Corporate Partners

Basic Membership Benefits

Corporate Partner membership is an excellent way to engage your company with the entire Bourns College of Engineering and complement any existing relationships you may already have with individual faculty members. In developing partnerships, BCOE works to address the unique interests of each individual company, whether those interests are to increase company visibility; access world-class faculty, students, and alumni; or collaborate on targeted research projects. Corporate Partners membership also provides UCR students and alumni with valuable networking opportunities. Basic benefits include:

1. Networking with fellow executives & key faculty, including an annual Corporate Partners lunch meeting and a special reception during BCOE's TechHorizons
2. Advance information concerning TechHorizons and other annual campus events
3. Priority campus recruiting for permanent employment, internships & summer jobs
4. Opportunities to Interact with student organizations and access to the college's Director of Professional Development
5. Hosting students and faculty at your company's facility
6. Personal tours & insider's access to UCR's state-of-the-art laboratories
7. Up-to-date information via BCOE newsletters & the annual report
8. VIP invitations to lectures, seminars, and conferences where innovative research is presented by world experts
9. Introductions to faculty : Sponsor research, license technology, pursue joint funding
10. Visibility on BCOE website
11. On-campus parking permit
12. Library privileges
13. Recognition in Chancellor's Associates programs

Annual Membership Levels

a. $50,000 – Platinum

a. A seat on the department's or center's Advisory Council
b. Named graduate fellowship in area of special interest
c. Direct connection to department 's or center's Chair or Director
d. Company Day at UCR: Mini-symposium with participants from company and selected faculty members
e. Opportunity to participate in the undergraduate senior-year project program, in which the member company can propose year-long projects for a team of 3-4 students to work on under the supervision of a faculty advisor
f. Plus all the following benefits:

b. **$25,000 – Gold**
    a. Facilitated opportunities for corporate employees to gain experience in research labs
    b. Quarterly research reports
    c. Department researchers' participation on company's Technical Advisory Committees
    d. Informational meetings between company's technical staff and faculty
    e. Advance knowledge of emerging technologies and specific advances
    f. Opportunity to sponsor research programs, summer internships, or undergraduate and graduate course projects
    g. *Plus all the following benefits:*

c. **$10,000 - Silver**
    a. Access to the latest academic research developments
    b. Specialized consulting and testing services available
    c. Opportunities to co-jointly pursue valuable external funding such as UC Discovery Grants, Micro Grants, and other government-sponsored grants based on faculty-industry collaborations
    d. Additional benefits can be added to meet company objectives

d. **Bronze - $5,000**
    a. Ability to connect with a specific school or center as an Affiliate, eg: Corporate Partner, CE-CERT Affiliate; Corporate Partner, Electrical Engineering Affiliate
    b. Facilitated access to faculty, senior administrators, researchers & staff
    c. Invitation to an annual college, department or center meeting
    d. Opportunities for employees' education and training
    e. Invitation to department or center Recruitment Day and Student Poster Day
    f. On-site interviewing
    g. Subscription to an affiliate school's or center's publications
    h. Speaking opportunities on campus as a guest lecturer or for student societies
    i. Recognition as a Table Sponsor at TechHorizons conference or $1,000 credit toward a higher level sponsorship
    j. Access to selected BCOE facilities

e. **Corporate Partner Member - $2,500**
    a. All of the Basic Membership benefits

f. **Start-up Corporate Partner - $1,000** – Available for start-up companies < 5 yrs. old
    a. All of the Basic Membership benefits

g. **Corporate Partner Emerging Leader –** for UCR students and alumni ages 18-25 who will be the leaders in tomorrow's growth and innovation. Emerging Leader membership provides free access to networking, programs, events, and other Corporate Partner initiatives, including an

annual luncheon. Members are given the tools, resources, and connections to help further themselves as valued members of the Inland Empire & Southern California engineering community.

a. **Student -** $10
b. **Alumni -** $50

h. **BCOE Faculty Conduit** - Faculty recognition for those helping connect BCOE with Corporate Partners. Faculty will be recognized at the annual luncheon, on the Corporate Partners website and in the BCOE newsletter.

DRAFT
4/18/08

BCoE Unrestricted Corporate Donations Sharing Policy

General Policy:

The "BCoE Unrestricted Donations Sharing Policy" is intended to recognize the important role that faculty have in the generation of unrestricted corporate gifts and donations to BCoE, and allows for the sharing of a portion of those gifts with departments and or faculty research programs that are instrumental in arranging for those gifts. When departments and/or faculty have assisted substantially with successful solicitation of such an unrestricted gift to the College of $1,000 or more, a portion of the gift, net of the campus gift fee, will be shared with the department, faculty research program, or both, according to the table shown in Exhibit A, attached.

Procedure:

When a department or faculty member has provided assistance to the College's advancement staff that proves to be instrumental in arranging for an unrestricted gift to the College (most often a Corporate Partnership), the department and/or faculty research program will share in the proceeds from the gift. The role of the department and/or faculty member may include (but is not limited to) such assistance as identification of names of possible donors, visits with prospective donors, and attendance at fund raising events.

If any of these activities results in an unrestricted cash donation to BCoE, the department and/or faculty involved may request to share in the donation proceeds. Any such request will be routed to the Dean through BCoE's Assistant Dean for Development. The request will describe the nature of the contribution of the faculty member to the process that resulted in the donation. Based on this description, the Assistant Dean for Development will make a recommendation to the Dean on the importance of the department and/or faculty member's contribution. If approved, the unrestricted donation will be shared with the department and/or faculty research program according to the table shown in Exhibit A.

Donation sharing funds allocated to faculty can be used for any purpose that is consistent with UCR policies and procedures. These purposes include faculty summer salary, graduate student support, travel, equipment and supplies, and seed projects.

Exhibit A - BCoE Unrestricted Donations Sharing Policy
Gift Sharing Table - Corporate Partner Program

Dev. Officers

Amount	Level	Dean's Office	Department	Faculty Laboratory
$50,000	Platinum	$47,500		
$25,000	Gold	$23,750		
$10,000	Silver	$9,500		
$5,000	Bronze	$4,750		
$2,500	Corporate Member	$2,375		
$1,000	Emerging Leaders	$950		

If Dev. Officers plus Dept. Chair

Amount	Level	Dean's Office	Department	Faculty Laboratory
$50,000	Platinum	$35,625	$11,875	
$25,000	Gold	$16,625	$7,125	
$10,000	Silver	$7,125	$2,375	
$5,000	Bronze	$3,563	$1,188	
$2,500	Corporate Member	$1,663	$713	
$1,000	Emerging Leaders	$475	$475	

If Dev. Officers plus Faculty

Amount	Level	Dean's Office	Department	Faculty Laboratory
$50,000	Platinum	$35,625		$11,875
$25,000	Gold	$16,625		$7,125
$10,000	Silver	$7,125		$2,375
$5,000	Bronze	$3,563		$1,188
$2,500	Corporate Member	$1,663		$713
$1,000	Emerging Leaders	$475		$475

If Dev. Officers plus Dept. + Faculty

Amount	Level	Dean's Office	Department	Faculty Laboratory
$50,000	Platinum	$35,625	$5,938	$5,938
$25,000	Gold	$16,625	$3,563	$3,563
$10,000	Silver	$7,125	$1,188	$1,188
$5,000	Bronze	$3,563	$594	$594
$2,500	Corporate Member	$1,663	$356	$356
$1,000	Emerging Leaders	$475	$238	$238

Notes: (1) all gifts will have the standard 5% gift tax applied prior to distribution to the College, Department, or Faculty Research Program; (2) the same formula will be used to share unrestricted gifts that are not a part of the Corporate Partners Program applying the level closest to the amount of the actual gift (e.g., a gift of $2,750 would be shared with the faculty using the same figures for the $2,500 level; and (3) if more than two faculty members are involved, then they will share the "Faculty Laboratory" portion equally.

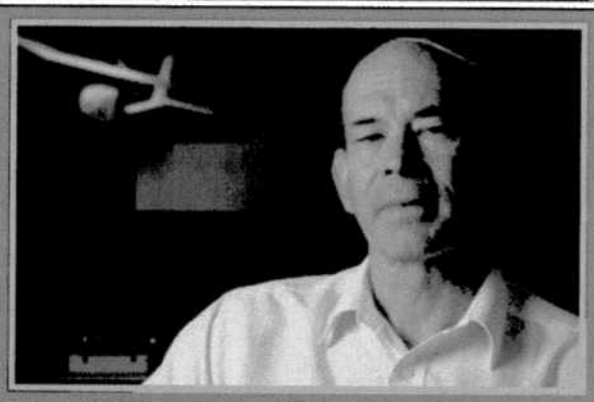
BOURNS COLLEGE OF ENGINEERING

Distinguished Lecturer Series

Wally Rippel

Bourns College of Engineering
Distinguished Lecturer

April 23, 2008—3 p.m.
EBU II 205/206

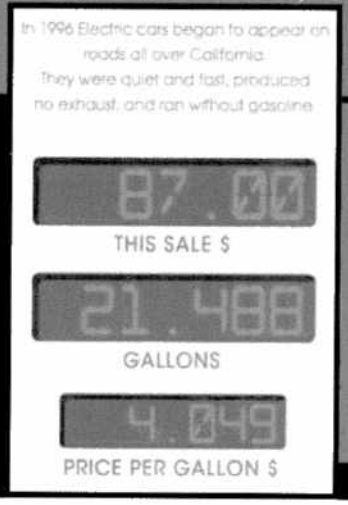


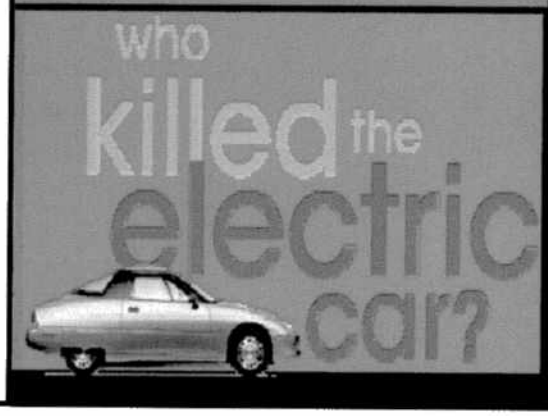
Making What's Left into What's Right

ABSTRACT: Each second, our planet receives 49 billion kilowatt-hours worth of energy in the form of sunlight. During the last three hundred million years, about eighteen hours worth of this energy has been stored within the Earth's crust in the form of oil. Half of that energy has now been used and the remaining half will be depleted within two decades. In that 97% of transportation is powered by oil, we now face the engineering challenge of providing an alternative. While natural gas and coal are options, the issue of global warming may prevent the use of these fuels where sequestration is not possible. Nuclear energy is not an option for automotive applications. What's left is what may be right – wind and solar – provided energy storage can be economically achieved.

BIOGRAPHY: Wally Rippel has been the Principal Power Electronics Engineer at AeroVironment (R&D) since 1992, where he has invented a variety of things including an integrated charger-inverter for electric and hybrid applications, and designed an advanced hub motor for electric vehicles. Rippel has a B.S. in Physics from Caltech and a M.S. in Electrical Engineering from Cornell University. Previously he has worked as a part time consultant for AeroVironment, where he helped write the proposal for the Impact EV project and worked on the Impact's induction motor and power electronics after AeroVironment received a contract from GM. Rippel has received thirteen New Technology Awards from NASA, has been published over twenty times and holds twenty three US patents. He is now writing a book on transportation futures, titled *Making What's Left into What's Right*.

Reception to follow immediately after the lecture





2009 U.S. News Ranking - Criteria

Criterion	Weighting
Peer assessment	25%
Recruiter assessment	15%
Research expenditures (total)	15%
Research expenditures (per faculty)	10%
Faculty percentage in NAE	7.5%
PhD student per faculty ratio	7.5%
Avg quantitative GRE score of new MS and PhD entrants	6.75%
PhD degrees granted	6.25%
MS student per faculty ratio	3.75%
Admission percentage (admits/applicants) – MS & PhD	3.25%

2009 U.S. News Ranking

Public University	Score	Peer assessment (out of 5)	Recruiter assessment (out of 5)	Average qGRE score of new entrants	Overall acceptance rate	PhD student/ faculty ratio	Faculty membership in NAE	Engineering school research expenditures, millions	Research expenditures per faculty member, thousands	PhD degrees awarded	MS student/ faculty ratio
Rank 1 - 25	70	4.0	3.9	763	29.6%	4.0	6.4%	$133.76	$529.53	189	3.0
Rank 26 - 50	47	3.2	3.4	754	31.9%	3.2	3.5%	$69.67	$368.42	95	3.0
Rank 51 - 75	34	2.7	3.1	738	37.4%	2.6	1.4%	$35.10	$338.01	53	2.8
Rank 76-100	26	2.5	2.9	735	44.4%	1.9	1.0%	$25.30	$221.14	38	3.1
UC (excluding UCR)	57	3.4	3.6	764	28.2%	5.1	8.0%	$75.59	$520.82	106	3.0
UC Riverside	**33**	**2.5**	**2.8**	**755**	**33.0%**	**3.5**	**1.2%**	**$34.04**	**$447.93**	**40**	**0.7**
UCR Rank (out of 63 public)	38	49	54	24	37	17	39	41	17	50	60
Percentile	39%	15%	10%	62%	42%	69%	38%	35%	74%	21%	2%

2009 U.S. News Ranking

	Rank	Peer assessment (out of 5)	Recruiter assessment (out of 5)	Average qGRE score of new entrants	Overall acceptance rate	PhD student/ faculty ratio	Faculty membership in NAE	Engineering school research expenditures , millions	Research expenditures per faculty member, thousands	PhD degrees awarded	Total graduate engineering enrollment	MS student/ faculty ratio
UC Berkeley	**3**	4.8	4.6	772	20.4%	5.9	19.8%	$120.30	$507.60	223	1,780	1.27
UC Davis	**32**	3.4	3.6	749	35.6%	4.3	5.5%	$68.35	$369.45	111	1,124	1.50
UC Irvine	**37**	3.1	3.5	758	25.8%	4.1	5.5%	$66.21	$427.14	92	984	2.01
UC Los Angeles	**13**	3.8	3.9	768	36.0%	5.2	14.1%	$86.29	$567.72	157	1,388	3.91
UC Riverside	**65**	**2.5**	**2.8**	**755**	**33.0%**	**3.5**	**1.2%**	**$34.04**	**$447.93**	**40**	**367**	0.71
UC San Diego	**11**	3.7	3.9	765	25.0%	4.7	9.7%	$140.99	$834.24	132	1,213	2.20
UC Santa Barbara	**19**	3.5	3.6	773	28.3%	4.2	15,3%	$92.29	$688.75	95	724	0.70
UC Santa Cruz	**92**	2.3	2.7	750	39.2%	2.6	1.4%	$18.06	$250.86	23	312	1.14

2009 U.S. News & World Report Rankings - America' Best Graduate Schools

University of California, Riverside Rankings

Program	UCR	UCB	UCD	UCI	UCLA	UCSD	UCSF	UCSB	UCSC
Business	**NA**	7	44	44	11	NA	NA	NA	NA
Education	**58**	7	68	77	3			58	108
Engineering	**64**	**3**	**33**	**37**	**13**	**11**	**NA**	**19**	**92**
Law	**NA**	6	44	NA	16	NA	38	NA	NA
Medicine	**NA**	NA	48	43	9	14	5	NA	NA

Aerospace	**NA**	NA	33	28	15	NA	NA	NA	NA
Bioengineering	**NA**	11	27	40	44	2	NA	NA	NA
Chemical Engineering	**53**	1	20	53	25	NA	NA	9	NA
Civil Engineering	**NA**	1	16	38	27	16	NA	NA	NA
Computer Engineering	**57**	2	37	29	13	18	NA	29	NA
Computer Science*	**65**	1	37	31	13	16	NA	37	58
Electrical Engineering	**NA**	2	37	37	14	17	NA	18	83
Environmental Engineering	**50**	2	13	39	NA	NA	NA	NA	NA
Materials	**NA**	3	22	47	22	32	NA	5	NA
Mechanical Engineering	**NA**	3	35	35	14	20	NA	24	NA

DRAFT

BCOE Faculty Instructional Workload Policy

A normal classroom teaching load in the College consists of four (4) courses per academic year.

Deviations from the above teaching load varies by department but may include the following:

- New faculty members may be given one quarter teaching relief when joining UCR in order to get their research started. New faculty may also delay teaching their graduate specialty course until a significant body of graduate students is established in their research specialty.
- Untenured faculty members may be given one course relief for one year or up until they are tenured
- Between one and two course relief is provided the Department Chair; one course relief is provided the Vice-Chair, Graduate Advisor. Center Directors, faculty members with split appointments or with special administrative duties may have a different agreement.
- The course load for Associate Dean is consistent with the percent of the faculty appointment

In all cases, deviations from the normal teaching load are reviewed by the College Dean's Office for appropriateness and compliance with UC policies. Approval for any such deviation must be obtained from the Dean, College of Engineering.

In addition to the normal course load, instruction, training and supervision of students' research activities are an important teaching activity for BCOE faculty. These include instruction of undergraduate student research assistants either in the summer or during the academic year as special studies or paid research assistantships, and supervision/instruction of graduate students (M.S. or Ph.D. level). The College goal is to reach on the average 4.5 PhD and 2 MS students per faculty.~~currently formulating a targeted goal for the number of graduate students supervised by each faculty.~~ Faculty members who have 6 or more graduate students registered in supervised research courses (297 or 299) may be given one course relief during the year . An additional course relief may be given for supervising exceptional number of graduate students (12 students or more) upon recommendation of the chair and approval by the Dean.

Course Buyout Policy:

A faculty member may request from the Dean, via the Department/Program Chair, to buyout from teaching ~~in a given quarter~~. The current teaching load for a research active faculty member is four quarter courses; those not active in research will have a much higher teaching load.

During the buyout period:

1) The faculty is expected to participate in her/his service and research activities and
2) The faculty is expected to be on campus.

Buyout cost:

A faculty member can use external funding sources to buyout his/her AY teaching load according to the following percentages:

One course: 10% of faculty member's AY salaries and benefits
Two courses: 25% of faculty member's AY salaries and benefits

Since teaching is an important part of a faculty member's academic responsibilities, formal class room teaching below two courses per AY will need to be justified and will need to be approved by the Dean. If approved, the Dean will determine the course buyout percentage due for these cases with input from the department Chair.

Funds generated by course buyouts will be distributed according to the following percentages:

50% to faculty member's department
50% to BCoE Dean's Office

These allocations are net of any additional course instruction (lecturer) costs resulting from the course buyout.

~~Reducing the teaching load from four to three courses – 15% of the academic year salary. Benefits on that salary amount must also be paid from extramural fund used.~~

~~Reducing the teaching load from three to two courses - additional 20% of the academic year salary. Benefits on that salary amount must also be paid from extramural fund used.~~

~~Reducing the teaching load from two to one course - additional 30% of the academic year salary. Benefits on that salary amount must also be paid from extramural fund used.~~

~~Reducing the teaching load to zero - 100% of the academic year salary. Benefits on that salary amount must also be paid from extramural fund used.~~

Buyouts will be an exception and will have to be supported by extramural funds. Initial complement funds may not be used. Reducing the teaching load below ~~three~~ two courses per AY will be very rare.

Bourns College of Engineering
Faculty Instructional Workload Policy

- Bioengineering
- Chemical & Environmental Engineering
- Computer Science & Engineering
- Electrical Engineering
- Mechanical Engineering

A normal classroom teaching load in the College consists of four (4) courses per academic year.

Deviations from the above teaching load varies by department but may include the following:

- New faculty members may be given one quarter teaching relief when joining UCR in order to get their research started.
- New faculty may also delay teaching their graduate specialty course until a significant body of graduate students is established in their research specialty.
- Untenured faculty members may be given one course relief for one year or up until they are tenured
- Between one and two course relief is provided the Department Chair; one course relief is provided the Vice-Chair, Graduate Advisor. Center Directors, faculty members with split appointments or with special administrative duties may have a different agreement.
- The course load for Associate Dean is consistent with the percent of the faculty appointment

In all cases, deviations from the normal teaching load are reviewed by the College Dean's Office for appropriateness and compliance with UC policies. Approval for any such deviation must be obtained from the Dean, College of Engineering.

In addition to the normal course load, instruction, training and supervision of students' research activities are an important teaching activity for BCOE faculty. These include instruction of undergraduate student research assistants either in the summer or during the academic year as special studies or paid research assistantships, and supervision/instruction of graduate students (M.S. or Ph.D. level). The College is currently formulating a targeted goal for the number of graduate students supervised by each faculty.

Course Buyout Policy:

A faculty member may request from the Dean, via the Department/Program Chair, to buyout from teaching in a given quarter. The current teaching load for a research active faculty member is four quarter courses; those not active in research will have a much higher teaching load.

During the buyout period:

1) The faculty is expected to participate in her/his service and research activities and
2) The faculty is expected to be on campus.

Buyout cost:

Reducing the teaching load from four to three courses - 15% of the academic year salary. Benefits on that salary amount must also be paid from extramural fund used.

Reducing the teaching load from three to two courses - additional 20% of the academic year salary. Benefits on that salary amount must also be paid from extramural fund used.

Reducing the teaching load from two to one course - additional 30% of the academic year salary. Benefits on that salary amount must also be paid from extramural fund used.

Reducing the teaching load to zero - 100% of the academic year salary. Benefits on that salary amount must also be paid from extramural fund used.

Buyouts will be an exception and will have to be supported by extramural funds. Initial complement funds may not be used. Reducing the teaching load below three courses will be very rare.

BCOE GRADUATE STUDENT RECRUITMENT STATUS: 2008-09 COHORT

Graduate Division Data as of April 21, 2008

Program	Apps	Admits	Accepts	Target	% of Target
BIEN	57	20	10	15	66.7%
CEE	116	48	20	22	90.9%
CS	452	116	51	52	98.1%
EE	467	92	37	40	92.5%
ME	115	13	4	22	18.2%
Total	1207	289	122	151	80.8%

Unit	Apps	Admits	Accepts	Target	% of Target
BCOE	1207	289	122	120	101.7%
CHASS	1133	291	149	194	76.8%
CNAS	1324	299	118	227	52.0%
DBS	36	7	0	4	0.0%
GSOE	179	70	41	16	256.3%
Total	3879	956	430	561	76.6%

Graduate Division Data as of June 18, 2007

Program	Apps	Admits	Accepts	Target	% of Target
BIEN	39	14	8	8	100.0%
CEE	113	44	23	20	115.0%
CS	335	86	40	35	114.3%
EE	314	91	45	35	128.6%
ME	98	54	36	23	156.5%
Total	899	289	152	121	125.6%

Graduate Division Data as of April 21, 2008

International Students

Program	2007			2008		
	Apps	Admits	Accepts	Apps	Admits	Accepts
BIEN	16	5	4	27	7	4
CEE	84	26	16	85	26	11
CS	271	45	13	406	89	36
EE	274	51	18	424	77	31
ME	75	36	22	92	10	4
Total	720	163	73	1034	209	86

Domestic Students

Program	2007			2008		
	Apps	Admits	Accepts	Apps	Admits	Accepts
BIEN	19	9	3	30	13	6
CEE	28	17	7	31	22	9
CS	55	20	5	46	27	15
EE	37	14	10	43	15	6
ME	21	8	4	23	3	0
Total	160	68	29	173	80	36

All Students

Program	2007			2008		
	Apps	Admits	Accepts	Apps	Admits	Accepts
BIEN	35	14	7	57	20	10
CEE	112	43	23	116	48	20
CS	326	65	18	452	116	51
EE	311	65	28	467	92	37
ME	96	44	26	115	13	4
Total	880	231	102	1207	289	122

04/18/08 COLLEGE OF ENGINEERING FRESHMEN												
MAJOR	APPLICANTS			ADMITTED			ACCEPTED			ENR		
	2008	2007	Difference	2008	2007	Difference	2008	2007	Difference	2008	2007	
Bioengineering	399	366	9%	364	342	6%	20	18	11%	0	0	
Chemical Engineering	322	210	53%	284	180	58%	16	7	129%	0	0	
Computer Engineering	573	466	23%	431	363	19%	36	16	125%	0	0	
Computer Science	540	486	11%	431	406	6%	39	22	77%	0	0	
Electrical Engineering	433	374	16%	356	339	5%	24	16	50%	0	0	
Environmental Engineering	140	97	44%	122	83	47%	7	3	133%	0	0	
Information Systems	65	43	51%	56	37	51%	4	2	100%	0	0	
Materials Science and Engineering	317			297			2			0		
Mechanical Engineering	907	950	-5%	796	836	-5%	45	28	61%	0	0	
TOTAL FRESHMEN	3696	2992	24%	3137	2586	21%	193	112	72%	0	0	

04/18/08 COLLEGE OF ENGINEERING TRANSFER											
MAJOR	APPLICANTS			ADMITTED			ACCEPTED			ENR	
	2008	2007	Difference	2008	2007	Difference	2008	2007	Difference		
Bioengineering	38	34	12%	11	12	-8%	0	1	-100%	0	0
Chemical Engineering	34	37	-8%	6	12	-50%	2	2	0%	0	0
Computer Engineering	29	32	-9%	8	3	167%	0	0		0	0
Computer Science	76	74	3%	9	11	-18%	0	0		0	0
Electrical Engineering	68	68	0%	9	6	50%	0	1	-100%	0	0
Environmental Engineering	9	14	-36%	1	3	-67%	0	0		0	0
Information Systems	14	11	27%	0	0		0	0		0	0
Limited Student	1			0			0			0	
Materials Science and Engineering	7			1			0			0	
Mechanical Engineering	86	70	23%	7	3	133%	0	0		0	0
TOTAL TRANSFER	362	340	6%	52	50	4%	2	4	-50%	0	0