

2018-2019 Program Review Executive Summary

Overview

Wichita State University program review is organized around a year-long preparation and review of a self-study that is intended to create a thoughtful assessment of the quality of academic programs and to establish goals for improvements. The process of reviewing these studies (which includes faculty, the deans, the University Program Review committee, the Assistant Vice President for Academic Affairs and the Provost) is expected to strengthen the academic programs, identify program needs and campus priorities, identify areas for reorganization and provide opportunities for both short and long-term goal setting.

On a four-year cycle each academic unit prepares a self-study using a standard reporting template. These four-year reports then feed into the required review by the Kansas Board of Regents (i.e., each program is required to be reviewed twice during an 8 year period). Hence, there is a continuous review process of each academic unit.

The quadrennial reporting cycle, begins one year in advance of being due each November, (on a staggered schedule so that college programs are reviewed together) when the Office of Academic Affairs offers a workshop for chairs and assessment coordinators, and continues until April 1st when the studies are submitted to the respective Deans. Thereafter the studies are reviewed by the Deans, Graduate School (as appropriate) and the University Program Review committee (consisting of the Assistant Vice President for Academic Affairs; Director of the Office of Planning Analysis; the President, President-Elect, and Past-President of the Faculty Senate; and a Dean). Each unit is provided with an opportunity to discuss and clarify those reviews. The University committee submits its final report to the Provost by December 1st.

Intensive Review of Selected Programs

The programs being reviewed this year are in the College of Engineering (aerospace, biomedical, electrical and computer science, mechanical, industrial, systems and manufacturing and engineering technology), Fairmount College of Liberal Arts and Sciences (biology, chemistry, physics), the Honors College and the Institute for Interdisciplinary Innovation. All Programs were reviewed including those at the bachelor, master and doctoral level.

To assist programs in writing their self-studies, departments/programs had access to:

• Program minima data provided by the Office of Planning and Analysis. These data were made available fall 2017.

- Data from exit surveys and other surveys collected by the University and within departments.
- External specialty accreditation reports (as appropriate).

Overall Outcome of Program Reviews reported to KBOR: Program review results reported to KBOR differ than those evaluated this year. The Wichita State University report focused on the College of Health Professions, which participated in the quadrennial cycle in 2017-2018. Every program reviewed in the College of Health Professions met or exceeded expectations in the six areas evaluated. It was evident to the evaluation team that data-informed decisions and use of prior year feedback led to many of the improvements. Forward-facing goals will help insure that continuous improvement will continue. The KBOR report is available on the university website.

Triggered Programs Monitored

In addition to the programs that underwent intensive review this year (starting on page 4), the remaining low major/degree triggered programs were also reviewed for updates on plans to increase majors and degrees (using AY 2018 data, see below).

Program	Trigger from Minima Report	Status
Athletic Training	UG Degrees	Continue – intensive review in SP 2020
Arts/Studio Arts	GR Majors/Degrees	Continue – Intensive review in SP 2019
Biomedical Engineering	GR Majors	Continue - NEW
Chemistry	GR Majors/Degrees (MS)	Continue - Intensive review in SP 2021
		MS only awarded to students who are ABD
Communication Science/Disorders	GR Degrees (PhD)	Continue - Intensive review in SP 2020
Game and Interactive Media Design	UG Majors	Continue - NEW
Interdisciplinary (Liberal Studies)	UG Majors/Degrees	Considering for strategic program alignment
	GR Majors/ Degrees	
Manufacturing Engineering	UG Majors / Degrees	Considering for strategic program alignment
Music Teacher Education	UG Degrees/Grad Majors	Continue – Intensive Review in SP 2019
Philosophy	UG Majors/Degrees	Continue - Intensive review in SP 2020
		Academic support program
Physics	UG Degrees	Continue – Intensive review in 2021
	GR Majors/ Degrees	Academic support program
Psychology	GR Degrees (MA)	Continue – Intensive review in 2020
		MA only awarded to students who are ABD
Forensic Science	UG Degrees	Continue - Intensive review in SP 2020
Sociology	GR Majors/Degrees	Continue - Intensive review in SP 2020
Spanish	GR Majors/ Degrees	Considering for strategic program alignment
Women's Studies	UG Majors/Degrees	Considering for strategic program alignment

Note: new to this list as of 2018 are: Biomedical Engineering, Game and Interactive Media Design, Music Teacher Education, Physics for graduate majors and degrees, Spanish for undergraduate majors.

Potential Costs of Recommendations

None of the recommendations made will require any additional cost to the University.

DEPARTMENTAL/SCHOOL PROGRESS TOWARD ASSESSMENT OF PROGRAM – OVERALL EVALUATION

Year: 2019	On Target	Meets Expectations	Does Not Meet Expectations
	3	2	1
Department is expected to address:			
Centrality of the program to fulfilling the mission and role of the institution	9	2	
Quality of the program as assessed by the strengths, productivity and qualifications of the faculty	8	3	
Quality of the program as assessed by its curriculum and impact on students	5	4	
Demonstrated student need and employer demand for the program	6	5	
Service the program provides to the discipline, the university and beyond	5	4	
Evidence of feedback loop demonstrating program improvement	2	8	2

Note: *College of Engineering – Aerospace, Biomedical, Electrical & Computer Science, Engineering Technology, Industrial, Systems & Manufacturing, Mechanical Engineering Fairmount College of Liberal Arts and Sciences – Biology, Chemistry, Geology, Mathematics, Statistics and Physics only.

- 1. The Program Review Committee provided feedback to each unit in terms of their overall assessment of how the unit completed their assessment self-study.
- 2. Compared to the 2014 review, improvement continues to occur in the overall process. More programs were on target across the six areas evaluated.
- 3. All units have aligned to the university mission, meet expectations related to productivity and qualifications of faculty, assessment of curricula and employer demand and student need.
- 4. Forward-facing goals were created by all units to improve goals setting and use of feedback loops.

Wichita State University College of Engineering

Aerospace

	On Target	Meets Expectations	Does Not Meet Expectations
	3	2	1
Department is expected to address:			
Centrality of the program to fulfilling the mission and role of the institution	Program mission is clearly defined and is in alignment with university mission.	Program mission is clearly stated. The role of the program and relationship to the university mission is in general aligned with university mission.	Program mission is not stated or is not in alignment with university mission
Quality of the program as assessed by the strengths, productivity and qualifications of the faculty	The document clearly reflects that faculty members are fully qualified to support the program goals with productivity directly linked to program enhancement	The document reflects that the strengths, productivity and qualifications of the faculty associated with the program are sufficient to sustain the program.	Faculty productivity and quality are not evaluated as sufficient to meet the needs of the program.
Quality of the program as assessed by its curriculum and impact on students	The program assessment clearly shows both alignment and positive impact of the curriculum on student learning.	The program assessment plan is fully implemented and shows the alignment of the curriculum with student learning outcomes as they reflect the quality of student learning	The assessment plan does not align the curriculum with student learning outcomes or does not demonstrate the impact of the curriculum on student learning.
Demonstrated student need and employer demand for the program	The program clearly demonstrates importance based on employer need and student demand.	The program presents data that shows either employer demand or student need.	The program data does not indicate student need nor employer demand.
Service the program provides to the discipline, the university and beyond	The program clearly demonstrates its value to the discipline, to the university and to the community.	The program demonstrates value to the discipline, the university or the community.	The program does not demonstrate value to its discipline, the university and/or the community.
Evidence of feedback loop demonstrating program improvement	The program not only makes changes based on the data, but also systematically studies the effects of any changes to assure that programs are strengthened without adverse consequences. Shows significant program improvement as a result of feedback loop.	The program regularly uses data to evaluate student performance and the efficacy of its courses and programs. Changes made using assessments are documented, although results from those changes are yet to be seen.	The program makes limited or no use of data collected to evaluate the efficacy of its courses and programs.

Degrees Offered:	B.S.; M.S; Ph.D.
Triggered Programs:	Ph.D. – Degree completion
	Aerospace
2016 Needs Going Forward:	 Deploy an action plan to improve undergraduate student satisfaction which is lower than that of the University. Department should consider developing a sustainable faculty staffing plan. Explicitly report the services programs provided to the discipline, the University and beyond. While student learning assessment demonstrates students are learning the content and matches ABET requirements, it is unclear how many students are assessed for each outcome, and there is limited information on how the data are used in terms of students not meeting the outcome. For graduate assessment, in the future, department should align with the graduate assessment plan developed by the college of engineering graduate committee.
	2018 Comments
Commendations:	 Program clearly recognizes issues in certain areas of program sustainability, including student enrollment, performance, graduation rates, and faculty grant and publication performance. Creation of a B.S. to Ph.D Assessment of student performance in AE 223, AE 250, AE 373 Changes to course pre-requisites to minimize bottlenecks based on assessment is commendable Strong extra-curricular support with business partners ABET Accreditation
Recommendations Going Forward:	 Stronger identification of the centrality of the program to the university mission is needed Evidence that progress was made on goals included in the last program review should be included Documentation of assessment instruments and outcomes need further definition. Consider inclusion of CO-OP survey as appendix Need to create and include succession plan for retiring faculty member. Need rubrics for graduate learning outcomes/student performance More information on service to broader community Include plans to improve status of currently triggered programs
General Feedback	All goals should be specific, measurable, attainable, realistic and time-bound

BioMedical

	On Target	Meets Expectations	Does Not Meet Expectations
Department is expected to	3	2	1
address:			
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Demonstrated student need and employer demand for the program	The program clearly demonstrates importance based on employer need and student demand.	The program presents data that shows either employer demand or student need.	The program data does not indicate student need nor employer demand.
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Evidence of feedback loop demonstrating program improvement	The program not only makes changes based on the data, but also systematically studies the effects of any changes to assure that programs are strengthened without adverse consequences. Shows significant program improvement as a result of feedback loop.	The program regularly uses data to evaluate student performance and the efficacy of its courses and programs. Changes made using assessments are documented, although results from those changes are yet to be seen.	The program makes limited or no use of data collected to evaluate the efficacy of its courses and programs.
Degrees Offered: B.S	; M.S;		

Triggered Programs:	M.S. > 5 majors (NEW PROGRAM – Not Indicative of a problem)
	Biomedical
2016 Needs Going Forward	 Student learning assessment demonstrates students are learning the content and matches ABET requirements, however, it is unclear how many students are assessed for each outcome, and there is limited information on how the data are used in terms of students not meeting the outcome. The program and department have been renamed to biomedical engineering, but throughout the document it is still called bioengineering. Align department/program mission with the university mission. Work with college dean/provost on steps to create a graduate program.
	2018 Comments
Notes: Commendations:	 Strong BS learning outcomes Several assessment tools for each objective Clear view of departmental strengths Clear documentation of service and the profession Commendable grant activity. Increases noted in Dean's response. ABET Accreditation Increases in credit hour production, enrollment and graduation. Student satisfaction rates are commendable.
Recommendations Going Forward:	 Note possible need for update of mission due to changes with university mission. Need to strengthen graduate student learner outcomes Forward-facing goals are not tied to documented concerns or data provided. Clarify how department identifies when a goal is met. (80% of what N?) Clarify MBE outcomes/ results, unclear to reader. As MS BME Develops will need to include a clear feedback loop.
General Feedback	 All goals should be specific, measurable, attainable, realistic and time-bound Need to address all questions, including 3.e on KBOR 2020 Foundational Skills and 4.b

Electrical and Computer Science

	On Target	Meets Expectations	Does Not Meet Expectations
	3	2	1
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Evidence of feedback loop demonstrating program improvement	The program not only makes changes based on the data, but also systematically studies the effects of any changes to assure that programs are strengthened without adverse consequences. Shows significant program improvement as a result of feedback loop.	The program regularly uses data to evaluate student performance and the efficacy of its courses and programs. Changes made using assessments are documented, although results from those changes are yet to be seen.	The program makes limited or no use of data collected to evaluate the efficacy of its courses and programs.

Degrees Offered:	B.S. Electrical Engineering, Computer Engineering, Computer Science; M.S. Electrical Engineering, Computer Engineering, Computer Science; Ph.D. Electrical Engineering and Computer Science
Triggered Programs:	NONE
	Electrical and Computer Science
2016 Needs Going Forward:	 Department uses multiple assessment tools to evaluate student learning and using data to make changes as needed, however, it is unclear how many students are assessed for each outcome, and there is limited information on how the data is used in terms of students not meeting the outcome. The document indicated they will need to hire 3 more tenure/tenure-track faculty in order to sustain the number of students enrolled Include employment data and how it's used for graduates for next review. Show more documentation on service the program provides to the university and beyond in next program review. More specific goals and targets needed to measure plans for the next 3 years.
Notes:	 Provide more examples thorough the review. What are some illustrative examples of where students work (coop), the kinds of projects they work on (senior capstone), and the kinds of service activities performed by faculty. For the MS in Computer Networking, there is no data for assessment for the program. The program has undergone changes (curriculum and faculty oversight) which explains the missing data. Honest assessment of how they met/failed to meet goals from prior review. Acknowledges need to improve the feedback loop.
Commendations:	• Nice integration/synthesis of multiple pieces of data for assessment (drawing from Open House, coop, exit survey, etc.).
Recommendations Going Forward:	 Include SCH, majors and graduates to better determine size of the department and enrollment trends. Include BLS data (and additional information) on employment trends. Break all of the data out by degree. Include additional assessment information for MS in Computer Networking.
General Feedback	 All goals should be specific, measurable, attainable, realistic and time-bound Tie goals to needs identified via assessment Faculty signatures missing

Engineering Technology

	On Target	Meets Expectations	Does Not Meet Expectations
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Evidence of feedback loop demonstrating program improvement	The program not only makes changes based on the data, but also systematically studies the effects of any changes to assure that programs are strengthened without adverse consequences. Shows significant program improvement as a result of feedback loop.	The program regularly uses data to evaluate student performance and the efficacy of its courses and programs. Changes made using assessments are documented, although results from those changes are yet to be seen.	The program makes limited or no use of data collected to evaluate the efficacy of its courses and programs.

Degrees Offered:	B.S Industrial, Manufacturing.; M.S Industrial, MEM Engineering Management; Ph.D. Industrial		
Triggered Programs:	NA		
	Engineering Technology		
2016 Needs Going Forward:	 It would be helpful for the program to be more specific in their mission in terms of their discipline. Need more information on the expectation of the faculty role in scholarship. As the number of graduates grow, it will be important to track, monitor, and evaluate alumni outcomes to improve the curriculum. Discuss role in service to the university, college, university, and beyond. Future reviews should demonstrate closing the loop in terms of collecting and using data. 		
	2018 Comments		
Notes: Commendations:	 Mission is implied, but a tighter connection is desired. No tenure track faculty thus, no research expectations per the Dean Strong employer need Senior experiential-based project which is reviewed by faculty and industry Calculus I & II were recently added but no reference to the need for the courses other than to improve program reputation. No discussion of relevance to career goals. 50% of faculty shared with other departments, yet increased presentations ABET Accreditation 		
	 Clear learning outcomes and assessment tools and analysis Increased student satisfaction, except 2017, rationale provided Increased student enrollment and credit hour production Clear documentation of University/external service with students (pg. 19) Clear feedback loop (tracked student satisfaction) Included student outcome rubric 		
Recommendations Going Forward:	 Provide clarification of requirements for service (pg. 4) Provide brief details on advisory board membership Include 2+2 focus in program goals Include definition of a-k in Table 3:2 		
General Feedback	 All goals should be specific, measurable, attainable, realistic and time-bound Table 4b was left incomplete. Table 6 was left incomplete 		

Industrial, Systems & Manufacturing Engineering

	On Target	Meets Expectations	Does Not Meet Expectations
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Evidence of feedback loop demonstrating program improvement	The program not only makes changes based on the data, but also systematically studies the effects of any changes to assure that programs are strengthened without adverse consequences. Shows significant program improvement as a result of feedback loop.	The program regularly uses data to evaluate student performance and the efficacy of its courses and programs. Changes made using assessments are documented, although results from those changes are yet to be seen.	The program makes limited or no use of data collected to evaluate the efficacy of its courses and programs.

Degrees Offered:	B.S Industrial, Manufacturing.; M.S Industrial, MEM Engineering Management; Ph.D. Industrial
Triggered Programs:	B.S. Manufacturing (12 only, 2.6 grads)
	Industrial, Systems & Manufacturing Engineering
2016 Needs Going Forward:	 Refine undergraduate assessment plan/make clear what the targets and results are; unclear how many students are assessed for each outcome, and there is limited information on how the data are used in terms of students not meeting the outcome. Examine exit survey data on student satisfaction and determine what can be done to improve satisfaction scores for the next review. Increase number of under-represented minority students (which has already been addressed by the department). Include more information regarding the service the program provides to the university and beyond in the next program review
Notes:	 Mission clear and aligned with college and university Productive but decreasing grant awards (\$1.7 M – 782K) Presentations & Conference presence decreasing but new faculty will assist No data available for graduate job placement High employer need & salaries Career expansion expected 10% Evidence of use of feedback loop by modifying program based on assessed needs/strengths (p. 24) Noted concern related to loss of faculty due to low salaries. Recent name change (not included in narrative) but thought to be a strategy to increase program appeal
Commendations:	 Created a student success center internal to the department Faculty Hiring to ensure appropriate faculty levels ABET Accreditation Increasing enrollments at UG and Graduate level Increased credit hour production and badge creation Interdisciplinary MS Business
Recommendations Going Forward:	 Programs should be more clearly documented with revised outcomes that are measurable Assessment tools should also be clarified (pg. 10 UG) and extend beyond reliance on courses and narrative should address the target/criteria, results and analysis Special attention should be made to strengthen graduate learning outcomes UG exit interviews suggest improvements needed with both instruction and advising SWOT analysis should be clearly linked to program goals Service to greater university and community should be noted
General Feedback	 All goals should be specific, measurable, attainable, realistic and time-bound, did not address trigger Reliance on acronyms without definition was difficult for reader Form should be completed thoroughly, Table 4 b. was left incomplete

Mechanical

	On Target	Meets Expectations	Does Not Meet Expectations
	3	2	1
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Degrees Offered:	B.S.; M.S; Ph.D.
Triggered Programs:	NA NA
Mechanical	
Evidence of Response to	
Previous PR Recs:	
	2018 Comments
Notes:	Mission clear and aligned with college and university
	 Consistent presentations and conference proceedings; decrease in publication
	 Noted concern about ability to recruit due to lower salaries and start up packages
	UG Student satisfaction is high
	Need additional lab space
	Interdisciplinary research noted
	 Definitions of "self-educate" as used in assessment plan should be included.
Commendations:	Growing number of URM is commendable.
	Grant funding increased from \$617K to \$1.3M
	Strong credit hour production and graduate growth
	ABET Accreditation
Recommendations Going	Increase graduate student satisfaction – instruction quality
Forward:	Strengthen feedback loop. Unclear on the plan when goals are not met.
General Feedback	All goals should be specific, measurable, attainable, realistic and time-bound
	 Responses to all questions should be provided, included KBOR 2020 Foundational Skills 3.e

Wichita State University Fairmount College of Liberal Arts and Sciences

Natural and Sciences and Mathematics - Biology

	On Target	Meets Expectations	Does Not Meet Expectations
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Degrees Offered:	B.A; B.S.; M.S.
Triggered Programs:	NONE
	Natural and Sciences and Mathematics - Biology
2016 Needs Going Forward:	 Learning outcomes, and assessment tools should help assess and continuously improving the program. There are no learning outcomes which may measure communication and presentation skills of the students. Department should report and elaborate on results from several sources other than exit surveys. Grades from a course should not be used as target values. Assessment at graduate level should involve more comprehensive tools, not only through MS Thesis defense and student exit interviews. Faculty and staff resources are needed to increase the productivity and research of the department. Finding a better way to track graduate employment data would likely be helpful to inform the UG program for improvements.
	2018 Comments
Notes:	Provided standardized expectation for productivity in narrative.
Commendations:	 Good job tying program mission to university mission in all 3 areas (educational, cultural, & economical) Fair amount of grant money awarded along with presentations & journal articles Being innovative by creating a text book, a website, an application, and an invention Using a variety of assessment tools both at the UG and GR level No KBOR triggers
Recommendations Going Forward:	 Include more goals for the undergraduate (UG) program and elaborate more on progress on goals for UG program More course offerings (if possible, they have acknowledged this need) Continue to recruit under-represented groups
General Feedback	 All goals should be specific, measurable, attainable, realistic and time-bound Tie goals to needs identified via assessment Faculty signatures missing

Natural Sciences and Mathematics – Chemistry

	On Target	Meets Expectations	Does Not Meet Expectations
	3	2	1
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Evidence of feedback loop demonstrating program improvement	The program not only makes changes based on the data, but also systematically studies the effects of any changes to assure that programs are strengthened without adverse consequences. Shows significant program improvement as a result of feedback loop.	The program regularly uses data to evaluate student performance and the efficacy of its courses and programs. Changes made using assessments are documented, although results from those changes are yet to be seen.	The program makes limited or no use of data collected to evaluate the efficacy of its courses and programs.

Degrees Offered:	Degrees Offered: B.S; M.S, Ph.D
Triggered Programs:	M.S. program triggered for number of majors (11.2/20) and number of degrees (3.4/5)
	Natural Sciences and Mathematics — Chemistry
2016 Needs Going Forward:	 Recommend further clarification of program demand/needs via student data, employer data (in and out-of-state). In addition to information on pattern of employment among graduates, particularly at the undergraduate level, it is recommended that general post-graduation salaries at all levels of graduates be included as part of future program assessment for the purpose of strengthening program statement on need and general planning for departmental growth. MS program is triggered re: enrollment and students graduating. Need to provide further review of opportunities to strengthen both figures in the context of the overall program, overall needs and opportunities.
	• Department on track to meet assessment expectations. They need to prioritize analysis and reporting of results/improvements of learning outcomes for undergraduate, MS and PhD level programs. Clarification of the nature and application of some current measures, exams and reports, is needed. Not clear how many students were evaluated.
	Prioritize the assessment of the Biochemistry option (Chem 661) on a continuing basis.
	Address "targets" set for PhD level efforts in accordance with graduate school expectation.
	2018 Comments
Notes:	Has hired needed faculty as funding permits
Commendations:	 Substantial number of journal articles & external grant money; provides SCH for other department majors; significant amount of research conducted and including undergraduate & graduate students in research Highest student satisfaction in college division from Exit Survey Created own lab manual to better fit curriculum and saved students money at the same time Made efforts to see what graduates are doing (via Linked-In, Facebook, departmental survey)
Recommendations	Include cultural component in mission statement (educational & economic drivers addressed, cultural not really diameter)
Going Forward:	 discussed) Employ other assessment tools besides ACS exams at the UG level (note made that in the future research reports will be evaluated using AACU rubrics) Include service provided beyond the university for item number 5 (Service the program providesetc.)
General Feedback	 All goals should be specific, measurable, attainable, realistic and time-bound Tie goals to needs identified via assessment Faculty signatures missing Form dated May of 2015

Natural Sciences and Mathematics – Geology

	On Target	Meets Expectations	Does Not Meet Expectations
	3	2	1
Department is expected to address:			
Centrality of the program to fulfilling the mission and role of the institution	Program mission is clearly defined and is in alignment with university mission.	Program mission is clearly stated. The role of the program and relationship to the university mission is in general aligned with university mission.	Program mission is not stated or is not in alignment with university mission
Quality of the program as assessed by the strengths, productivity and qualifications of the faculty	The document clearly reflects that faculty members are fully qualified to support the program goals with productivity directly linked to program enhancement	The document reflects that the strengths, productivity and qualifications of the faculty associated with the program are sufficient to sustain the program.	Faculty productivity and quality are not evaluated as sufficient to meet the needs of the program.
Quality of the program as assessed by its curriculum and impact on students	The program assessment clearly shows both alignment and positive impact of the curriculum on student learning.	The program assessment plan is fully implemented and shows the alignment of the curriculum with student learning outcomes as they reflect the quality of student learning	The assessment plan does not align the curriculum with student learning outcomes or does not demonstrate the impact of the curriculum on student learning.
Demonstrated student need and employer demand for the program	The program clearly demonstrates importance based on employer need and student demand.	The program presents data that shows either employer demand or student need.	The program data does not indicate student need nor employer demand.
Service the program provides to the discipline, the university and beyond	The program clearly demonstrates its value to the discipline, to the university and to the community.	The program demonstrates value to the discipline, the university or the community.	The program does not demonstrate value to its discipline, the university and/or the community.
Evidence of feedback loop demonstrating program improvement	The program not only makes changes based on the data, but also systematically studies the effects of any changes to assure that programs are strengthened without adverse consequences. Shows significant program improvement as a result of feedback loop.	The program regularly uses data to evaluate student performance and the efficacy of its courses and programs. Changes made using assessments are documented, although results from those changes are yet to be seen.	The program makes limited or no use of data collected to evaluate the efficacy of its courses and programs.

Degrees Offered:	Degrees Offered: B.S; M.S		
Triggered Programs:	M.S. program triggered for number of faculty (4/6)		
	Natural Sciences and Mathematics — Geology		
2016 Needs Going Forward:	Use of course grades to measure outcomes should be refined by moving to identification of specific assignments accompanied by scoring guides or rubrics that are clearly aligned to learning outcomes.		
	2018 Comments		
Notes:	Student satisfaction survey results are trending down. Rational provided.		
	 Noted concerns related to lack of faculty, cyclic nature of industry, and student demographics. 		
Commendations:	Substantial grant amount awarded in 2017 (\$2.1 million)		
 Have increased number of URM students in Geology Strong alumni support through scholarships 			
	Met all goals set from prior review		
	Collaboration with other departments and national/international organizations		
	 Acknowledgment of enrollment tied to employment cycle of the oil & gas industry and addressing other areas of study (groundwater remediation & hydrogeology on page 21 		
Recommendations Going	• Include cultural component to department mission statement (did address on page 20 with international &		
Forward:	global learning)		
	Add one or two more learning outcomes for the B.S. program (currently have 2, EEPS has 4)		
	• Use of more assessment tools on learning outcomes in addition to class assignments (page 10)		
	• Set new goals for next Program Review – goals are the same as last year, and these goals were met		
General Feedback	All goals should be specific, measurable, attainable, realistic and time-bound		
	Tie goals to needs identified via assessment		

Natural Sciences and Mathematics – Mathematics/Statistics and Physics

	On Target	Meets Expectations	Does Not Meet Expectations
	3	2	1
Department is expected to address:			
Centrality of the program to fulfilling the mission and role of the institution	Program mission is clearly defined and is in alignment with university mission.	Program mission is clearly stated. The role of the program and relationship to the university mission is in general aligned with university mission.	Program mission is not stated or is not in alignment with university mission
Quality of the program as assessed by the strengths, productivity and qualifications of the faculty	The document clearly reflects that faculty members are fully qualified to support the program goals with productivity directly linked to program enhancement	The document reflects that the strengths, productivity and qualifications of the faculty associated with the program are sufficient to sustain the program.	Faculty productivity and quality are not evaluated as sufficient to meet the needs of the program.
Quality of the program as assessed by its curriculum and impact on students	The program assessment clearly shows both alignment and positive impact of the curriculum on student learning. (Math/Stats)	The program assessment plan is fully implemented and shows the alignment of the curriculum with student learning outcomes as they reflect the quality of student learning	The assessment plan does not align the curriculum with student learning outcomes or does not demonstrate the impact of the curriculum on student learning. (Physics)
Demonstrated student need and employer demand for the program	The program clearly demonstrates importance based on employer need and student demand.	The program presents data that shows either employer demand or student need.	The program data does not indicate student need nor employer demand.
Service the program provides to the discipline, the university and beyond	The program clearly demonstrates its value to the discipline, to the university and to the community.	The program demonstrates value to the discipline, the university or the community.	The program does not demonstrate value to its discipline, the university and/or the community.
Evidence of feedback loop demonstrating program improvement	The program not only makes changes based on the data, but also systematically studies the effects of any changes to assure that programs are strengthened without adverse consequences. Shows significant program improvement as a result of feedback loop.	-	The program makes limited or no use of data collected to evaluate the efficacy of its courses and programs.

Degrees Offered:	B.S. Mathematics, B.S. Physics, M.S. Mathematics, M.S. Physics, PhD Applied Mathematics
Triggered Programs:	PhD Applied Mathematics
	Natural Sciences and Mathematics — Mathematics/Statistics and Physics
2016 Needs Going Forward	 The program documents growth in undergraduate programs (4-8% so far; 20% projected long-term). Yet, all programs enroll recognizably fewer students than were actually admitted, while inquiries are also on the increase. This is the case for all three BS program. Capacity and funding is well documented as one important issue in the eventual resolution of this matter. But the department is also encouraged to revisit alternative strategies to strengthen enrollments among inquiries and among admitted students. Reactivating the MS in physics may be helpful in this regard. The Physics program should revisit the instruments used to measure program success and clarify target (generic vs. program). Post-graduation salaries for past students is in decline, this may have an impact on future enrollment patterns and should be considered in planning/projection for departmental growth. The programs are in need of funding for faculty, student, and space. The report documents the need for additional tenure-track math and physics faculty (2 each) and for an additional tenure-track statistics faculty. Programs remains highly dependent on internal (and possibly external) funding to address much needed growth as expressed in report.
	2018 Comments
Notes:	 Noted loss of faculty over the years, and the new appointment this year in the mathematics department. The physics program was restructured to fit within the math department in 2016 and has yet to complete a full 3-year cycle of data collection and assessment. The Physics program should be commended for its relative success over its brief (recent) existence.
Commendations:	 Clear vision/mission statements. Both programs (Math/Statistics, and Physics) manage to teach curriculum, publish, and provide service to the university in a strong fashion. Despite a lack of resources publication and grant activity and community engagement (work activity) is good. The programs should be commended for the large service role they provide to the University Gen Ed program and the college of engineering. They should also be recognized for the math alternatives they offer to non-majors. One program (Math/Statistics BS/MS) demonstrate the value of their success by way of enrollment and student success. While the number or majors is moderate, it remains stable as does the number of graduates. Faculty productivity is solid. The Math/Stats program collects data and presents assessment data pertaining to its courses. Assessment instruments are identified and the program has successful outcomes meeting expectations in all categories.

Recommendations Going Forward:	• The data for physics suggest some growth, but sustainability will continue to require resources. As is, Physics has insufficient enrollment to sustain themselves (self-described). The program could benefit from further funding for recruitments as it continues.
	• Physics is also encouraged to follow through with the stated intensions of fully developing assessment instrument(s) and data collection during the next review cycle.
	• Some concern of over-reliance of physics to use the GRE. Questions about access to the test and applicable fees?
	• Math is encouraged to address further the results of their assessments in terms of ongoing program development. Physics was in assessment and data collection planning stages when report was submitted last cycle (see above 2016 notes) and should have results for this section. None present
General Feedback	• Page length of the document exceeded the 15 page limit (151 pages). Some documentation and narrative was contextual and explained current state, but it should be edited.
	 All goals should be specific, measurable, attainable, realistic and time-bound
	Tie goals to needs identified via assessment

Wichita State University Institute for Interdisciplinary Innovation

Institute for Interdisciplinary Innovation

	On Target	Meets Expectations	Does Not Meet Expectations
Department is expected to	3	2	1
address:			
Centrality of the program to fulfilling the mission and role of the institution	Program mission is clearly defined and is in alignment with university mission.	Program mission is clearly stated. The role of the program and relationship to the university mission is in general aligned with university mission.	Program mission is not stated or is not in alignment with university mission
Quality of the program as assessed by the strengths, productivity and qualifications of the faculty	The document clearly reflects that faculty members are fully qualified to support the program goals with productivity directly linked to program enhancement	The document reflects that the strengths, productivity and qualifications of the faculty associated with the program are sufficient to sustain the program.	Faculty productivity and quality are not evaluated as sufficient to meet the needs of the program.
Quality of the program as assessed by its curriculum and impact on students	The program assessment clearly shows both alignment and positive impact of the curriculum on student learning.	The program assessment plan is fully implemented and shows the alignment of the curriculum with student learning outcomes as they reflect the quality of student learning	The assessment plan does not align the curriculum with student learning outcomes or does not demonstrate the impact of the curriculum on student learning.
Demonstrated student need and employer demand for the program	The program clearly demonstrates importance based on employer need and student demand.	The program presents data that shows either employer demand or student need.	The program data does not indicate student need nor employer demand.
Service the program provides to the discipline, the university and beyond	The program clearly demonstrates its value to the discipline, to the university and to the community.	The program demonstrates value to the discipline, the university or the community.	The program does not demonstrate value to its discipline, the university and/or the community.
Evidence of feedback loop demonstrating program improvement	The program not only makes changes based on the data, but also systematically studies the effects of any changes to assure that programs are strengthened without adverse consequences. Shows significant program improvement as a result of feedback loop.	1	The program makes limited or no use of data collected to evaluate the efficacy of its courses and programs.

Degrees Offered:	M.I.D.		
Triggered Programs:	M.I.D.		
	Institute for Interdisciplinary Innovation		
2016 Needs Going Forward	N/A New program, first evaluation cycle		
	2018 Comments		
Notes:	 The program is identified as: Jeremy Patterson The program is recent and generally addresses potential rather than realization (at this early stage in the life of the program). Program is innovative and interdisciplinary. The program as developed, does not fit into this 		
	evaluative structure. The committee suggests creating a modified evaluative structure based on forward facing goals.		
Commendations:	 Clear vision/mission statements. Strong sense of faculty role in enrollment growth Solid teaching objectives Grant activity is very significant! Faculty productivity is high. 		
Recommendations Going Forward:	 While the teaching objectives are solid, the explanation of the assessment plan could be more comprehensive, especially since it's a new program. Employer demand for students was left blank, while noting entrepreneurship goals. Narrative speaks to 39K innovation related jobs on LinkedIn. As the program grows, so will the need for faculty, both adjunct and full-time. Additional resources will be needed to remain on the forefront of innovation race in HE. 		
General Feedback	 All goals should be specific, measurable, attainable, realistic and time-bound Tie goals to needs identified via assessment 		

Wichita State University Honors Baccalaureate

Honors Baccalaureate

	On Target	Meets Expectations	Does Not Meet Expectations
Department is expected to address:	3	2	1
Centrality of the program to fulfilling the mission and role of the institution	Program mission is clearly defined and is in alignment with university mission.	Program mission is clearly stated. The role of the program and relationship to the university mission is in general aligned with university mission.	Program mission is not stated or is not in alignment with university mission
Quality of the program as assessed by the strengths, productivity and qualifications of the faculty	The document clearly reflects that faculty members are fully qualified to support the program goals with productivity directly linked to program enhancement	The document reflects that the strengths, productivity and qualifications of the faculty associated with the program are sufficient to sustain the program.	Faculty productivity and quality are not evaluated as sufficient to meet the needs of the program. (Not Applicable)
Quality of the program as assessed by its curriculum and impact on students	The program assessment clearly shows both alignment and positive impact of the curriculum on student learning.	The program assessment plan is fully implemented and shows the alignment of the curriculum with student learning outcomes as they reflect the quality of student learning	The assessment plan does not align the curriculum with student learning outcomes or does not demonstrate the impact of the curriculum on student learning.
Demonstrated student need and employer demand for the program	The program clearly demonstrates importance based on employer need and student demand.	The program presents data that shows either employer demand or student need.	The program data does not indicate student need nor employer demand.
Service the program provides to the discipline, the university and beyond	The program clearly demonstrates its value to the discipline, to the university and to the community.	The program demonstrates value to the discipline, the university or the community.	The program does not demonstrate value to its discipline, the university and/or the community.
Evidence of feedback loop demonstrating program improvement	The program not only makes changes based on the data, but also systematically studies the effects of any changes to assure that programs are strengthened without adverse consequences. Shows significant program improvement as a result of feedback loop.	The program regularly uses data to evaluate student performance and the efficacy of its courses and programs. Changes made using assessments are documented, although results from those changes are yet to be seen.	The program makes limited or no use of data collected to evaluate the efficacy of its courses and programs.

Degrees Offered:	Honors Baccalaureate		
Triggered Programs:	Majors 1.25 <25; Grads 1<10		
Honors Baccalaureate			
2016 Needs Going Forward:	Not applicable. New Program.		
2018 Comments			
Notes:	 The committee acknowledges the relative newness of this program. It is difficult to have solid outcomes at this juncture in the program's development. The interdisciplinary nature of the Honors College design limits the faculty assignments (there are no full-time faculty holding appointments in the college). Student-Learning data available for non-majors, but little available to assess the majors due to low enrollment. 		
	Difficult to find career outlook/employer demand information for non-traditional majors.		
Commendations:	 Alignment of Honors Baccalaureate mission with the mission of Wichita State University. While there are few Honors majors (triggered), participation in the college and the tracks or micro-programs is growing. Student surveys reveal that students (major and non-major) are satisfied with program. 		
Recommendations Going Forward:	 Clear distinction between goals, curriculum, outcomes, results and analysis for students enrolled in the Honors Baccalaureate and students taking Honors College courses and/or Honors College students. Review learning outcomes and diversity assessment tools. Enrollment in a specific course is highly relied upon for outcomes. Develop outcomes and measures for applied learning. Improve recruitment and retention of students – Triggered program. 		
General Feedback	 Goals and strategies should tie back to noted needs. All goals should be specific, measurable, attainable, realistic and time-bound 		