



END OF TERM REPORT

01 AUG. 2010 – 31 JULY 2016:

Dean Aura C. Matias

May 10, 2016
UP Engineering Theater

MELCHOR HALL

MELCHOR HALL
A COLLEGE OF ENGINEERING
TRAINING CENTER FOR APPLIED
GEODESY AND PHOTOGRAMMETRY

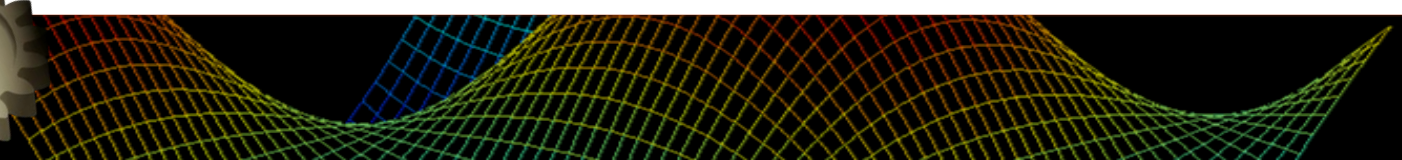
I. Vision, Mission, Strategies

Vision

A global leader in engineering education, research and technology innovation.

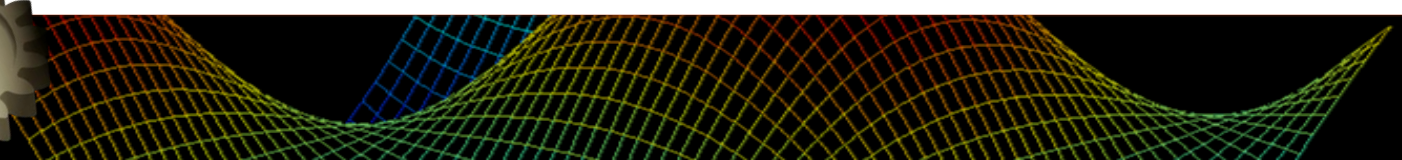
Mission

- **Knowledge.** To nurture honorable & excellent engineers and future leaders with global perspectives and aspirations for the nation.
- **Progress.** To generate knowledge and produce innovations that address challenges in sustainability, safety and security, health and quality of life.
- **Service.** To serve the evolving needs of society through proactive, interdisciplinary and multi-sectoral initiatives.



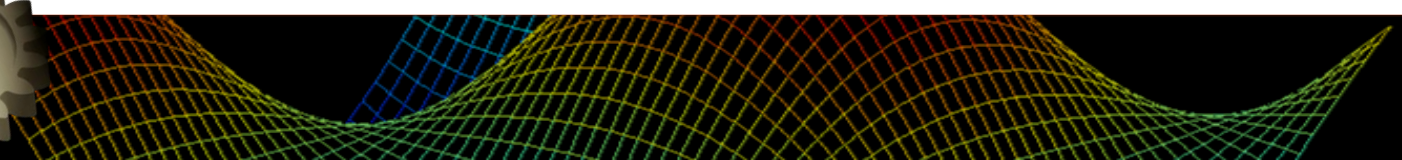
Strategies 2011-2016

- Attract the best students, who are academically strong, passionate, committed and with leadership potential
- Nurture, recruit, and retain best quality faculty and staff
- Focus on high impact research that advances knowledge and application at par with international standards of excellence



Strategies 2011-2016

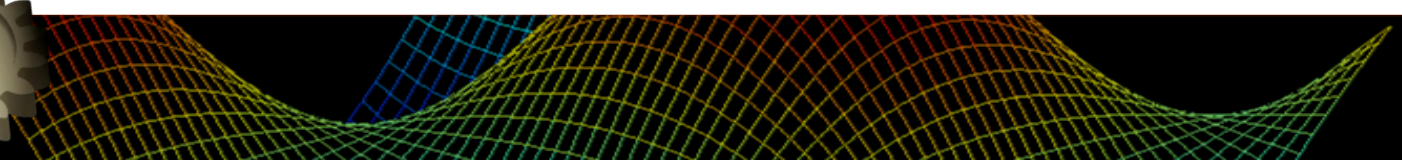
- Provide high quality learning experiences and environments, harnessing students greatest potential, injecting the spirit of innovation and entrepreneurship
- Create and sustain committed linkages with alumni, industry partners, government and other stakeholders in support of our vision/mission
- Adopt best practices for effective governance, operational efficiency, management of physical and human resources



II. Strategy 1: Students

Attracting the best students, who are academically strong, passionate, committed and with leadership potential

- Maintain full quota qualifiers
- Attract students from Science High Schools
- Increase graduate students
- Increase graduation rates



II. Strategy #1: Students

1. Freshmen Profile

Oblation Scholars	
Academic Year	No. of Oblation Scholars
2011-2012	18
2012-2013	25
2013-2014	20
2014-2015	19
2015-2016	17

Top 10 High Schools

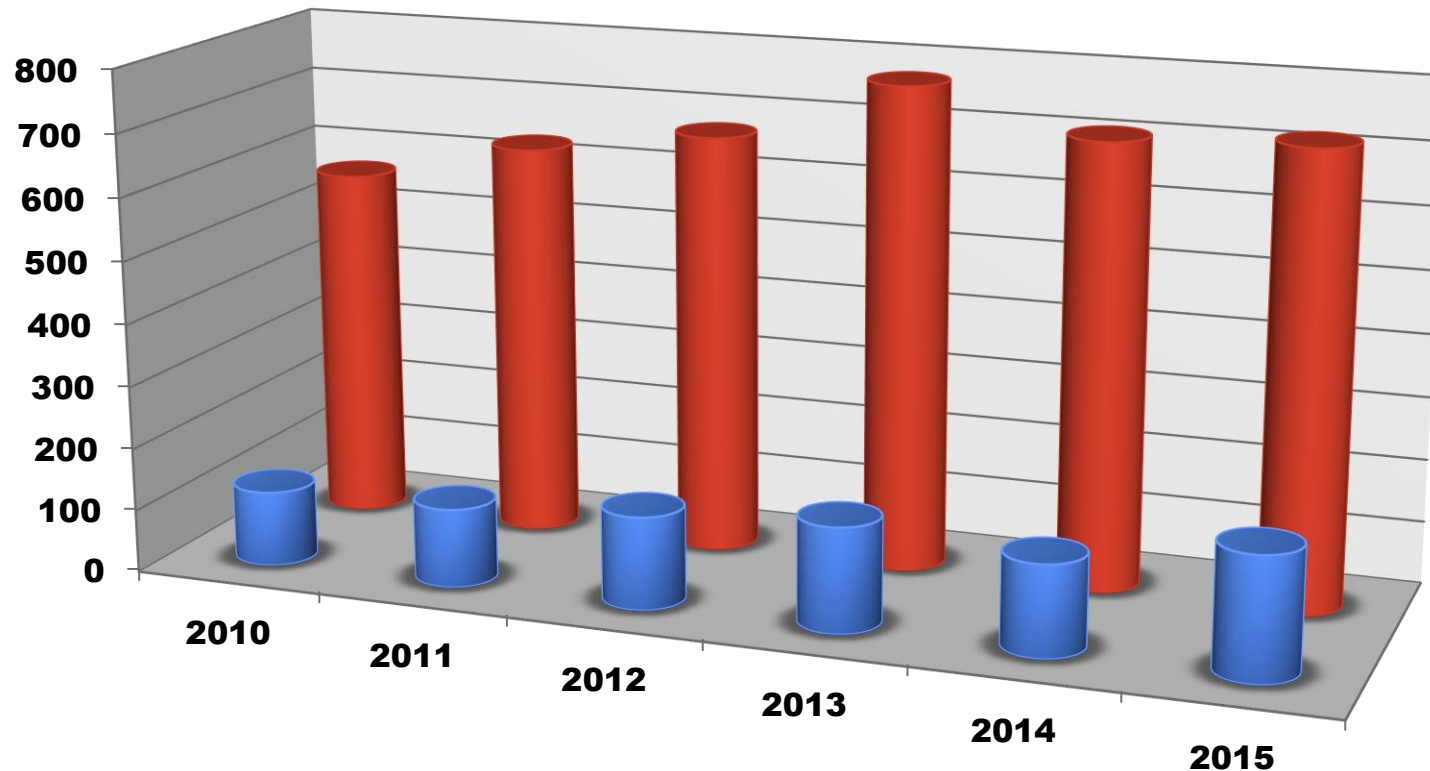
1. PSHS, Diliman
2. Quezon City Science HS
3. Ateneo de Manila University
4. PSHS, Bicol Region
5. Manila Science High School
6. Xavier School
7. Makati Science High School
- 8-10. PSHS, Southern Mindanao;
Western Visayas;
Central Visayas

M/F ratio 1 : 1.16 (53.82% females)
UPD qualifiers



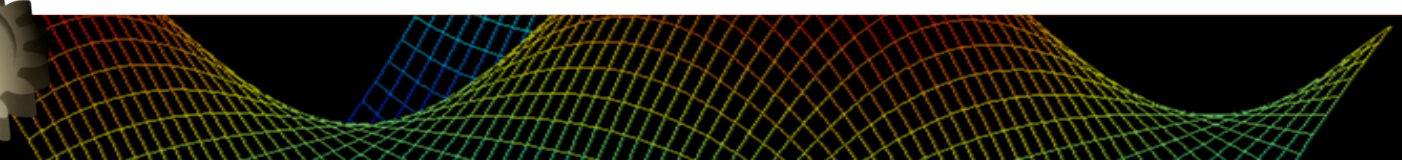
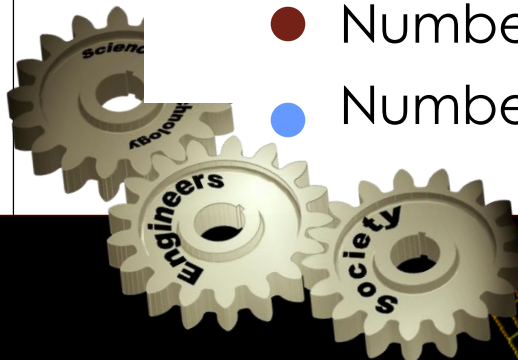
II. Strategy #1: Students

2. No. of Graduates (2010-2016)



- Number of Graduates
- Number of Honor Graduates

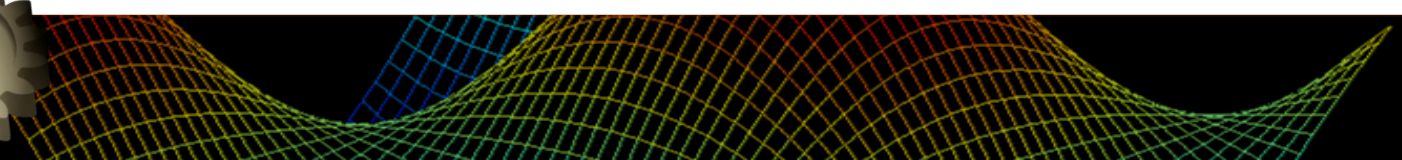
2016 – 201 honor graduates out of 748 graduates



II. Strategy #1: Students

Gawad Chanselor para sa Natatanging Mag-aaral

- ❖ Arizza Ann S. Nocum, BS IE, 2016
Raymond S. Velaso, BS ChE, 2016
- ❖ John Paul M. Sawali, BS CE, 2015
- ❖ Lancelot C. Yupingkun, BS IE, 2014
- ❖ Angella Rainbow Lim, BS ChE, 2013
- ❖ Jasper Powell Esguerra, BS ChE, 2013
- ❖ Darlene Loraine S. Que, BS ChE, 2012
- ❖ Jude Mikhail O. Aberilla, BS ChE, 2011
Nicole Yazon, BS ChE, 2011



II. Strategy #1: Students

BPI-DOST Science Awards

- ❖ John Andrew Kane Jovellana, BS ChE, 2016
Charleston Dale Ambatali, BS ECE, 2016
- ❖ Steven Matthew C. Cheng, BS ECE, 2015
- ❖ John Alexander Cruz, BS ChE, 2014

Best Project in 2014 for his research, “Design and Field Testing of a Plasma-Enhanced Optical Fiber for Hydrogen Production via Visible Light-Driven Photocatalytic Water-Splitting”

- ❖ Adrian C. Salces, BS ECE, 2014
- ❖ Angella Rainbow H. Lim, BS ChE, 2013
- ❖ Maria Katrina D. Guevara, BS ECE, 2012
Annabelle D. Chua, BS ChE, 2012
- ❖ Luke Wicent F. Sy, BS ECE, 2011



II. Strategy #1: Students

COE Recognition Rites



UP Amphitheater, 2013 ad 2014n



University of the Philippines
College of Engineering
Recognition Rites 2015
June 29, 2015 PICC



Philippine International Convention Center (PICC, 2015 and 2016)



II. Strategy #1: Students

Undergraduate Scholarships

There are 38 private scholarships (study and thesis grants) for undergraduate students.

AY 2010-2011 23 recipients

AY 2015-2016 103 recipients

New Scholarships for 2015-16

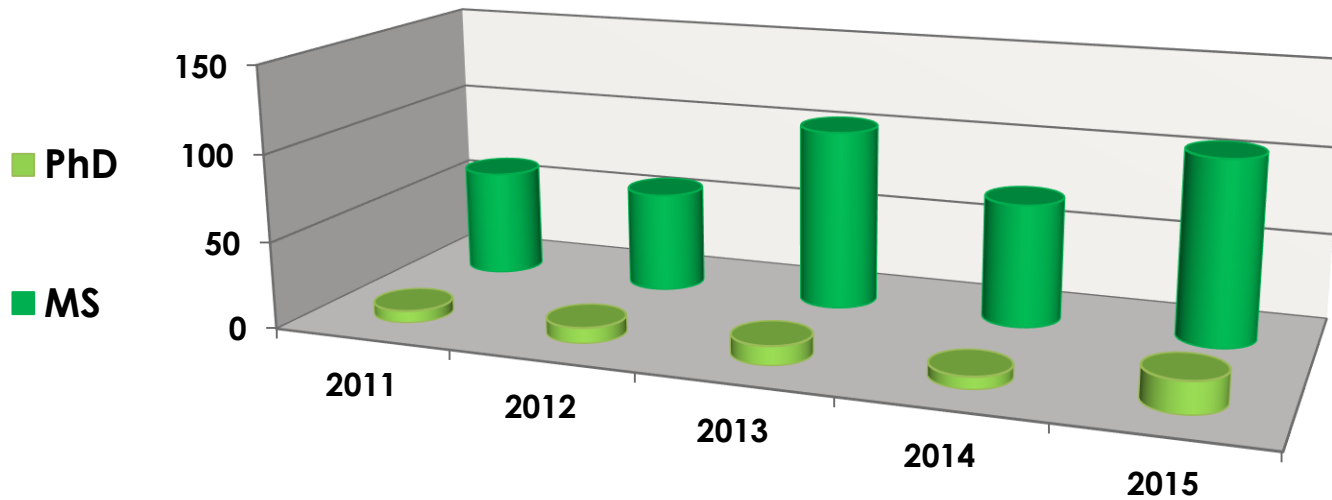
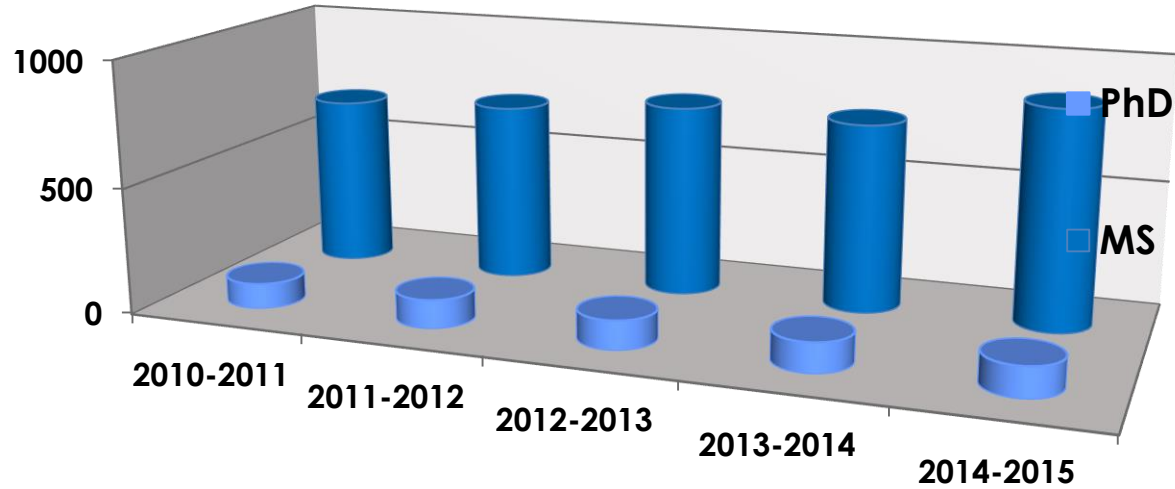
- ❖ F. Dela Cruz Thesis Support Grant
- ❖ Focus Global Study Grant
- ❖ Fujitsu Ten Solutions Study Grant
- ❖ Honorato L. Goco Thesis Support Grant
- ❖ JD Legaspi Scholarship
- ❖ Amante Aguilar Study Grant
- ❖ Cravings Food Services Inc. Study Grant
- ❖ Felicio Family Study Grant
- ❖ Leo M. Goco Thesis Support Grant
- ❖ Paglinawan Thesis Grant
- ❖ Yson Scholarship Program



II. Strategy #1: Students

3. Graduate Students Profile

No. of Enrollees



Graduation Rate

2016 – MS – 82
PhD – 11

II. Strategy #1: Students

National Graduate School of Engineering (NGSE) Recognition Rites



Celebrity Sports Plaza, 2015



UP Bahay ng Alumni, 2013-14; 2016



III. Strategy #2: Faculty and Staff

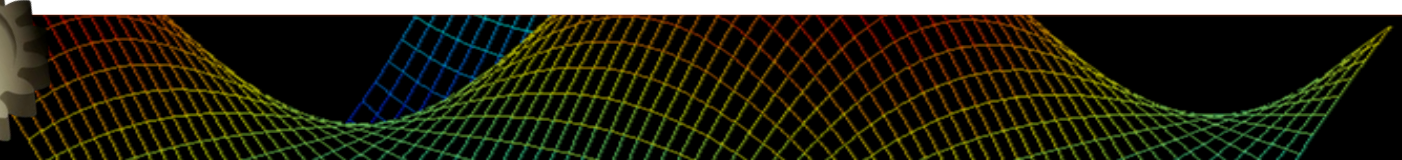
Nurture, Recruit and Retain the best quality faculty and staff

Faculty

- Increase faculty with PhD
- Increase publication output
- Increase No. of PCA/TRG/RDG

Staff

- Provide relevant training and capability building
- Promote wellness and professionalism
- Initiate Recognition and Awards System



III. Strategy #2: Faculty and Staff

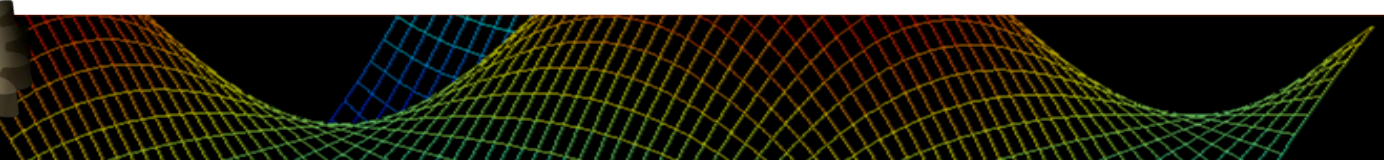
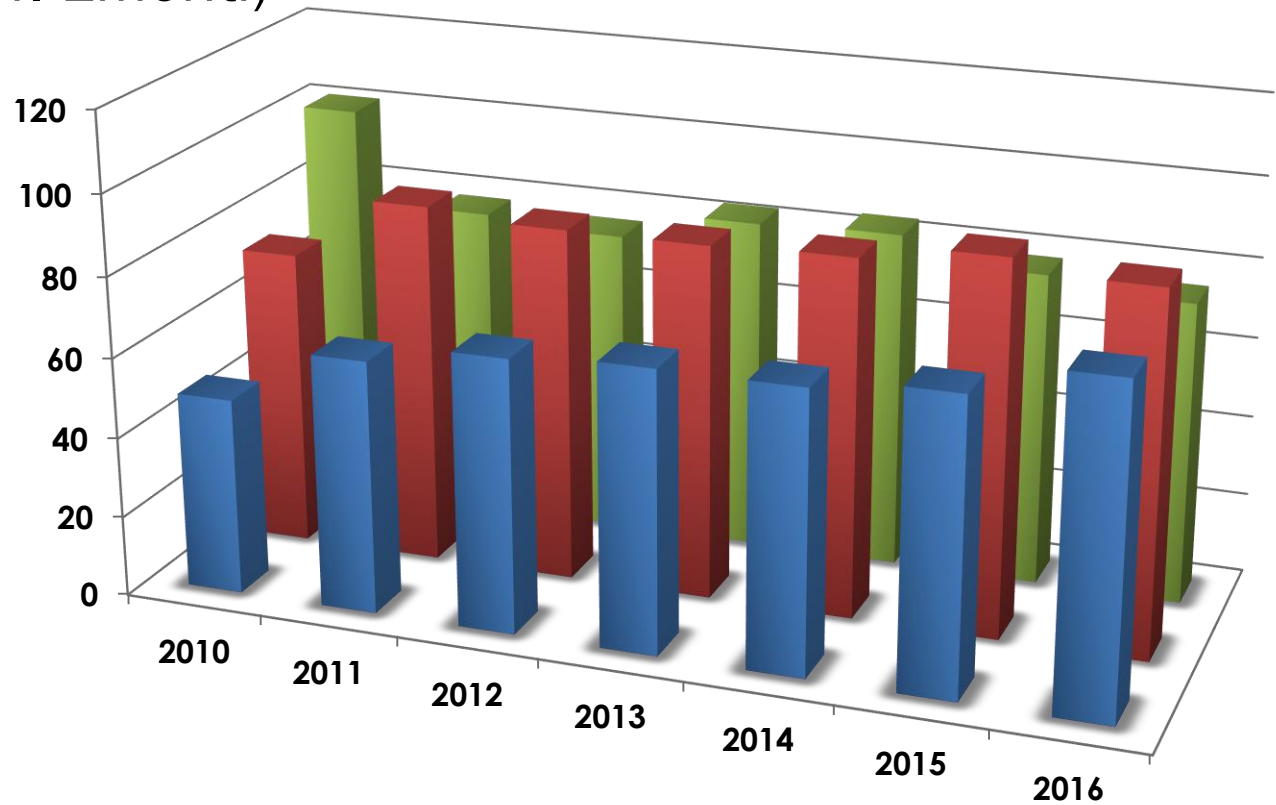
No. of Faculty Members

246 147 – Temporary

99 – Permanent

(with 2 Prof. Emeriti)

■ PhD ■ MS ■ BS



Professorial Chair Awards (PCAs) and Teaching Research Grants (TRG)

- 80 Professorial Chairs, 2010
- 16 TRGs in 2010
- 114 Professorial Chairs, 2015
- 31 TRGs in 2015

New PCAs in 2015

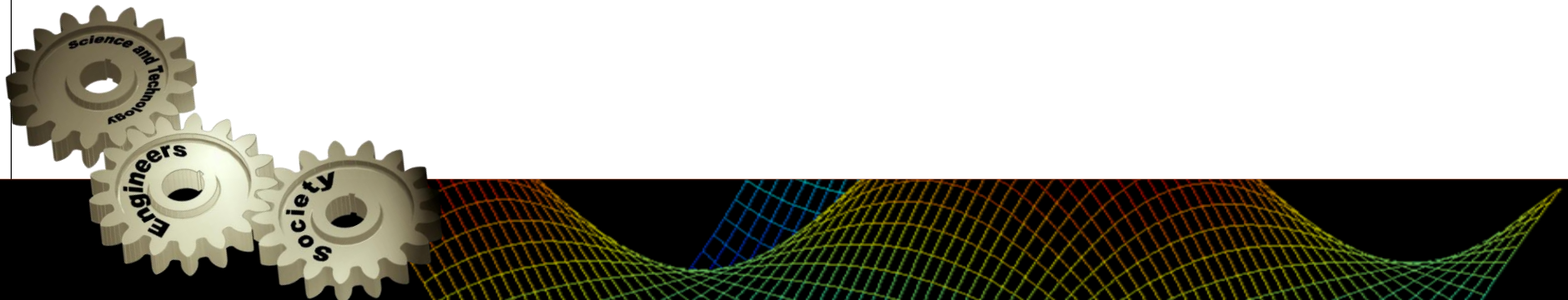
- Apolonio and Lorna Yson PC
- Atty. Raul C. Villanueva PC
- Chancellor Ernesto Tabujara PC
- Federico E. Puno PC (6)
- Hilary De Leon PC
- Honorato L. Goco PC
- Jardiolin Family PC (2)
- Jose Aliling PC
- Oscar M. Lopez PC in Envi Eng'g.
- Pedro Dumol PC
- Soy & Tess Medina PC
- Vicente & Juanita Hao Chin PC



III. Strategy #2: Faculty and Staff

Faculty and Research Conferences

- ❖ Junior Faculty Conference, Villa Cristina Resort, Antipolo, 9-11 April 2016
- ❖ “ASEAN Integration and K-12 Basic Education: New Challenges to Engineering Education,” White Rock, Subic, 26-28 March 2015
- ❖ Faculty Research Conference, Subic, Holiday Villas, 26-28 Oct. 2015
- ❖ Junior Faculty Conference, Shercon Resort, Batangas 14-15 April 2012
- ❖ “Upholding Excellence and Leadership in the Next 100 Years” May 20-21, 2011, Caliraya Resort Club, Laguna



Gawad Chanselor para sa Natatanging Guro

Dr. Henry N. Adorna, 2015

Dr. Rizalinda L. De Leon, 2015

Dr. Rowena Cristina L. Guevara, 2011

The Manila Water Foundation Prize for Engineering Excellence 2015

Dr. Joel Joseph S. Marciano

Dr. Enrico C. Paringit

Green Talents Competition 2015 organized by the Federal Ministry of Education and Research in Germany

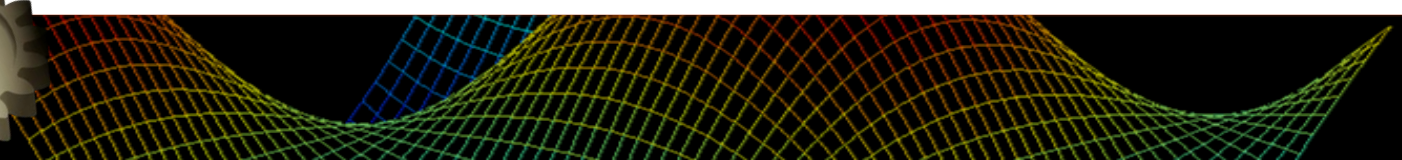
Dr. Joey D. Ocon

Academician, National Academy of Science and Technology (NAST)

Dr. Aura C. Matias, 2011

2010 Outstanding Research Award for Science and Technology from DOST & NAST

Dr. Guillermo Q. Tabios



III. Strategy #2: Faculty and Staff

Pioneering Activities

1. Basic Life Support Seminars
2. Health and Wellness Programs
 - ❖ Line Dance culminating with “Sayawan Na” program
 - ❖ Zumba
 - ❖ Eng’g Pawis Mo
3. Quarterly Fellowship for Admin Staff/REPS
4. Gabi ng Parangal para sa Kawani at REPS
5. COE Foundation Day Fiesta



III. Strategy #2: Faculty and Staff

Awards/Recognition

Gawad Chanselor sa Natatanging REPS

Ms. Sharon Ma. S. Esposito-Betan, Head Librarian,
2009 and 2015

Engr. Jojene R. Santillan, 2013

Haligi ng Engineering

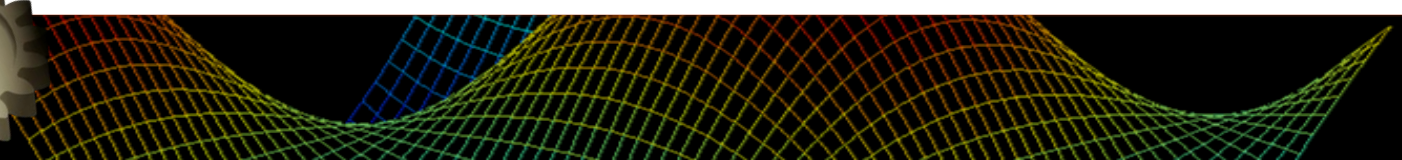
Mr. Sukarno A. Ali, 2016

Ms. Amelia M. Yanzon, 2015

Ms. Aloha D.L. Nacu, 2014

Ms. Elizabeth L. Salazar, 2013

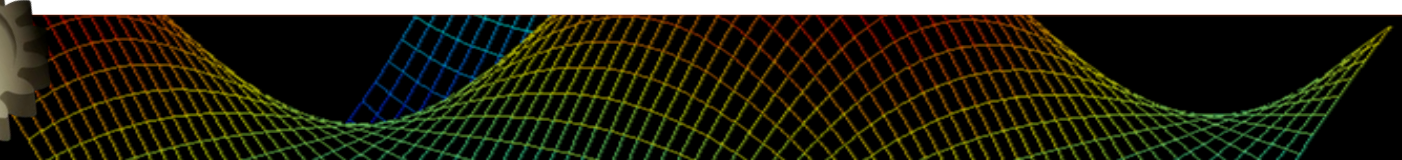
Ms. Sharon Ma. S. Esposito-Betan, 2012



IV. Strategy #3: High Impact Research

Engage in high impact research that advances knowledge and application at par with international standards of excellence

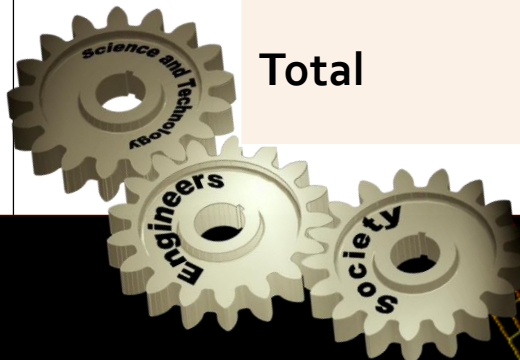
- Increase No. of R&D Engagements with DOST and other government agencies
- Focus on multi-disciplinary R&D in 5 ERTD tracks (ICT, Energy, Envi & Infra, Semicon & Electronics, Manufacturing)



IV. Strategy #3: High Impact Research

DOST-ERDT GIA Projects

Total Approved Research and Development Project (UPD)	Project Amount
Year 2011	9 projects/ P71,407,881.18
Year 2012	25 projects/P334,434,932.56
Year 2013	12 projects/P83,769,222.38
Year 2014	5 projects/P98,325,444.57
Year 2015	5 projects/P89,937,071.08
Year 2016	3 projects/113,884,687.82
Total	59 projects/791,759,239.59

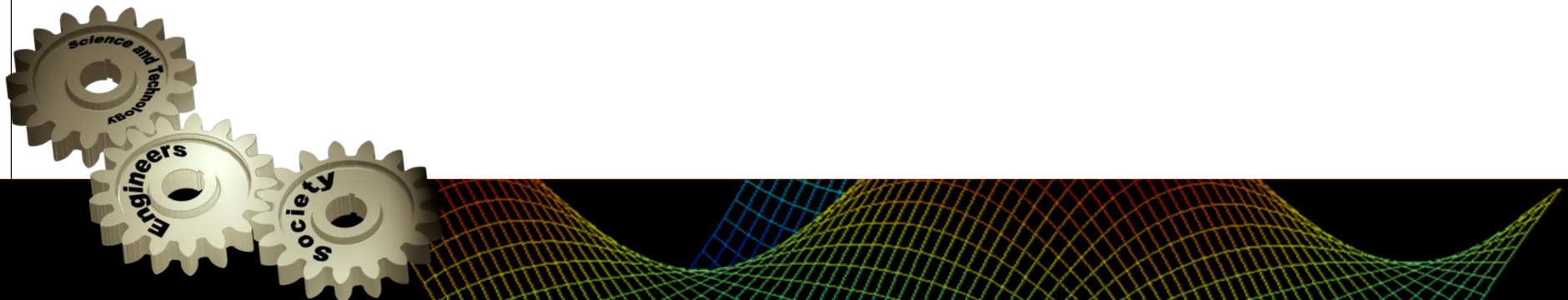


IV. Strategy #3: High Impact Research

Research and Development Centers

- NEC
- BRS
- NHRC
- NCTS
- TCAGP

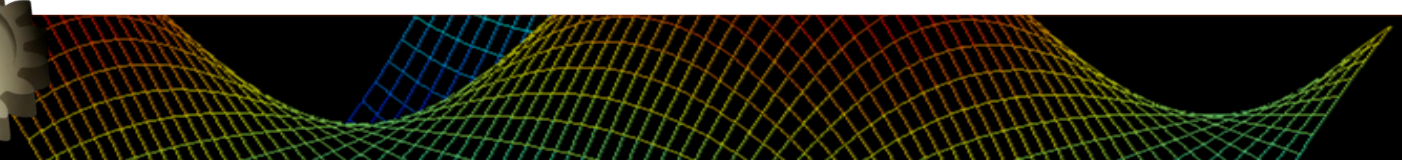
1. Disaster and Climate Change, e.g. Senslope
2. Responsible Mining
3. Microsatellite
4. LEAP (Marine)
5. Phil LiDAR



V. Strategy #4: Learning Environment

Provided high quality learning experiences and environments, harnessing students greatest potential, injecting the spirit of innovation and entrepreneurship

- Complete 6 new Buildings at the Engg Complex and Upgrade Melchor Hall and Engg Library
- Engage students in local and international competitions (academic, sports, performing arts, creative media)
- Build up Technology Entrepreneurship Program
- Establish the Engineering Fraternities United (EFU)



New Buildings

ICE Bldg.



V. Strategy #4: Learning Environment

FACILITIES UPGRADE

- ❖ Melchor Hall
 - Retiling of Hallways
 - Renovation of GE Wing
 - Faculty Lounge
 - 5th Floor Classrooms & Computer Laboratories
- ❖ Renovation of Engg Lib 1
- ❖ Landscaping & Maintenance of West Wing Lawn
- ❖ Installation of CCTV System
- ❖ Roofing of CHAC



V. Strategy #4: Learning Environment

Engineering Libraries 1 and 2



**THE LEARNING COMMONS: 2010
Outstanding Library Program of
the Year by the Philippine
Association of Academic and
Research Librarians (PAARL)**



cielo

Central Interactive Engineering Library Online, UP Diliman

V. Strategy #4: Learning Environment

Undergraduate Project Competition (UPC)

2016 UPC Winners

1st place: “*Developing a Physically Cross-linked Hydroxyethyl Cellulose Hydrogel for Wound Dressing Application*”

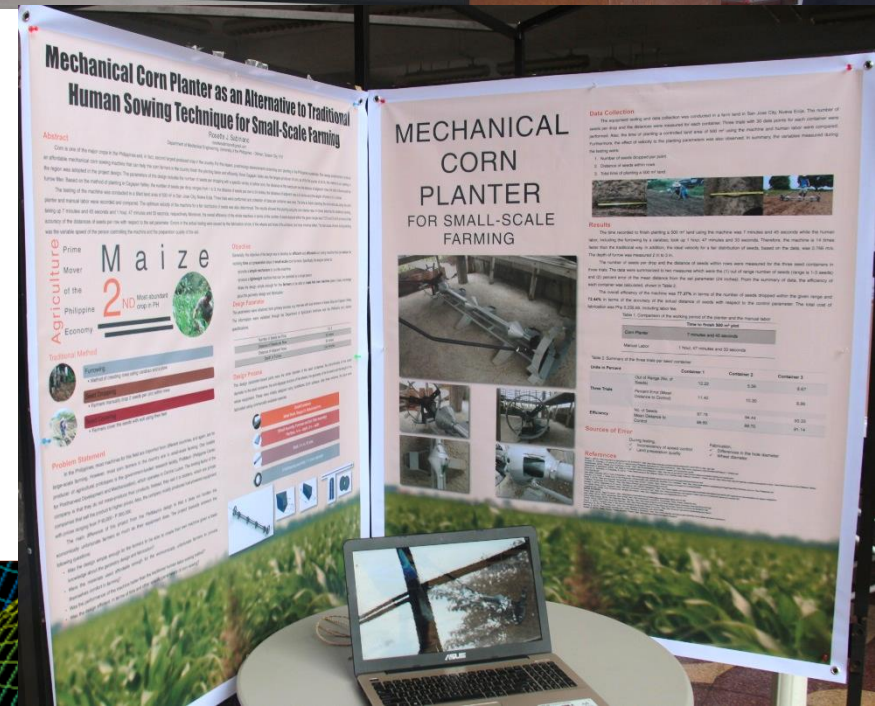
❖ Jamico Y. Jamlang; Mica Therese T. Marañon; Girro Jonn O. Rigor

2nd place: “*Mechanical Corn Planter as an Alternative to Traditional Human Sowing Technique for Small-Scale Farming*”

❖ Rosette J. Sabiniano

3rd place: “*Hydrothermal Synthesis of Hierarchical Hematite (α -Fe₂O₃) Nanostructures for Photocatalytic Degradation of Methyl Orange*”

❖ Nick Joaquin Rapadas



V. Strategy #4: Learning Environment

Undergraduate Project Competition (UPC)

2015 UPC Winners

1st place: “Heart Smart: An Adaptive Cardiovascular Exercise Training Device for Cardiac Rehabilitation Patients”

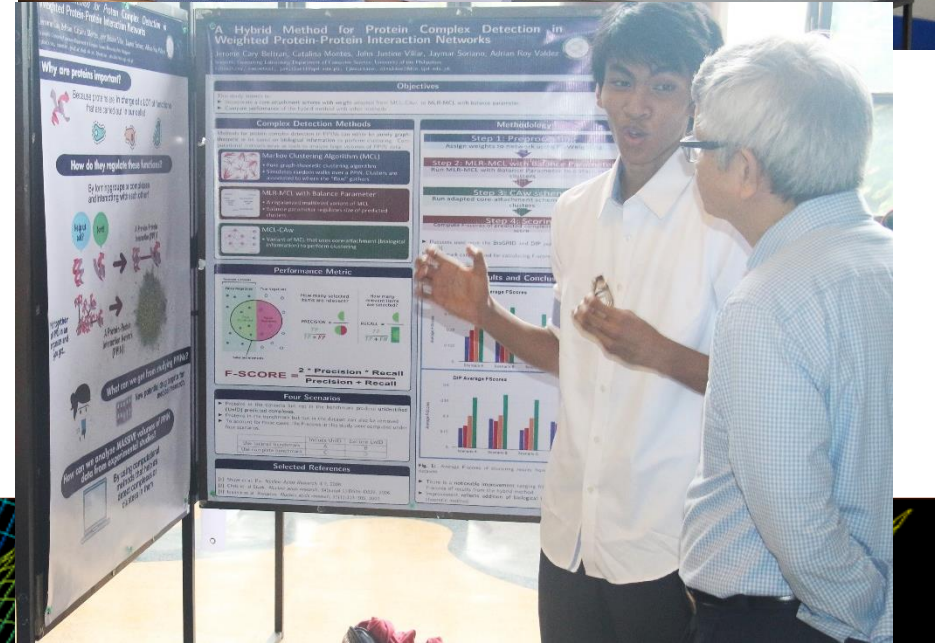
❖ Carlos Benedict J. Santos;
Gianinna Paola V. Santos

2nd place: “A Hybrid Method for Protein Complex Prediction in Weighted Protein-Protein Interaction Networks”

❖ Jerome Cary B. Beltran;
Catalina A. Montes

3rd place: “Authentication Methods Using Raspberry Pi”

❖ Matthew Kendrick D. Co; John Kiefer
S. Yap



V. Strategy #4: Learning Environment

Undergraduate Project Competition (UPC)

2014 Winners

1st place: *“Multimedia-based Monitoring of Medical of Medical Technologists Trained on Integrated Microscopy”*

❖ Catherine Angangco; Jasper Cacbay; Juan Felipe Coronel; Marven Sanchez; Noel Sison II

2nd place: *“Design, Characterization and Testing of a Plasma-Enhanced Optical Fiber Material for Visible Light-Driven Photocatalytic Applications”*

❖ Alexander John Cruz; Reynaldo L. Marquez Jr.; Florence Jane Zurbano

3rd place: *“Smart Traffic Lights, Adaptive Control in Intersection Using Cameras as Detectors”*

❖ Japhet Ballon; Rupert Calvin Sievert

2013 Winners

1st place: *“Hydrogen Production by Visible Light-Driven Photocatalytic Water-Splitting Using Plasma-enhanced Cadmium Zinc Sulfide (Cd_xZn_{1-x}S)”*

❖ Eric L. Del Rosario; Lorraine J. Doon; Paolo Nicolo C. Perez

2nd place: *“Laboratory Investigation of Gabion-Type Low Dam with Vermicast as Core Material”*

❖ Ralph John Barte; Ken Renier Carandang; Rhey Joseph Daway

3rd place: *“A Zigbee-based Airconditioning Automation and Energy Management with Direct Load Control Capabilities”*

❖ Melwin M. Oro; Noreil Christopher R. Reyes



V. Strategy #4: Learning Environment

Engineering Marketing Congress

WHO WILL BE THE NEXT EMC CHAMPION?

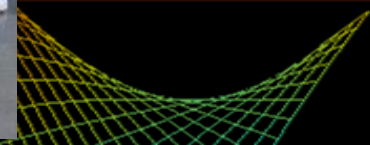
TEAM AEROTECHNIKA TEAM BIOPACK TEAM TAMAGO TEAM PRIME 1
TEAM M-A-L-K TEAM ME NA ME TEAM THE MATRICES
TEAM MEDICS TEAM XQUISITE

ENGINEERING MARKETING CONGRESS
FINALS NIGHT
September 12, 5:30PM, Engineering Theater

IN COOPERATION WITH:
John Rost Rost R
RALMIG
Sign & Logo

ENGINEERING RESEARCH AND DEVELOPMENT FSC DeG

Engineering Icon



V. Strategy #4: Learning Environment

ENGINEERING WEEK



Maskipaps

Smokers Night

Ms. Eng'g

Jammeng'g

Awitan

Indakan



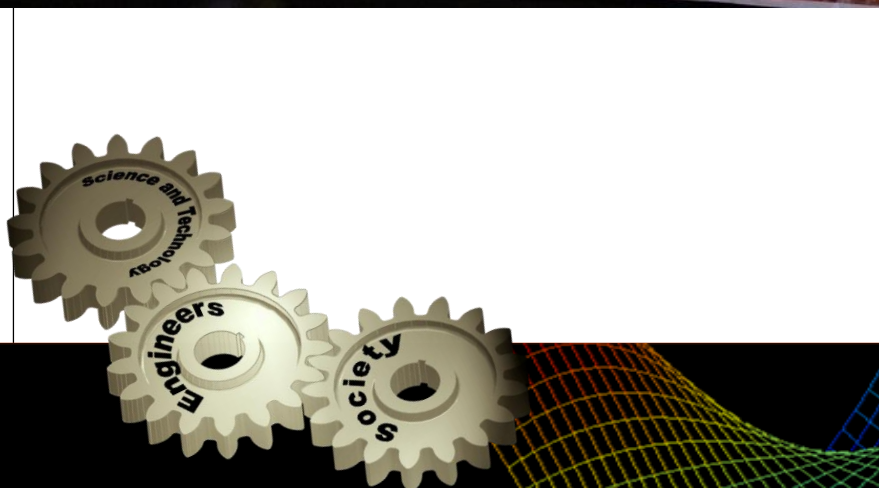
V. Strategy #4: Learning Environment

LANTERN PARADE

1st Place: Paligsahan
ng mga Parol 2015



Photo by Jannielyn Bigtas



V. Strategy #4: Learning Environment

Local and International Student Competitions

- ❖ 5th Industrial Engineering Competition ASEAN Level, 1st place, Bandung, Indonesia, January 2012
- ❖ Shell Eco-Marathon, Winner 2011 Urban Concept Diesel KL, Malaysia, July 8-10, 2011
- ❖ Bosch Kart Competition, 2nd Place
- ❖ Emerson Cup 2011, Excellence Awar
- ❖ International Earthquake Engineering Competition (IDEER 2011)
- International Earth Science Olympiad (IESO) Modena, Italy Sept. 2011



won the 2011 Urban Concept Diesel @ 59.9 km/liter in the 2nd Shell Eco-Marathon.

V. Strategy #4: Learning Environment

Engineering Fraternities United (EFU)

Beta Epsilon, Epsilon Chi, EMC², Tau Alpha



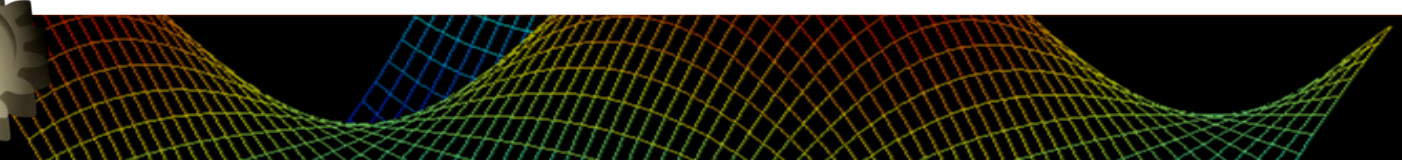
- ❖ Tree Planting, 8 Oct. 2010
- ❖ Ilang-Ilang Dorm Painting, 26 Nov. 2011
- ❖ Disaster Response Operation Training, 8-9 Sept. 2012
- ❖ Earthquake and Fire Drill, 12 Sept. 2012, Melchor Hall
- ❖ Medical Mission, 18 April 2015, Melchor Hall
- ❖ Engineering Unity Path, 30 April 2016



VI. Strategy #5: Linkages

Create and sustain committed linkages with alumni, industry partners, government and other stakeholders in support of our vision/mission

- Increase reach through DZUP “IKE”
- Set-up IGLAP to increase industry and government partnerships/engagements
- Organize the College Advisory Council and Department/Institute Advisory Councils
- Strengthen relationship with UPAE and UPERDFI



VI. Strategy #5: Linkages

“Itanong kay Engineer” (IKE)

- Aired over DZUP 1602, Mondays, 4:00-5:00 p.m., is now on its 6th year. Finalist, 2010 KBP Golden Dove Awards
- Hosts: Lea Brida Diola, Edge Angeles, Harold Aquino, Aura Matias, Ji Reyes, Marie Filio



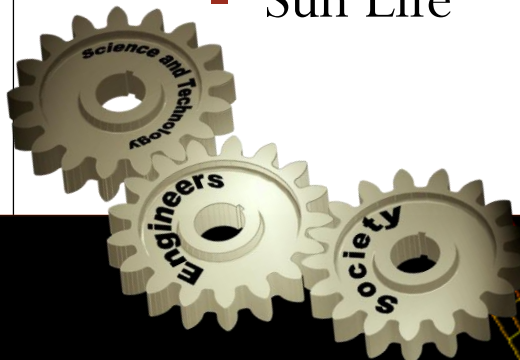


Linkage with the Academe Program (IGLAP)

Partners

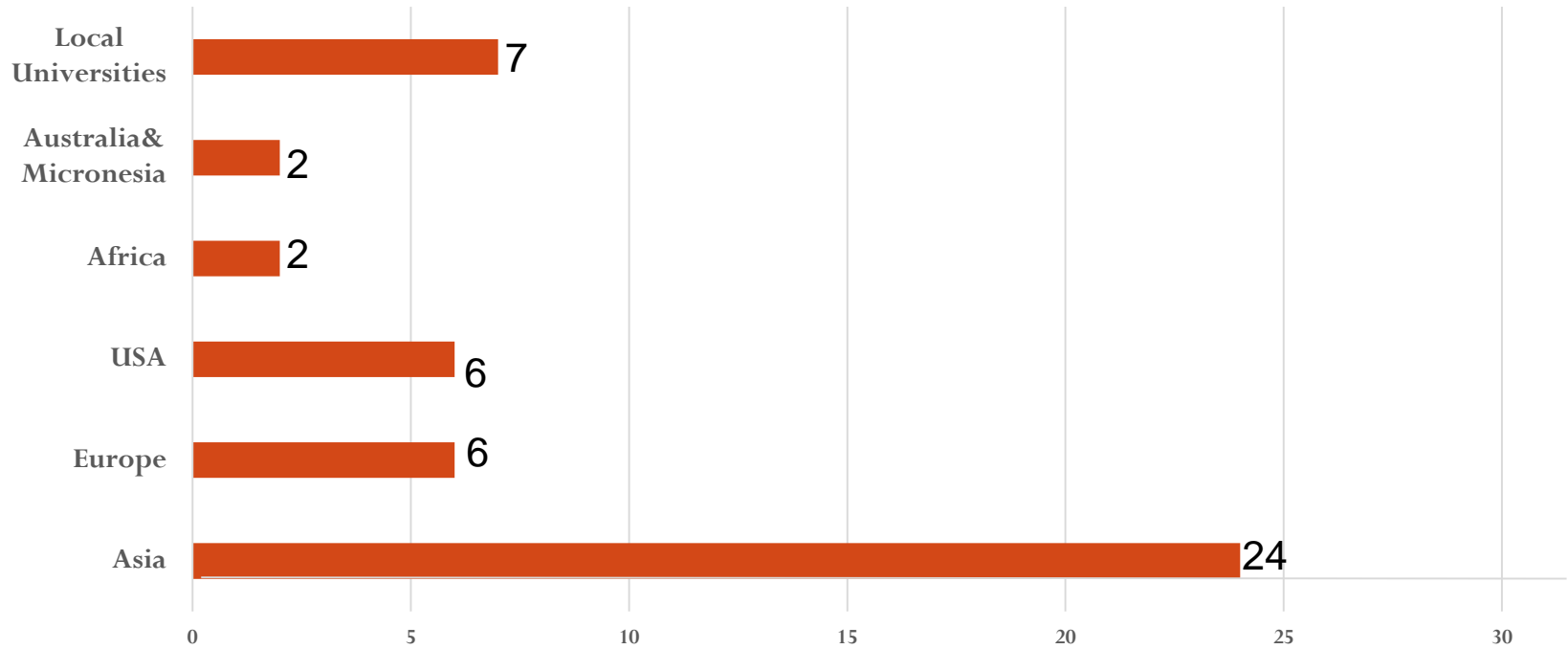
- Lafarge
- Petron
- L'Oréal
- Accenture
- Maynilad
- Metro Pacific Tollways
- IBM
- Sun Life
- Asia United Bank
- Meralco
- SunPower
- MWSS
- Analog Devices
- JGC Philippines
- Nokia Labs

Career Development Office



UNIVERSITY PARTNERSHIPS 2011-2015

UP COLLEGE OF ENGINEERING



TAIWAN TECH
National Taiwan University of Science and Technology



NANYANG TECHNOLOGICAL UNIVERSITY



THE UNIVERSITY OF QUEENSLAND
AUSTRALIA



ILLINOIS
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN



HOCHSCHULE RHEIN-WAAL
Rhine-Waal University of Applied Sciences



東京工業大学
Tokyo Institute of Technology



ມະຫາວິທະຍາໄລແຫ່ງຊາດ
National University of Laos



東京大学
THE UNIVERSITY OF TOKYO



Bauhaus-Universität Weimar



MAPUA
INSTITUTE OF TECHNOLOGY



Rowan University



NUS
National University of Singapore

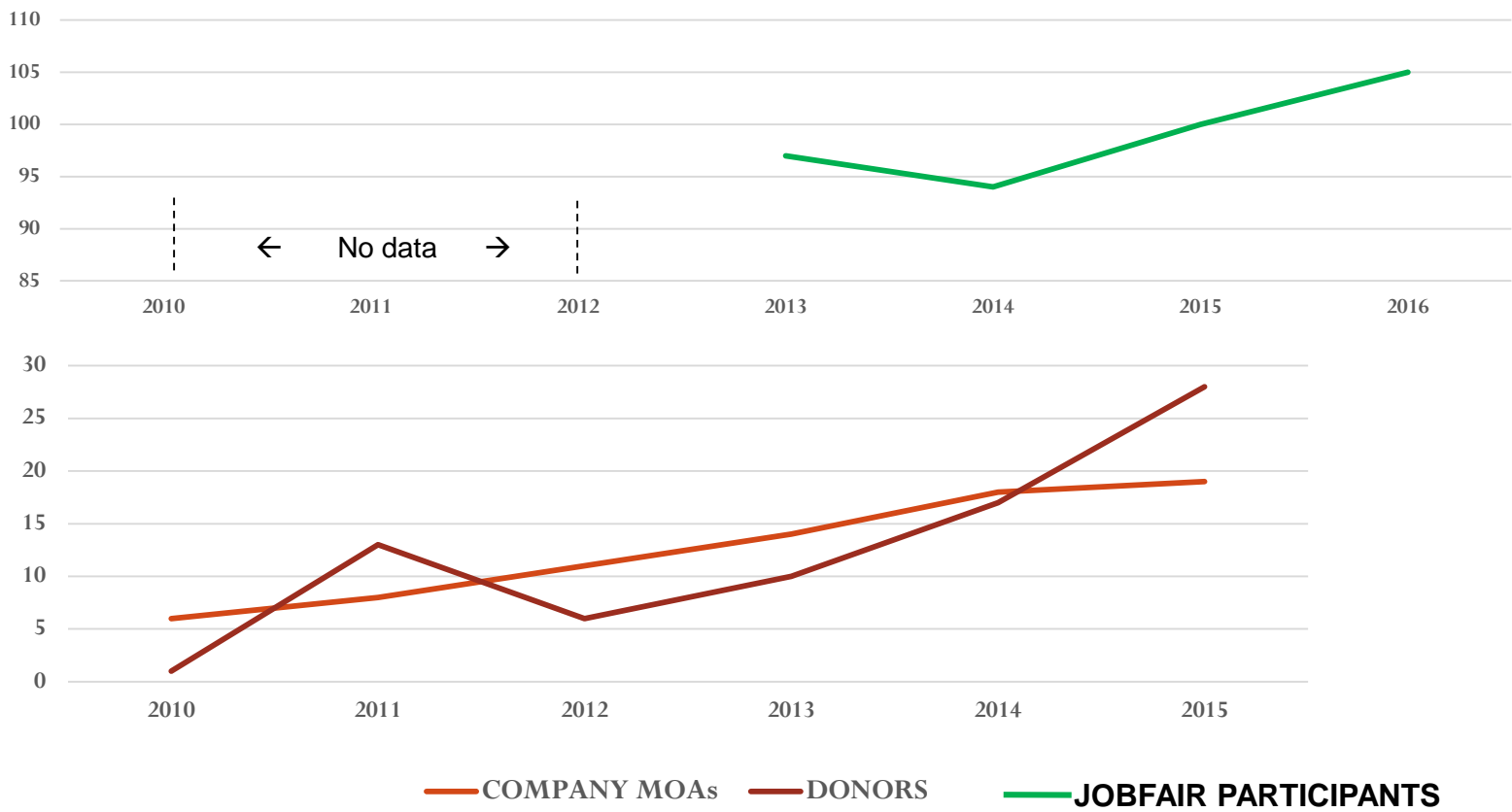


SEOUL NATIONAL UNIVERSITY



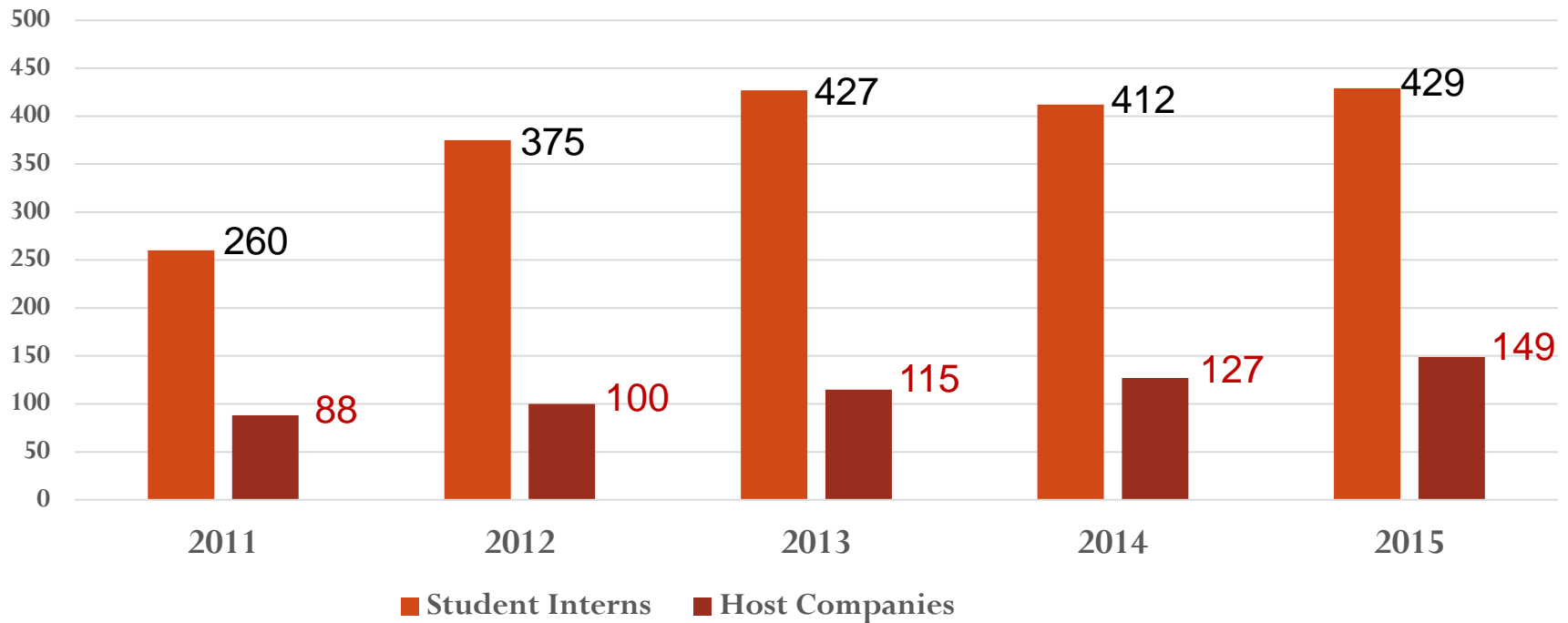
UNIVERSITY OF MALAYA

INDUSTRY ENGAGEMENTS 2010-2016



INTERNSHIP COUNT 2011-2015

UP COLLEGE OF ENGINEERING



Note: Change in Acad. Calendar 2014
(many students went on long vacation)



ISSUE: “To require or not to require” in the curriculum?

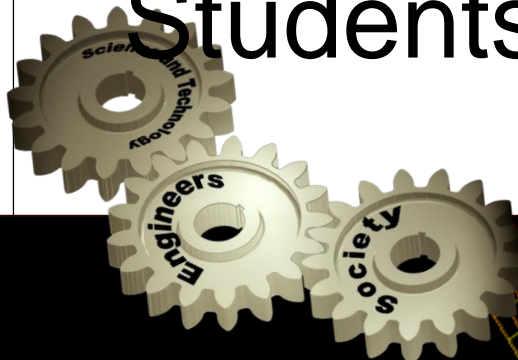
[companies might not be able to absorb all 800+ students]

VI. Strategy #5: Linkages

Career Assistance Program for Engineering Students



Students
Helping
Students



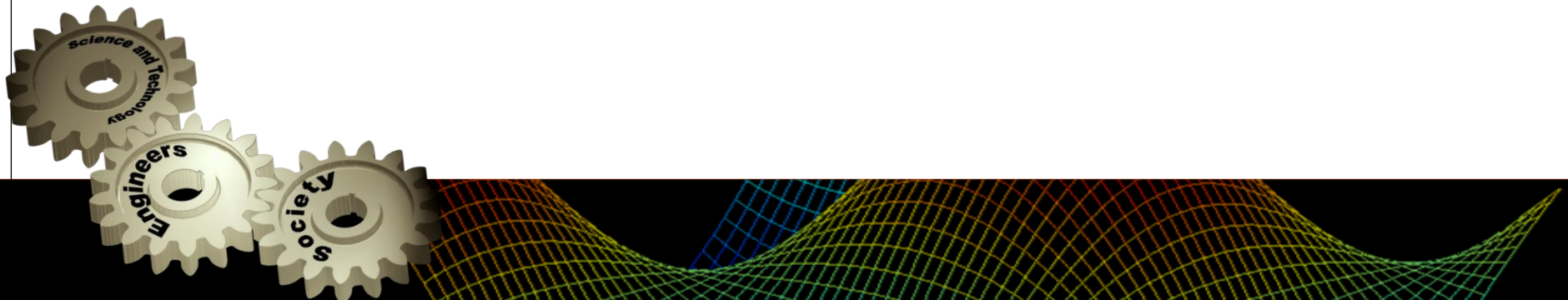
VI. Strategy #5: Linkages

The College Advisory Council (CAC)

- ❖ Created in 2015, CAC's role is to provide guidance and assistance to the College with regard to curriculum development, research directions, industry linkages and support for sources of funding.

Members:

1. Dr. Magdalena Albarracin Jr.
2. Mr. Dado Banatao
3. Engr. Filemon Berba Jr.
4. Mr. Ed Chua
5. Engr. Sid Consunji
6. Mr. Manuel Pangilinan
7. Mr. Ramon Segismundo
8. Mr. Alfonso A. Aliga Jr.
9. Dr. Aura Matias
10. Dr. Rhod Gonzalez
11. Dr. Augustus Resurreccion



VI. Strategy #5: Linkages

The UP Alumni Engineers (UPAE)

- ❖ Alumni Homecoming
- ❖ UPAE PCAs (2)
- ❖ Distinguished Alumni Lecture Series (DALs)
- ❖ Study Now Pay Later (SNPL)
 - Grants student loan of P60,000 per school year for 3rd year students
 - Grantee receives the amount until his/her fifth year, bringing the total loan to P180,000.
 - due and payable three years after the student graduates or one year after gainful employment, without interest

<u>Liberito V. Espiritu</u>	President
<u>Adrian S. Arias</u>	Vice-President Internal
<u>Nicanor S. Villaseñor III</u>	Vice-President External
<u>Elise A. Del Rosario</u>	Secretary & Executive Director
<u>Carlos Antonio M. Berba</u>	Treasurer
10 Board of Trustees	



VI. Strategy #5: Linkages

The UPERDFI

Officers

Manuel T. Frondoso	Chair, Board of Trustees
Alfonso A. Aliga Jr.	President
Lito San Juan	Vice-President for Finance & Treasurer
Aura C. Matias	Vice-President for Operations
Editha J. Atienza	Comptroller
Fortunato T. Dela Peña	Secretary & Asst. Treasurer

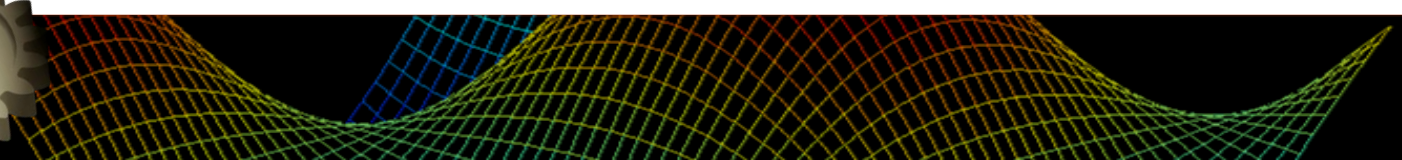
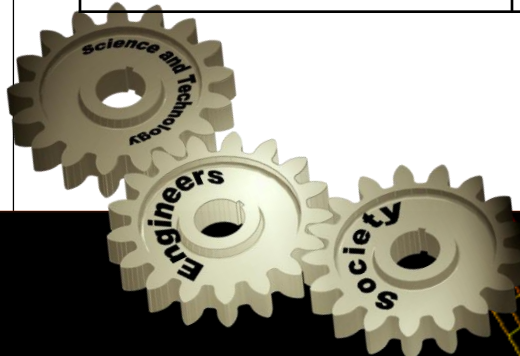
Professorial Chairs
Teaching & Research Grants

Faculty Awards
Student Awards

Undergraduate Scholarships
Study Grants
Thesis Grants

Endowed Room Donations

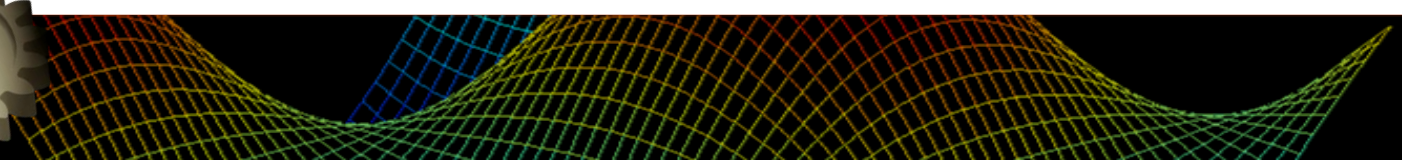
International Competition
Sponsorships



VII. Strategy 6: Operational Excellence

Adopt best practices for effective governance, operational efficiency, management of physical and human resources

- Streamline operations and implement administrative quality assurance measures
- Prepare COE for Earthquake/Fire
- Review and Revise Curriculum
- Prepare and Apply for Program Accreditation and CHED COE recognition



VII. Strategy 6: Operational Excellence

Administrative Quality Assurance

COE

- Biometric Attendance
- Wearing of ID
- Installation of CCTV System & Enhancement of Security Measures
- Inventory Management
- Waste Management
 - Proper waste disposal/ segregation
 - Power & water consumption
- Electronic Information Management System
 - Earthquake and Fire Drill

NEC

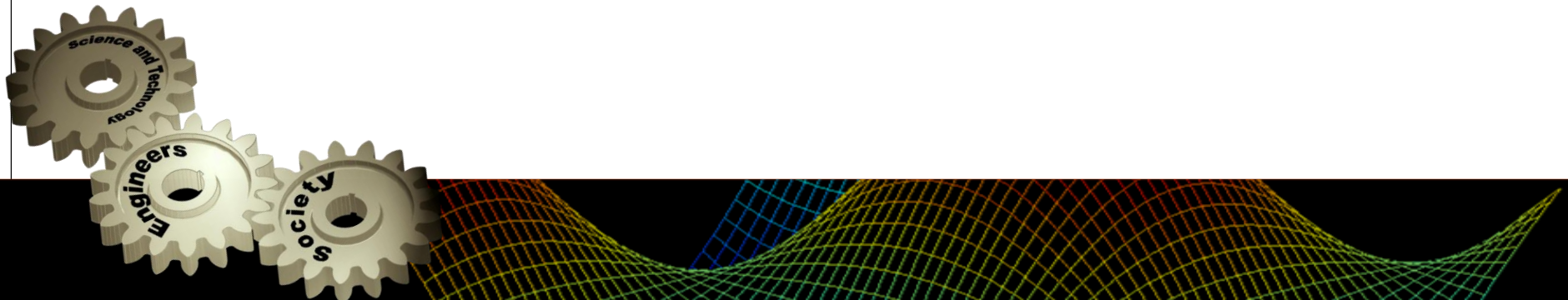
- Recipient of the Level 1 Certification from the Philippine Quality Challenge in 2012
- Recipient of the Seal of Improvement 2014
- Philippine Quality Award, 18 May 2016



VII. Strategy 6: Operational Excellence

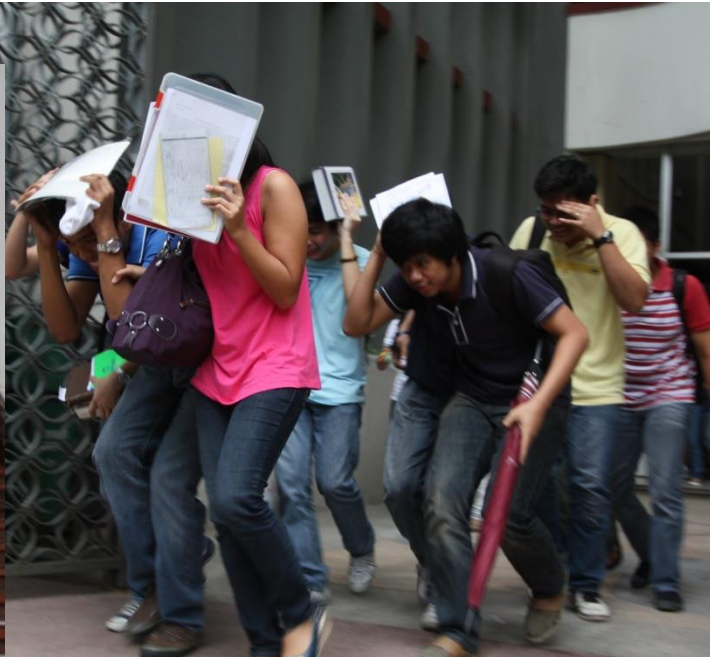
Academic Quality Assurance

- Periodic Curriculum Review
- Industry Roundtable Discussions
- Workshop on Accreditation to Washington Accord
- Creation of Industry & Government Advisory Council
- CHED Centers of Excellence: GE
- AUNSEED-QA – ICE



VII. Strategy 6: Operational Excellence

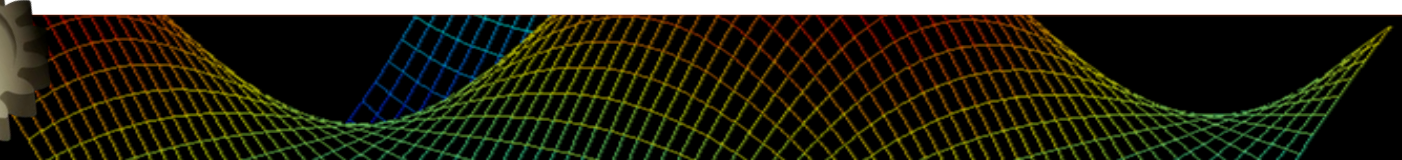
Earthquake and Fire Drills



VII. Strategy 6: Operational Excellence

Strategic Planning Seminars/Workshops

- ❖ Love for Work – January 24 and 31, 2011
- ❖ Strategic Planning Workshop, May 6-7, 2011, Ocean View Resort, Subic
- ❖ Planning Workshop, May 3-5, 2012, Maynilad Room & Baguio City
- ❖ Continuous & Never-ending Improvement (CANI) of Knowledge, Skills, and Attitudes (KSA), Oct. 30, 2012, Maynilad Room
- ❖ Planning Workshop, Quality Management Systems & the Philippine Quality Awards, May 23-25, 2013, Phiphi Resort, Morong, Bataan
- ❖ Teambuilding and Planning Workshop, May 2014, Caliraya Resort, Laguna
- ❖ Strategic Planning Workshop, July 3-4, 2015, Coral View Resort, Morong, Bataan
- ❖ UPCOE Admin. Staff/REPS Performance Review Workshop and Training, May 16, 2016, Villa Escudero Resorts, Tiaong, Quezon



Acknowledgment



Thank you.

