

SB 5528
Background on ETIC/ETSF Investments
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ETSF/ETIC Investment – Outcomes

With limited time for testimony, I would like to submit the following highlights to underscore the impact of the state's investment.

- We are the nation's 10th largest College of Engineering in undergraduate enrollment.
- We are No. 1 in the nation in number of computer science degrees awarded annually.
- We awarded 2,045 undergraduate and graduate degrees in 2020.
- We are No. 3 for public R1 universities in percentage of faculty who are women.
- Our research expertise in robotics, manufacturing, earthquakes and tsunamis, artificial intelligence, and software, among other areas, brought in \$59.3 million in research funding in 2020.

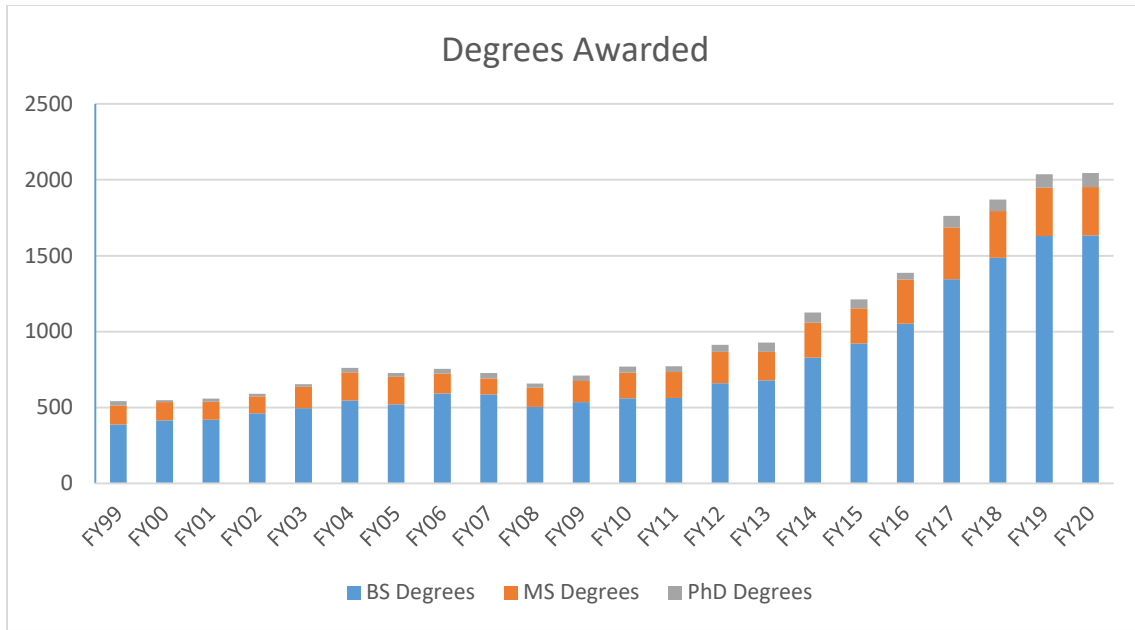
The Oregon legislature's foresight and initiative to make long term investments into engineering, computer science, and other high tech programs enabled this growth. The stability provided by ETIC's support since FY99 allowed the college to hire faculty, support start-up packages, triple the number graduates, quadruple research funding, and develop personal philanthropy, industry investments, and agency funding. The College of Engineering invested wisely, with guidance from the ETIC board, and focused on competing against aspirational peer universities for the best faculty. OSU's College of Engineering sought to be the destination of choice for world-class faculty with research expertise in computer electronics, hardware and software, advanced manufacturing, materials, clean energy, artificial intelligence, machine learning, robotics, resilient infrastructure and clean water.

Today the college relies on the sustaining funds to support the original goals of ETIC, including recruiting and retaining outstanding faculty and students and minimizing the impact of a high student to faculty ratio.

With two decades of ETIC/ESTF investment, the number of graduates from OSU's College of Engineering nearly quadrupled and the faculty doubled.

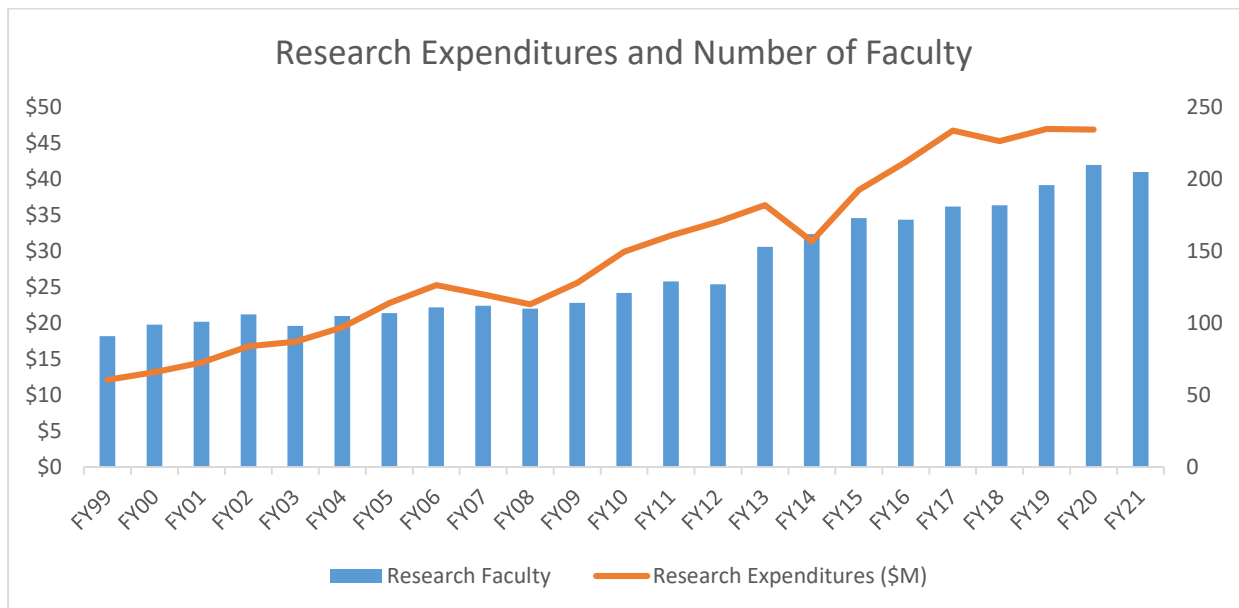
Return on Investment: Degrees and Student Credit Hours

The College continues to increase the number of degrees conferred each year, and in 2015, exceeded the ETIC goals for degrees for each level: BS, MS and Ph.D. This increase was directly attributable to ETIC investment, and the current numbers of degrees awarded and students served are unsustainable without continued investment. This year, the college is launching new initiatives aimed at retention and recruitment.



External Investment and Research Metrics

As anticipated, the ETIC and other external investments in the College of Engineering are symbiotic. As an example, ETIC investments helped to recruit anchor faculty in the college’s nationally ranked robotics program, now known as the Collaborative Robotics and Intelligent Systems (CoRIS) Institute. Our faculty partner with global companies (many with a local presence), and key federal agencies such as the National Science Foundation, Office of Naval Research, DARPA and Army Research Labs. These partnerships bring external investment and broad visibility to the college, to OSU, and to Oregon.



Other Key Performance Indicators Tracked by College Leadership

ETIC's industry-driven board provided significant guidance as OSU's College of Engineering sought to strategically invest the state's funding. In the absence of the ETIC board, the dean of the College of Engineering built a leadership council that includes industry leaders from Intel, IBM, Hewlett Packard, Nike, Precision Castparts, MDU Construction Services, and Garmin. That council along with the college's leadership team identified key performance indicators to track investments. These indicators, in addition to those identified by ETIC, support the college's current investment strategy.

Current Select Key-Performance Indicators

	FY16	FY17	FY18	FY19	FY20	FY21
Undergraduate Enrollment	7,070	7,433	7,932	7,839	8,092	8,439
Graduate Enrollment	1,304	1,376	1,368	1,366	1,386	1,354
Number of T/TT Faculty	173	182	181	196	210	205
Undergraduate Student/Faculty Ratio	40.8	40.8	43.8	40.0	38.5	41.2
% of T/TT faculty that are women	15%	18.6%	21.6%	24.0%	25.2%	25.9%
% URM Student Enrolled	19.9%	21.4%	22.8%	25.6%	25.0%	28.6%
% Women Undergraduates	18.9%	19.3%	20.0%	20.1%	20.9%	21.8%
% First Generation Students Enrolled	24.0%	21.9%	20.5%	19.6%	19.5%	19.8%
Research Expenditures (\$m)	\$42.4	\$47.0	\$45.3	\$47.0	\$46.9	*

*unknown until FY is over.