactical Operative Amphibious Drive (TOAD): A Research Breakthrough in Disaster Response**, International Research Colloquium, Subic Bay Philippines, May 27, 2016
2. **“Fuzzy Inference System for Gabor Based Vibration Severity Classification of Motors”** International Research Conference on the Innovations in Engineering, Science and Technology, Batangas State University, Philippines, Nov. 27-29, 2013
3. **“Porter-Based Value Creation Model for the Competitiveness of Batangas State University College of Engineering”**  
International Symposium on Advanced Engineering (ISAE),  
Pukyong National University, Busan Korea, November 11-13, 2013
4. **“MatLab Based Speaker Separation System Using Degenerate Unmixing Estimation Technique”**  
International Symposium on Advanced Engineering (ISAE),  
Pukyong National University, Busan Korea, November 11-13, 2013
5. **“Analysis of Competitiveness of Batangas State University College of Engineering Using Porter’s Five Competitive Forces Model”**  
Australasian Association for Engineering Education (AAEE) Annual Conference  
Swinburne University of Technology, Melbourne, Australia, December 3-5, 2012,
6. **“Qualitative Inferences on Stochastic Matrices via Information Theory”**  
5<sup>th</sup> International Conference on Humanoid Nanotechnology, Information  
Technology, Control, Environment, and Management  
Traders Hotel Manila, March 10-13, 2011
7. **“Encrypted Voice Communication System using Pseudo-Random Sequence and X-OR Bit Masking Techniques”** International Conference on Multimedia Information Technology and its Application (MITA) 2009 at Osaka Prefecture University, Japan on August 19-21, 2009
8. **“Solar Powered Electronic Rat Repellent System”**  
STARRDEC – BSU IN-HOUSE REVIEW Batangas State University  
August 12, 2009

9. **“Microcontroller Based Irrigation System”**  
29<sup>th</sup> Annual Philippine-American Academy of Science and Engineering (PAASE) Meeting and Symposium  
Ateneo De Manila University on July 13-15, 2009
10. **“Response Analysis of Proportional-Integrated-Derivate (PID) Speed Controller for Some Direct Current Shunt Motors”**  
International Symposium on Advanced Engineering (ISAE)  
Pukyong National University, Busan Korea on March 19-21, 2009
11. **“Response Analysis of Proportional-Integrated-Derivate (PID) Speed Controller for Some Direct Current Shunt Motors”**  
Engineering Research Conference  
Bayview Park Hotel, Manila, March 10, 2009
12. **“Robot Trajectory Planning and Control”**  
Luzon Science Consortium Symposium  
Updates and Trends on Physics Education and Research  
Batangas State University, September 24-26, 2008
13. **“Cryptographic Algorithm for Digital Colored Video using Pixel-to-ASCII Character Conversion Technique”**  
28<sup>th</sup> Annual Philippine American Academy of Science and Engineering Meeting  
Georgetown University, Washington, D.C. USA, May 22 -24, 2008
14. **“Vibration Severity Classification of Motors using Gabor Expansion”**  
National Engineering Research Conference  
January 7-9, 2008, Mariano Marcos State University, Batac City, Ilocos Norte
15. **“Vibration Severity Classification of Motors using Gabor Expansion”**  
International Conference on Multimedia Information Technology and its Application  
August 19-22, 2007, Edsa Shangri-La Hotel, Manila
16. **“Vibration Severity Classification of Motors using Gabor Expansion”**  
International Symposium on Advanced Engineering (ISAE)  
Pukyong National University, Busan, Korea, Dec. 1-3, 2005

#### **GRADUATE SCHOOL RESEARCHES SUPERVISED / ADVISED**

1. **Evaluation and Analysis of the Operating Characteristics of Batangas II Electric Cooperative, Inc. Substations**  
by Frederick H. Lingao, Master of Engineering, EE, April 2012
2. **A Graph Theoretic Model for Alarm Correlation and Fault Localization for DIGITEL Batangas Main Switching Unit**  
by Engr. Divina Gracia D. Ronquillo, M-Engg.- ECE, June 2010
3. **System Reliability of Batangas II Electric Cooperative**  
by Engr. Edzel M. Gamab, M-Engg-EE, June 2010
4. **Technical Handbook for First Bay Power Corporation (FBPC) Bauan, Batangas**  
by Engr. Elenor M. Reyes, M-Engg-EE, June 2010
5. **Design and Development of a Proposed Autotransformer Motor Starter Prototype for Induced Draft Fan (IDF) of Batangas Sugar Central Inc., at Balayan, Batangas**

- by Engr. Rhobert E. Alvarez, M-Engg-EE, October 2009
6. **Automated Measurement Tool for GSM Outdoor Radio Frequency Signal**  
by Engr. Princess Marie B. Melo, M-Engg.- ECE, October 2005
  7. **Combined Frequency Components for Vietnamese Speech Recognition**  
by Nguyen Quoc Bao, MSIT, March 2011
  8. **Proposed Tsunami Warning Algorithm using Wireless Sensor Network Technology** by Dinh Xuan Lam, MSIT, March 2011
  9. **Development of Traffic Control System using Fuzzy Logic**  
by Ngo Thi Bich Ngoc, MSIT June 2010

#### UNDERGRADUATE RESEARCHES SUPERVISED / ADVISED

	TITLE	MONTH/YEAR
1	DESIGN AND IMPLEMENTATION OF A WIRELESS SYNCHRONIZED CLOCK SYSTEM USING ZIGBEE TECHNOLOGY FOR THE CEAFACS BUILDING OF BATANGAS STATE UNIVERSITY	Jun-10
2	DESIGN AND IMPLEMENTATION OF A PUBLIC ADDRESS SYSTEM FOR CEAFACS BUILDING OF BATANGAS STATE UNIVERSITY	Mar-10
3	DESIGN AND DEVELOPMENT OF A WEB-BASED PATIENT MONITORING SYSTEM	Mar-10
4	AUTOMATED PROTOTYPE PROCESSOR FOR THE PRODUCTION OF BIODIESEL FROM USED VEGETABLE OIL	Mar-10
5	DESIGN, DEVELOPMENT AND INSTALLATION OF SOLAR POWERED LIGHTING SYSTEM FOR CALAWIT TOURISTS INFORMATION CENTER IN BRGY. CALAWIT, BALETE, BATANGAS	Mar-10
6	DESIGN AND DEVELOPMENT OF AN AUTOMATED CORN HUSKING AND SHELLING MACHINE	Mar-10
7	DESIGN AND DEVELOPMENT OF A DELAMINATION DETECTING DEVICE	Aug-09
8	DESIGN, DEVELOPMENT AND ANALYSIS OF A VARIABLE SPEED AND BLADE ANGLE CONVECTION COOLING FAN FOR PERSONAL COMPUTERS	May-09
9	DESIGN AND DEVELOPMENT OF A CALIBRATION SYSTEM AND SUPPORT MATERIALS FOR THERMOCOUPLES AND RESISTANCE TEMPERATURE DETECTORS	May-09
10	DESIGN AND DEVELOPMENT OF AN AUTOMATED COCONUT OIL EXTRACTOR	Mar-09
11	DESIGN AND DEVELOPMENT OF AN AUTOMATED ESPRESSO-TYPE COFFEE MAKING MACHINE	Mar-09
12	DESIGN AND DEVELOPMENT OF AN MCU-BASED WARNING SYSTEM FOR QUATERNARIES SECTION OF STEPAN PHILIPPINES INCORPORATED	Mar-09
13	DESIGN AND DEVELOPMENT OF A GSM-BASED RADIO CENTER TERMINAL STATION PREMISES MONITORING SYSTEM FOR PLDT COMPANY	Mar-09

14	AUTOMATED HOG FEEDS WEIGHING AND DISPENSING SYSTEM FOR BRGY. MALALIM MULTI-PURPOSE COOPERATIVE	Mar-09
15	DESIGN, DEVELOPMENT AND PROPOSED IMPLEMENTATION OF A SOLAR POWERED ELECTRONIC RAT REPELLENT SYSTEM	Mar-08
16	DESIGN AND DEVELOPMENT OF A MODIFIED TRANSMISSION LINES TRAINER	Mar-08
17	DESIGN AND DEVELOPMENT OF A MODIFIED TRANSMISSION LINE TRAINER (INSTRUCTIONAL MANUAL)	Mar-08
18	SIGNAL STRENGTH MEASUREMENTS OF MAJOR MOBILE IN SELECTED AREAS OF BATANGAS PROVINCE	Mar-08
19	DESIGN AND DEVELOPMENT OF AN ELECTRO-STATIC-DISCHARGE (ESD) WRIST STRAP USAGE ALARM SYSTEM	Mar-08
20	DESIGN AND DEVELOPMENT OF A MODIFIED EUCALYPTUS OIL EXTRACTION APPARATUS USING PROGRAMMABLE LOGIC CONTROLLER	Nov-07
21	DESIGN AND DEVELOPMENT OF AN AUTOMATIC CAR SECURITY SHUT-DOWN SYSTEM USING SMS TECHNOLOGY	May-07
22	DESIGN AND DEVELOPMENT OF INTEGRATED WIRELESS SYSTEM FOR LIBRARY MANAGEMENT AND ONLINE SERVICES FOR BSU-ECE DEPARTMENT	Mar-07
23	DESIGN AND DEVELOPMENT OF MECHATRONIC BOTTLE LABELING MACHINE	Mar-07
24	DESIGN AND DEVELOPMENT OF A MULTIFUNCTIONAL SINK	Mar-07
25	DESIGN AND DEVELOPMENT OF AN AUTOMATED VCD RENTAL MACHINE	Mar-07
26	DESIGN AND DEVELOPMENT OF A MICROCONTROLLER BASED PAPER VENDING MACHINE	Mar-07
27	DESIGN AND DEVELOPMENT OF AN RFID-BASED PARKING MONITORING SYSTEM	Mar-07
28	DESIGN AND DEVELOPMENT OF AN AUTOMATED MOBILE SUPPLY CARRIER	Mar-07
29	DESIGN AND DEVELOPMENT OF AN AUTOMATED RICE DISPENSER AND COOKER	Mar-07
30	DESIGN AND DEVELOPMENT OF A TOUCH SCREEN CONTROLLED AUDIO MIXER	Mar-06
31	DESIGN AND DEVELOPMENT OF DIGITAL VIDEO ENHANCEMENT USING IMAGE RESTORATION AND COLOR ADJUSTMENT ALGORITHM	Mar-06
32	DESIGN AND IMPLEMENTATION OF MATLAB BASED SPEAKER SEPERATION SYSTEM USING DEGENERATE UNMIXING ESTIMATION TECHNIQUE	Mar-06
33	DESIGN AND DEVELOPMENT OF A TEST GENERATOR PRESENTED IN TOUCH SCREEN INTERFACE	Mar-06
34	DESIGN AND DEVELOPMENT OF A MINIATURE COMPONENT FAULT DETECTION SYSTEM USING OPTICAL IMAGING	Mar-06
35	DESIGN AND DEVELOPMENT OF A MCU-BASED IRRIGATION SYSTEM	Mar-06

36	DESIGN AND SIMULATION OF A SIGNATURE VERIFICATION ALGORITHM USING DYNAMIC SIGNATURE CHARACTERISTICS METHOD	Mar-06
37	DESIGN AND DEVELOPMENT OF ROBOTIC CD PALLETIZER	Mar-06
38	DESIGN AND DEVELOPMENT OF A HARMONIC FILTER SYSTEM FOR SHIELDED METAL ARC WELDING (SMAW)	Mar-05
39	DESIGN AND DEVELOPMENT OF A COAXIAL CABLE FAULT LOCATOR	Mar-05
40	MATLAB - BASED LINE ECHO CANCELLATION FOR PUBLIC SWITCHED TELEPHONE NETWORK	Mar-05
41	DESIGN AND DEVELOPMENT OF A DIGITAL SIGNAL PROCESSING TRAINING MODULE	Mar-05
42	MATLAB-BASED VOICE MANIPULATION SYSTEM	Jun-04
43	DESIGN AND DEVELOPMENT OF PC-BASED VOICE COMMAND SYSTEM FOR ELECTRICAL DEVICES ACTIVATION AND AUTOMATION	Mar-04
44	PROPOSED ELECTRONIC BAGGAGE COUNTER FOR BATANGAS STATE UNIVERSITY ALANGILAN CAMPUS LIBRARY USING BARCODING SCHEME	Mar-04
45	PC-BASED CALL ROUTING SYSTEM USING SPEECH RECOGNITION	Mar-04
46	PROPOSED AND DESIGN AND DEVELOPMENT OF WIRELESS CALL ALERT SYSTEM FOR BATANGAS STATE UNIVERSITY	Mar-04
47	MATLAB-BASED PROPORTIONAL INTEGRAL DERIVATIVE CONTROLLER	Mar-04
48	BIN SIGNAL VERIFICATION SYSTEM	Mar-04
49	MATLAB-BASED VIDEOKE SCORING SYSTEM USING FAST FOURIER TRANSFORM	Mar-04
50	DESIGN AND DEVELOPMENT OF A MODIFIED ELECTRO-PNEUMATIC TRAINING MODULE (AUTOMATION TRAINER)	Mar-04
51	DEFORMATION VERIFICATION OF PLASTIC BOTTLES USING STEREO VISION APPROACH	Mar-04
52	DESIGN AND SIMULATION OF A DIGITAL COLORED VIDEO STEGANOGRAPHY ALGORITHM USING LEAST SIGNIFICANT BIT MODIFICATION TECHNIQUE	Jun-03
53	HIGH TO LOW DYNAMIC RANGE IMAGE COMPRESSION USING DETAIL PROFILE SEPARATION ENHANCED WITH MULTIDIMENSIONAL FILTERING	Jun-03
54	IMAGE COMPRESSION USING HUFFMAN CODING	May-03
55	IMPROVED FAST FOURIER TRANSFORM BASED PROCEDURE FOR TEXTURE SYNTHESIS	May-03
56	FUZZY FILTERING ALGORITHM FOR ENHANCING CORRUPTED IMAGES	Apr-03
57	SPEECH SIGNAL COMPRESSION USING WAVELET ANALYSIS	Mar-03
58	DESIGN AND SIMULATION OF SIGNATURE VERIFICATION ALGORITHM USING PIXEL DISTRIBUTION ANALYSIS	Mar-03
59	DESIGN AND SIMULATION OF A WIRELESS LOG-IN SYSTEM	Mar-03



60	ENHANCING SLEW RATE OF A $\mu$ A741 OPERATIONAL AMPLIFIER BY TRANSCONDUCTANCE REDUCTION	Mar-02
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### **COURSES HANDLED**

#### **Graduate School**

1. Management and Supervision of Educational Institutions
2. Educational Planning and Leadership Internship
3. Quantitative Policy and Decision Making
4. Organizational Design and Dynamics
5. Strategic Management
6. Theories and Models of Organizations
7. Human Resource Management and Organizational Behavior in Education
8. Advanced Statistics
9. Research Methodology
10. Quantitative Research
11. Qualitative Research
12. Communication Theory
13. Digital Signal Processing
14. Optical Fiber Communication
15. Antennas and Radio Wave Propagation
16. Advanced Feedback Control System
17. Advanced Engineering Mathematics
18. Fuzzy Logic
19. Numerical Analysis
20. Special Topics in Digital Signal Processing

#### **College of Engineering**

21. Differential Equations
22. Transmission Lines & Antennas
23. Control Systems
24. Digital Signal Processing
25. Advanced Engineering Mathematics
26. Numerical Methods
27. Electromagnetics
28. Vector Analysis
29. Communication System Design
30. Vibration Engineering

### INSTRUCTIONAL MATERIALS DEVELOPED

1. General Engineering Mathematics, November 2006
2. Advanced Probability and Statistics for Engineers, November 2006
3. Radio Wave Propagation, November 2006
4. Mathematical Simulation and Modeling, October 2003
5. Signals and Systems, June 2003
6. Numerical Methods, October 2001
7. Actuators and Sensor Engineering, June 2003
8. Vibration Engineering, October 2004
9. Introduction to Mechatronics, June 2003
10. Image Processing, October 2002
11. Wireless Communications, June 2002
12. Vector Analysis, June 2002
13. Methods of Research for ECE, June 2004
14. Dynamics Systems, October 2004
15. Computer Aided Instructional Materials for Special Topics in Electronics & Communications Engineering
16. Computer Aided Instructional Materials for Advanced Communication Systems
17. Mathematical Simulation and Modeling
18. Differential Equations
19. Transmission Lines and Antennas
20. Digital Signal Processing
21. Electromagnetics

### SERVICES AS LECTURER / RESOURCE SPEAKER

1. 2<sup>nd</sup> Technology Business Incubator, The Manila Hotel, Manila, December 19, 2019
2. **Innovations in Public Administration Reforms in ASEAN and Asian Communities: Forging Knowledge Co-Creation, Linking Societies and the Foundations for Democracy, Peace and Sustainable Development**, PSPA International Conference, BSA Twin Towers Hotel, Mandaluyong City, November 17, 2018
3. **Towards Enhancement of the R&D Ecosystem on MIMAROPA SUCs: A Conference**, 2018 Regional Science and Technology Week, San Jose, Occidental Mindoro, October 11, 2018
4. **Translating Research to Innovations in Science, Technology and Natural Resources Management**, 2018 Bicol International Research, Development and Extension Conference, Bicol University East Campus, Legazpi City, Albay, March 17, 2018

5. **Disaster Prevention Experiences Sharing: Philippines**, 2017 International Carnival of Disaster Prevention & Reduction in the City of Kaohsiung, National University of Kaohsiung, Kaohsiung, Taiwan, September 20, 2017
6. **Internet of Things**, Philippine Semiconductor and Electronics Convention, SMX, Mall of Asia, June 23, 2017
7. **Town and Gown and Academe-LGU Linkages: Educational Institutions as Local Knowledge Creators, Governance Hub, and Catalysts for Sustainable Local Development and Stronger Local Democracies**, PPSA International Conference, Waterfront Hotel, Cebu City, May 12, 2017
8. **Outcomes-Based Engineering Education and Accreditation** Philippine Technological Council, Accreditation Conference for Engineering, City Asturias Hotel Palawan, November 21, 2016
9. **Higher Educations Institutions as Hubs for Local Governance, 2106 PSPA International Research Conference**, Hotel Benilde, Manila, November 3-5, 2016
10. **Towards Asset Management Excellence for the Presidential Leadership Program Course 3: Resource Mobilization Towards Generating and Managing Financial and Other Resources**, under Philippine Higher Education Career System (PHILHECS - PLP) Program by the Development Academy of the Philippines, Commission on Higher Education and Philippine Association of State Universities and Colleges, Le Monet Hotel, Baguio City October 25, 2016
11. **Asset Management for the Executive Development Program Module 4: Resource Generation and Financial Management**, under Philippine Higher Education Career System (PHILHECS - EDP) Program by the Development Academy of the Philippines, Commission on Higher Education and Philippine Association of State Universities and Colleges, First Pacific Leadership Academy, Antipolo City, September 7, 2016
12. **Plenary Speaker**, International Research Colloquium, Subic Bay Traveler's Hotel, Subic Bay Freeport Zone, May 26-27, 2016
13. **Technology Forum on Tactical Operative Amphibious Drive (TOAD) Vehicle**, 2016 Science Nation Tour: Agham na Ramdam in Central Luzon, NEDA III Conference Room, Maimpis, City of San Fernando, Pampanga, April 12, 2016
14. **Capability Building Seminar on PRE, APP and PPMP According to RA 9184**, STRASUC 3<sup>rd</sup> Quarter Executive Council Meeting, Laguna State Polytechnic University-San Pablo City Campus, September 10, 2015
15. **Visiting Professor Program: Institutionalizing Technopreneurship in the Curriculum**, Batangas State University, Batangas City, August 3-7, 2015
16. **Ideation Design and Development Training-Workshop: Establishment, Operation and Institutionalization, DOST IV-A**, The University Hotel, UP Campus Diliman, Quezon City, June 2, 2015
17. **School of Engineering Faculty Research Capability Training on Conducting Action Research in Engineering**, Humbert Hall, Colegio de San Juan de Letran Calamba, May 20, 2015

18. **Training on the use of Smart Farming/Precision Agriculture through Automation Technologies**, PCAARRD and CLARRDEC, Central Luzon State University, Science City of Muñoz, Nueva Ecija, May 12-16, 2014
19. **Seminar Workshop on Research Writing: the BatStateU ARASOF's Commitment for Quality Research Output**, Higher Education Building, BatStateU ARASOF-Nasugbu, November 18-22, 2013
20. **Training on Automated Production Systems for Increasing Agricultural Productivity**, PCAARRD, BSU, and DOST IV-A, Batangas State University Main Campus II, Alangilan, Batangas City, June 28, 2013
21. **National Training on Automated Production Systems for Increasing Agricultural Productivity**, Batangas State University, Batangas City, June 24-28, 2013
22. **Training-Seminar on the Overview of Research Management (Southern Luzon Cluster)**, CHED, UPLB, and PHILARM, PSU Hostel, Palawan State University, Puerto Princesa City, March 12-14, 2013
23. **First Graduate Research Forum**, Audio Visual Room, Engineering Building, Batangas State University Main Campus II, Alangilan, Batangas City, September 23, 2102
24. **Outcomes Based Education**, Philippine Society of Information Technology Educators, Colegio San Agustin, Biñan, Laguna, September 7, 2012
25. **Seminar Workshop on Outcomes Based Education and Problem Based Learning**  
Batangas State University Faculty Development Seminar  
Batangas City, August 31, 2012
26. **CEAFACS Graduate School Orientation**, Batangas State University Main Campus II, Alangilan, Batangas City, August 5, 2012
27. **Batangueno Engineers: Unification Towards Professional Excellence**  
Institute of Electronics Engineering of the Philippines, Batangas Chapter  
Lyceum of the Philippine University, Batangas City, July 22, 2012
28. **Electronics and Communications Research Areas and Proposal Preparation**  
IECEP CALABARZON Seminar  
Batangas State University, Batangas City, November 29, 2008
29. **Robot Trajectory Planning Control, Updates and Trends on Physics Education and Research**, Philippine Science Consortium, Batangas State University, Batangas City, September 24-26, 2008
30. **Mathematics Proficiency**  
JPL Library, Lyceum Institute of Technology,  
Calamba, Laguna, February 1, 2008
31. **Microwave Communication**  
LSPU, Santa Cruz, Laguna, February 9, 2008
32. **Fiber Optic Communication**, Polytechnic University of the Philippines Sto. Tomas Extension, Sto. Tomas, Batangas, December 19, 2007
33. **MATLAB and its Application**

- Romblon State College, Odiongan, Romblon  
September 29-30, 2007
34. **Critic on Faculty Researches**, First Asia Institute of Technology and Humanities, Tanauan City, September 26, 2006
  35. **Robotics**, Institute of Electronics Engineers of the Philippines, University of Pangasinan Students Chapter, University of Pangasinan, Arellano St, Dagupan City, February 23, 2006
  36. **Proficiency in Mathematics**  
Laguna State Polytechnic University, Santa Cruz, Laguna  
July 24, 2006
  37. **Robotics**  
First Asia Institute of Technology and Humanities, Tanauan City  
February 22, 2006
  38. **Math Proficiency**  
Lyceum Institute of Technology  
Makiling, Calamba City, February 15, 2006]
  39. **Solving Techniques in Mathematics**  
Polytechnic University of the Philippines  
Sta. Mesa Manila, January 25, 2006
  40. **Robotics**  
Polytechnic University of the Philippines  
Sta. Mesa Manila, January 25, 2006
  41. **Introduction to Robotics and Proficiency in Mathematics**, Electronics & Communication Engineering Society, Laguna State Polytechnic University, Santa Cruz Campus, Laguna, October 6, 2005
  42. **Mathematics Proficiency**  
Polytechnic University of the Philippines Maragondon, Cavite, August 27, 2005
  43. **Digital Signal Processing Seminar**  
STI College-Batangas, Noble St. Batangas City, July 23, 2005
  44. **The Emerging Challenges of Globalization**, 3<sup>rd</sup> National Conference on Industrial Technology, Philippine Association of Colleges and Universities of Industrial Technology (PACUIT), Batangas State University, Batangas City, April 27, 2005
  45. **Digital Signal Processing and Mathematics Proficiency**, Junior Institute of Electronics and Communications Engineers, AMA Computer College, February 26, 2005
  46. **Robotics and Math Proficiency Seminar**  
Polytechnic University of the Philippines, Taguig,  
February 4, 2005
  47. **Digital Signal Processing**, AMA Computer College-Lipa Campus, January 19, 2005
  48. **Seminar on Digital Signal Processing**, De La Salle Lipa Tertiary School, Lipa City, January 8, 2005



49. **Math Skills Enhancement Seminar**  
University of Perpetual Help Dalta System, Bacoor, Cavite,  
August 12, 2004
50. **Fiber Optics Technology**, Junior Institute of Electronics and Communications  
Engineers, AMA Batangas Campus, Max's Restaurant, P. Burgos St., Batangas City,  
March 20, 2004
51. **Digital Signal Processing and Math Proficiency**, Adamson Univeristy Electronics  
and Communications Engineering Students Society, Adamson University, March 19,  
2004
52. **Mathematics Proficiency and Digital Signal Processing**, AECES Lecture Seminar  
Series, Cavite State University, Don Severino De Las Alas Campus, Indang Cavite,  
February 26, 2004
53. **Math Proficiency**  
St. Paul University Philippines, February 23, 2004
54. **Digital Signal Processing**, AMA Computer College Lipa Campus, February 13, 2004
55. **Mathematics Proficiency Seminar**, Polytechnic University of the Philippines Sto.  
Tomas Extension, Sto. Tomas, Batangas, February 6, 2004
56. **MATLAB Applications Software (Faculty Development Seminar)**  
Technological Institute of the Philippines, Quezon City,  
September 18, 2003
57. **Seminar Workshop in Physics : "Linking Science Communities Through Physics"**  
Luzon Science Consortium  
Pangasinan State University, Lingayen, Pangasinan, October 20 - 22, 2004
58. **Math Proficiency-A Tool for a Better World**, Student Development Seminar,  
Central Colleges of the Philippines, Association of Electronics and Communication  
Engineering Students And Alumni Association, CCP Library, January 23, 2004
59. **Matrix Laboratory**, Batangas State University Main Campus II, Alangilan, Batangas  
City, January 22, 2004
60. **Review Course in Amplitude Modulation Exam for ECE Licensure Exam**  
MIT Review Center, Inc., Sampaloc Manila, May 27-30, 2002
61. **Review Course in Mathematics for EE Licensure Exam**  
Powerline Review Center, Inc., Sampaloc Manila, May 25-30, 2001
62. **Review Course in Mathematics for ECE Licensure Exam**  
Engineering Reviewers of Asia, Sampaloc Manila,  
April 29-30, 2001
63. **Review Course in Engineering Economy**  
RLB Career Development and Technological Center  
Sampaloc, Manila, December 26 & 28, 2000

**LOCAL SEMINARS AND TRAININGS ATTENDED**

1. **IRIS Presidential Leadership Course**  
Ateneo Professional Schools, Makati City, August 29-31, 2018
2. **2<sup>nd</sup> National Research and Development Conference**,  
Manila Hotel, One Rizal Park, Manila, February 15, 2017
3. **ISO 9001:2008 Internal Quality Audit**,  
HAE Consultancy and Training Services,  
Hotel Dominique, Tagaytay City, January 3-5, 2017
4. **PHIL-HECS Presidential Leadership Advancement Program on Thinking Strategically and Creatively: Responding to Needs and Creating Opportunities in Transforming SUCs**, under Philippine Higher Education Career System (PHILHECS - PLP) Program by the Development Academy of the Philippines, Commission on Higher Education and Philippine Association of State Universities and Colleges, Hotel Luna Vigan City, November 2016
5. **66<sup>th</sup> IECEP Annual General membership Meeting, Conference and Exposition**  
Philippine Trade Training Center, Pasay City, October 27-29, 2016
6. **Workshop on the FY 2016 SUC Leveling Forms (Phase II) for the Regional Evaluation Committee (REC)**, Hive Hotel and Convention Place, Quezon City, August 26, 2016
7. **PHIL-HECS Presidential Leadership Advancement Program PLP Course: Leading a Globally Competitive Higher Education Institution**, under Philippine Higher Education Career System (PHILHECS - PLP) Program by the Development Academy of the Philippines, Commission on Higher Education and Philippine Association of State Universities & Colleges, Limketkai Hotel Cagayan de Oro City, July 28-30, 2016
8. **The Shape of Philippine Higher Education: Tackling Quality and Charting Future Directions for Internationalization**,  
Ortigas, Pasig City, March 21, 2016
9. **Presidential Leadership Conference and Consultation**,  
Marco Polo Hotel, Meralco Ave., Ortigas Center, Pasig City, January 12-14, 2016
10. **National Forum on Disaster Preparedness and Response 2015**,  
New World Manila Bay Hotel, Manila, October 13-15, 2015
11. **2015 ASEAN Quality Assurance Network Seminar**,  
PICC, September 2, 2015
12. **2015 Philippine Higher Education President's Summit**,  
SM Aura Premier, Taguig City, August 20, 2015
13. **USAID STRIDE 2<sup>nd</sup> Meeting of the Philippine Government-University- Industry Research Roundtable-PGUIRR**, Makati City, April 30, 2015
14. **Seminar-Workshop on the Baldrige Performance Excellence Framework for Higher Education**, Dap Building, Pasig City, March 18, 2015

15. **Seminar-Training on AACUP Level IV Accreditation**, Batangas State University, Batangas City, February 20, 2015
16. **PhilDev IDEA-UC Berkely Center for Entrepreneurship and Technology (CET) Roadshow**, Makati City, February 25, 2015
17. **Public Administration Governance Reforms and Innovations**, Water Front hotel, Davao City, October 9-11, 2014
18. **Innovations and Good Practices Workshop in Higher Education for State University and Colleges (SUCs): Promoting Entrepreneurship and Volunteerism in SUCs**, GK Enchanted Farm, Angat, Bulacan May 8-9, 2014
19. **Regional Development Research Agenda Workshop**  
Splash Mountain Resort, Los Baños, Laguna, April 10, 2014
20. **Flagship Course on the Management of Research in State Universities and Colleges (SUCs)**, DAP Building, San Miguel Ave., Pasig City, November 4-8, 2013; December 2-6, 2013; January 12-16, 2014
21. **Geographical Information System (GIS) and Disaster Assessment Needs Analysis (DANA) Training of Trainers** Days Hotel, Batangas City, March 21, 2014
22. **Corporate Sensitivity Workshop, Managing the Future: Reinforcing University Culture**, Batangas State University, Batangas City, July 18-19, 2013
23. **63<sup>rd</sup> IECEP National Midyear Convention and General Membership Meeting**  
Grand Caprice, Cagayan De Oro City, June 14-15, 2013
24. **Social and Economic Responsibility: A Challenge to R & D Managers**  
Villa Caceres Hotel, Naga City, April 16-18, 2013
25. **Training Seminar on the Overview of Research Management**  
Palawan State University, Palawan Puerto Princesa, March 12-14, 2013
26. **Driving Financial Executives to Quality Assurance of Tertiary Education**  
Legend Hotel, Puerto Princesa Palawan, February 11-13, 2013
27. **25<sup>th</sup> Regional Symposium on Research and Development Highlights**  
Cultural Center, Provincial Capitol, Sta. Cruz Laguna, October 23, 2012
28. **Strategic Positioning of Philippine Public Higher Education**, Philippine Association of State Universities and Colleges, Manila Hotel, October 15-17, 2012
29. **Summit on Verde Island Passage Marine Corridor**, Department of Environment and Natural Resources, Hotel Ponte Fino Batangas City, September 28, 2012
30. **Leading Engineering Program Accreditation (PTC CASEE 105)**, Philippine Technological Council, Tagaytay City, August 27-28, 2012
31. **Policies and Standards to Enhance Quality Assurance in Philippine Higher Education through an Outcomes-based and Typology-based QA**, CHED Auditorium, Quezon City, August 24, 2012
32. **Workshop on Revisiting and Enhancing the SUCs' Strategic Plans of the Executive Development Program for SUCs**, Academy's Graduate School of Public and Development Management, Tagaytay City, July 26, 2012

33. **SUCFINEX Role: Orchestrating Internally Generated Funds for Quality Tertiary Education**, State Universities and Colleges Financial Executives, Inc., June 21, 2012
34. **Strengthening Response to the Emerging Industrial Technology Challenges**  
Ramon Magsaysay Technological University, Zambales, April 25-27, 2012
35. **PTC Certification and Accreditation System for Engineering Education (PTC-CASEE) and Outcomes-Based Education for Engineering Education Providers in HEIs**, March 27, 2012
36. **15<sup>th</sup> National Convention: SUCTEA: Responding to Curricular Reforms in Teacher Education**, Bayview Park Hotel, Roxas Boulevard, Manila, February 15-17, 2012
37. **Laws, Rules and Regulations on Government Expenditures**, Association of Government Internal Auditors, Hotel Kimberly, Malate, Manila, February 1-3, 2012
38. **2<sup>nd</sup> Engineering Summit "The ASEAN Engineering Community in 2015"**, Philippine Technological Council and ASEAN Academy of Engineering and Technology, Manila Hotel, January 26-28, 2012
39. **Engineering Accreditation Training and Workshop: Developing and Implementing Sustainable Educational Program Assessment Process**, Philippine Technological Council, Manila Hotel, January 25-26, 2012
40. **Introduction to PTC Certification and Accreditation System for Engineering Education and Outcomes-Based Education**, Fontana Hotel, Clark Economic Zone, Pampanga, December 8-9, 2011
41. **CHED-PASUC National Forum on SUC's Private Partnership on Education Economic Zone**, Cavite State University, Indang Cavite, August 24-26, 2011
42. **SMART Wireless Broadband Training (Module 2) Virtual Private Network (VPN) IP Video Technology**  
Batangas State University, January 28-29, 2010
43. **Advanced Microcontroller Applications Workshop**  
Taft Ave. , Manila, September 12, 2009
44. **Seminar workshop on the Formulation of the Batangas State University Citizen's Charter** GPB Main Campus I, Batangas City, June 18-20, 2009
45. **Research Preparation as part of the Doctor of Business Administration Program** , GPB Main Campus I, Batangas City , October 18-22, 2008
46. **Organizational Behavior and Leadership as part of the International Executive Development Seminar**  
GPB Main Campus I, Batangas City, May 14-15, 2008
47. **Financial Management as part of the International Executive Development Seminar** , GPB Main Campus I, Batangas City, May 12-13, 2008
48. **Round Table Discussion with the Board of Electronics Engineering at Lyceum Institute of Technology**,  
Calamba City, Laguna, January 5, 2008
49. **Research Discipleship Program (RDP) Workshop**

- Philippine Columbian Association, Manila, November 16, 2007
50. **Advanced Industrial Automation**  
World Trade Center, Roxas Boulevard Pasay City, September 27-28, 2007
  51. **Developing and Programming Robot Intelligence Workshop**  
UP ISSI, E. Jacinto St. Diliman, Quezon City, Philippines, September 24, 2007,
  52. **Mobile Communications and Microelectronics Conference**  
CAFA Theater University of San Carlos, Talamban, Cebu City, March 19, 2007
  53. **First Nationwide Synergy Cup**  
De La Salle University-Manila, Taft Avenue Manila, November 21, 2006
  54. **Electro-Pneumatic Systems and Design**  
Batangas State University Alangilan Campus, August 18-19, 2004
  55. **Switching and Control Relay Technology**  
Batangas State University Alangilan Campus, August 16-17, 2004
  56. **Seminar-Workshop on Industry and Energy R&D Agenda Formulation and Program Prioritization**, STCIERD, Batangas State University Alangilan Campus, Batangas City, July 12-13, 2004
  57. **Basic Industrial Pneumatics**, Mechatronics Laboratory, Engineering Building, Batangas State University Main Campus II, Alangilan, Batangas City, July 26-28, 2004
  58. **GSM System Training**  
Batangas State University, Batangas City, June 24-25, 2004
  59. **AMPS Overview**, Batangas State University, Batangas City, June 15, 2004
  60. **Total ACCESS Communications System, TACS**  
Batangas State University, Batangas City, June 14, 2004
  61. **Cellular Overview**, Batangas State University, June 13, 2004
  62. **GSM Overview**, Batangas State University, Batangas City, June 13, 2004
  63. **CDMA Overview**, Batangas State University, June 13, 2004
  64. **Fundamentals of Communications Systems**  
Batangas State University, Batangas City, June 12, 2004
  65. **Robotics**, Mechatronics Engineering Department, Batangas State University, Batangas City, March 3, 2004
  66. **Advance Communication Systems**  
Batangas State University, Batangas City, January 12, 2004
  67. **Experimental Design and Statistical Analysis for Research in Industry and Energy**, STCIERD, Batangas State University Main Campus II, Alangilan, Batangas City, December 8-9, 2003



68. **Instrumentation Control Systems**, Batangas State University Main Campus II, Alangilan, Batangas City, December 12, 2002
69. **Mobile Data Communication Security**  
Batangas State University, September 1, 2002
70. **Technical Seminar on Third Generation Wireless Communications**  
Industrial Technology Center in EARIST, Manila, August 3, 2002
71. **Fiber Optics Technology**  
Telecommunications Institute, January 25, 2001
72. **Filter Design, Department of Electronics and Communications Engineering of St. Loius University, Baguio City in cooperation with the Philippine Institutional University Cooperation-SLU Program, OTTO Hahn Building, Saint Loius University, Baguio City, June 2-3, 2000**
73. **Short Course on Digital Signal Processing: Theory and Practice**  
National Engineering Center, University of the Philippines-Diliman, Quezon City  
October 11-15, 1999
74. **Research and Development Internship Program in Electronics**, Advanced Science and Technology Institute, Technology Park Complex, C.P. Garcia Avenue, UP Campus, Diliman, Quezon City, April 1-May 31, 1998
75. **VHDL Design Seminar**, Advanced Science and Technology Institute, UP Campus, Diliman Quezon City, October 21-25, 1996

#### EXTENSION SERVICE PROVIDED BY GIVING TECHNICAL TRAININGS

1. **Digital Literacy Training and PC Troubleshooting and Networking Training**  
CM Azcarate Elementary School, June 24 - 45, 2010
2. **Digital Literacy Training**  
Binubusan Elementary School, May 23, 2010
3. **PC Troubleshooting and Networking Training**  
Binubusan Elementary School, May 22, 2010
4. **PC Troubleshooting and Networking Training**  
Guinayangan National High School, June 27, 2009
5. **PC Troubleshooting and Networking Training**  
Pulo National High School, June 13, 2009
6. **PC Troubleshooting and Networking Training**  
Puerto Galera National High School, June 13, 2009
7. **PC Troubleshooting and Networking Training**  
Marinduque National High School, July 26, 2008
8. **PC Troubleshooting and Networking Training**  
Maragondon National High School, June 28, 2008

9. **PC Troubleshooting and Networking Training**  
Cavite National Science High School, June 23, 2008
10. **PC Troubleshooting and Networking Training**  
Calamba Bayside National High School, April 2, 2008
11. **Extension Service to Romblon State College: Faculty Training on MATLAB and its Applications**  
Romblon State College, December 2007
12. **Electronics Training Course for Students of Anselmo A. Sandoval Memorial National High School (ASMNHS)**  
December 2007 – February 2008

#### EXTENSION SERVICE PROVIDED IN THE FORM OF TECHNOLOGY TRANSFER

13. **Design and Development of an MCU-Based Warning System for Quaternaries Section of Stepan Philippines Incorporated: AY 2008-2009**
14. **Development of an RFID System with Voice Recognition System for Philippine Long Distance Telecommunications (PLDT) – Batangas : AY 2008-2009**
15. **Development of a Proposed GSM-Based Radio Center Terminal Station Premises Monitoring for Philippine Long Distance Telecommunications (PLDT) - Rosario AY 2008-2009**
16. **Development of a Hog Feed Mixer for Brgy. Malalim Multi-Purpose Cooperative AY 2008-2009**
17. **Design and Development of an Electro-Static Discharge (ESD) Wrist Strap Usage Alarm System**  
Cypress Manufacturing Ltd., AY 2007-2008
18. **Design and Development of Machine Ground Resistance Monitoring**  
Cypress Manufacturing Ltd., AY 2007-2008
19. **Design and Development of an Automated Strip Counter**  
Cypress Manufacturing Ltd., AY 2007-2008

#### CONSULTANCY AND OTHER EXPERT SERVICES

1. **Technical Consultant of the Radyo Balisong Radio Station**  
January 2000 to January 2005
2. **Technical Consultant of Industrial Inspection (Int'l), Inc.**  
Testing of Electromagnetic Hazard, June 2003 to June 2004
3. **Technical Consultant of Industrial Inspection (Int'l), Inc.**  
Testing of Electromagnetic Hazard, May 2002 to May 2003
4. **Technical Consultant of the DWPB FM Broadcast Station**  
Batangas State University, School of Development Communication
5. **Technical Consultant, Fire Hydrant Control System Design**  
Cordero Ice Plant from June 2002 – June 2003
6. **Telephone System Design, Proposed Office Building Expansion**

- Masuda Philippines, Inc.  
108 North Science Avenue, Laguna Technopark, Biñan, Laguna
7. **Paging System Design**, Proposed Office Building Expansion  
Masuda Philippines, Inc.  
108 North Science Avenue, Laguna Technopark, Biñan, Laguna
  8. **Fire Alarm System Design**, Proposed Office Building Expansion  
Masuda Philippines, Inc.  
108 North Science Avenue, Laguna Technopark, Biñan, Laguna
  9. **Fire Detection Design**, Motorcycle Parts Manufacturing Plant  
Masuda Philippines, Inc.  
108 North Science Avenue, Laguna Technopark, Biñan, Laguna
  10. **Cellular Antenna Design for Tower Conversion**  
Smart Communications, Inc, Anastacia Sto Tomas, Batangas
  11. **Outside Plant Design**  
Globe E-Sprawl Project Detailed Secondary Cable Network  
Calapan, Mindoro
  12. **Power and Grounding System Design**  
Philippine Long Distance Telephone Company  
Russia Cor. Don Bosco, Bls, North Paranaque
  13. **Globe E-Sprawl Project**  
Innove Communication Inc. /Globe,  
San Pablo, Laguna and Calapan, Mindoro

#### INTELLECTUAL PROPERTY ASSETS APPLICATION

1. Title: **Safety Assembly for Watercraft and Amphibious Vessel**  
Inventors: Tirso A. Ronquillo, Albertson D. Amante  
Eugene Ereño, Armando Sinohin  
Filing Date: 15 November 2016  
Application No.: 12016000406  
Nature of IP: Invention  
Status: Patent Pending
2. Title: **Amphibious Vessel**  
Inventors: Tirso A. Ronquillo, Albertson D. Amante  
Eugene Ereño, Armando Sinohin  
Filing Date: 3 February 2016  
Application No.: 22016000072  
Nature of IP: Utility Model  
Status: Pending
3. Title: **Early Warning System**  
Inventors: Tirso A. Ronquillo, Albertson D. Amante  
Filing Date: 1 August 2017  
Application No.: 32017000663  
Nature of IP: Industrial Design

- |                  |  |
|------------------|--|
| Status           | Patent Pending   |
| 4. Title:        | <b>Multi-functional Wireless Data-Acquisition Platform</b> |
| Inventors:       | Tirso A. Ronquillo, Albertson D. Amante                    |
| Filing Date:     | 22December 2015  |
| Application No.: | 1/2015/000454  |
| Nature of IP:    | Invention  |
| Status           | Patent Pending   |
| 5. Title:        | <b>Statue (Batangas State University Marker)</b>           |
| Designer:        | Tirso A. Ronquillo   |
| Filing Date:     | 15November 2016  |
| Application No.: | 32016001256  |
| Nature of IP:    | Industrial Design  |
| Status           | Under Review   |