

Engineering & Technology Industry Council Performance Scorecard

Biennium 2003-2005

**College of Engineering
Oregon State University**

July 2004

Successes and Challenges

Successes:

- Bringing in Top New Faculty
- Growth in graduates
- Attracting Top Students
- Private Investment
- Research Cluster Growth

Successes and Challenges

(cont.)

Challenges:

- Funding

- Pressure on general fund
- Salary freeze
- Affordability for students

- Deep Collaboration

Fiscal Summary

FY04¹ as of 06/30/04

OSU

	Total Available²	YTD Actual³	Year-End Projection⁴	Projected Variance⁵
OSU COE ETIC⁶	\$6,020,031	\$3,172,632	\$ 0	\$2,847,399
EXT ETIC⁶	\$ 205,000	\$ 128,172	\$ 0	\$ 76,028

Comment – Approximately \$930,000 of the projected variance is due to outstanding contractual commitments as of FY04 close due to faculty start-up and equipment purchases.

(1) Fiscal year ending June of indicated year.

(2) Prior year carry-forward plus current fiscal year budget

(3) Year to Date as of date shown in title.

(4) Sum of encumbered and other forecasted expenses expected to clear during fiscal year.

(5) Year-End Projection vs. Total Available.

(6) Total for all ETIC funded programs at institution

(2)-(5) Attach ETIC Financial Info spreadsheet with matching values

Private Support¹

FY04² as of 06/30/04

	Value
Student Scholarships & fellowships	\$1,828,212
Other cash donations	6,692,109
Other cash grants and contracts	1,416,718
Equipment donations and discounts	680,227
Real estate	175,000
Other property	
Internship salaries (See note below)	
Other salaries and equivalent	
Other	<u>1,843</u>
Total	\$10,794,109
Annual Goal³	9,650,000
Variance	1,144,109

Note: Private investment for internships for just MECOP/CECOP is about \$3.8M, but the funds do not flow through so we have no precise record and therefore a value is not included here. Total internship investment is estimated at ~ three times this.

- (1) Provide details using current version of ETICFinancialInfoTemplate. Report based on Policy on Private Support Reporting <http://www.oregonetic.org/mission/eticprivatematch5.pdf>
- (2) Fiscal year ending June of indicated year.
- (3) From ETIC Plan for 2003-2005 Biennium. For first year of biennium, Annual Goal is goal given in plan. For second year of biennium, Annual Goal is total goal for Biennium less private support received in first year.

Other Leverage – Federal & Other Grants New FY04 - \$17.9M

As of 6/30/04

Grantor	Description	Value
Dept of Energy	DOE Westrn Nuclear Science Alliance	\$ 1,300,000
Environmental Protection Agency-Env	EPA WRHSRC	\$ 885,000
US Ed Grants	Oregon Rehabilitation Engineering Research Center on Accessible Pub	\$ 710,042
Advanced Research Projects Agency	Heat Actuated Heat Pump Development - Task 3	\$ 519,841
Advanced Research Projects Agency	KI-LEARN: Knowledge-Intensive Learning Methods for Knowledge-Rich	\$ 486,000
Georgia Institute of Technology	GIT Luminescence for Com,Display,ID	\$ 435,999
National Science Foundation-Engr	CAREER: Process Engineering of Chemical Bath Deposition: A Soft S	\$ 400,000
National Academy of Sciences	NAS Evaluate Best Mgmt Practices	\$ 399,878
Dept of Energy	DOE Passive Safety Sys Performance	\$ 396,982
USDA Cooperative State Research Se	Development of Advisory Services for Optimum Irrigation Management	\$ 289,000
National Science Foundation-Comput	MKIDS (Management of Knowledge Intensive Dynamic Systems): Cap	\$ 286,800
Nuclear Regulatory Commission	NRC APEX Thermal Hydraulic Program	\$ 269,983
National Science Foundation-Engr	Tsunamis in 3-D Bathymetry	\$ 265,322
National Science Foundation-Comput	ITWF (Information Technology Workforce Program): Gender HCI (Hum	\$ 249,285
National Science Foundation-Geoscie	Collaborative Research: CMG: Mathematical and Experimental Analys	\$ 243,480
Environmental Protection Agency-Env	EPA WRHSRC	\$ 240,891
Environmental Protection Agency-Env	EPA WRHSRC	\$ 225,000
National Science Foundation-Engr	NEES: Upgrading Oregon State's Multidirectional Wave Basin for Rem	\$ 220,000
Oregon Dept of Transportation/FTA	Repair of Diagonal-Tension Cracks with Fiber-Reinforced Composites	\$ 210,000
Cytec Corporation	Heat Driven Cooling System: Task 1	\$ 208,486
National Science Foundation-Comput	ITR: Pattern Recognition for Ecological Science and Environmental En	\$ 202,950
Advanced Research Projects Agency	Heat Actuated Heat Pump Development - Task 2	\$ 190,005
National Science Foundation-Engr	Equipment Proposal: Directional Wavemaker System for the 3-D Tsuna	\$ 183,857
National Oceanic and Atmospheric Ac	Oregon Sea Grant Omnibus: Sea Grant National Strategic Investment	\$ 181,838
National Science Foundation-Engr	NSF Upgrade Basin for Tsunami Rsrch	\$ 180,139
National Science Foundation-Engr	NSF Tsunamis in 3-D Bathymetry	\$ 179,658
US Ed Grants	Oregon Rehabilitation Engineering Research Center on Accessible Pub	\$ 172,324
National Science Foundation-Engr	NSF Upgrade Basin for Tsunami Rsrch	\$ 171,722
Oregon Dept of Transportation/NHTSA	Transportation Engineering Short Courses	\$ 170,000
National Science Foundation-Comput	ITR (Information Technology Research): Collaborative Research: Deper	\$ 159,613
Cytec Corporation	Heat Driven Cooling System: Task 2	\$ 156,553
National Science Foundation-Comput	NSF Collaborative Knowledge Spaces	\$ 156,323
National Science Foundation-Comput	NSF Off-the-Shelf Learnng Algorithms	\$ 154,628
Oregon Dept of Transportation/FTA	Asphalt Mix Characterization Using Dynamic Modules and APA (Asph	\$ 150,597
		Continued...

Other Leverage – Federal & Other Grants New FY04 -- \$17.9M

As of 6/30/04

Grantor	Description	Value
Dept of Energy	DOE Industrial Assessment Center	\$ 140,000
Cytec Corporation	Heat Actuated Heat Pump Development for Portable Cooling Applicati	\$ 138,999
National Science Foundation-Comput	Relational Reinforcement Learning	\$ 138,350
National Science Foundation-Engr	Novel, High Performance On-Chip Tunable Components and Crosstalk	\$ 135,000
Stanford University	SU Harmonic Balance Algorithms/Modl	\$ 132,052
Stanford University	SU Harmonic Balance Algorithms/Modl	\$ 126,467
Office of Naval Research	Modeling and Simulation of Nonlinear Dynamic Responses of Marine P	\$ 124,853
National Science Foundation-Comput	ITR (Information Technology Research): Collaborative Research: Deper	\$ 122,915
Purdue University/NRC	Phase Separation in Tees	\$ 117,000
University of California/San Diego/NSF	National Partnership for Advanced Computational Infrastructure (NPAC	\$ 115,000
Dept of Energy	DOE Advnc Beta Dosimetry Techniques	\$ 113,838
Dept of Energy	Using a Consensus Conference to Characterize Regulatory Concerns I	\$ 111,910
Dept of Energy	Influence of Reactive Transport on the Reduction of U(VI) in the Presen	\$ 110,619
University of California/San Diego/NSF	National Partnership for Advanced Computational Infrastructure (NPAC	\$ 110,000
University of California/San Diego/NSF	National Partnership for Advanced Computational Infrastructure (NPAC	\$ 110,000
Advanced Research Projects Agency	Heat Actuated Heat Pump Development - Task 4	\$ 108,963
Consortium of Universities for Researc	CUREE NEES Consortium Development	\$ 105,388
Washington State University	Radiation-hard PLL (Phase-locked Loop) Design Tolerant to Noise and	\$ 105,000
USDA Forest Service	Phase 3 of Dynamic Vegetation Models Development: Including Wetla	\$ 104,729
National Aeronautics and Space Adm	NASA National Space Grant Program	\$ 100,000
	Total Shown	\$ 13,023,279
	All Other Projects	\$ 4,877,301
	All Projects as of 6/30/04	\$ 19,317,298
	Estimate of Private Grants and Contracts	\$ 1,416,718
	Estimate of New Federal and Other Grants	\$ 17,900,580

Faculty Supported

As of 06/30/04

	Goal ¹	Actual ²
Hired in previous biennia ³ :	20	17
Hired in this biennium ³ :	6	3
	-----	-----
Total	26	17

Comment – Completed hiring for goal of previous biennium and have 5 of the 6 goal for this biennium slated to come this fall.

- (1) From ETIC Plan for '03-'05 Biennium.
- (2) Those currently employed, not including those to be hired later in biennium. Stated as FTE. Includes any adjuncts supported by ETIC funds.
- (3) Being supported by ETIC funds during '03-'05 Biennium.

Faculty Supported

As of 6/30/04

OSU Extension: ETIC Pre-College Project

	Goal ¹	Actual ²
Hired in previous biennium ³ :	2	2
Hired in this biennium ³ :	0	0
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Total	2	2

(1) From ETIC Plan for '03-'05 Biennium.

(2) Those currently employed, not including those to be hired later in biennium. Stated as FTE. Includes any adjuncts supported by ETIC funds.

(3) Being supported by ETIC funds during '03-'05 Biennium.

Undergraduate Category

As of 6/30/04

	AY99	AY03	AY04	AY05	AY06	AY09 ¹
Student Credit Hours						
Goal ²	52,690	55,290	66,500	68,900	69,000	69,000
Projected/Actual ³	52,690	62,511	63,050	68,900	69,000	69,000
Variance ⁴	na	7,221	(3,450)	0	0	0
Graduates						
Goal ²	389	493	519	545	545	545
Projected/Actual ³	389	496	546	545	545	545
Variance ⁴	na	10	25	0	0	0

Comments:

1. Academic Years ending in June of indicated years.
2. From ETIC Plan for '03-'05 Biennium.
3. Actual numbers for prior years. Projections for years not yet complete, including future years. Projections may be different from goal. Values in the current year or prior years that are not final are indicated with an "E", e.g. 78E.
4. Projected/Actual less Goal for all years where Goal established, including years with projected values.

Graduate Category

As of 6/30/04

	AY99	AY03	AY04	AY05	AY06	AY09 ¹
Student Credit Hours						
Goal ²	12,870	14,112	21,600	22,300	22,800	23,600
Projected/Actual ³	12,870	18,435	19,453	22,300	22,800	23,600
Variance ⁴	na	4323	(2147)	0	0	0
Graduates						
Goal ²	154	193	210	215	218	240
Projected/Actual ³	154	160	208	215	218	240
Variance ⁴	na	(33)	1	0	0	0

Comments: The large jump in graduate degrees that we have been expecting has arrived.

1. Academic Years ending in June of indicated years.
2. From ETIC Plan for '03-'05 Biennium.
3. Actuals for prior years. Projections for years not yet complete, including future years. Projections may be different from goal. Values in the current year or prior years that are not final are indicated with an "E", e.g. 78E.
4. Projected/Actual less Goal for all years where Goal established, including years with projected values.

Student Metrics

AY04 as of 06/30/04

	Prior Year	Current Year	
	Actual ⁷	Goal ⁶	Actual ⁷
Freshmen SAT/ACT ² :	~73%	83%	73%
Incoming grad-student GRE ³ :	~88%	80%	78%
Women graduating ⁴ :	115(18%)	(14%)	120(17%)
Minorities graduating ^{4,5} :	82(15%)	(13%)	88(16%)

(1) Academic year ending in June of indicated year

(2) Percentiles for freshmen that have declared relevant majors. If applicants are required to submit SAT scores, the percentile corresponding to the average composite SAT score of those submitting them. If applicants have choice of SAT and ACT, average composite SAT score and the average composite ACT score, converted to percentiles in each case, and combined as the weighted average of the two.

(3) Percentiles based on the average quantitative score over those submitting such scores; ignoring verbal and analytic scores.

(4) From engineering, computer science, and other programs directly benefiting from ETIC funding, stated as number graduating and as a percent of all those graduating.

(5) Racial and ethnic minorities who are US citizens or permanent residents – stated as number graduating and as a percent of US citizens or permanent residents.

(6) From ETIC Plan for '03-'05 Plan.

(7) If actual is not yet available, estimate is marked with “E”. If estimate is not possible, “N/A” is shown.

Research Metrics

FY04 as of 02/29/04 – being updated

	Prior Year	Current Year	
	Actual ⁶	Goal ⁵	Actual ⁶
Research Faculty ²	103		100
Total Research Expenditures ³	\$20M	\$20M	\$22M,E
Research Expenditures / Faculty ⁴	\$190K		\$220K, E

- (1) Fiscal year ending in June of indicated year
- (2) Number of faculty members whose roles include research
- (3) Total dollars spent by ETIC-related departments towards research during academic year
- (4) Total Research Expenditures divided by Research Faculty
- (5) From ETIC Plan for '03-'05 Plan.
- (6) If actual is not yet available, estimate is marked with "E". If estimate is not possible, "N/A" is shown.

Intellectual Property Metrics

AY04¹ as of 06/30/04

	Prior Year	Current Year	
	Actual ⁶	Goal ⁵	Actual ⁶
Spin-offs ²	0		0
Patent Disclosures	19		23
Patents Awarded	3		2
Number of Licenses ³	1	7	3
Revenue ³	\$80K		\$50K

(1) Academic year ending June of indicated year.

(2) Number of spin offs as reported to Association of University Technology Managers.

(3) Number of patent licenses or other royalty-generating intellectual property licenses granted to commercial entities

(4) Revenue from patent and other intellectual property licenses granted to commercial entities.

(5) From ETIC Plan for '03-'05 Plan.

(6) If actual is not yet available, estimate is marked with "E". If estimate is not possible, "N/A" is shown.

National Ranking

As of 06/30/04

	AY99	AY03	AY04	AY05	AY06	AY09 ¹
• EECS						
– Goal ³	65-75		60-70	60-65	55-65	50-60
– Actual/Projection: ⁴	65-75	38	45(62,54)			
• ME						
– Goal ³	45-55		40-50	40-50	40-50	40-50
– Actual/Projection: ⁴	45-55	49	62(82)			
• CCEE						
– Goal ³	35-45		30-40	30-40	30-40	30-40
– Actual/Projection: ⁴	35-45	37	31(50)			
• College of Engineering						
– Goal ³	83	65-75	65-75	60-70	55-65	50-60
– Actual/Projection: ⁴	83	78 (83)	78 (78)			

Comment – College entry for '03 and '04 shows two values: 1. OSU's COE rank in total research funding based on ASEE data and 2. US News and World Report ranking for Graduate Engineering Schools based on metrics and reputation, in (). Department entries are similar, but please note that the published rankings, in (), which are new this year from USN&WR are based only on reputation.

- 1 Academic years ending in June of indicated years
- 2 Name of program, department or college
- 3 From ETIC Plan for '03-'05 Plan – goals of programs, departments, and or college in terms of national ranking through 2009.
- 4 Actuals for prior years. Projections for years not yet complete, including future years. Projections may be different from goal. Values in the current year or prior years that are not final are indicated with an "E", e.g. 78E