Women Engineers as Academic Leaders

Rowena Cristina L. Guevara University of the Philippines Diliman November 11, 2006



Top 4 Universities in the Philippines

- University of the Philippines (UP)
- De La Salle University (DLSU)
- Ateneo de Manila
- University of Sto. Tomas (UST)





Three Philippine Universities



Dean Pag-asa Gaspillo



Dean Marilyn Mabini

UP – 1908 1st woman dean: 2004-2007 (40) BS, MSEE - UP PhDEE – UMich



Running a College

- Attention to detail
- Stricter implementation of policies and procedures
- Major contribution 1: accreditation (DLSU, UST), resource generation (UP)
- Major contribution 2: improve teaching resources and methods, better graduates (competence & values)



The best thing about being a woman dean

- Prudent and respectful treatment from people (UST)
- Easier to deal with the male population (DLSU)
- Goodwill factor (UP)



Challenges of being a woman dean

- Dealing with difficult personalities (UST)
- Dealing with "macho men" (DLSU)
- Dealing with stereo-typing (UP)



Obstacles and advantages to being women engineers

- Physical limitation of women (UST)
- Men and women engineers are equals (DLSU, UP)

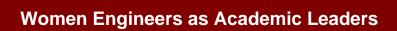




	UP		DL	SU	U	ST
	male	female	male	female	male	female
Chemical	278	358	95	87	172	220
Civil	298	184	260	57	439	147
Computer Science	223	186				
Computer	226	107	236	59		
Electrical	71	11			365	40
Elec'nics & Comms	306	113	728	158	475	152
Geodetic	123	87				
Industrial	189	314	236	181	278	300
Materials	120	170				
Metallurgical	65	49				
Mining	60	33				
Mechanical	211	47	452	99	430	18
ToTAL	2170	1659	2007	641	2159	877
	56.67%	43.33%	75.79%	24.21%	71.11%	28.89%

Faculty Statistics

	UP	UP		DLSU		UST	
	male	female	male	female	male	female	
Faculty	123	43	58	23	69	58	
% faculty	74.10%	25.90%	71.60%	28.40%	54.33%	45.67%	
Chairs	6	3	3	3	4	3	
% chairs	66.67%	33.33%	50.00%	50.00%	57.14%	42.86%	







Mission



Engineers and other technical men play a vital role in industrialization. Engineering education should, therefore, be attuned to the needs of technological development. Being the primary source of quality manpower, it is the mission of the UP College of Engineering to provide industry and government with trained engineers in all branches of profession.

University of the Philippines COLLEGE OF ENGINEERING



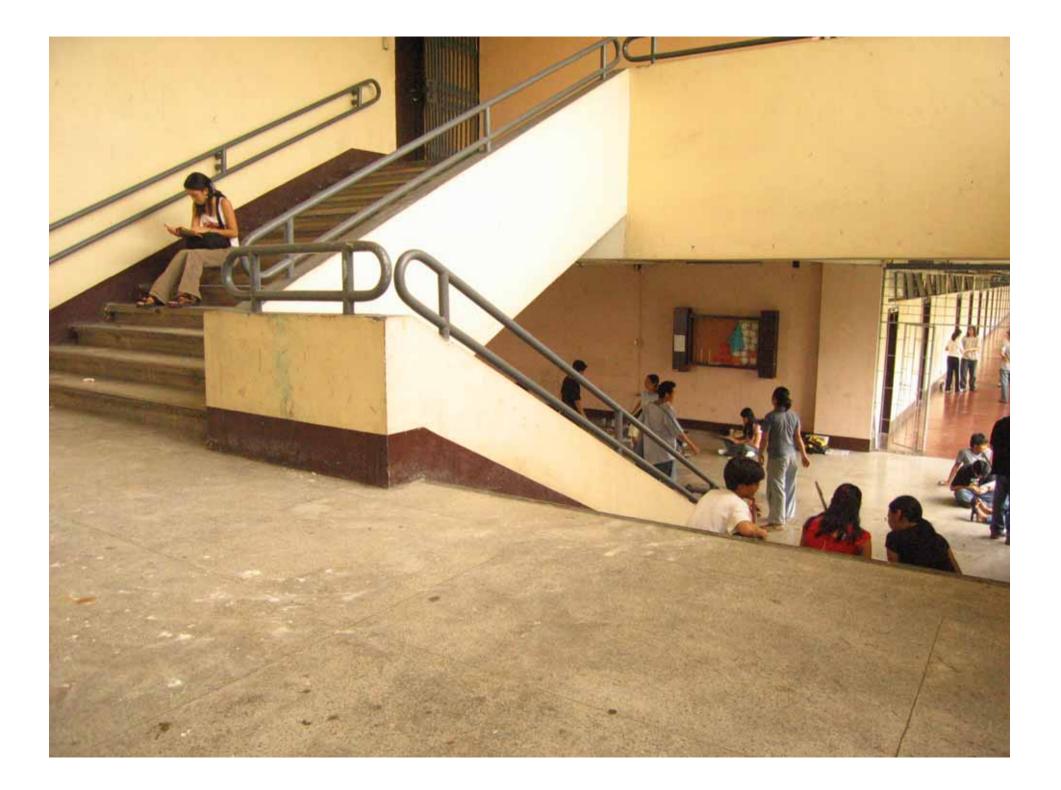
www.engg.upd.edu.ph

Highest Passing Rate in ALL Engineering Board Exams



CHED Centers of Excellence & Centers of Development





	B		
	11.	210.	10
Sex	Μ	F	Total
5th	38	78	116
4th	34	62	96
3rd	23	59	82
2nd	46	68	114
1st	48	47	95
Total	189	314	503
	38%	62%	

	BS		
5		12	-
Sex	Μ	F	Total
5th	35	67	102
4th	57	66	123
3rd	49	81	130
2nd	72	73	145
1st	65	71	136
Total	278	358	636
	٨٢%	56%	

U /O

	BSN	BSMatE		
	- T	(deed)		
Sex	Μ	Ľ	Total	
5th	19	29	48	
4th	41	62	103	
3rd	14	19	33	
2nd	14	26	40	
1st	32	34	66	
Total	120	170	290	
	41%	59%		

	BS	BSCS		
	1	1	J.	
Sex	M	F	Total	
5th	X	X	x	
4th	54	33	87	
3rd	30	28	58	
2nd	58	62	120	
1st	81	63	144	
Total	223	186	409	
	55%	45%		

	BSN	letE		
Sex	Μ	F	Total	
5th	13	8	21	
4th	16	16	32	
3rd	5	2	7	
2nd	17	8	25	
1st	14	15	29	
Total	65	49	114	
57% 43%				

	BS		
Sex	Μ	F	Total
5th	64	44	108
4th	19	14	33
3rd	6	8	14
2nd	13	6	19
1st	21	15	36
Total	123	87	210
59% 41%			

	BSEM		
Sex	Μ	F	Total
5th	19	14	33
4th	16	2	18
3rd	8	5	13
2nd	16	10	26
1st	- 1	2	3
Total	60	33	93
65% 35%			

	BS	BSCoE		
Sex	Μ	F	Total	
5th	36	10	46	
4th	40	17	57	
3rd	26	19	45	
2nd	51	30	81	
1st	73	31	104	
Total	226	107	333	
12.46	68%	32%		

	Non-Major				
Sex	Μ	F	Total		
5th	8	3	11		
4th	20	9	29		
3rd	22	8	30		
2nd	7	7	14		
1st	0	0	0		
Total	57	27	84		
	68% 32%				

	BS	ECE			
		PAN-			
Sex	M	F	Total		
5th	53	15	68		
4th	52	26	78		
3rd	66	19	85		
2nd	71	25	96		
1st	64	28	92		
Total	306	113	419		
73% 27%					

	BS		
			M.
Sex	М	F	Total
5th	11	3	14
4th	36	5	41
3rd	43	9	52
2nd	59	13	72
1st	62	17	79
Total	211	47	258

BSEE		
	7	E WAIIN
Μ	F	Total
12	4	16
9	2	11
7	1	8
20	2	22
23	2	25
71	11	82
	M 12 9 7 20 23	M F 12 4 9 2 7 1 20 2 23 2

87% 13%

Faculty Statistics

Department	male	female	% female
ChE	13	6	31.58%
CE CS	14	2	12.50%
	11	8	42.11%
ES	18	2	10.00%
EEE	26	6	18.75%
GE	12	2	14.29%
IE	8	7	46.67%
ME	12	1	7.69%
MMM	9	9	50.00%
TOTAL	123	43	25.90%

BPI Science Awardees

UNESCO Mainstreaming in Energy Policy and Technology

Indonesia, 2006

Best Team: Charlene Tan, Larisse Garcia, Dr. Tonette Tanchuling

Consistent Winner in the Microcontroller Design Competition



United Nations Millenium Development Goals

Goals to be met by 191 UN Member States by 2015

Eradicating Extreme Poverty and hunger Ensure Environmental Sustainability





WINNER: Mondialogo Engineering Award

Pythoremediation Project MITIGATE LEACHATE USING PLANTS

A Sustainable Approach to the Control and Remediation of Municipal Solid Waste Leachate at the Payatas Disposal Facility in Metro Manila

A collaboration between UP College of Engineering, National University of Singapore and QC Local Government through Payatas Operations Group and IPM Environmental Services, Inc.





MARKETING CONGRESS 1ST UP DILIMAN COLLEGE OF ENGINEERING

MARKETING COMPETITION 2005

16 Sept. 4 p.m. Engineering Theatre









The Online Resumé Repository of the College of Engineering



ORANGE will provide all UP Engineering students and alumni a FREE web account where they can post and update their resumé. ORANGE Objectives:

To provide Engineering students with better career opportunities

- To establish better linkages with alumni and industry partners
- To assist companies in selecting quality employees





Engineering Student Council in August 23, 2005 Fundraising Cocktails at Manila Polo Club

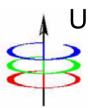




Public Forum on Competitive & Affordable Power Rates



April 13, 2005



U.P. Electrical and Electronics Engineers Alumni Association Department of Electrical and Electronics Engineering College of Engineering

Between the Philippines Excession of the Philippines



Step 1: Start Right





Step 2: There can only be 1

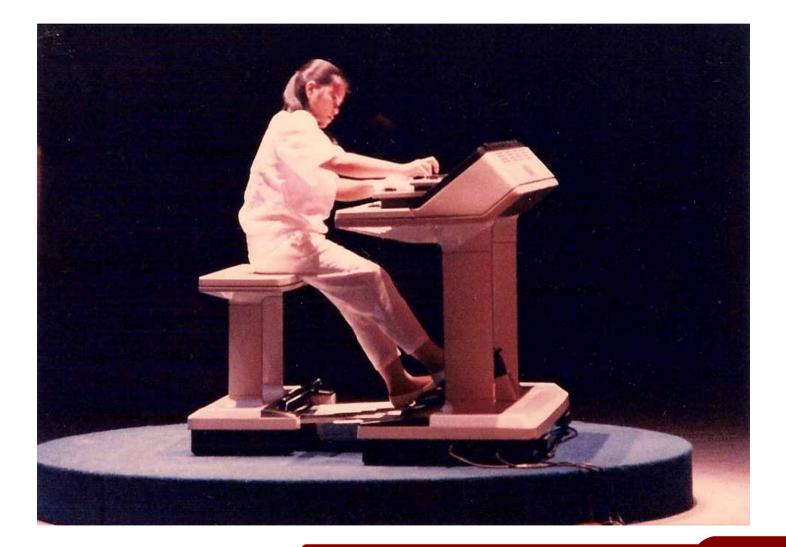








Step 2: There can only be 1





Step 3: Good friends







Step 4: Recognize Turning Points





DSP Lab – established in 1990









Real time implementation of low bit rate wideband speech coders on ADSP21065L

Amadea Paula Q. Unisa

Rowena Cristina L. Guevara, Ph.D. Adviser





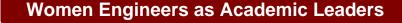
AN ACCURATE KARAOKE GRADER USING

MODAL DISTRIBUTION ANALYSIS

DANIEL A. MUÑOZ

BS Electronics and Communications Engineering

Dr. Rowena Cristina L. Guevara Adviser







A Comparative Analysis of Wavelet-Based Coding Algorithms in the H.264 Framework

Juan Paolo Asis Digital Signal Processing Laboratory Adviser: Dr. Rowena Cristina L. Guevara



Leadership 1: Broken Windows Theory

Wilson and Kelling's (1982) broken windows theory, which in some circles has become a classic foundational document for community policing, referred to physical signs that an area was uncared for. Abandoned buildings and automobiles, the accumulation of trash and litter, broken windows and lights, and graffiti or profanity (signs of crime or incivilities) all invite criminal behavior.

Before



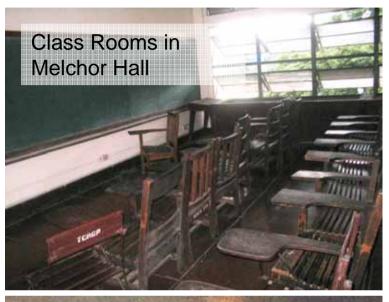








Before





New Engineering Library & Computer Science Building



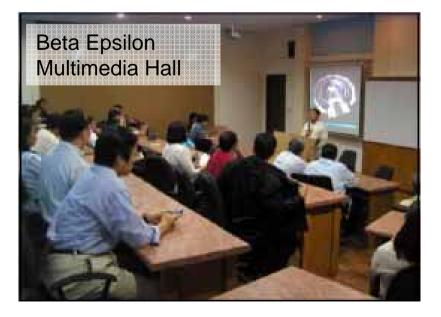




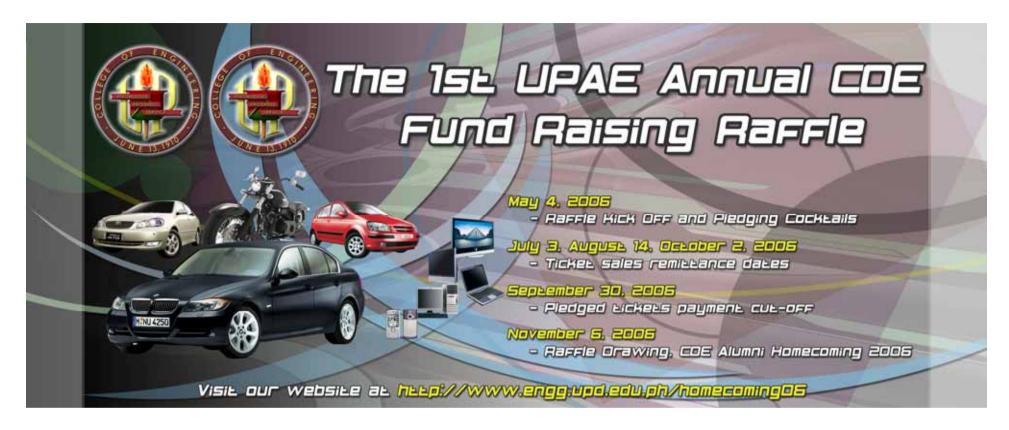
After











For more Information:

Visit <u>http://www.engg.upd.edu.ph/homecoming2006</u> or UPAE Office at the National Engineering Center Rm 207 Call (632) 436-1386 or (632) 922-4714 look for Beth or Arlene Email: <u>upae@engg.upd.edu.ph</u> or <u>dean@engg.upd.edu.ph</u>



After



 New Engineering Library &

 Computer Science Building

 New Class Rooms in Melchor Hall

Leadership 2: The Art of War (Sun Tzu)

Walk in the path defined by rule, and accommodate yourself to the enemy until you can fight a decisive battle

The skillful general conducts his army just as though he were leading a single man by the hand





The Art of War (Sun Tzu): 5 Essentials for victory

- He will win who knows when to fight and when not to fight
- He will win who knows how to handle both superior and inferior forces.
- He will win whose army is animated by the same spirit throughout all its ranks
- He will win who, prepared himself, waits to take the enemy unprepared.
- He will win who has military capacity and is not interfered with by the sovereign



Leadership 3: Have fun, too!





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