Degree Program Breakout Group Guidelines

A list of degree programs is attached.

- The focus of this discussion is to identify degree program opportunities that will generate revenue.

Tuition

- Current (2008-09) tuition levels are:

BS	$36,300
MEng	$36,300
MS/PhD	$29,500 (Lower research based graduate tuition)

- BS, MS, and PhD program tuition goes directly to the Provost. Tuition is one of the revenue sources the Provost uses to provide the college budget allocation and pay for undergraduate financial aid and graduate fellowships.
- MEng tuition provides revenue to the Provost, College, and Departments/Schools. It is distributed as follows:

Provost	20%	
College	52%	65% benefits the college
Department/School	28%	($23,595 per student)

Assistantship Costs

- The cost of funding a doctoral student assistantship (15-20 hrs/wk) in 2009-10 will be:
  - Tuition - $29,500 (MS/PhD)
  - Academic Year Stipend - $21,400 (minimum) or 12 Month Stipend - $28,533 (minimum)
  - Student Health Insurance - $1,514 (individual)
  - Student Activity Fee - $70

Undergraduate Degree Programs

- Regular engineering undergraduate applications for fall 2009 admission were up 17%.
- Students can enroll in Biological Engineering and Environmental Engineering either in the College of Engineering or the College of Agriculture and Life Sciences. Students enrolling through CALS pay a lower Contract College tuition rate ($20,160 for NYS residents, $35,200 for non-residents).
- International students, with the exception of students from Canada and Mexico, are not eligible for financial aid.
- The Provost has asked us to increase our incoming freshman class target from 710 to 735, starting with the entering fall 2009 freshman class, to generate additional tuition revenue. Our allocation from the Provost has not been increased to support these additional students.
- Cornell does not admit part-time undergraduate students.
- Currently no undergraduate programs are offered via distance learning.
- Transfer students help us balance our enrollment loses due to attrition. We usually admit transfer students in the fall as either sophomores or juniors.

Graduate Degree Programs

- PhD tuition in 2009-2010 will be $29,500 and MEng tuition will be $37,750. The university plan to continue to reduce PhD tuition further is on hold.
- MEng students are generally not eligible for fellowships.
- We have a goal to give all first year MS/PhD students a fellowship.
- In general graduate fields do not admit MS students (CEE is the exception to this rule). The MS degree is a default fall back if a student is not able to complete the PhD degree.
- Increasing the size of the PhD program:
    - should also result in an increase of research revenue and expenditures
    - increases the cost of fellowships
- The Graduate School does not permit part-time graduate study and does not allow pro-rated tuition.
- The Graduate School does not support distance learning for research based graduate programs (MS and PhD).
- There are two professional degree graduate level distance learning degrees offered by Cornell:
    - Systems Engineering-MEng (College of Engineering)
    - MBA (Johnson Graduate School of Management)
- There is one MEng degree offered jointly with the Johnson School - MEng/MBA.
- Approval of new, or changes to existing, degree programs takes 6-18 months.

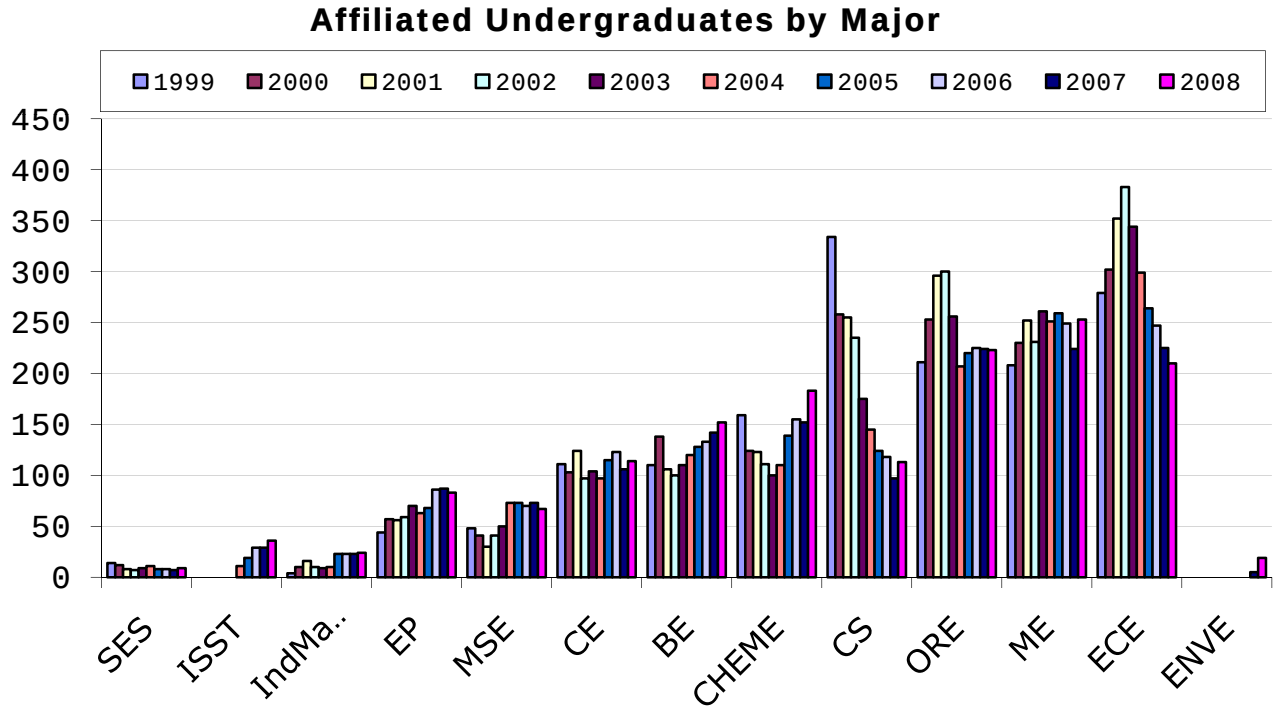
COLLEGE OF ENGINEERING

Department/School	Graduate Field	Program Name	Degree
Applied and Engineering Physics		Engineering Physics	BS
	Applied Physics	Engineering Physics	MEng
	Applied Physics	Applied Physics	MS/PhD
Biological and Environmental Engineering		Biological Engineering	BS
		Environmental Engineering	BS
	Biological and Environmental Engineering	Agriculture and Biological Engineering	MEng
	Biological and Environmental Engineering	Agriculture and Biological Engineering	MS/PhD
Biomedical Engineering			BS
	Biomedical Engineering	Biomedical Engineering	MEng
	Biomedical Engineering	Biomedical Engineering	MS/PhD
Chemical and Biomolecular Engineering		Chemical Engineering	BS
	Chemical Engineering	Chemical Engineering	MEng
	Chemical Engineering	Chemical Engineering	MS/PhD
Civil and Environmental Engineering		Civil Engineering	BS
		Environmental Engineering	BS
	Civil and Environmental Engineering	Civil and Environmental Engineering	MEng
	Civil and Environmental Engineering	Engineering Management	MEng
	Civil and Environmental Engineering	Civil and Environmental Engineering	MS/PhD
Computer Science		Computer Science	BS
		Information Science, Systems and Technology	BS
	Computer Science	Computer Science	MEng
	Computer Science	Computer Science	MS/PhD
	Information Science	Information Science	PhD
Earth and Atmospheric Sciences		Science of Earth Systems	BS
	Geological Sciences	Geological Sciences	MEng
	Geological Sciences	Geological Sciences	MS/PhD
Electrical and Computer Engineering		Electrical and Computer Engineering	BS
	Electrical and Computer Engineering	Electrical Engineering	MEng
	Electrical and Computer Engineering	Electrical Engineering	MS/PhD

Department/School	Graduate Field	Program Name	Degree
Materials Science and Engineering		Materials Science and Engineering	BS
	Materials Science and Engineering	Materials Science and Engineering	MEng
	Materials Science and Engineering	Materials Science and Engineering	MS/PhD
Mechanical and Aerospace Engineering		Mechanical Engineering	BS
	Aerospace Engineering	Aerospace Engineering	MEng
	Mechanical Engineering	Mechanical Engineering	MEng
	Theoretical and Applied Mechanics	Engineering Mechanics	MEng
	Aerospace Engineering	Aerospace Engineering	MS/PhD
	Mechanical Engineering	Mechanical Engineering	MS/PhD
	Theoretical and Applied Mechanics	Theoretical and Applied Mechanics	MS/PhD
Operations Research & Information Engineering		Operations Research and Engineering	BS
		Information Science, Systems and Technology	BS
	Operations Research & Information Engineering	Operations Research & Information Engineering	MEng
	Operations Research & Information Engineering	Operations Research	MS/PhD
Systems Engineering Program	Systems Engineering	Systems Engineering	MEng

Affiliated Undergraduate Students - Fall

UG Majors	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
SES	14	12	8	7	9	11	8	8	7	9
ISST						11	19	29	29	36
IndMajor	4	10	16	10	9	10	23	23	23	24
EP	44	57	56	59	70	63	68	86	87	83
MSE	48	41	30	41	50	73	73	70	73	67
CE	111	103	124	97	104	97	115	123	106	114
BE	110	138	106	100	110	120	128	133	142	152
CHEME	159	124	123	111	100	110	139	155	152	183
CS	334	258	255	235	175	145	124	118	97	113
ORE	211	253	296	300	256	207	220	225	224	223
ME	208	230	252	231	261	251	259	249	224	253
ECE	279	302	352	383	344	299	264	247	225	210
ENVE									5	19
Total	**1522**	**1528**	**1618**	**1574**	**1488**	**1397**	**1440**	**1466**	**1394**	**1486**

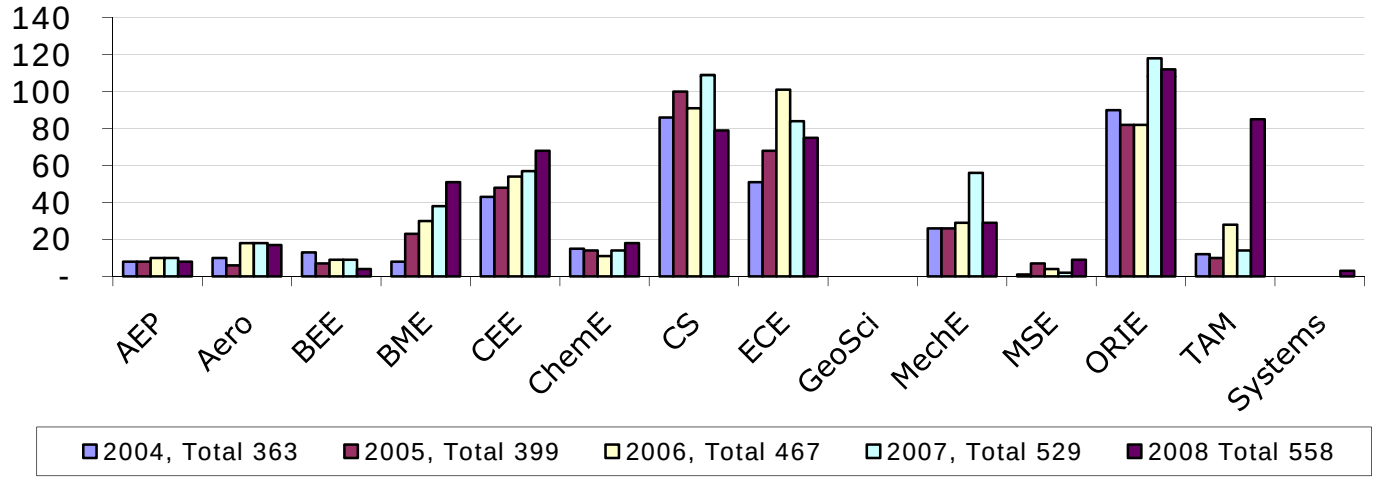


ENGINEERING GRADUATE ENROLLMENT

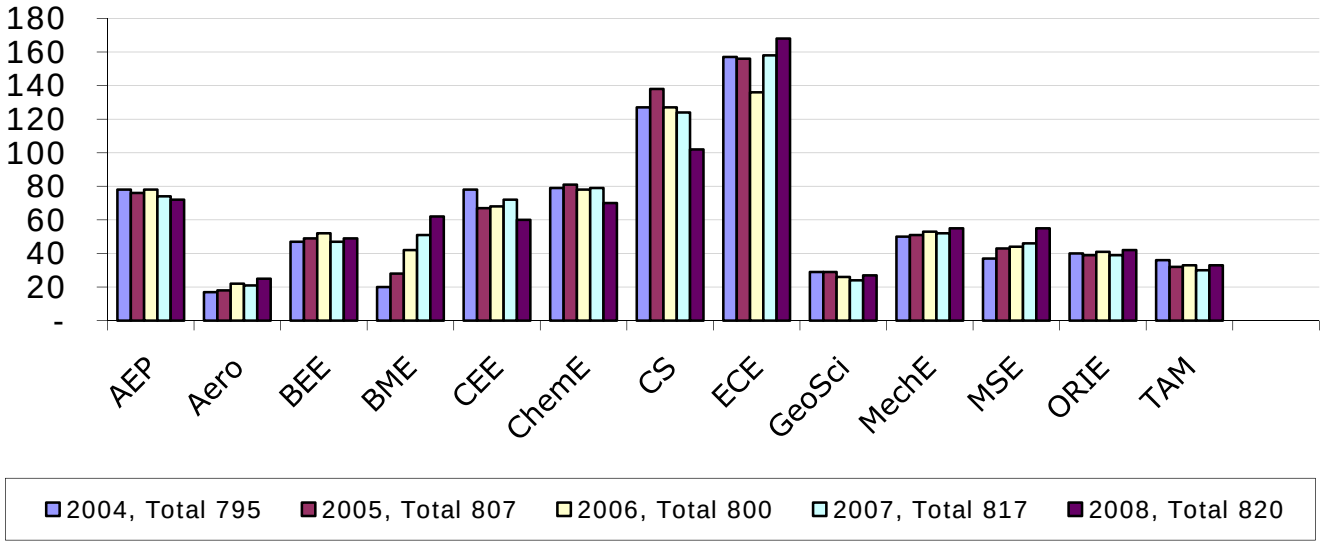
	MEng Only					MS + PhD				
Field	2004, Total 363	2005, Total 399	2006, Total 467	2007, Total 529	2008 Total 558	2004, Total 795	2005, Total 807	2006, Total 800	2007, Total 817	2008, Total 820
	MEng	MEng	MEng	MEng	MEng	PhD	PhD	PhD	PhD	PhD
AEP	8	8	10	10	8	78	76	78	74	72
Aero	10	6	18	18	17	17	18	22	21	25
BEE	13	7	9	9	4	47	49	52	47	49
BME	8	23	30	38	51	20	28	42	51	62
CEE	43	48	54	57	68	78	67	68	72	60
ChemE	15	14	11	14	18	79	81	78	79	70
CS	86	100	91	109	79	127	138	127	124	102
ECE	51	68	101	84	75	157	156	136	158	168
GeoSci	0	0	0	0	0	29	29	26	24	27
MechE	26	26	29	56	29	50	51	53	52	55
MSE	1	7	4	2	9	37	43	44	46	55
ORIE	90	82	82	118	112	40	39	41	39	42
TAM	12	10	28	14	85	36	32	33	30	33
Systems	0	0	0	0	3	0	0	0	0	0
Total	**363**	**399**	**467**	**529**	**558**	**795**	**807**	**800**	**817**	**820**

Source: Frozen File

MEng Enrollment



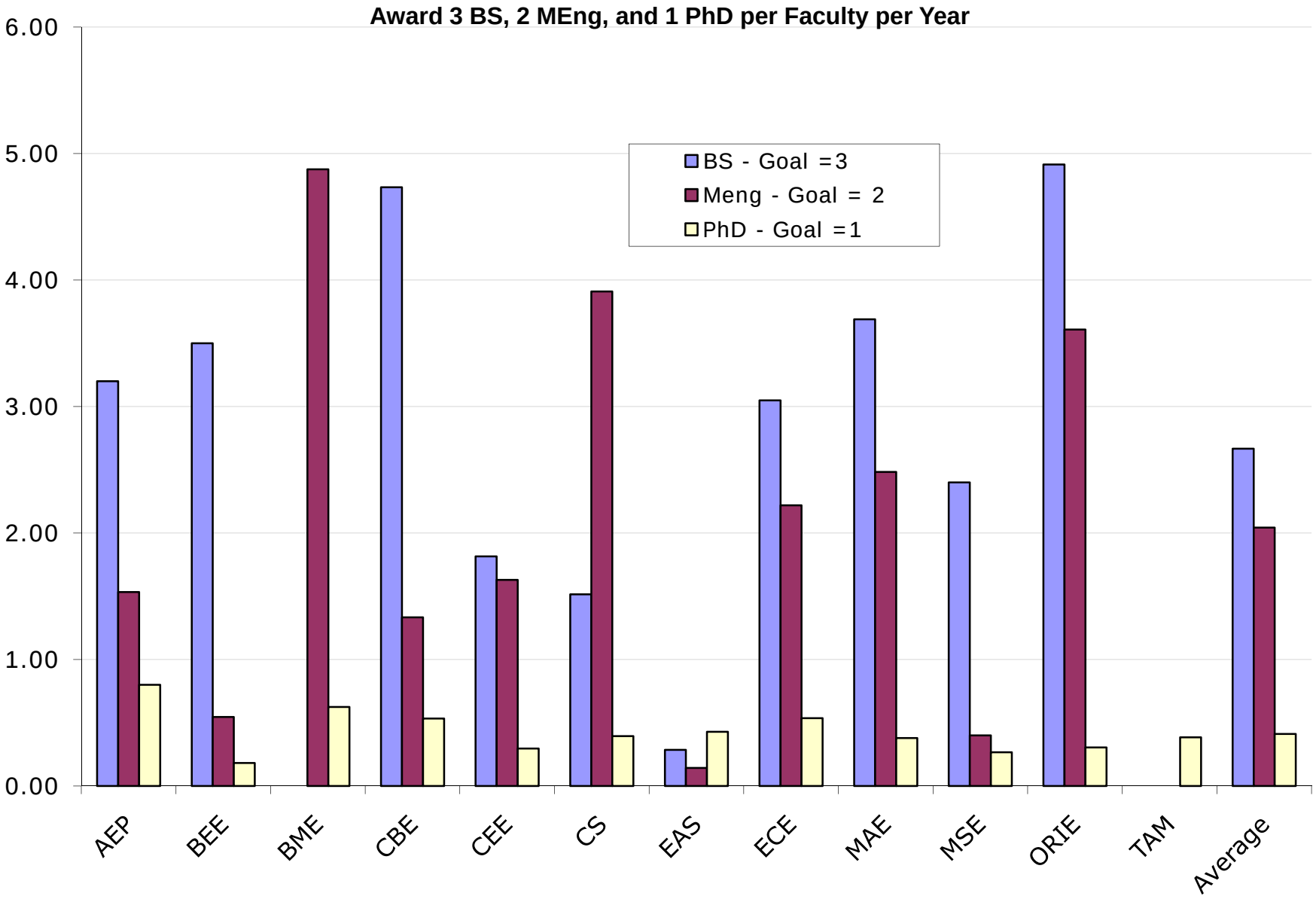
MS/PhD Enrollment



Fall 2008 Students/Faculty FTE

Dept	Filled FTE Fall 08	UG Enroll	PhD Enroll	MEng Enroll*	Total Enroll*	Rank
AEP	15.0	5.5	4.8	0.5	10.9	7
BME	10.5	0.0	5.9	4.9	10.8	6
CBE	16.0	11.5	4.4	1.1	17.0	11
CEE	25.0	4.6	2.4	2.7	9.7	4
CS	28.0	4.2	2.8	2.8	10.6	5
EAS	12.5	0.8	2.2	0.0	3.0	1
ECE	36.0	5.7	4.7	2.1	12.4	8
MAE	28.3	9.0	2.8	1.6	13.5	9
MSE	16.0	4.2	3.4	0.6	8.2	3
ORIE	25.0	9.1	1.7	4.5	15.3	10
TAM	12.0	0.0	2.8	0.3	3.0	1

* Does not include 85 Systems Engineering MEng Students taught by ORIE, MAE, & CEE


Award 3 BS, 2 MEng, and 1 PhD per Faculty per Year
6.00
5.00
4.00
3.00
2.00
1.00
0.00
BS - Goal =3
Meng - Goal = 2
PhD - Goal =1
AEP
BEE
BME
CBE
CEE
CS
EAS
ECE
MAE
MSE
ORIE
TAM
Average

SAMPLE DISTANCE DEGREE PROGRAMS AT PEER INSTITUTIONS

School	Description	PT/FT	Duration	Tuition/Cost	Outcome
Stanford					
ECE On-line Masters Degree -Honors Coopertive Program	ECE Masters degree offered entirely on-line for working professionals. Streaming audio/video with synchronized slide shows.	PT	Up to 5 years	$1,100 per quarter unit	MS degree
Georgia Tech					
Masters Degrees On-line (8)	On-line M.S. degrees in Aerospace Eng, Computational Science & Eng, Electrical & Computer Eng, Environmental Eng, Industrial Eng, Mechanical Eng, Medical Physics, Operations Research. No thesis required.	PT - Typically students take 1 course per semester	10 courses or approximately 5 years	Most tuitions paid by company	M.S. Degree
University of Illinois-UC					
On-line Master of Computer Science	Degree offered entirely on-line - no campus visits. Available to both on-campus and off-campus students.	PT or FT	Off campus students can take up to 5 years to complete the program	Tuition and Fees = $853 per credit hour. 36 credit hours required - $30,708	M.C.S. Degree
On-line Master of Science in Mechanical Engineering	M.S. degree offered entirely on-line. No campus visits required.	PT or FT	Off campus students can take up to 5 years to complete the program	Tuition and Fees = $853 per credit hour. Project based MS - 36 credit hrs. Thesis based MS - 32 hrs.	M.S. Degree
Purdue University					
Masters Level On-line Degree Programs	Interdisciplinary Program - Flexible on-line (streaming video) masters level degree programs with no pre-set curriculum - for working professionals. 30 credits (10 courses). Thesis and non-thesis options. Also MSE degrees offered in ECE, Aero/Astro, Ind Engrg, and Mech E. Also on-line dual degree MSE/MBA requiring 60 credits. Some courses available by web cast, dvd, cd, or videotape.	PT or FT	Usually 1 course per semester = ~ 3 years+	$2,725 per credit for streaming video courses. $3,635 for project courses	MSE or MS Degree