

DEPARTMENT OF TECHNOLOGY

FY21 Annual Budget Report

February 2021



**ILLINOIS STATE
UNIVERSITY**

Illinois' first public university

TED BRANOFF – CHAIRPERSON

JOSH BROWN – ASSISTANT CHAIRPERSON

Faculty

Matt Aldeman, PhD: Sustainable & Renewable Energy
Troy Blunier, MS: Engineering Technology
Ted Branoff, PhD: Chairperson
Josh Brown, PhD: Technology & Engineering Ed.
Adam Burke, MS: Graphic Communications
Geoffrey Campbell, MS: Computer Systems Tech.
Yi-hsiang “Isaac” Chang, PhD: Tech. Management
Kevin Devine, EdD: Engineering Technology
Anu Gokhale, PhD: Computer Systems Technology
Sundeep Inti, PhD: Construction Management
Randy Jacobs, MS: Construction Management
Jin Ho Jo, PhD: Sustainable & Renewable Energy
Chris Merrill, PhD: Technology & Engineering Ed.
Jaby Mohammed, PhD: Engineering Technology
Stephen Mujeye, PhD: Computer Systems Technology

Borinara Park, PhD: Graduate Program
Klaus Schmidt, PhD: Graduate Coordinator
Euysup Shim: PhD: Construction Management
Pranshoo Solanki, PhD: Construction Management
Jeritt Williams, MS: Engineering Technology
Dan Wilson, DIT: Graphic Communications
Haiyan “Sally” Xie, PhD: Construction Management

Administrative Professionals & Civil Service

Misty Bell: Office Administrator, Lead Staff
Ashley Berg: Academic Advisor
Jennifer Florence: Program Student Advisor
Elizabeth Gerrard: Office Manager
Robert Shuman: Senior Laboratory Technician

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Introduction

The purpose of the Annual Budget Report is to (a) summarize our departmental support of the CAST Strategic Plan and Educating Illinois, (b) indicate measures of productivity, (c) describe resource reallocations or reorganizations, (d) and provide accountability for supplemental funding. Where possible, performance measures are from quantitative data compiled by other ISU units such as Research and Sponsored Programs Office and Planning, Research and Policy Analysis.

Department Vision, Mission and Goals

Mission: *Through excellence in authentic learning, scholarship, and outreach experiences, we prepare technology-oriented professionals for an ever-changing environment. We embrace the diversity of programs within the Department of Technology, which build upon the University's strong general education foundation.*

Vision: *Leaders in applied engineering, technology management and education.*

Goal 1: Provide state-of-the-art applied learning environments for undergraduate and graduate students in high-demand disciplines.

Goal 2: Support and reward faculty and staff excellence.

Goal 3: Promote a culture of respect and inclusion among faculty, staff, and students.

Goal 4: Enhance the effectiveness of the Department by strengthening engagement.

Listing of College and University Goals

CAST Strategic Plan 2019-2024

1. Integrate relevant applied learning and technologies to provide an exemplary educational experience focusing on individual goals for both undergraduate and graduate students.
2. Foster a cohesive culture of diversity, inclusion, and equity that reaches all our students, faculty, and staff.
3. Support a workplace that facilitates and rewards faculty and staff excellence.
4. Develop and maintain productive relationships with external constituencies.

Educate ~ Connect ~ Elevate 2018-2023

1. Enhance Strength and Stability
2. Foster Innovation
3. Nurture Diversity and Inclusion
4. Enrich Engagement

Departmental Goal Alignment with CAST and Educating Illinois

DEPARTMENT OF TECHNOLOGY GOALS 2019-2024	CAST 2019-2024	EDUCATE~CONNECT~ELEVATE 2018-2023
1. Provide state-of-the-art applied learning environments for undergraduate and graduate students in high-demand disciplines.	I. Integrate relevant applied learning and technologies to provide an exemplary educational experience focusing on individual goals for both undergraduate and graduate students.	I. Enhance Strength and Stability
2. Support and reward faculty and staff excellence.	III. Support a workplace that facilitates and rewards faculty and staff excellence.	II. Foster Innovation
3. Promote a culture of respect and inclusion among faculty, staff, and students.	II. Foster a cohesive culture of diversity, inclusion, and equity that reaches all our students, faculty, and staff.	III. Nurture Diversity and Inclusion
4. Enhance the effectiveness of the Department by strengthening engagement.	IV. Develop and maintain productive relationships with external constituencies.	IV. Enrich Engagement

I. Accomplishments and Productivity for FY21 --

Progress at Achieving Illinois State University, CAST, and TEC Goals

ISU Goal 1: Enhance Strength and Stability.

CAST Goal 1: Integrate relevant applied learning and technologies to provide an exemplary educational experience focusing on individual goals for both undergraduate and graduate students.

TEC Goal 1: Provide state-of-the-art applied learning environments for undergraduate and graduate students in high-demand disciplines.

TEC Goal 1: Strategy 1. Regularly assess and evaluate all departmental functions and programs to assure continuous improvement of academic rigor, scholarship and service.

Implementation actions	FY21 Outcomes / Status
<p>1. Maintain program quality as indicated by successful program reviews and re-accreditation by discipline-specific accrediting agencies such as ACCE, ATMAE, and NCATE.</p>	<ul style="list-style-type: none"> • The Sustainable & Renewable Energy program had a successful 8-year program review in FY19. • Computer Systems Technology (CST) and Engineering Technology (ET) were re-accredited by the Association of Technology Management and Applied Technology (ATMAE) in November 2017. • Graphic Communications (GC) initial accreditation for ACCGC for 6-years by ACCGC in September 2015. Faculty submitted a self-study for reaccreditation in FY21. • Construction Management (CM) re-accreditation for 6-years by ACCE in July 2015. Faculty submitted a self-study for reaccreditation in FY21. • Technology and Engineering Education (T&EE) reaccredited by CAEP in 2019. • Computer Systems Technology, Construction Management, Engineering Technology, Graphic Communications Technology, Technology & Engineering Education, and the Graduate program submitted program review documents in FY21.
<p>2. Update and implement the departmental <i>Academic Quality Assurance Program</i> for all programs and services (Deliverable: <i>Annual Assessment Report and Program Goal Reports</i>).</p>	<ul style="list-style-type: none"> • The annual assessment report is posted on the TEC website each year (About). • TEC Assistant Chair oversees data collection and the development of the annual assessment report. Each program is charged to document program improvements based upon annual assessment data. • Academic Quality Improvement Plans updated in 2012 as part of program review. Posted on University Assessment Services web site. • The UCC approved the following curriculum revisions in 2020: <ul style="list-style-type: none"> • Computer Systems Technology: <ul style="list-style-type: none"> • New courses: TEC361-Teaching Computer Science in the Secondary School and TEC362-Seminar on Teaching Computer Science in the Secondary School. • Added clinical hours statements to TEC101 & TEC307. • Graduate Program: <ul style="list-style-type: none"> • Submitted new course TEC436 – Contemporary Issues in Quality Management and Analytics. • Deleted the Training & Development sequence.

<p>3. Maintain active industry advisory committees in each program that meet at least annually to review, improve, and validate curriculum and other strategic programmatic directions.</p>	<p><i>Advisory Board Meetings Dates</i></p> <table border="1"> <thead> <tr> <th>Program</th> <th># in 2020</th> <th>Date(s) of Last Meetings</th> </tr> </thead> <tbody> <tr> <td>CST</td> <td>1</td> <td>5/1/2020</td> </tr> <tr> <td>CM</td> <td>1</td> <td>11/6/2020</td> </tr> <tr> <td>ET</td> <td>0</td> <td>5/17/2019</td> </tr> <tr> <td>GCT</td> <td>1</td> <td>9/25/2020</td> </tr> <tr> <td>SRE</td> <td>1</td> <td>4/17/2020</td> </tr> <tr> <td>Tech Ed</td> <td>0</td> <td>4/24/2019</td> </tr> <tr> <td>Grad</td> <td>0</td> <td>3/29/2019</td> </tr> </tbody> </table>	Program	# in 2020	Date(s) of Last Meetings	CST	1	5/1/2020	CM	1	11/6/2020	ET	0	5/17/2019	GCT	1	9/25/2020	SRE	1	4/17/2020	Tech Ed	0	4/24/2019	Grad	0	3/29/2019
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Grad	0	3/29/2019																							
<p>4. Conduct regular classroom peer observations with probationary faculty and non-tenured track faculty (NTT) to assess teaching performance and to promote quality of instruction.</p>	<ul style="list-style-type: none"> Peer observations and follow-ups of 3 tenure-track faculty in October/November 2020. Teaching expectations and feedback from IDEA evaluations included in Assignment of Duties letters to part-time instructors. One-on-one meetings held with all full-time faculty each spring to review IDEA ratings and plans for instructional improvements, as well as plans for scholarship, service, and professional development. 																								
<p>5. Encourage students to pursue professional certification exams (such as CISCO, Microsoft, AIC Level 1, SME, Teacher Certification, etc.).</p>	<ul style="list-style-type: none"> Computer System Technology faculty encourage students to take professional certification exams (e.g., CISCO, Microsoft, etc.). Construction Management students take the AIC Level 1 exam. All Technology & Engineering Education students are required to take two state teacher examinations and develop an EdTPA portfolio as a national assessment for licensure. As part of TEC 250, TEC 317, TEC 353, TEC 354, Graphic Communications Technology students earn certifications in Print Planning & Estimating, Color Management Fundamentals, Autodesk Maya, and Publication Design for Print & Digital Media. 																								
<p>6. Review and update as necessary DFSC Policies to provide appropriate incentives for high quality performance in teaching, research, and service.</p>	<ul style="list-style-type: none"> DFSC guidelines last revised in Fall 2018. Main revisions were to clarify promotion in rank and Example Indicators of Teaching, Scholarship, and Service Performance. 																								
<p>7. Utilize enrollment management to maintain appropriate instructional capacity and student quality.</p>	<ul style="list-style-type: none"> Target admission numbers provided to EMAS for each program. All courses are major blocked until TEC students have registered. Recruitment activities in #8 below. Admission GPA is similar to other units in CAST. The Department's enrollment remained consistent from Fall 2019 (594) to Fall 2020 (593). Department enrollment was still up 12% over Fall 2013 numbers (when ERIP started). 																								

TEC Goal 1: Strategy 2. Recruit, retain, and recognize diverse high quality students.

Implementation Actions	FY21 Outcomes / Status
<p>8. Annually update the departmental <i>Diversity Plan</i> to ascertain actions needed for enhancement of participation by underrepresented groups.</p>	<ul style="list-style-type: none"> Technology and Engineering Education grants target diverse schools across Illinois. T&EE students are required to complete 50 clinical hours in a diverse school setting. Departmental Diversity Plan updated annually.
<p>9. Provide funding to faculty and staff for high-impact recruitment activities.</p>	<ul style="list-style-type: none"> Recruitment events included participation in (a) ISU Open Houses, Scholars & Honors days, departmental showcases, and weekly tours for interested students, (b) selected high school career days, (c) visits from high schools, (d) articulation meetings and subsequent agreements with community colleges, and (e) special recruitment and promotional events such as IDEA

	<p>competition, TSA competitions, and Tech Day that collectively bring hundreds of students and numerous high school teachers to the Department and ISU over the course of the year.</p> <ul style="list-style-type: none"> • Periodically host University College advisors for educational tours. We hosted approximately 20 advisors on February 22, 2019 to update them on the programs and give them a tour. • Chair, Advisor, and Program Coordinators (as needed) meet regularly to review recruitment activities outlined in annual program Plans of Work. • A welcome letter was sent to all admitted students during the Fall 2019 or Spring 2020 semester. In addition, admitted students received an email regarding scholarships from the Department Chair. • During FY2018, a TEC Student Ambassador program was initiated. Program areas nominated individuals who could represent their programs and the department at events such as open houses, individual tours, and alumni events. The program continued in FY21. • The Department worked with University Admissions in FY21 on targeted advertising for Computer Systems Technology, Graphic Communications Technology, Sustainable & Renewable Energy, and Technology & Engineering Education.
<p>10. Maintain up-to-date professional marketing materials, including a department Web site, program brochures and information sheets, and portable travel displays.</p>	<ul style="list-style-type: none"> • A major revision of the TEC website was done in 2017. • Website updated each summer and periodically as needed throughout the year. • News blog replaced mailed newsletter in December 2009. News items are created regularly to update our constituents. • Facebook and LinkedIn pages for the Department and various undergraduate programs are maintained with photos and news items. • Construction Management continued their annual newsletter and sent it to high school Technology teachers, community college administrators in construction related programs, and construction companies in Illinois. • The Graphic Communications Technology program maintains Facebook, Instagram, Twitter, and LinkedIn groups with regular posts and updates. • In 2019 we worked with University Marketing & Communications to update our promotional materials for the department.
<p>11. Maintain updated articulation guidelines with Illinois community colleges.</p>	<ul style="list-style-type: none"> • Department maintains over 100 program level articulations with 22 Illinois community colleges. Guidelines updated by Coordinators as needed to accommodate curriculum changes.
<p>12. Respond to university initiatives to inform and direct students to Department of Technology programs.</p>	<ul style="list-style-type: none"> • The Department provides University College with up-to-date materials so they can properly advise students across campus about our programs. • Department advisors and Department Chair participated in Preview during the summer of 2019. • Branoff and 4 other individuals from across campus met with Admissions counselors in 2019 to discuss ways to eliminate confusion among programs on campus which have a computing focus.

<p>13. Annually award scholarships and other recognitions to high-performing students.</p>	<ul style="list-style-type: none"> • TEC Scholarship and Honors recognition was not held in 2020. • 19 new or continuing students shared in over \$27,000 of departmental scholarship awards. In addition, students reported receiving external scholarships. 												
<p>14. Promote student participation in the Honors Program and other scholarly recognitions.</p>	<ul style="list-style-type: none"> • Eighteen students within the Department are enrolled in the Honors program (academic good standing, a full-time student, and have completed a minimum of 60 hours with a cumulative GPA of 3.3 on a 4.0 scale). <p><i>5-year comparison of Honors Students.</i></p> <table border="1" data-bbox="717 562 1133 751"> <thead> <tr> <th>Year</th> <th>Fall Census</th> </tr> </thead> <tbody> <tr> <td>2020</td> <td>18</td> </tr> <tr> <td>2019</td> <td>14</td> </tr> <tr> <td>2018</td> <td>10</td> </tr> <tr> <td>2017</td> <td>13</td> </tr> <tr> <td>2016</td> <td>8</td> </tr> </tbody> </table>	Year	Fall Census	2020	18	2019	14	2018	10	2017	13	2016	8
Year	Fall Census												
2020	18												
2019	14												
2018	10												
2017	13												
2016	8												
<p>15. Pursue alternate delivery of courses to meet global changes and market conditions.</p>	<ul style="list-style-type: none"> • Six undergraduate and five graduate courses were offered online during summer 2019. • The Department continued to offer an online master’s sequence to target non-traditional audiences into the graduate program. • In March of 2020, all TEC courses were moved to an online environment because of the COVID-19 pandemic. • The Fall 2020 semester consisted of a mixture of face-to-face (7), hybrid (11), and online (60) sections. 												

TEC Goal 1: Strategy 3. Recruit, retain, and recognize diverse high-quality faculty and staff.

Implementation Actions	FY21 Outcomes / Status
<p>Fill tenure track lines as permission is granted to search.</p>	<ul style="list-style-type: none"> • The Department searched for two tenure-track positions in FY20 in the areas of Construction Management (1 position) and Computer Systems Technology (1 position). Both positions were successfully filled for Fall 2020.
<p>16. Provide support for faculty professional development to continually improve knowledge and skills in teaching and research</p>	<ul style="list-style-type: none"> • All full-time faculty are eligible for a specified level of travel funds for conferences, presentations, and professional development. • Competitive professional development funds available as budgets permit. Three faculty initiatives were funded for FY21. Faculty requesting funds are required to submit a 3-year professional development plan outlining enhancement strategies and benefits of the planned activities. • Mentor programs are established for all TT faculty. The new tenure-track faculty were provided teaching and research mentors. • Tenure-track faculty in their first two years are provided additional professional development funds to nurture a focused research agenda. • Faculty are strongly encouraged to participate in/apply for CTLT and other internal professional development (PD) funding opportunities.
<p>17. Structure teaching loads to facilitate research expectations.</p>	<ul style="list-style-type: none"> • When possible without impacting instruction, accommodations in teaching assignments, such as scheduling classes on only two or three days per week, are made to provide blocks of time conducive to scholarly productivity.

	<ul style="list-style-type: none"> As funds permit, new tenure-track faculty receive a one course release in the fall semester during their first year. 																																				
18. Provide opportunities for summer employment and industry externships.	<ul style="list-style-type: none"> Ten faculty taught courses during the 2020 summer. 																																				
19. Annually recognize outstanding departmental faculty for teaching, research, and service and nominate faculty for other award programs as appropriate.	<ul style="list-style-type: none"> 2020 Departmental Awards to Williams, Xie, and Jo respectively for Teaching, Research, and Service. TEC Alumni awards were postponed in 2020. CAST Alumni awards were postponed in 2020. Dr. Anu Gokhale received the ISU Distinguished Professor and the Chizmar-Ostrosky Scholarship of Teaching and Learning University Award. Dr. Sally Xie was nominated and received a one-year research leave at the University of Cambridge. Dr. Matt Aldeman received the University Research Initiative Award and the CAST Outstanding Research Award (pre-tenure). Troy Blunier was elected to the ITEEA Board of Directors. 																																				
20. Encourage faculty involvement in CTLT services and workshops.	<ul style="list-style-type: none"> Faculty regularly participate in CTLT topical workshops to improve classroom instruction. The table below presents the number of TEC faculty who participated in CTLT events and the total participation hours for all faculty for the each of last ten years. <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Year</th> <th># of individuals</th> <th>Total Hours</th> </tr> </thead> <tbody> <tr><td>2020</td><td>28</td><td>312</td></tr> <tr><td>2019</td><td>20</td><td>402</td></tr> <tr><td>2018</td><td>14</td><td>182</td></tr> <tr><td>2017</td><td>17</td><td>231</td></tr> <tr><td>2016</td><td>10</td><td>201</td></tr> <tr><td>2015</td><td>11</td><td>473</td></tr> <tr><td>2014</td><td>8</td><td>257</td></tr> <tr><td>2013</td><td>17</td><td>219</td></tr> <tr><td>2012</td><td>18</td><td>244</td></tr> <tr><td>2011</td><td>13</td><td>220</td></tr> <tr><td>2010</td><td>9</td><td>78</td></tr> </tbody> </table>	Year	# of individuals	Total Hours	2020	28	312	2019	20	402	2018	14	182	2017	17	231	2016	10	201	2015	11	473	2014	8	257	2013	17	219	2012	18	244	2011	13	220	2010	9	78
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21. Pursue a diverse high-quality faculty and staff through appropriate recruitment activities.	<ul style="list-style-type: none"> When conducting searches for faculty and staff in 2020, ads were placed in a wide spectrum of venues to attract the best candidates. This included professional society websites, HBCU publications, and standard publications for faculty position announcements. 																																				

TEC Goal 1: Strategy 4. Promote collaborations among faculty, student, and industry to develop leadership skills, professionalism, and collegiality.

Implementation Actions	FY21 Outcomes / Status
22. Solicit industry funding to support and encourage student participation in professional organizations and associated events such as field trips, guest speakers, conferences, competitions, and trade shows.	<p>Numerous opportunities available for students to engage in meetings, field trips, conferences and competitions sponsored by professional organizations. Following is a representative sample of these activities.</p> <ul style="list-style-type: none"> Over 30 CM students attended ACI, ASC, and MCAA national/state/local meetings/events/competitions, mostly funded by industry and professional organizations. CM Partnership program was established in 2013 to fund student professional development. See

	<p>https://tec.illinoisstate.edu/giving/construction-management-industry-partnership/</p> <ul style="list-style-type: none"> • Four GCT students started preparing for the Phoenix Challenge Competition. They produced the first product, but activities were shut down in March of 2020. Previous student travel for this competition has been partially funded by the <i>William P. LaBounty Endowment for Graphic Communications</i>. • T&EE students participated in conferences and competitions associated with state, regional, and national professional organizations including ITEEA, Midwest TEECA, and ITEEA Conference and the national TEECA competitions.
23. Promote experiential learning opportunities and mentoring for students such as industry-based graduate assistantships, professional practice, honors projects, and independent studies.	<ul style="list-style-type: none"> • CM and ET require work experience hours prior to the senior capstone courses. • 14 BS and 19 MS students were placed in internships (TEC 398 and TEC 498) in 2020. Most undergrads opt for “informal” summer internship positions without registering for credit.
24. Organize and conduct social events that promote student-faculty interaction (i.e., tailgates, homecoming, etc.).	<ul style="list-style-type: none"> • TEC Ambassadors and Advisors organized at “TEC Bowling Night” on Friday, February 28, 2020. Approximately 15 faculty, staff, students, spouses, and children attended the event.
25. Provide opportunities for students, faculty, and staff to improve knowledge and skills through engagement with professional organizations.	<ul style="list-style-type: none"> • ISU faculty and students hosted an Autodesk workshop on Friday, February 7, 2020 sponsored by the IDEA (Illinois Design Educators Association). • Dr. Solanki has worked on several research projects with students and other faculty to integrate recycled glass and plastic with construction materials. His research teams work closely with the Town of Normal and the local recycling facility.

ISU Goal 2: Foster Innovation.

CAST Goal 3: Support a workplace that facilitates and rewards faculty and staff excellence.

TEC Goal 2: Support and reward faculty and staff excellence.

TEC Goal 2: Strategy 1. Enhance a culture of research and scholarship across the department that also celebrates faculty involvement in internally and externally funded activities.

Implementation Actions	FY21 Outcomes / Status
26. Support the department’s scholarly productivity with an emphasis on refereed publications and other appropriate scholarship.	<ul style="list-style-type: none"> • See: Goal 1: Strategy 3. Recruit, retain, and recognize diverse high-quality faculty and staff for details regarding initiatives and resources provided to support faculty travel for scholarly presentations, professional develop, teaching load assignments, mentoring, and awards. • The <i>Wiens/Custer Professional Development Endowment</i> provides financial support for faculty participation in development activities that promote skills related to scholarship and grantsmanship. In addition, funding is available for incentivize consulting support tailored to specific external grant needs in the areas of budget preparation, critical review, and even proof reading. Preference will be given to faculty who are in the early stages of their career.
27. Promote participation in grants and external funding by tenured faculty.	<ul style="list-style-type: none"> • Success at grantsmanship is recognized at public venues and faculty are nominated for research related awards. Annual merit review values and rewards grantsmanship.

		<i>Summary of Annual Grant/Contract Productivity</i>				
		Year	# of Proposal	\$ Submitted	# of Awards	\$ Awarded
		FY20	3.00	834,429	1.00	635,000
		FY19	6.00	1,045,655	5.00	737,124
		FY18	9.48	2,557,136	5.00	720,178
		FY17	4.00	564,876	0.67	184,250
		FY16	2.67	380,250	2.07	252,701
		FY15	2.45	653,861	1.00	212,939
		FY14	1.00	223,715	2.33	1,018,336
		FY13	3.00	1,846,121	3.00	1,221,075
		FY12	6.53	2,318,546	4.50	1,420,262
		FY11	5.43	1,066,706	4.43	1,170,619
		FY10	7.29	1,762,938	4.35	1,249,597
		Data from Research and Sponsored Programs				
28. Provide departmental resources in support of research and grant submission.	<ul style="list-style-type: none"> The <i>Wiens/Custer Professional Development Endowment</i> provides financial support for faculty participation in development activities that promote skills related to scholarship and grantsmanship. Each year faculty can submit proposals to received funding for activities related furthering their professional development. 					
29. Facilitate effective mentorship of junior faculty to develop a focused line of scholarship that integrates teaching, research, and service/outreach.	<ul style="list-style-type: none"> Mentors are assigned to all new tenure-track faculty. Chair also visits with tenure-track faculty regularly to review, encourage, and support scholarly productivity. Tenure-track faculty are strongly encouraged to participate in the URG program and other CAST/ISU workshops to enhance grantsmanship skills. Three TT faculty had ongoing URGs in 2020. Three TT faculty have competitive external grant awards. 					
30. Promote faculty involvement in CAST, CTLT, and University funding opportunities and sponsored research skill development activities.	<ul style="list-style-type: none"> Tenure-track faculty regularly participate in the CAST/RSP research and grant writing workshops. Tenured faculty participate as appropriated. 					

TEC Goal 2: Strategy 2. Disseminate the results of research through journal publications, conference proceedings, and research presentations.

Implementation Actions	FY21 Outcomes / Status																		
31. Encourage tenure-track faculty to participate in the CAST Publication Incentive Program.	<ul style="list-style-type: none"> Faculty are encouraged to access CAST Publication Incentive Program (PIP) funds for additional travel support. In 2020, 3 faculty submitted 9 applications and earned PIP awards for 8 peer reviewed journal or proceedings publications. <p><i>5-Year Comparison Of Faculty Scholarly Productivity As Measured by PIP Awards</i></p> <table border="1"> <thead> <tr> <th>Yr</th> <th># of Faculty</th> <th># CAST Awards</th> </tr> </thead> <tbody> <tr> <td>2020</td> <td>2</td> <td>3</td> </tr> <tr> <td>2019</td> <td>6</td> <td>13</td> </tr> <tr> <td>2018</td> <td>3</td> <td>8</td> </tr> <tr> <td>2017</td> <td>4</td> <td>8</td> </tr> <tr> <td>2016</td> <td>6</td> <td>18</td> </tr> </tbody> </table>	Yr	# of Faculty	# CAST Awards	2020	2	3	2019	6	13	2018	3	8	2017	4	8	2016	6	18
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2017	4	8																	
2016	6	18																	
32. Provide travel support for faculty making refereed presentations at professional conferences.	<ul style="list-style-type: none"> TEC provides \$1000 in travel support annual to faculty making refereed presentations at professional conferences. Additional funds are available to tenure-track faculty in their first two years. 																		

	<ul style="list-style-type: none"> • TEC provides funding for graduate students who are accepted to give peer reviewed research presentations at professional conferences.
33. Provide departmental resources to support faculty research facilities and laboratories.	<ul style="list-style-type: none"> • \$70,000 was carried over from FY19 to purchase a Universal Testing Machine for construction materials. The Dean’s Office was also contributing \$80,000 toward this purchase. The machine is to be used in Construction Management classes and will also be used for faculty and student research. The UTM arrived early in 2020. Because of COVID-19, installation did not occur until December 2020.

TEC Goal 2: Strategy 3. Support and reward innovation and excellence in teaching.

Implementation Actions	FY21 Outcomes / Status
34. Encourage faculty to participate in professional development workshops sponsored by the CTLT or other organizations.	<ul style="list-style-type: none"> • Twenty-eight faculty and staff participated in 312 hours of CTLT professional development. • 330 hours were related to course and curriculum professional development. • 82 hours were related to diversity and community engagement initiatives.
35. Recognize outstanding faculty by nominating them for College and University teaching awards.	<ul style="list-style-type: none"> • One tenure track faculty was nominated for University Distinguished Professor.
36. Provide funds to support innovative learning environments.	<ul style="list-style-type: none"> • Program Coordinators submit annual Resource Allocation Plans (RAP) for capital equipment and facilities improvements. Requests are prioritized and supported as funding allows. Programs are encouraged to include longer-term resource planning in their annual Plan of Work.

TEC Goal 2: Strategy 4. Provide professional development support and opportunities for faculty and staff.

Implementation Actions	FY21 Outcomes / Status
37. Encourage faculty to participate in professional development activities that promote excellence.	<ul style="list-style-type: none"> • Faculty – Dr. Shim attended training for Tilos software. Dr. Park attended training on fluid simulation and system dynamics with AnyLogic, and he attended the Dynamic Society Summer School. Dr. Solanki attended a workshop sponsored by ACI. • Staff – one TEC staff logged 12 hours of professional development activities related to software.
38. Provide professional development funding for faculty, especially when the activities lead to external funding proposals.	<ul style="list-style-type: none"> • Three faculty received funding in 2020 toward work to generate an external funding proposal.

TEC Goal 2: Strategy 5. Encourage and reward meaningful service by faculty and staff.

Implementation Actions	FY21 Outcomes / Status
39. Encourage faculty and staff to participate in service activities on and off campus.	<ul style="list-style-type: none"> • See item 59 for a list of on-campus faculty service. • Josh Brown served as assistant to the Unit 5 Parkside Elementary School librarian in 2020.

	<ul style="list-style-type: none"> • Jin Jo served the Ecology Action Center helping with the Bloomington-Normal Community Energy Strategic Planning Process. • Chris Merrill and Jeritt Williams made personal protection equipment for area health care workers. • Jaby Mohammed volunteered at the Normal Public Library. He also volunteered to help with the “move-out” process for residence halls in 2020. • Bo Park served as an analytics consultant for the Children’s Discovery Museum in Uptown Normal.
40. Recognize faculty and staff service in website media posts, monthly donor letters, and annual reports.	<ul style="list-style-type: none"> • Jin Jo was recognized with the 2020 Department of Technology Service Award. • Dan Wilson was recognized through CAST stories for sharing his extensive knowledge of online learning to his campus colleagues.
41. Recognize outstanding faculty and staff by nominating them for College and University service awards.	<ul style="list-style-type: none"> • None in 2020.

ISU Goal 3: Nurture Diversity and Inclusion.

CAST Goal 2: Foster a cohesive culture of diversity, inclusion, and equity that reaches all our students, faculty, and staff.

TEC Goal 3: Promote a culture of respect and inclusion among faculty, staff, and students.

TEC Goal 3: Strategy 1. Promote inclusion, respect, and equity within our classrooms by creating awareness and programming for faculty and staff.

Implementation Actions	FY21 Outcomes / Status
42. Encourage faculty and staff to attend professional development activities related to inclusion.	<ul style="list-style-type: none"> • 14 TEC faculty and 4 staff attended the CTLT workshop on “Microaggressions Workshop” in February of 2020. • Two faculty attended other CTLT workshops in 2020 on microaggressions and implicit bias.
43. Devote at least one meeting per year to inclusion, respect, and equity professional development.	<ul style="list-style-type: none"> • The February 21, 2020 TEC meeting was devoted to a workshop on “Microaggressions”.
44. Collaborate with campus organizations related to diversity initiatives and utilize existing campus resources.	<ul style="list-style-type: none"> • Department of Technology faculty and staff were encouraged to participate in a workshop on “Microaggressions.” This workshop was sponsored by the CTLT. • Faculty were encouraged to participate in other workshops sponsored by the university.
45. Provide an anonymous channel for regular feedback about departmental experiences with faculty, staff, and other students to address issues and commend accolades.	<ul style="list-style-type: none"> • Graduating seniors all have an opportunity to complete our Senior Survey to give feedback on their experiences within the Department of Technology. • Graduate students are typically interviewed by phone or in person regarding their experiences.

Goal 3: Strategy 2. Continue to diversify and promote equity among faculty, staff, and students.

Implementation Actions	FY21 Outcomes / Status
46. Be strategic when posting faculty and staff position announcements to maximize the diversity of the search pools.	<ul style="list-style-type: none"> • When conducting searches for faculty in 2020, ads were placed in a wide spectrum of venues to attract the best candidates. This included professional society websites, HBCU publications, and standard publications for faculty and staff position announcements.

Department of Technology

47. Create social media stories that highlight diversity in the department.	<ul style="list-style-type: none"> The Department of Technology Facebook page highlights a wide-range of stories illustrating the diversity of programs and students within the department.
48. Include questions about student experiences with diversity and equity on the senior survey to inform departmental faculty and staff.	<ul style="list-style-type: none"> These questions were added to the Spring 2020 senior survey.
49. Ensure diverse and equitable representation on advisory boards.	<ul style="list-style-type: none"> All program area coordinators work to ensure advisory board members represent the diversity of our constituents.

Goal 3: Strategy 3. Increase and reward collaboration among students and faculty within the Department, College, and University.

Implementation Actions	FY21 Outcomes / Status
50. Encourage faculty to design projects that promote students working across curricula.	<ul style="list-style-type: none"> TEC 320 project groups involve students across multiple program areas.
51. Promote teaching and research projects across program areas and departments/schools.	<ul style="list-style-type: none"> Dr. Pranshoo Solanki is working with faculty and students in TEC and Health Sciences on a research project using recycled glass as a replacement of cement in controlled low-strength material. Their work is funded by the EPA.

Goal 3: Strategy 4. Continue to expand the international opportunities for students and faculty.

Implementation Actions	FY21 Outcomes / Status
52. Promote opportunities for faculty and students to study abroad, present and/or collaborate on international research projects, host visiting scholars, and globalize the curriculum.	<ul style="list-style-type: none"> Sustainable & Renewable Energy students are encouraged to complete a study abroad experience at AAMS University in Aarhus, Denmark. One SRE student attended AAMS in the spring of 2020. Anu Gokhale, Klaus Schmidt, and Sally Xie have collaborated with international colleagues on research projects.
53. Create social media stories that highlight international activities.	<ul style="list-style-type: none"> International stories are posted on the Department of Technology's news site and Facebook page.
54. Highlight international initiatives at departmental meetings.	<ul style="list-style-type: none"> International initiatives are highlighted when appropriate at departmental meetings.
55. Gather data from graduating students to continuously improve the graduate program.	<ul style="list-style-type: none"> International students are typically interviewed upon graduation to gather feedback regarding their experiences.

ISU Goal 4: Enrich Engagement.

CAST Goal 4: Develop and maintain productive relationships with external constituencies.

TEC Goal 4: Enhance the effectiveness of the Department by strengthening engagement.

TEC Goal 4: Strategy 1. Encourage involvement in outreach, consulting activities, and leadership in appropriate state, national and international professional organizations.

Implementation Actions	FY21 Outcomes / Status
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<p>56. Encourage faculty participation in outreach and technology transfer activities.</p>	<p>Outreach/consulting activities in 2020:</p> <ul style="list-style-type: none"> • Teacher professional development – Merrill & J. Brown. • Robotics, manufacturing, and CAD consulting – Devine. • Wind/Solar energy workshops – Aldeman & Jo. • IDEA workshops for drafting educators – Blunier & Williams. • MDI workshops – Park & Schmidt. • Quality Management and Analytics workshops – Park. 																																										
<p>57. Encourage faculty participation and leadership in national and international professional organizations associated with our departmental disciplines.</p>	<p>Faculty were actively involved in providing service to State or National Professional Organizations. A sampling of professional societies include: ACCE, ACCGC, ASC, ASEE, ATMAE, GLGA, IEEE, IGAEA, ISGG, ITEEA, and TSA.</p>																																										
<p>58. Encourage faculty participation as members of accreditation boards and accreditation and program review teams.</p>	<ul style="list-style-type: none"> • Dr. Dan Wilson has worked with the accreditation board of ACCGC. 																																										
<p>59. Encourage faculty participation in campus-wide committees and activities.</p>	<p>All faculty serve on one or more TEC/CAST/ISU committee(s). Faculty service is included in annual activity reports. Following is a listing of TEC faculty serving on College and University level committees.</p> <table border="0" style="width: 100%;"> <tr> <td>Acad. Freedom, Ethics & Grievance</td> <td>Bo Park</td> </tr> <tr> <td>CAST Council</td> <td>Josh Brown, Vice-Chair ('20) Euysup Shim (2020-2023)</td> </tr> <tr> <td>CAST Curriculum Committee</td> <td>Kevin Devine, Vice-Chair</td> </tr> <tr> <td>CAST Research Council</td> <td>Pranshoo Solanki</td> </tr> <tr> <td>CeMaST, Associate Director</td> <td>Chris Merrill</td> </tr> <tr> <td>CFSC</td> <td>Chris Merrill</td> </tr> <tr> <td>Civic Engagement Council</td> <td>Jin Jo</td> </tr> <tr> <td>Classroom Logistics Adv. Group</td> <td>Klaus Schmidt</td> </tr> <tr> <td>Classified Research Review Comm</td> <td>Pranshoo Solanki</td> </tr> <tr> <td>Engineering Arch. Committee</td> <td>Matt Aldeman</td> </tr> <tr> <td>Engineering Curriculum Comm</td> <td>Ted Branoff</td> </tr> <tr> <td>GradBird Scholar Committee</td> <td>Klaus Schmidt</td> </tr> <tr> <td>Innovative Consulting Community</td> <td>Pranshoo Solanki</td> </tr> <tr> <td>ISU Faculty Review Committee</td> <td>Jin Jo</td> </tr> <tr> <td>ISU Strategic Planning Committee</td> <td>Anu Gokhale</td> </tr> <tr> <td>Research Computing Adv. Council</td> <td>Isaac Chang</td> </tr> <tr> <td>Textbook Affordability Comm.</td> <td>Euysup Shim</td> </tr> <tr> <td>UAS – Advisory Council</td> <td>Josh Brown</td> </tr> <tr> <td>University Appeals Board</td> <td>Pranshoo Solanki</td> </tr> <tr> <td>University Research Council</td> <td>Bo Park</td> </tr> <tr> <td>University Review Committee</td> <td>Bo Park</td> </tr> </table>	Acad. Freedom, Ethics & Grievance	Bo Park	CAST Council	Josh Brown, Vice-Chair ('20) Euysup Shim (2020-2023)	CAST Curriculum Committee	Kevin Devine, Vice-Chair	CAST Research Council	Pranshoo Solanki	CeMaST, Associate Director	Chris Merrill	CFSC	Chris Merrill	Civic Engagement Council	Jin Jo	Classroom Logistics Adv. Group	Klaus Schmidt	Classified Research Review Comm	Pranshoo Solanki	Engineering Arch. Committee	Matt Aldeman	Engineering Curriculum Comm	Ted Branoff	GradBird Scholar Committee	Klaus Schmidt	Innovative Consulting Community	Pranshoo Solanki	ISU Faculty Review Committee	Jin Jo	ISU Strategic Planning Committee	Anu Gokhale	Research Computing Adv. Council	Isaac Chang	Textbook Affordability Comm.	Euysup Shim	UAS – Advisory Council	Josh Brown	University Appeals Board	Pranshoo Solanki	University Research Council	Bo Park	University Review Committee	Bo Park
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TEC Goal 4: Strategy 2. Encourage service-learning opportunities for students

Implementation Actions	FY21 Outcomes / Status
<p>60. Encourage faculty to develop service-learning experiences in appropriate courses.</p>	<ul style="list-style-type: none"> • Department of Technology faculty are encouraged to be more strategic related to community engagement and service-learning activities. These activities can now be entered within Digital Measures for their annual activity reports.

61. Encourage student civic engagement in community service activities, student organizations, and service-learning projects.	<ul style="list-style-type: none"> • During the fall of 2020, Sustainable & Renewable Energy students and Dr. Matt Aldeman worked with Sunnyside Garden community garden and co-op to design and recommend a greenhouse for their community garden.
62. Provide professional development support for faculty to develop service-learning experiences in appropriate courses.	<ul style="list-style-type: none"> • The university offers annual funding opportunities for Civic Engagement. All faculty are eligible to apply for these awards. • Faculty can apply for Professional Development funds to develop service-learning components to their courses.

TEC Goal 4: Strategy 3. Encourage collaborations with alumni and emeriti faculty.

Implementation Actions	FY21 Outcomes / Status
63. Arrange meetings with program coordinators and emeriti faculty to foster collaborative development initiatives.	<ul style="list-style-type: none"> • Ad hoc meetings with emeriti faculty are arranged when necessary.
64. Maintain regular contact with alumni and friends (newsletter, website, campus events, award recognitions, etc.).	<ul style="list-style-type: none"> • News items are displayed regularly on the Department of Technology website and Facebook and LinkedIn pages. • Donor letters are sent monthly and highlight activities within the department.
65. Support faculty participation at events that engage alumni and friends.	<ul style="list-style-type: none"> • Faculty are encouraged to attend Alumni Day, Homecoming, Advisory Board meetings, and other events.

TEC Goal 4: Strategy 4. Model a culture of giving and philanthropy.

Implementation Actions	FY21 Outcomes / Status																								
66. Encourage all faculty to contribute to the Foundation on a regular basis (100% committed campaign).	<p><i>10-Year comparative summary of faculty/staff giving</i></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="background-color: yellow;">Year</th> <th style="background-color: yellow;"># Faculty/Staff Giving</th> </tr> </thead> <tbody> <tr><td>2020</td><td></td></tr> <tr><td>2019</td><td>8</td></tr> <tr><td>2018</td><td>9</td></tr> <tr><td>2017</td><td>11</td></tr> <tr><td>2016</td><td>12</td></tr> <tr><td>2015</td><td>10</td></tr> <tr><td>2014</td><td>13</td></tr> <tr><td>2013</td><td>11</td></tr> <tr><td>2012</td><td>11</td></tr> <tr><td>2011</td><td>9</td></tr> <tr><td>2010</td><td>11</td></tr> </tbody> </table>	Year	# Faculty/Staff Giving	2020		2019	8	2018	9	2017	11	2016	12	2015	10	2014	13	2013	11	2012	11	2011	9	2010	11
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67. Where appropriate, talk about the importance of giving back to the University to current students and alumni.	<ul style="list-style-type: none"> • During the TEC Scholarship Reception, the chair talks about the importance of giving and how current scholarship recipients have benefited from donations to the Department. 																								

TEC Goal 4: Strategy 5. Maintain high quality instructional technology, facilities, and computing infrastructure.

Implementation Actions	FY21 Outcomes / Status
68. Submit group comments from TEC to the <i>Campus Master Plan</i> task force in support of new or upgraded facilities.	<ul style="list-style-type: none"> • When appropriate, the Department may submit entries to the Campus Master Plan blog.

<p>69. Annually update the <i>5-Year Facility and Major Equipment Plan</i> linked to departmental strategies.</p>	<p>Program Coordinators submit annual Resource Allocation Plans (RAP) for capital equipment and facilities improvements. Requests are prioritized and supported as funding allows. Programs are encouraged to include longer-term resource planning in their annual Plan of Work. Projects completed or in progress for FY21 include:</p> <ul style="list-style-type: none"> • Computer Systems Technology – Upgraded lab equipment. • Construction Management – Upgraded equipment in the concrete mixing area. Also updated some of the tools in the mechanical and electrical lab. With the help with funds from CAST, we are in the process of purchasing a universal testing machine for the Construction Management program. • Engineering Technology – Added a CNC mill, desktop stereolithography printer, CNC controller, and benchtop power supplies. • Graphic Communications – Upgraded software for TEC317. Added a desktop 3D scanner. • Renewable Energy – Purchased pyranometers and data loggers. • Technology and Engineering Education – Purchased Vex robotics kit and Bernina embroidery software.
<p>70. Annually invest in the department computer network infrastructure including hardware and software, projection equipment, computer lab updates, servers and security components.</p>	<ul style="list-style-type: none"> • Upgraded the Macintosh computers in NSB.
<p>71. Consider sustainability and environmental impacts when making material/equipment purchases and facility improvements.</p>	<ul style="list-style-type: none"> • Faculty are encouraged to provide electronic instructional materials to students to minimize printing. • Many faculty use VPN and Remote Desktop to work from off campus locations. • Most faculty utilizing ReggieNet for course management. • At least 8 online classes delivered in each of the past 8 summers.
<p>72. Annually update and implement the departmental <i>Advancement & Development Plan</i> that includes a long-range vision and funding targets for equipment, facility, and endowed scholarships.</p>	<ul style="list-style-type: none"> • <i>Departmental Development Plan</i> updated annually. • Illinois State University continued the public phase of a comprehensive campaign. • Our development officer (Craig Schmidt) and dean (Todd McLoda) have worked to increase major gift donors to the department. • Faculty have worked to secure major donations of software and equipment from friends of the Department.

TEC Goal 4: Strategy 6. Leverage the experience of advisory board members to strengthen and explore advancement opportunities.

Implementation Actions	FY21 Outcomes / Status
<p>73. Add advancement and development initiatives to regular advisory board meeting agendas.</p>	<ul style="list-style-type: none"> • TEC Coordinators are encouraged to add advancement and development initiatives to advisory board meetings. With the help of University Advancement, the Construction Management faculty have created an Industry Partnership Program to provide opportunities for organizations to support student activities.
<p>74. Encourage advisory board members to explore creative advancement and development opportunities.</p>	<ul style="list-style-type: none"> • When appropriate and when time permits, TEC Coordinators dedicate portions of their advisory meetings to advancement and development opportunities.

Departmental Measures of Productivity

A five-year listing of key measures of productivity are presented below. Additional measures are listed in the major accomplishments.

Degrees Conferred Fiscal Year	FY2016	FY2017	FY2018	FY2019	FY2020
B.S. Degrees (All Majors)	138	123	174	131	x
M.S. Technology Degrees	114	109	96	51	x

**Outcome is based on the number of unique degrees rather than the number of unique students; therefore, if a student earned more than one unique award in the same fiscal year, then he or she would be counted more than once.*

Enrollment by B.S. Degree – Fall Census Day	2016	2017	2018	2019	2020
Industrial Technology – Computer Systems Tech	83	76	77	63	60
Construction Management	166	199	175	177	187
Engineering Technology	118	111	103	120	104
Graphic Communication Technology	58	55	45	54	64
Sustainable & Renewable Energy	60	63	40	46	48
Technology Education	33	36	40	33	39
Total	518	540	480	499	502
M.S. Technology – Fall Census Day	82	91	101	95	91

Fall Faculty FTE	2016	2017	2018	2019	2020
Tenure Track	16	16	15	15	17
Full-Time Non-Tenure	4	4	5	5	5
Part-Time Instructors (FTE)	2.55	3.55	3.92	4.4	3.1
Dept. Total	22.55	23.55	23.92	24.40	25.1

Credit Hours	2016	2017	2018	2019	2020
Undergraduate Total	8,187	8,585	8,468	8,798	8,958
Graduate Total	1,470	1,515	1,933	2,050	1,937
Dept. Total	9,657	10,100	10,401	10,848	10,895

External Funding Awards	FY 16	FY 17	FY 18	FY 19	FY 20
# of Proposal	2.67	4.00	9.48	6.00	3.0
\$ Submitted	380,250	564,876	2,557,136	1,045,655	834,429
# of Awards	2.07	0.67	5.00	5.00	1.0
\$ Awarded	252,701	184,250	720,178	737,124	635,000

Source: Research and Sponsored Programs

Faculty Productivity Measures	2016	2017	2018	2019	2020
Refereed Journal & Proceedings (PIP)	15	16	19	22	16
Refereed Proceedings and Presentations	9	22	25	23	13
Books (new or revised editions)	1	1	0	0	0

II. Internal Reallocations and Reorganizations

A. *Describe any reallocations or reorganizations including the movement of positions, the upgrade of positions, the creation of new positions, or the reallocation of personnel or operating funds within the unit.*

Variance and instructional capacity dollars were used to fund part-time non-tenure track, full-time non-tenure track faculty, and summer courses. Two successful searches for tenure-track faculty resulted in hiring Dr. Sundeep Inti (Construction Management) and Dr. Stephen Mujeje (Computer Systems Technology). Both started August 16, 2020.

B. *Describe how the unit used additional funds to enhance accomplishments and productivity: Additional funds may include enhancement dollars, external funding, foundation funds, variance dollars, external contracts, and technology tuition dollars, or other special funds provided with general revenue dollars.*

Enhancement Dollars

None in FY2021.

Variance Dollars

Variance is utilized to fund qualified part-time non-tenure track faculty, non-tenure track faculty, and graduate student stipends. Also see following report and data regarding instructional capacity accountability.

Instructional Capacity Funds

Describe the use of instructional capacity funds and how these funds have helped meet the goals and priorities of the College/Unit. Include plans for any component of instructional capacity not yet fulfilled for FY21 (as applicable).

The CAST Strategic Plan, Goal 1 states, “*Integrate relevant applied learning and technologies to provide an exemplary educational experience focusing on individual goals for both undergraduate and graduate students.*” Under Goal 1, Strategy 4 says “*Employ and retain diverse faculty who are equally motivated by high quality teaching and scholarly activity.*” Instructional capacity funds directly support these College goals and priorities. The Department of Technology has a similar goal to “*Provide state-of-the-art applied learning environments for undergraduate and graduate students in high-demand disciplines.*” Instructional capacity funds are allocated to the Department of Technology for each academic year from the CAST allocation.

In FY20, the Department of Technology was allocated \$142,091.00 of instructional capacity funding from CAST and spent \$159,765.50 on classes taught by adjunct instructors. Of that total, \$14,991.00 came from buy-out support from grants or faculty teaching release for services provided to other academic units. Therefore, the total paid from Technology resources to maintain instructional capacity was \$2,683.50. Detailed instructional capacity expenses have been submitted to CAST in a separate document.

External Funding

- TEC students received approximately \$36,000 in externally funded scholarships from corporate or professional organizations.
- Registered Student Organizations received \$11,721.22 in industry support for student travel and expenses to participate in conferences and competitions sponsored by professional organization.
- Corporate partners provide a wide range of industry caliber software at no or low cost. Software provided at no cost includes Cadenas Partsolutions, EAF, On-Center, QuickBid, Palisade @RISK, BlueBeam, Esko Artios CAD, EFI Digital Store Front, PrintPoint 7.0, PrintSmith, Purlen, and XMPie uCreate. Software purchased at discounted educational pricing includes Articulate, Siemens NX, and RobotStudio. The following software is used at no cost to the Department through AutoDesk’s educational licensing agreements: AutoCAD, Building Design Suite Ultimate, and Inventor.

Foundation Funding

The table below summarizes the value of gifts and the number of donors during the past five years. This number includes regular “Gladly we Give” contributions by 7 Illinois State University faculty/staff. Sources of funding to Foundation TEC accounts include alumni gifts, corporate matching gifts, Annual Fund, in-kind donations, scholarship sponsors, emeriti, and faculty/staff payroll deductions. Endowment yields and other Foundation accounts funded approximately \$27,250 in annual scholarship awards or program enhancement funding.

Year	Amount	# of Donors
2020	\$78,236	109
2019	\$168,228*	177
2018	\$53,468*	189
2017	\$181,264*	218
2016	\$115,513*	215

**Does not include in-kind software donations*

External Contracts

As reported by Research and Sponsored Programs, Technology faculty submitted proposals for grants and contracts totaling \$834,429 and was awarded \$635,000 in external support. Following are the highlights from external funding in 2020.

- Merrill (PI) completed a \$635,000 federal grant titled “*Illinois Career and Technical Education Innovative Curriculum Resources Project*”. July 1, 2019-June 30, 2020.
- Merrill (PI) secured a \$635,000 federal grant titled “*Illinois Career and Technical Education Innovative Curriculum Resources Project*”. July 1, 2020-June 30, 2021.
- Solanki (PI) secured a \$18,000 Illinois-Indiana Sea Grant titled “*The Beneficial Reuse of Lake Michigan’s Dredged Materials in Sustainable Construction Material: Flowable Fill*”. June 2020-June 2021.
- Solanki (PI) and Xie (Co-PI) secured a \$249,997 Illinois Center for Transportation / Illinois Department of Transportation grant titled “*Influence of Field-Curing Conditions on Strength of Concrete Test Specimens*”. August 2020 – August 2022.
- Brown (Co-PI) and Branoff (Senior Researcher) continued a \$599,485 NSF grant titled “*Active Learning Modules to Support Problem-Based Learning: Effects on Engineering Retention and Academic Outcomes of At-Risk Students*”. Illinois State is a sub-awardee on this grant and will receive approximately \$80,000 over FY19 and FY21. This grant is a collaboration with faculty at Embry-Riddle Aeronautical University, North Carolina State University, and Texas Tech University.
- Collectively, these activities have enhanced the mission and productivity of the department by (a) providing indirect funds, (b) developing and maintaining vitally important involvement of faculty with industry, (c) providing opportunities for student involvement, and (d) generating data and experience for application in faculty publications and presentations.

Tech Tuition / AEF Funds

Tech tuition funds are utilized to support computer laboratory monitors (student workers) and to upgrade equipment in eligible laboratories.

Fiscal Year	Tech Tuition / AEF Funds
2021	\$62,059
2020	\$45,973
2019	\$41,615
2018	\$44,404
2017	\$25,973
2016	\$22,526
2015	\$25,973

C. Major Objectives for FY22

Describe the unit's most important objectives for FY22. Outline how the objectives support the mission/goals of the Unit/Department/School, College and *Educate • Connect • Elevate*.

Goal 1: Provide state-of-the-art applied learning environments for undergraduate and graduate students in high-demand disciplines.

Action Items – Students

1. Explore ways to increase the retention and graduation rates of Department of Technology majors.

Action Items – Curriculum

2. Successfully complete reaccreditations for Construction Management and Graphic Communications Technology.
3. Faculty in all areas are examining their curricula to make revisions before the Fall 2021 deadlines.
4. Continue planning for programs in Engineering.

Action Items – Facilities and Equipment

5. **Computing:** The department maintains approximately 200 computers distributed amongst four primary PC computer laboratories (TUR 160B, 167, 171, and 210), one PC networking lab (TUR 173), one Mac laboratory (NSB 010), faculty, staff, and GA office machines, and various other laboratory support functions. In order to maintain industry level computing power, our goal is to systematically upgrade one computer lab per year and then rotate out our lowest performing machines. In FY22 we will upgrade computers in graduate student and faculty offices.
6. **Caterpillar Integrated Manufacturing Laboratory**
The Caterpillar Integrated Manufacturing Laboratory is now 11 years old. Updates are needed for the ABB robot controllers, Rockwell Automation controllers and safety systems, other essential equipment. A previous estimate for this project was approximately \$240,000.

Goal 2: Support and reward faculty and staff excellence.

Action Items – Faculty

7. Mentor and provide professional development opportunities for the junior faculty who have joined our department over the past several years.
8. Maintain professional development opportunities for all faculty funded from grant in-directs and other resources.
9. Successfully transition new tenure-track faculty into the department.

Action Items - Research & Scholarship

10. Deliver on existing grants and continue to pursue external grant and contract opportunities.
11. Partner with other ISU units and external organizations to pursue new grants and contracts.
12. Collaborate with international colleagues on research initiative arising from MOUs.

Goal 3: Promote a culture of respect and inclusion among faculty, staff, and students.

13. Continue to dedicate at least one faculty meeting per year to professional development related to respect and inclusion.
14. Promote professional development initiatives offered by the College and University.

Goal 4: Enhance the effectiveness of the Department by strengthening engagement.

Action Items – Advancement and Development

15. Continue to deliver outreach consulting and training to industry and education. Topics may include quality management and analytics, CM leadership, LEEP AP, project management, Schools that Work, safety consulting, manufacturing process improvement.
16. **Work with University Advancement to secure new endowments and equipment donations as well as develop new relationships with industry partners:** A priority for the coming year is to work with University Advancement to strengthen connections with industry. Another priority is to work with companies who wish to give “in-kind” equipment donations. Encourage faculty to participate in philanthropy.

END