

SoE WORKING DRAFT (9/3/2015)

Broad Goal 1

Alfred University will offer high-quality undergraduate and graduate education, characterized by Alfred's creative spirit, preparing our students to flourish in a rapidly changing world. This means we will:

Strategies Goal 1

- 1A: Define and deliver a vibrant educational experience that ensures common learning outcomes for all undergraduate students.
- 1B: Invest in dynamic and innovative curricular and co-curricular pedagogy that challenges students to grow as creative and critical thinkers.
- 1C: Increase the number of students who complete applied learning experiences such as internships, service learning, co-op participation, capstone projects, and study abroad.
- 1D: Enhance our efforts to help students to successfully transition from Alfred University to careers or advanced degree programs.

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Strategies	Objectives	Tactics	Timelines and Responsibilities	Measured Outcomes	Recommended Next Steps
1A: Define and deliver a vibrant educational experience that ensures common learning outcomes for all undergraduate students.	All SoE curricula will be aligned with AU general education outcomes as well ABET criterion 3 outcomes.	Review, map and revise SoE curricula to adequately address AU general education outcomes Review and revise SoE learning outcomes to meet newly proposed ABET criterion 3 outcomes, if adopted.	SoE Faculty. Timing dependent on ABET actions, 2016-2017 expected.	Continued Middle States and ABET accreditation	Faculty retreats; participation in university-wide assessment committee
1B: Invest in dynamic and innovative curricular and co-curricular pedagogy that challenges students to grow as creative and critical thinkers.	SoE faculty will be familiar with and encouraged to incorporate high-impact practices in their teaching practices	Require and fund untenured faculty to attend NETI and ABET assessment workshops. Encourage tenured faculty to attend these workshops. Host workshops on campus	Dean's office and individual faculty /ongoing, assess annually.	# faculty completing workshops; # of high-impact practices incorporated in classes	Untenured faculty to identify schedule for NETI and ABET workshops and complete TER forms
	SoE faculty will be familiar with contemporary trends in engineering education and their specific disciplines	Identify faculty liaisons with key professional groups Support faculty attendance of professional society meetings, workshops, etc.	Dean's office and individual faculty.	# faculty attending meeting and workshops # of faculty holding offices, presenting papers, et.	Faculty to discuss professional development plan with chairs and/or dean
	Students will have access to and gain experience with the tools used in modern engineering practice	Conduct periodic surveys of employers to understand contemporary needs, analyze, and implement Set and meet goals for building computing experiences in upper-level classes. Set and meet goals for increased exposure to modern tools in lab classes Seek funding to improve facilities for advanced manufacturing, renewable energy, and materials	Dean's office / committee (Spring 17?) Faculty committee Faculty committee Dean/University Relations - ongoing until complete	Assessment of student outcomes related to "modern tools" # of courses using modern tools % proposals, \$ received	Period surveys as part of ABET assessment activities Dean to appoint computing and laboratory committees

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Strategies	Objectives	Tactics	Timelines and Responsibilities	Measured Outcomes	Recommended Next Steps
<p>1B (cont.) Invest in dynamic and innovative curricular and co-curricular pedagogy that challenges students to grow as creative and critical thinkers</p>	<p>All students will engage in a high-quality project-based learning that requires them to make decisions and achieve objectives under realistic constraints.</p>	<p>Roll out new design sequence.</p> <p>Specify and assess characteristics of a high-quality projects (undergrad and grad)</p> <p>Solicit and secure funding to sponsor student design and research projects, including national competitions</p>	<p>Dean/Chairs, in progress. Full instituted by Fall 2017.</p> <p>Committee with recommendations by 2016-2017</p> <p>Funding: Dean, Instructors, CACT, & UR Start 2016-17</p>	<p>Progress and completion</p> <p># sponsored projects, \$ received</p>	<p>Dean to appoint committee to define hallmarks of a high quality project:</p>
	<p>Increase opportunities for multidisciplinary projects</p>	<p>Continue discussion with other units on campus</p>	<p>tbd</p>		
<p>1C: Increase the number of student who complete applied learning experiences such as internships, service learning, co-op participation, Capstone projects, and study abroad.</p>	<p>All SoE students will engage in a high-quality capstone project</p>	<p>Specify and assess learning outcomes of senior thesis and design courses to improve learning and meet ABET requirements</p>	<p>Committee with recommendations by 2016-2017</p>	<p>Progress towards and completion</p>	<p>Dean to appoint committee</p>
	<p>All students will be aware of the benefits and logistics of co-op, internships, and study-abroad.</p>	<p>Improve advising related to study abroad and co-op</p>	<p>SoE faculty advisors, undergraduate seminar leader</p>	<p>Advising survey</p>	<p>Advising tips delivered in faculty meetings</p>
	<p>SoE will support efforts to increase the number of co-op and internship opportunities available to our students</p>	<p>Grow CACT associate program to increase number of co-op / intern opportunities</p> <p>Continued outreach with to industry</p>	<p>CACT Director, Dean</p>	<p># of students participating in co-op and internship</p>	<p>Continuation of ongoing activities</p>
	<p>SoE will increase the number of graduate students participating in enhancing experiences, i.e. short-term exchanges, internships, interactions with industry sponsors, etc.</p>	<p>Conduct critical review of graduate programs (2015-2016); Agree upon and implement recommendations.</p>	<p>Graduate committee (recommendations by December 2015). Faculty discussion, actions, and implementation by Fall 2017.</p>	<p># of student participating</p>	<p>Graduate committee to meet</p>

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Strategies	Objectives	Tactics	Timelines and Responsibilities	Measured Outcomes	Recommended Next Steps
1D: Enhance our efforts to help students to successfully transition from Alfred University to careers or advanced degree Programs. (continued)	Students will have opportunities to participate in regional and national professional society meetings to attend jobs fairs.	Continue to support student engagement in professional society meetings: regional and national Seek additional funding to support student travel. Better advertise opportunities for external support	Club advisors, dean	# or % of students participating, seminar survey	
	Graduates of our graduate programs will possess the professional skills, as well as technical knowledge, necessary to advance to leadership positions in their chosen fields.	Conduct critical review of graduate programs (2015-2016); Agree upon and implement recommendations.	Graduate committee (recommendations by December 2015). Faculty discussion, actions, and implementation by Fall 2017	Assessment of student outcomes	Graduate committee to meet
	SoE will increase the number of student receiving fellowships	Institute annual plan to encourage eligible seniors to graduate students to apply for fellowships.	Per plan, advisors, institute by 2015-2016	# of student receiving fellowships	
	Graduates of our undergraduate programs will possess the professional skills, as well as technical knowledge, necessary to advance to leadership positions in their chosen fields	Define desired level "professional skill" and implement recommendations. Review effectiveness of ELEAD program.	Ad hoc committee, form for 2017-18 academic year.	Assessment of student outcomes	Form committee in SoE. Perhaps collaboration with Business School/Leadership Center.

SoE WORKING DRAFT (9/3/2015)

Broad Goal 2

Alfred University will build on its 175 plus year commitment to diversity and social justice maintaining its forward-looking social and educational ideals. This means we will:

Strategies Goal 2

- 2A: Reaffirm and advance our pledge to make all members of the Alfred University community feel that they belong.
- 2B: Develop new initiatives for even greater diversity and exposure to different cultures.
- 2C: Integrate and expand our students' engagement with and connections to the communities we serve fostering a student culture of civic engagement and awareness of social justice issues wherever operate.
- 2D: Leverage our creativity and expertise in new ways to be a better asset to the communities we serve.

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Alfred University will build on its 175 plus year commitment to diversity and social justice to advance its forward-looking social and educational ideals. This means we will:

Strategies	Objectives	Tactics	Timelines and Responsibilities	Measured Outcomes	Recommended Next Steps
2A: Reaffirm and advance our pledge to make all members of the Alfred University community feel that they belong	High-quality freshman experience	Create first-year coordinating committee. First-year instructors to meet with dean at least once per semester; assess, evaluate, implement	TBD	Student satisfaction survey, retention	Dean to appoint coordinating committee
	High-quality transfer experience	Create transfer coordinating committee	TBD	Student satisfaction survey, retention	Dean to appoint transfer coordinating committee
	High-quality retention program for students on academic probation	Continue	Assistant Dean, ongoing	Retention	
	Sustained activity of student engineering groups	Encourage student activity through seminar	Seminar instructor & advisors	# of students participating	
	Sustained engagement of entire graduate student population	Form and engage graduate student advisory board. Regular SoE student-faculty-post-doc mixers.	Graduate committee (recommendations by December 2015). Faculty discussion, actions, and implementation by Fall 2017	Student survey	In motion
	High-quality graduate student orientation program	Graduate committee to review current orientation and make recommendations. Information from current graduate students?	Graduate committee (recommendations by December 2015). Faculty discussion, actions, and implementation by Fall 2017		
		New faculty orientation	Tbd		
	Increased interaction among academic units		Tbd		
		Gain understanding of where non-retained students go. SoE → other AU?	Tbd		

SoE WORKING DRAFT (9/3/2015)

Strategies	Objectives	Tactics	Timelines and Responsibilities	Measured Outcomes	Recommended Next Steps
2B: Develop new initiatives for even greater diversity and exposure to different cultures.	Sustained activity of underrepresented engineering student professional groups: SWE, SHPE, SBE, international graduate advisory group	Encourage student activity through seminar	Seminar instructor & advisors	# of students participating	Dean to recruit dedicated advisors.
	Increase number of under-represented students pursuing graduate programs	Join GEMS. Actively recruit graduate students for diversity fellowships.			Appoint SoE faculty member as SoE diversity coordinator
	Improved and more intentional visiting scholars program	tbd	tbd		
		Form strategic partnerships with other institutions. Offer merged DL graduate classes.			
	Increased faculty diversity	Better understand and apply best practices in advertising available faculty positions			
2C: Integrate and expand our students' engagement with and connections to the communities we serve fostering a student culture of civic engagement and awareness of social justice issues.	Sustained K-12 STEM outreach programs	Build upon current activities, and encourage more faculty and students in K-12 outreach activity	SMP et al.	# of projects # of interactions	
	Increase number of students completing projects for not-for-profits	Apply for NYSID grants to sponsor engineering design projects	XW to advertise to undergraduate students during seminar; Instructor(s) of design course	# of projects	
2D: Leverage our creativity and expertise in new ways to be a better asset to the communities we serve	Continuing education opportunities for HS science teachers	Determine interest, explore collaborations with ASC	tbd	# projects	
	Increase number of student collaborating with start-up companies in region	Solicit start-up companies to sponsor student design and research projects; cost share through CACT	MH et al.	# student participating	
	Build reputation as positive contributor to the region's economic development, especially as it relates to advanced materials & manufacturing, renewable energy, and entrepreneurship	Continue to collaboration with region's economic development agencies continue to seek funding to support entrepreneurship, advanced manufacturing, renewable energy Host industry workshops / conferences in collaboration in established named lectures Explore collaborations with School of Business	DE, MH, ongoing	# of connections # of grants, \$ funding # of workshops	Develop and communicate more detailed plan for SoE's contribution to regional economic development

SoE WORKING DRAFT (9/3/2015)

Strategies	Objectives	Tactics	Timelines and Responsibilities	Measured Outcomes	Recommended Next Steps
2D: Leverage our creativity and expertise in new ways to be a better asset to the communities we serve (continued)	Sustained programming in Kyocera-Inamori museum & Discovery Room	TBD			

SoE WORKING DRAFT (9/3/2015)

Broad Goal 3:

Alfred University will promote sustainability as a basic principle of educational, environmental, financial, social and institutional responsibility. This means we will:

Strategies Goal 3

- 3A: Better communicate Alfred University's identity for both internal communities and external markets.
- 3B: Evaluate our services, operations and academic programs for suitability to our current and emerging needs and make resource allocations accordingly.
- 3C: Develop new and strengthen current revenue streams.
- 3D: Develop new avenues to educate both traditional and non-traditional students at our home campus and other locations.
- 3E: Better coordinate green initiatives and develop new green initiatives.
- 3F: Develop even stronger alumni ties to encourage philanthropy and involvement with the University.
- 3G: Make Alfred University an even more attractive place to work.

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Broad Goal 3:

Alfred University will promote sustainability as a basic principle of educational, environmental, financial, social and institutional responsibility. This means we will:

Strategies	Objectives	Tactics	Timelines and Responsibilities	Measured Outcomes	Recommended Next Steps
3A: Better communicate Alfred University's identity for both internal communities and external markets.	Marketing materials will accurately reflect multiple aspects of SoE enterprise; undergraduate, graduate, research, outreach	Collaborations across campus to create and coordinate marketing materials. Develop annual SoE marketing plan.	Dean		Coordinate with University activities
	Increase marketing of select SoE's programs nationally and internationally	Collaboration with other office across campus: Leverage faculty's personal connections in England, China, Iran, Brazil, Columbia			Coordinate with University activities
	Attractive on-campus displays	Annually inspect displays for currency and replace	Dean's office		
	Better advertisement of on-campus events		Dean's office		
	Expand and strengthen student-to-student recruiting	Leverage connections of current students to HS			
3B: Evaluate our services, operations, and academic programs for suitability to our current and emerging needs and make resource allocations accordingly.	Optimize use of resources	Critically evaluate ROI of services and operations, and recommend actions	Faculty and staff committees, ongoing		Ongoing discussions
	SoE will be properly staffed to offer its academic programs & services	Increase understanding of IR/IE data (workload, enrollment, retention, etc.) Provide clear statement of workload policies to faculty	Dean & Chairs		Ongoing discussions
	SoE will be adequately staffed to ensure proper maintenance of its laboratory facilities.	Critical review and replacement of key technical support staff Increased use of student labor (grad and undergrad) for equipment upkeep and routine maintenance	Research committee; Plan by end of 2016		Dean to appoint committee

SoE WORKING DRAFT (9/3/2015)

Strategies	Objectives	Tactics	Timelines and Responsibilities	Measured Outcomes	Recommended Next Steps
3C: Develop new and strengthen current revenue streams.	Renewed designation of CACT, estimated \$1M annually	Prepare for CACT re-designation proposal	MH / DE 2018-2020	Re-designation	
	Steady stream of income from CHTC to cover personnel costs and to offset equipment maintenance costs	Develop CHTC business plan	DE / MH with consultation, Spring 2016	tbd	
	\$5M annually in research from federal, state, and industry	Update research strategy to reflect new faculty, facilities, etc. Example tactics: Define and build strategic partnerships to better compete for federal and state agency awards; Regular strategic visits to federal agencies; Increase awareness of federal funding opportunities. Assign faculty to monitor specific agencies.; Support participation in federal regional and federal working groups	Research strategy committee, ongoing	# of proposals submitted	
	Increased tuition revenue (See Tactics in 3D			
3D: Develop new avenues to educate both traditional and non-traditional students at our home campus and other locations.	Increased number of transfer students from NYS community colleges	Routine offering and advertisement of gateway courses online Marketing	CEMS 214 – done CEMS 216 - ? ENGR 201 - ?	Courses offered? # of students taking courses # of transfers	
	Revenue generation from on-line offering of “specialized” ceramic and glass courses	Survey to determine market demand for glass/ceramic certificates, on-line MS programs, etc. Non-thesis MS? Certificate?	2016-2017		Employ consults for market survey
	Increase number of company supported graduate students	Develop and implement policies for company-supported graduate students	2015-2016, Dean & select committee	# of students	Form committee
	Increase number of country-supported graduate students	Develop relationships in select countries (Brazil, SA?) Increased collaboration with UB-Dental (PhD – Dental Ceramics) & possible modification of PhD requirements	Dean’s office DE, MH, AW		
	Increase attractiveness of MS program for self-funded students	Revisit 4+1 programs			

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Strategies	Objectives	Tactics	Timelines and Responsibilities	Measured Outcomes	Recommended Next Steps
3E: Better coordinate green initiatives and develop new green initiatives.	Decreased costs expended on paper and printing	Increased use of on-line documents Communicate policies to students	Everyone		
	Incorporation of green energy technology to serve both educational and facilities needs	Collaborate with physical plant(s) to identify grant opportunities to fund green energy technologies	Edwards, Leigh, Wang		
3F: Develop even stronger alumni ties to encourage philanthropy and involvement with the University.	Increased alumni support, both financial and in-kind	Annual alumni events (MST, Ceramics Expo) Alumni at seminar Leverage alumni at funding agencies Acknowledge alumni accomplishments !!!! Alumni profiles in marketing Establish culture of philanthropy with current SoE students			
3G: Make Alfred University an even more attractive place to work.	A work place that acknowledges and respects the wide range of individual contributions to the AU enterprise.	Help establish and support a culture of courtesy at AU.			
	A workplace that encourages highest level performance from employees	Adhere to annual review process / employment policies that encourage excellence. Support professional development of faculty and staff	Modification of annual review forms to better meet department needs. (360 reviews?) Annual review process that includes professional development plan.		
	Compensation that is equitable and strives to meet regional/national benchmarks, as appropriate	Regularly review compensation and strive for equity and competitive packages. Awareness and communication of national benchmarking studies, UMC, ASEE, etc.			
	Attractive and safe facilities	Identify individual responsibility for offices, labs, common space etc.; Periodic & routine inspections			

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Definitions:

- Goal: A general, broad aspiration.
- Strategy: A general approach to seeking a particular goal or aspect of a goal.
- Objective: A clear and specific achievement that contributes to a goal.
- Tactic: Specific behaviors that will achieve an objective.
- Timelines and Responsibilities: What is the expected time by which the tactic will have had an effect, kind of assessment, who is responsible for executing the tactic and who will conduct the assessment.
- Measured Outcome: The phenomenon that, when realized, will signal success or failure of the tactic in attaining the objective. Usually quantifiable and measureable.
- Recommended Next Steps: What are the next steps indicated by the assessment.