

Engineering & Technology Industry Council Performance Scorecard

Biennium 2006-2007

Portland State University

Maseeh College of Engineering and Computer Science

July 2007

Fiscal Summary

FY07¹ as of 6/30/07

ETIC Investment⁶	Total Available²	YTD Actual³	Projected Variance⁵
Dean's Reserve	\$94,723	\$94,723	\$0
Enrollment Management	\$839,684	\$869,150	-\$29,466
OMSE	\$468,542	\$413,726	\$54,816
MCECS Academic Dept.	\$4,382,341	\$4,220,110	\$162,231
Top Tier Investment*	\$635	\$0	\$635
ETIC Total	\$5,785,925	\$5,597,709	\$188,216

* Adjustment for Compensated Absence Liability

- (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.
- (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 Support

FY07 as of 6/30/07

	Value
Northwest Center for Engineering, Science, and Technology ¹	\$ 2,646,505
Scholarships & fellowships	\$115,600
Research	\$96,000
Miscellaneous Support	<u>\$63,041</u>
Total Private Donor Support	\$ 2,921,146
Equipment Donations	\$ 390,953
	Total
	\$ 3,312,099
	FY07 Goal ²
	\$ 3,724,000
	Variance
	\$ -411,901

- (1) Eligible for matching by state of Oregon general obligation bonds, and so generated an equal amount of matching funds.
- (2) From ETIC Plan for 2005-2007 Biennium. Annual Goal is total goal for Biennium less private support received in first year.

Other Leverage -- Federal & Other Grants, New Grants for Biennium 05-07

Granter	Description	Value
National Science Foundation	CAREER: Component-Based Hardware/Software Co-Verification of Embedded Systems	\$626,894
National Science Foundation	CAREER: Electromagnetic Scattering and Propagation at Terahertz Frequencies	\$566,428
National Science Foundation	Collaborative Research: Biogeochemical Transformations and Cross-Margin Transport	\$496,753
Oregon Health and Science University	Science & Technology Center for Coastal Margin Observation & Prediction (CCF-0424602)	\$492,556
National Science Foundation	CT-ISG: Making Network Layer Proofs-of-Work Work	\$491,625
Maryland Procurement Office	Programatica for System Software	\$489,976
National Science Foundation	Exploiting Live Plus Archive Data for Intelligent Transportation Systems	\$410,670
Semiconductor Research Corporation	Stochastic Modeling of Device Test Input and Test Response for Improved Yield and Reliability	\$400,486
US Department of Agriculture	A Mechanistic Study of the Transport and Fate of Biosolid Colloids in Soil	\$394,392
National Science Foundation	Adapting Information Using Superimposed Models and Structures	\$390,000
National Oceanic and Atmospheric Administration	Estuarine Habitat and Juvenile Salmon: Linkages in the Lower Columbia River and Estuary	\$360,000
Thrasher Research Fund	Modeling Intracranial Pressure Dynamics in Pediatric Traumatic Brain Injury	\$319,882
Office of Naval Research	Mid-Frequency Bottom Scattering Model Development and Validation	\$300,000
Office of Naval Research	Multistatic Active Target using an Invariance Constraint within an Evolutionary Formulation	\$290,680
National Institute of Justice	Using Portable Radios to Operate Mobile Data Terminals	\$287,000
Semiconductor Research Corporation	Scalable Co-Verification Based on Hardware IPs and Software Components	\$271,240
National Science Foundation	SoD-HCER Semantics Based System Design Using Omega	\$242,678
National Science Foundation	MRI: Instrument Development: Optical Tweezers/Micro-PIV System to Investigate Cell Biomechanics	\$214,226
Oregon State University	Ocean Modeling and Data Assimilation for Regional Studies of the Internal Tide	\$198,089
National Science Foundation	Internationalization of Computer Science Education: The Pacific Rim Community Model	\$196,806
Oregon State University	Tactical Power Sources	\$189,000
National Science Foundation	SoD Team: A Feedback-Based Architecture for Highly Reliable Embedded Software	\$185,973
	Total Shown	\$7,815,354
	OTHER	\$4,233,823
	TOTAL	\$12,049,177

ETIC Supported Faculty in Red

Faculty Supported

As of 6/30/07

	Goal ¹	Actual ²
Hired in previous biennia ³ :	10	10
Hired in this biennium ⁴ :	4	4
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Total	14	14

- (1) From ETIC Plan for 05-07 Biennium.
- (2) Those currently employed, not including those to be hired later in biennium. Stated as FTE. Includes any adjuncts supported by ETIC funds. Faculty receiving partial support from ETIC funds should be reported as partial FTE.
- (3) Faculty hired before beginning of 05-07 Biennium that are being supported by ETIC funds during 05-07 Biennium.
- (4) Faculty newly hired during current biennium using ETIC funds.

Undergraduate Category

As of 6/30/07

	AY99 ¹	AY04	AY05	AY06	AY07 ³	AY09
Student Credit Hours						
□ Goal	20,785	29,049	27,576	32,639	34,000	38,874 ³
□ Projected/Actual	20,785	27,035	32,011	28,415	28,518	32,222 ²
□ Variance	0	-2,014	4,435	-4,224	-5,482	
Graduates						
□ Goal ²	157	200	216	233	250	294 ³
□ Projected/Actual	157	192	221	211	205	232 ²
□ Variance	0	-8	+5	-12	-45	

(1) Academic Years ending in June of indicated years

(2) AY06 and AY07 From ETIC Plan for '05-'07 Biennium, AY09 From Feb. 28, 2007 07-09 Proposal

(3) Goals From ETIC Plan for 05-07

Graduate Category

As of 6/30/07

	AY99 ¹	AY04	AY05	AY06	AY07 ³	AY09
Student Credit Hours						
□ Goal ²	8,685	16,774	14,070	18,847	19,500	22,447 ³
□ Projected/Actual ³	8,685	13,451	12,535	11,798	12,357	13,819 ²
□ Variance ⁴	0	-3,323	1,535	-7,049	-7,143	
Graduates						
□ Goal ²	109	132	160	173	195	235 ³
□ Projected/Actual	109	154	216	240	201	219 ²
□ Variance	0	+22	+56	+167	+6	

(1) Academic Years ending in June of indicated years.

(2) AY06 and AY07 From ETIC Plan for '05-'07 Biennium, AY09 From Feb. 28, 2007 07-09 Proposal

(3) Goals From ETIC Plan for 05-07

Student Metrics

AY06-07 as of 6/30/07

	AY06 ¹	AY07 ¹	
	Actual ⁷	Goal ⁶	Actual
Freshmen SAT/ACT ²	59th	64th	62nd
Incoming grad-student GRE ³	80th	77th	77th
Women graduating ⁴	26%	22%	79 (20%)
Minorities graduating ^{4,5} (Undergrad and Grad)	21%	28%	54 (14%)

(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.

(6) From ETIC Plan for 05-07.

Research Metrics

FY07¹ as of 6/30/07

	AY06 ¹		AY07 ¹
	Actual		Goal ⁵
Research Faculty ²	84		85
Total Research Expenditures ³	\$6,000,955		\$5,200,000
Research Expenditures / Faculty ⁴	\$71,439		\$82,232
			Actual
			84
			\$5,770,000
			\$68,690

(College of Engineering)

- (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 PSU ETIC Plan for 05-07.

Intellectual Property Metrics

AY07¹ as of 6/30/07

	AY06 ¹	AY07 ¹	
	Actual	Goal ⁷	Actual
Spin-offs ²	2	1	0
Invention Disclosures ³	17	6	2
Patents Awarded ⁴	1	2	0
Number of Licenses ⁵	4	1	0
Revenue ⁶	\$10k	\$10k	\$0k

(1) Academic year ending June of indicated year.

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

(3) New patent applications, provisional or otherwise, during year.

(4) Patents awarded by U.S. Patent Office during year.

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

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

(7) From ETIC Plan for 05-07.

National Ranking

As of 6/30/06

- NSA designates PSU Computer Science Department as Center of Academic Excellence in Information Assurance Education
- US News & World Report – PSU ranked in the top 40 institutions in Service Learning
- US News & World Report – PSU ranked in the top 28 institutions in Learning Communities
- US News & World Report – PSU ranked in the top 23 institutions in Senior Capstone
- US news & World Report – PSU ranked in the top 18 institutions in Internships/co-ops
- US News & World Report – PSU ranked in top 38 institutions in first-year experiences
- IAMOT – PSU ETM ranked in top 50 global centers for Research

Successes

- Transportation Center
- The Northwest Electromagnetics and Acoustics Research Lab (NEAR - Lab)
- Energy Research Center (Maseeh Prof. Gerald Sheble)
- CEE Environmental Engineering BS Degree Approved
- ETM PhD Program Approved
- OR InC support for Manufacturing 21
- Successful evaluation for MME PhD Program
- But enrollments are up:

	Fall	Fall	Fall	Fall	06 to 07
Stdnt type	2004~	2005~	2006~	2007*	%incr
1st Term Fresh	127	141	137	154	12%
Transfer	192	210	154	172	12%
Undergraduate	1366	1317	1321	1408	7%
Graduate	502	495	529	568	7%

Challenges

- Continuing
 - Academic Program Approvals & Revisions
 - Macro-level Space Planning & Finance
 - Need for Systematic Decision-making for New Initiatives
 - Establish PhD degree program in MME
 - Achieve US News & World Report Ranking – AY '10
 - Nationally it is a difficult research funding environment

- New
 - Add POP supported faculty members in key Research Areas
 - Move Manufacturing 21 to a Signature Research Center