KANSAS BOARD OF REGENTS
COUNCIL OF CHIEF ACADEMIC OFFICERS

VIRTUAL MEETING AGENDA
Wednesday, March 16, 2022
9:00 a.m. – 10:00 a.m.
or upon adjournment of SCOCAO

The Council of Chief Academic Officers (COCAO) will meet virtually via Zoom. Meeting information will be sent to participants via email, or you may contact arobinson@ksbor.org.

I.	**Call to Order**	Jill Arensdorf, Chair	
	A. Roll Call		
	B. Approve Minutes from February 16, 2022		p. 3
II.	**First Readings**		
	A. BS in Entomology – K-State	Chuck Taber	p. 5
	B. MS in Communication Sciences & Disorders – K-State	Chuck Taber	p. 15
	C. MS in Integrated Systems Design & Dynamics – K-State	Chuck Taber	p. 22
III.	**Second Readings**		
	A. BA and BS in Advertising and Public Relations – K-State	Chuck Taber	p. 33
	B. BS in Cybersecurity – K-State	Chuck Taber	p. 43
	C. BBA in Business Studies – PSU	Howard Smith	p. 52
IV.	**Council of Faculty Senate Presidents Update**	Janet Stramel, FHSU	
V.	**Other Matters**		
	A. Discuss Opportunities (new degree programs, partnerships, strategic initiatives, etc.) that Universities are Considering or Planning to Pursue in the Future	COCAO Members	
VI.	**Next COCAO Meeting – April 20, 2022**		
	A. New Program Approvals		
VII.	**Adjournment**		

COUNCIL OF CHIEF ACADEMIC OFFICERS

The Council of Chief Academic Officers (COCAO), established in 1969, is composed of the academic vice presidents of the state universities. The Board's Vice President for Academic Affairs serves as an ex officio member, and the member from the same institution as the chairperson of the Council of Presidents serves as chairperson of the Council of Chief Academic Officers. The chief academic officers of the University of Kansas Medical Center and Washburn University are authorized to participate as non-voting members when agenda items affecting those institutions are to be considered. The Council of Chief Academic Officers meets monthly and reports to the Council of Presidents. The Council of Chief Academic Officers works with the Board Academic Affairs Committee through the Vice President for Academic Affairs. Membership includes:

Jill Arensdorf, Chair	FHSU	Howard Smith	PSU
Gary Wyatt	ESU	JuliAnn Mazachek	Washburn
Charles Taber	K-State	Shirley Lefever	WSU
Barbara Bichelmeyer	KU	Daniel Archer	KBOR
Robert Klein	KUMC		

Council of Chief Academic Officers

AY 2022 Meeting Schedule

COCAO Academic Year 2021- 2022 Meeting Dates				
Meeting Dates	**Location (virtual or in-person)**	**Lunch Rotation**	**Institution Materials Due**	**New Program Requests due**
September 15, 2021	Virtual		August 25, 2021	July 21, 2021
	*No October Meeting			
November 17, 2021	Virtual		October 27, 2021	September 22, 2021
December 15, 2021	Virtual		November 24, 2021	October 21, 2021
January 19, 2022	Virtual		December 29, 2021	November 24, 2021
February 16, 2022	Virtual		January 26, 2022	December 22, 2021
March 16, 2022	Virtual		February 23, 2022	January 19, 2022
April 20, 2022	Virtual		March 30, 2022	February 23, 2022
May 18, 2022	TBD		April 27, 2022	March 23, 2022
June 15, 2022	TBD		May 25, 2022	April 20, 2022

*COCAO meets at 9:00 a.m. or upon adjournment of SCOCAO unless otherwise noted.

Council of Chief Academic Officers
MINUTES

Wednesday, February 16, 2022

The February 16, 2022, Council of Chief Academic Officers (COCAO) meeting was called to order by Chair Jill Arensdorf at 9:05 a.m. The meeting was held through Zoom.

In Attendance:

Members:	Jill Arensdorf, FHSU	Barbara Bichelmeyer, KU	Robert Klein, KUMC
	Tanya Gonzalez, K-State	Howard Smith, PSU	JuliAnn Mazachek, Washburn
	Gary Wyatt, ESU	Shirley Lefever, WSU	Daniel Archer, KBOR
Staff:	Karla Wiscombe	Sam Christy-Dangermond	Amy Robinson
	Tara Lebar	Judd McCormack	Cindy Farrier
	Marti Leisinger	Natalie Yoza	Hector Martinez
Others:	Adam Borth, Fort Scott CC	Aron Potter, Coffeyville CC	Elaine Simmons, Barton CC
	Eugene Vasserman, K-State	Greg Paul, K-State	Janet Stramel, FHSU
	Jason Sharp, Labette CC	Jean Redeker, KU	Jerry Pope, KCKCC
	Jennifer Ball, Washburn	Jennifer Roberts, KU	JoLanna Kord, ESU
	Kim Morse, Washburn	Kim Zant, Cloud County CC	Luke Dowell, SCCC
	Linnea GlenMaye, WSU	Lisa Blair, NWKTC	Monette DePew, Pratt CC
	Matthew Mayo, KUMC	Michelle Schoon, Cowley CC	Mickey McCloud, JCCC
	Robert Klein, KUMC	Sharon Kibbe, Highland CC	Shelly Gehrke, ESU
	Paul Grimes, PSU	Tom Hallaq, K-State	Tom Nevill, Butler CC

Roll call was taken for members and presenters.

Approval of Minutes

Howard Smith moved to approve January 19, 2022, meeting minutes, and Shirley Lefever seconded the motion. With no corrections, the motion passed.

1st Readings

- Howard Smith and Paul Grimes presented the first reading for a BBA in Business Studies at PSU. The program will use existing courses, certificates, and minors already taught with existing faculty and repackage them into a stackable degree. This will allow students flexibility and ensure a better fit for their individual goals while still giving undecided students an exploration option.

- Tanya Gonzalez and Eugene Vasserman presented the first reading for a BS in Cybersecurity at K-State. Cybersecurity is a growing field with industry demand. This program was built off the existing cybersecurity option offered in their current BS in Computer Science. While similar, these two programs require different electives. The Accreditation Board for Engineering and Technology (ABET) has released criteria for accreditation and believes computer science is a key part of any degree with cybersecurity components. Creating a separate cybersecurity program will allow for better exposure and advertising and will increase student interest.

- Tanya Gonzalez and Gregory Paul presented the first reading for a BA and BS in Advertising and Public Relations at K-State. This program creates a way to clearly highlight a current program within their Mass Communication degree offered through the A.Q. Miller School of Journalism and Mass

Communications. Developing a stand-alone program will allow students to more clearly indicate their focus on a resume and enables the program to be more responsive to industry needs in a rapidly changing field. The program will use existing courses and faculty.

These programs will be up for a second reading and vote at the next COCAO meeting.

2nd Readings

Howard Smith moved to approve the KUMC request to offer an MS in Health Data Science, and Shirley Lefever seconded the motion. With no comments or questions, the motion passed unanimously through a roll call vote. The program will move forward to COPS later in the day for approval.

Other Requests

- Robert Klein presented an off-campus academic specialty program request from KUMC for ten years. Information and data showing success can be found on page 47 of the agenda. The program aims to increase the number of physicians practicing in central and western Kansas, and campuses are located in Wichita and Salina. Off-campus academic specialty programs are presented for approval for a period not to exceed ten years.

  Howard Smith moved to approve the off-campus academic specialty program request from KUMC, and Tanya Gonzalez seconded the motion. With no further discussion, the motion passed unanimously through a roll call vote.

- Jill Arensdorf presented a request to rename FHSUs Center for Civic Leadership to the Center for Civic Learning and Engagement. FHSU is getting ready to go through a Carnegie elective classification process and believes this is an opportunity to better align the center's name with the work the center is doing and the expectations of the Carnegie classifications. No additional resources will be used for this request to rename a center, which was brought to COCAO for informational purposes. As such, no vote was required.

Council of Faculty Senate Presidents (COFSP) Update

Janet Stramel, Chair and FHSU Faculty Senate President, provided the update. Later in the day, the council plans to discuss the rpk GROUP presentation. She noted the CoFSP has some concerns with analysis of program duplication and that institutional mission should be taken into account with the analysis. The council continues to review AP cut scores for college credit and has sent the approved systemwide scores to department heads for their review. The council will report back final cut score recommendations in May.

Adjournment

The next COCAO meeting is scheduled virtually for March 16, 2022.

Barbara Bichelmeyer moved to adjourn the meeting, and Shirley Lefever seconded the motion. With no further discussion, the meeting adjourned at 9:36 a.m.

Program Approval

Summary

Universities may apply for approval of new academic programs following the guidelines in the Kansas Board of Regents Policy Manual. Kansas State University has submitted an application for approval and the proposing academic unit has responded to all of the requirements of the program approval process.

March 16, 2022

I. General Information

A. Institution Kansas State University

B. Program Identification

Degree Level:	Bachelor of Science
Program Title:	Entomology
Degree to be Offered:	Entomology
Responsible Department or Unit:	College of Agriculture
CIP Code:	26.0702
Modality:	Face-to-Face, Online, Hybrid
Proposed Implementation Date:	Fall 2022

Total Number of Semester Credit Hours for the Degree: 120

II. Clinical Sites: Does this program require the use of Clinical Sites? NO

III. Justification

A market analysis conducted in February 2020 suggests there are about 2,500 high-quality jobs annually in the central United States that require, or prefer, a B.S. in Entomology. Moreover, about 100 Entomology degrees are conferred annually in this region, indicating a substantial shortage of qualified applicants. There are only 16 universities in the nation with an entomology program and only one other that offers specialization in Pre-Veterinary & Medical Entomology training. K-State Entomology is uniquely positioned to train students in insect-related Animal Health issues, as well as plant health and stored products entomology, given our established relationships with National Bio and Agri-Defense Facility (NBAF) and the United States Department of Agriculture (USDA), and their scientists working both within and outside our Department. With this diverse range of opportunities and the job market analysis, our proposed program is student focused and built to reflect the needed flexibility of what it means to be a 21st century Entomologist. Our program is intended to work for new students beginning their college careers, transfer students with any number of previous credits, and established students looking for a cost-effective way to increase their marketability by adding a second degree.

IV. Program Demand: Select one or both of the following to address student demand:

A. Survey of Student Interest

This survey below was conducted with Spring 2021 graduates only, thus the small sample size. However, we have been asking students who minored in the discipline at their exit interview this question for about six years now and their response is similar with about 50% saying they would have majored or duel degreed in Entomology if the option was available. It was these responses that originally motivated our plans to develop a new B.S. program.

Number of surveys administered: …… 9
Number of completed surveys returned: ……. 8
Percentage of students interested in program: … 75%

B. Market Analysis

The Department of Entomology is currently the largest Entomology minors program in the country according to an internal poll of Entomology Departments across the US. This informal survey also showed that there are only 16 universities out of the 39 responding that offer an Entomology BS degree. We have offered an undergraduate research experience for students across K-State, which initially started with 19 student labs and had over 160 students this past year conducting research in multiple labs across several Colleges and Departments. The five-year average for enrollment is 22 enrolled with seven receiving a degree. Consequently, this research experience now serves as a recruitment tool for other programs within the College of Agriculture. With an established track record of recruiting students into our minors program, we anticipate a considerable portion of these students would be interested in a dual degree options.

This new degree will take advantage of our current recruitment efforts across the state. We work closely with K-12 educators. We offer a summer soybean science institute and a mentorship and leadership institute for program alumni looking to expand inquiry-based teaching methods into classrooms across Kansas. Over 150 teachers have completed the program over the past ten years, and nearly $1M in funding has been secured from state commodity organizations to promote these efforts. We intend to expand our promotion to create increased awareness for STEM jobs in Agriculture, which aligns heavily with our proposed degree options. Our graduate student club, K-State Popenoe Entomology Club, sells insect collections as a service to Agriculture Education/FFA instructors across Kansas. The collections include 70 specimens needed to prepare for the Entomology section of the FFA Career Development Event (CDE), which is sponsored by the Department of Entomology at Kansas State University. Our Insect Zoo is another activity that allows direct interaction with over 8K patrons every year and is used in nearly all undergraduate Entomology courses at K-State.

V. Projected Enrollment for the Initial Three Years of the Program

Year	Total Headcount Per Year		Total Sem Credit Hrs Per Year	
	Full- Time	Part- Time	Full- Time	Part- Time
Implementation	10		300	
Year 2	22		660	
Year 3	36		1,080	

This projection starts with a cohort size of 10 students, then increases the cohort size by 2 each year.

VI. Employment.

Data from the US Bureau of Labor Statistics shows there are greater than 300,000 jobs as Agricultural and Food Scientists, Medical Scientists, and Biological Scientists with projected growth of approximately 5% by 2029 and a median salary of over $80,000. These data are more general than those focused specifically on Entomology, so we conducted a market analysis. This market analysis was conducted just prior to the COVID pandemic and indicated there are 2,368 annual job openings, in our region, under the Entomology CIP code, with only 119 degree program completions from states in our region (11 states including, AR, CO, IL, IA, KS, MN, MO, NE, OK, TX, WI). This means there are **19 annual job openings for every degree completion**. Salaries ranged from $45,000 to $60,000 for B.S. & M.S. degrees based on the market analysis, with ZipRecruiter suggesting a slightly higher range of $52,000 to $80,000. The average salary for all Entomology jobs was $86,528 as it also included Ph.Ds. A B.S.degree in Entomology doubles your life-time earnings relative to a H.S. degree, yielding on average a $1.6 million return on investment assuming an individual works until age 67.

A survey of jobs on Indeed.com conducted on August 17, 2021, shows that there were 9,955 jobs nationally related to insects, 37,987 related to infectious disease, a primary area of study for our students, and 2,110 jobs related to insect pests. These data suggest there are a significant number of Entomology-related jobs.

VII. Admission and Curriculum

A. Admission Criteria

Our admission criteria are the University standards. Admission to the university is test-optional and requires achieving EITHER:

- A cumulative high school GPA (weighted or unweighted) of 3.25 or higher **OR**
- ACT composite score of 21, or an SAT ERW+M score of 1060 or higher
  AND, if applicable, achieve a 2.0 GPA on all college credit taken in high school. If you do not meet these assured requirements, you are still encouraged to apply. Your application will be reviewed individually.

B. Curriculum

Our curriculum is built around both Entomological training and the skills the market analysis revealed that employers are looking for in new hires. Entomology skills and professional specialization, in particular those courses that allow students to focus on Animal Health Entomology, Plant Health Entomology, Stored Product Entomology, or basic insect biology, are found in the "Entomology" and "Entomology and Professional Specialization" portion of the curriculum. The flexibility of the "Entomology and Professional Specialization" portion of this curriculum reflects the diversity of areas that modern-day Entomologists occupy. For example, about half of the faculty in the Department of Entomology have PhDs in other disciplines. Concurrently, there are faculty with Entomology training and degrees in departments outside of Entomology, including Biology, Biochemistry, Grain Science, Plath Pathology, Horticulture, Agronomy, and Veterinary Medicine. Thus, a "one-size fits all" model isn't appropriate for our students as it doesn't reflect the breadth of career possibilities for individuals with an Entomology degree. In total, there are 45 Entomology credits in these two sections, with 15 of those credits tied to specialization. Moreover, ENTOM 400, 405, 410, 499, and 695 are courses that specifically address employer-desired skills based on the market analysis.

In addition to Entomology training, employers are keen to hire individuals with strong leadership and critical thinking skills as well as an understanding of business operations and management. Given the importance of these two areas, we require six credits in each. Other critical skills that employers are looking for include (i) experience with data analysis, (ii) a basic understanding of some discipline within bioscience, (iii) the ability to communicate effectively, and (iv) some deeper understanding of Agriculture in general. As such, we require three plus credits in each of these areas to provide all of our students a foundational background that allows them to meet minimum requirements for any entomology-related job. Students can then choose six additional credits in any of these areas to build a strength and make themselves highly competitive for jobs with that particular focus.

The remaining credits in Natural Science/Mathematics (18-20 credits), Humanities/Social Science (nine credits), University Requirements (eight credits), and Free Electives (≤ ten credits) round out a student's training. These credits provide a solid background in basic science and the humanities, while allowing students the opportunity to explore a wide range of courses that could ultimately shape the trajectory of their career.

As outlined above, a key strength of this proposed degree program is that it allows students to specialize in any current or emerging area of Entomology – a strength not found in any other Entomology program in the country. And while this strength offers advantages for training students and aligns perfectly with K-State's Economic

Prosperity Plan, it does make it difficult to represent all possible degree plans with a single example. However, the below curriculum example represents what a "typical" Entomology student that is focused on animal health, bioscience, and data analysis would take each semester. It includes 35 credits of Bioscience/Animal Health (20 of which are from Entomology), 14 credits of Business/Economics, and 11 credits of statistics. Almost all courses in Entomology include research methods, data collection, and data analysis, so students will be well trained in data analysis and critical thinking – both skills that employers strongly desire in their new hires.

Overview of curriculum:

Year 1: Fall **SCH = Semester Credit Hours**

Course #	Course Name	SCH (15)
ENTOM 100	Entomology Foundations	1
ENTOM 305	Animal Health Entomology	2
ENTOM 306	Animal Health Entomology Laboratory	1
ENTOM 400	Insect Sampling and Surveillance	2
GENBA 110	Business Foundations	3
ENGL 100	Expository Writing 100	3
MATH 100	College Algebra	3

Year 1: Spring

Course #	Course Name	SCH (15)
ENTOM 312	General Entomology	3
ENTOM 405	Introduction to Insect Data Analysis	1
ENTOM 410	Introduction to Insecticides	1
COMM 106	Public Speaking 1	3
BIOL 198	Principles of Biology	4
ENGL 200	Expository Writing 200	3

Year 2: Fall

Course #	Course Name	SCH (15)
ENTOM 499	Undergraduate Research Experience	1
ENTOM 300	Economic Entomology	3
PHILO 125	Introduction to Philosophy of Science	3
CHM 110	General Chemistry	3
ASI 500	Genetics	3
AGEC 115	Decision Tools for Agricultural Economics and Agribusiness	2

Year 2: Spring

Course #	Course Name	SCH (15)
ECON 110	Principles of Macroeconomics	3
BIOL 455	General Microbiology	4
BIOCH 265	Introductory Organic and Biochemistry	5
GENAG 210	Human and Cultural Diversity in the Food and Agricultural Sciences	3

Year 3: Fall

Course #	Course Name	SCH (15)
ENTOM 630	Introduction to Molecular Entomology	3
ENTOM 625	Integrative Behavioral Ecology	3
AGCOM 400	Agricultural Business Communications	3

STAT 340	Biometrics I	3
PLPTH 610	Biotechnology	3

Year 3: Spring

Course #	Course Name	SCH (15)
ENTOM 710	Insect Taxonomy	3
ENTOM 645	Introduction to Insect Chemical Ecology	3
ENTOM 660	Insect Genetics	3
STAT 341	Biometrics II	3
ANTH 200	Introduction to Cultural Anthropology	3

Year 4: Fall

Course #	Course Name	SCH (15)
ENTOM 649	Introduction to Arthropod Vectors of Human Pathogens	3
ENTOM 692	Insect Ecology	3
STAT 703	Introduction to Statistical Methods for the Sciences	3
GEOG 200	Human Geography	3
GENAG 225	Fundamentals of Global Food Systems Leadership	3

Year 4: Spring

Course #	Course Name	SCH (15)
ENTOM 302	Art and Insects	3
ENTOM 675	Introduction to Insect Physiology	4
ETNOM 695	Capstone Experience	3
ENGL 270	American Literature	3
MUSIC 160	Music Listening Laboratory	2

Total Number of Semester Credit Hours …… 120

VIII. CORE FACULTY

Note: * Next to Faculty Name Denotes Director of the Program, if applicable
FTE: 1.0 FTE = Full-Time Equivalency Devoted to Program

Faculty Name	Rank	Highest Degree	Tenure Track Y/N	Academic Area of Specialization	FTE to Proposed Program
Jeremy Marshall*	Associate Professor	PhD	Y	Evolutionary biology and genetics (including population genetics, genomics, proteomics, and functional genetics using RNAi) in relation to reproductive biology, sexual conflict, life-history strategies, behavioral and ecological phenotypes, and cricket biology	0.4

Tania Kim	Assistant Professor	PhD	Y	Insect ecology; landscape ecology; plant-insect interactions; conservation; integrated pest management	0.2
Cassandra Olds	Assistant Professor	PhD	Y	Veterinary entomology; livestock entomology; vector biology; vector-borne pathogen transmission; immunological control of vector-borne pathogens; vector competence; developing novel arthropod management strategies	0.1
Yoonseong Park	Professor	PhD	Y	Insect physiology; insect hormones; insect neuropeptides and neuropeptide receptors; transgenic insects	0.1
Tom Phillips	Professor	PhD	Y	Stored-product insects; chemical ecology; pesticide alternatives; integrated pest management	0.2
Kris Silver	Research Associate Professor	PhD	N	Insect toxicology and molecular mechanisms of insecticide activity; mechanisms of RNA interference and enhancing RNAi responses; insecticide resistance and detoxification	0.1
Kun Yan Zhu	University Distinguished Professor	PhD	Y	Mechanisms and application of RNA interference in insects; chitin biosynthesis; modifications and metabolism in insects; biochemical and molecular basis of insecticide resistance	0.1
Greg Zolnerowich	Professor	PhD	Y	Systematics and phylogenetics of parasitic Hymenoptera, and systematics in support of biological control; general insect identification; curator of Museum of Entomology and Prairie Arthropod Research	0.4
Brian McCornack	Professor and Head	PhD	Y	Field-crop pest management; integrated pest management tactics; sampling; invasive species; insect population dynamics; remote sensing and site-specific strategies; plant-insect interactions; web-based decision support systems	0.2

Number of graduate assistants assigned to this program …… **[3-4 partial GTA, remaining portions of student positions supported by GRA, extramural funds]**

IX. Expenditure and Funding Sources *(List amounts in dollars. Provide explanations as necessary.)*

A. EXPENDITURES	First FY	Second FY	Third FY
Personnel – Reassigned or Existing Positions			
Faculty	$0	$0	$0
Administrators *(other than instruction time)*	$0	$0	$0
Graduate Assistants	$0	$0	$0
Support Staff for Administration	$0	$0	$0
Fringe Benefits *(total for all groups)*	$0	$0	$0
Other Personnel Costs	$0	$0	$0
Total Existing Personnel Costs – Reassigned or Existing	$0	$0	$0
Personnel – New Positions			
Faculty (0.4 FTE by Year 3, state funds)	$0	$0	$36,000
Administrators *(other than instruction time)*	$0	$0	$0
Student Assistants (UG)	$0	$0	$0
Support Staff for Administration (*i.e., Student Success Coordinator, Years 1-2 funded by restricted fees, Year 3 onward funded through RCM and COA support)*	$30,000	$30,000	$30,000
Fringe Benefits *(total for all groups)*	$9,000	$9,000	$20,520
Other Personnel Costs	$0	$0	$0
Total New Personnel Costs – New Positions	$39,000	$39,000	$86,520
Start-up Costs - One-Time Expenses			
Library/learning resources	$0	$0	$0
Equipment/Technology	$0	$0	$0
Physical Facilities: Construction or Renovation	$0	$0	$0
Other	$0	$0	$0
Total Start-up Costs	$0	$0	$0

Operating Costs – Recurring Expenses			
Supplies/Expenses	$6,500	$7,500	$8,500
Library/learning resources	$0	$0	$0
Equipment/Technology	$0	$2,000	$2,000
Travel	$0	$0	$0
Other	$0	$0	$0
Total Operating Costs	$6,500	$9,500	$10,500
GRAND TOTAL COSTS	$45,500	$48,500	$97,020

B. FUNDING SOURCES *(projected as appropriate)*	Current	First FY (New)	Second FY (New)	Third FY (New)
Tuition / State Funds		$94,890	$208,758	$341,604
Student Fees		$6,089	$13,392	$21,910
Other Sources		$0	$0	$0
GRAND TOTAL FUNDING		$100,979	$222,150	$363,514
C. Projected Surplus/Deficit (+/-) (Grand Total Funding *minus* Grand Total Costs)		$55,479	$173,650	$266,494

X. Expenditures and Funding Sources Explanations

A. Expenditures

Personnel – Reassigned or Existing Positions

All ENTOM course offerings, including the new 400-level experience-based courses, are offered as part of current appointments – thus, no new funds are needed to cover the costs of teaching. Entomology has 13 faculty with various research, extension, and teaching responsibilities that adequately cover our diverse discipline. In addition, we have 11 adjunct faculty from the Agricultural Research Services (ARS) within the United States Department of Agriculture (USDA) and the National Bio and Agro-Defense Facility (NBAF) within Manhattan and within our own laboratories. Several scientists from these outside labs engage with our teaching faculty to provide students with unique learning and training opportunities. All faculty teaching core and specialization courses are employed by Kansas State University in the College of Agriculture.

Personnel – New Positions

We request funds to support half of a full-time, student success coordinator position. Half of the position will be paid from existing state-funds. The second half of this position will be supported using restricted fees and other soft funds. The student success coordinator will be a student facing position that is readily available to students, will help organize and facilitate a departmental orientation & enrollment course, strategize ways to increase student recruitment (i.e., scheduling prospective student visits, recruitment visits on campus, communicating with high schools/community colleges, etc.), help advise incoming students, review degree plan inconsistencies, work with the College of Agriculture Student Records Office as needed, connect students to appropriate offices and/or resources, and general program administration (i.e., making changes to line scheduling, annually updating departmental lists, pulling basic reports for faculty and departmental administration, and clearing minors for graduation). This position will free up time for faculty to focus on student success within the new program.

We anticipate the addition of new teaching tenths by year three. Our largest demographic of students in our minors program come from Animal Science and Industry within the College of Agriculture. Based on program growth in this area, we plan to hire a 40% teaching faculty to handle part of the academic advising workload, as well as develop new courses in forensic entomology and vector biology.

Start-up Costs – One-Time Expenses

There are no funds needed to start this program. Technology in teaching labs and collaborative learning spaces were upgraded using Strengthening People and Revitalizing Kansas (SPARK) funds; all spaces have the capability of delivering distance-education courses and/or recording lecture/labs.

Operating Costs – Recurring Expenses

Lab and teaching computers and supporting technology will periodically require upgrades starting in year two (estimated cost $2,000 per year). We also require funds for supplies/expenses associated with office materials, instruction, IT support, and promotion and marketing activities ($5,000 per year). In addition, we anticipate offering more undergraduate research experiences and capstone projects and this will require supplies for experiments (reagents, lab-based components), printing services for posters presented in symposiums ($1,000 in year one, increasing by $1,000 per year). We will also need to cover the cost of greenhouse and plot fees that are used in several courses offered in Entomology ($500 per year).

B. Revenue: Funding Sources

The revenue table below uses the in-state, on-campus tuition rate of $316.30 per credit hour. It assumes, based on the example curriculum, that 52.5% of all semester credit hours (SCH) are generated by the College of Agriculture (COA) and 47.5% are generated by the College of Arts and Sciences (COAS). COA has a general fee of $22.90 per credit hour for on-campus courses, while the COAS has a general fee of $17.40 per credit hour. All funds generated by fees will be retained by the generating college.

Tuition & Fees	Tuition per SCH	YR 1 SCH	Sub- Totals	YR 2 SCH	Sub- Totals	YR 3 SCH	Sub- Totals
In-State On-Campus Tuition	$316.30	300	$94,890	660	$208,758	1,080	$341,604
College of Agriculture Fees	$22.90	158	$3,618	347	$7,946	567	$12,984
College of Arts & Sciences Fees	$17.40	142	$2,471	313	$5,446	513	$8,926
Total University Revenue			**$100,979**		**$222,150**		**$363,514**

C. Projected Surplus/Deficit

Our budget estimate projects a budget surplus of $55,479 in Year 1, with a projected surplus of $266,494 by Year 3. Of these surplus funds, 75% of tuition dollars and 100% of College of Agriculture fees are retained by the College of Agriculture: Year 1 = $41,609; Year 2 = $130,238; and Year 3 = $199,871. Projected surpluses are sufficient to cover any personnel and program resources needed to maintain and grow the program with no added resources from the University.

XI. References

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Program Approval

Summary

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March 16, 2022

I. General Information

A. Institution Kansas State University

B. Program Identification

Degree Level:	Master's
Program Title:	Communication Sciences and Disorders
Degree to be Offered:	Master of Science in Communication Sciences and Disorders
Responsible Department or Unit:	College of Health and Human Sciences: Department of Applied Human Sciences
CIP Code:	51.0201
Modality:	Face-to-Face
Proposed Implementation Date:	Fall 2022

Total Number of Semester Credit Hours for the Degree: 51

II. Clinical Sites: Does this program require the use of Clinical Sites? Yes.

Since the program already exists as a specialization within the Family Studies and Human Services master's degree program, no new clinical sites are required. Externship affiliation agreements are in place for over 25 pediatric / school / educational sites, and 25 medical / health care settings. Although most of the placement sites are in Kansas, the program has clinical site agreements throughout the Midwest. The program does not anticipate new demand being placed on the community due to our clinical sites. No more than 15 students require an off-campus clinical site during a semester. The Kansas State Speech and Hearing Center accommodates program clinical needs during the first four semesters of a graduate student's program of study

III. Justification

The Communication Sciences and Disorders (CSD) program joined the School of Family Studies and Human Services (FSHS) in 1994 with the degree offered as a specialization within FSHS. The master's program in speech-language pathology offered through Communication Sciences and Disorders (CSD) specialization has been continuously accredited at Kansas State University since 1972. Since 1996 the CSD program has graduated approximately 301 students with an M.S. degree. Graduates of the program successfully pass the national exam in speech-language pathology and achieve credentials (certification/state licensure) to practice as speech-language pathologists in employment settings across the lifespan (e.g., infant-toddler, schools, hospitals, skilled nursing facilities, private practices).

Given this successful history, the benefits of establishing an M.S. degree in Communication Sciences and Disorders at Kansas State University include:

1. More accurately represents the students' educational program/professional credential

2. Improves degree marketing and student recruitment capabilities
3. Enhances program visibility within the University

IV. Program Demand: Select one or both of the following to address student demand:

Communication Sciences and Disorders (CSD) program is a long-standing existing degree program as a sub-plan within the Family Studies and Human Sciences master's degree at Kansas State University. Enrollment in the 2-year CSD MS program over the past five years has been steady at an average of 34 total graduate students each year. Each new cohort is about 17 graduate students.

The Kansas Department of Labor reports a projected growth of 17.5% for speech-language pathologist in the state of Kansas between 2018-2028. In the State of Kansas, a total of three other universities have programs similar to ours: University of Kansas, Wichita State University, and Fort Hays State University. However, the collective graduation of master's students in all four programs for the 2020-2021 academic year was 81, indicating a continued need for CSD masters programs in the state of Kansas.

V. Projected Enrollment for the Initial Three Years of the Program

The table reflects the total number of CSD graduate students (1st and 2nd year students). The implementation year reflects the program's 5-year average.

Year	Total Headcount Per Year		Total Sem Credit Hrs Per Year	
	Full- Time	Part- Time	Full- Time	Part- Time
Implementation	34	0	850	0
Year 2	35	0	875	0
Year 3	36	0	900	0

VI. Employment

The master's degree program prepares students to be licensed speech-language pathologist. Per U.S. Bureau of Labor Statistics, employment of speech-language pathologists is projected to grow 29% from 2020 to 2030 nationwide (compared to 8% for all other occupations). This higher-than-average growth is, in part, due to the aging baby-boomer population and associated speech-language and/or swallowing impairments that are the result of medical conditions. The BLS projects that about 15,200 openings for speech-language pathologists, on average, in the United States, over the next decade. The mean annual salary for speech-language pathologists was $83,24 in 2020.

The Kansas Department of Labor reports a projected growth of 17.5% for speech-language pathologist in the state of Kansas between 2018-2028. In the State of Kansas, the BLS reports the median annual salary for speech-language pathologist was $75,880 (May 2019). Over the past 20 years, upon graduation, Kansas State University master's students in CSD have consistently obtained full employment in settings such as the public schools, medical facilities, and private practice.

VII. Admission and Curriculum

D. Admission Criteria
To be considered for graduate admission, the applicant must have:

1. a bachelor's degree;

2. adequate undergraduate preparation in speech-language pathology or equivalent evidence of an appropriate background for undertaking an advanced degree program;
3. an overall undergraduate average of 3.0 or better;
4. an undergraduate average of 3.0 or better in the junior and senior years;
5. an undergraduate average of 3.0 or better in the major;
6. a personal statement regarding professional interests and goals (one page);
7. Graduate Record Examination (GRE) scores; and
8. three recommendation forms completed by instructors or possibly other individuals who can attest to the applicant's suitability for graduate study in speech-language pathology.

Interested students must complete the electronic application for graduate studies in CSD through the Graduate School. Applicants submit transcripts (unofficial or official) from **each** college and university attended, including Kansas State University. Official transcripts are required if recommended for admission.

Other electronic documents that are part of the application include:

- Personal statement (one page);
- Resume (optional);
- GRE scores;
- Three recommenders who complete an evaluation form.

In addition to university guidelines for English Proficiency Requirements, international applicants provide an audio recording of introduction to the program (about 5 minutes of talking).

E. Curriculum

Year 1: Fall **SCH = Semester Credit Hours**

Course #	Course Name	SCH 9
CSD 745	Neuromotor Speech Disorders	3
CSD 750	Voice Disorders	3
CSD 701	Research Experience in Communication Sciences and Disorders	1
CSD 705	Practicum in Speech-Language Pathology	2

Year 1: Spring

Course #	Course Name	SCH 12
CSD 841	Acquired Language and Cognitive Disorders	4
CSD 742	Language Assessment and Intervention II	3
CSD 748	Cleft Palate	1
CSD 780	Instrumental Measurement for Clinical Application	2
CSD 705	Practicum in Speech-Language Pathology	2

Year 1: Summer

Course #	Course Name	SCH 8
CSD 744	Aural Rehabilitation	2
CSD 725	Augmentative and Alternative Communication	2
CSD 743	Communication Impairments in Autism Spectrum Disorders	2
CSD 705	Practicum in Speech-Language Pathology	1
CSD 706	Practicum in Audiology	1

Year 2: Fall

Course #	Course Name	SCH 8
CSD 741	Fluency Disorders	3
CSD 844	Dysphagia	3
CSD 705	Practicum in Speech-Language Pathology	2

Year 2: Spring

Course #	Course Name	SCH 8
CSD 847	Externship in Speech-Language Pathology	6
CSD 851	Professional Issues in Speech-Language Pathology	2

Year 2: Summer

Course #	Course Name	SCH 6
CSD 847	Externship in Speech-Language Pathology	6

Total Number of Semester Credit Hours ……. 51*

*An available research option replaces one credit hour of CSD 701 for a total number of 56 semester credit hours.

Course #	Course Name	SCH optional
CSD 899	Masters Research	6

VIII. Core Faculty

FTE: 1.0 FTE = Full-Time Equivalency Devoted to Program

Faculty Name	Rank	Highest Degree	Tenure Track Y/N	Academic Area of Specialization	FTE to Proposed Program
Robert Garcia	Clinical Associate Professor	Au.D.	N	Audiology	0.50
Jane Garcia	Professor	Ph.D.	Y	Swallowing disorders caused by neurological conditions such as stroke, traumatic brain injury, cerebral palsy and disease processes	0.50
Kristin Pelczarski	Associate Professor	Ph.D.	Y	Fluency and fluency disorders; phonological processing and encoding; eye-tracking	0.50
Nandhu Radhakrishnan	Associate Professor	Ph.D.	N	Voice disorders; vocology	0.50
Melanie Hilgers	Clinical Associate Professor	M.S.	N	Early intervention; auditory processing disorders	0.50
DeAnna McCloud	Clinical Assistant Professor	M.S.	N	Communication development and disorders associated with infants, toddlers, and school	0.50

				aged children and teletherapy service delivery	
Jeridy Oetken	Clinical Assistant Professor	M.S.	N	Communication development and disorders with preschool and school aged children	0.50
Emily Johnson	Clinical Assistant Professor	M.S.	N	Communication and autism; preschool speech and langue disorders	0.50

Number of graduate assistants assigned to this program **3**

Note: A master's degree is considered an appropriate terminal degree for the bachelor's level instruction as this is a clinical program.

IX. Expenditure and Funding Sources

A. EXPENDITURES	First FY	Second FY	Third FY
Personnel – Reassigned or Existing Positions			
Faculty*	$319,887	$321,284	$332,810
Administrators *(other than instruction time)***	$0	$0	$0
Graduate Assistants***	$55,152	$57,358	$59,652
Support Staff for Administration (*e.g., secretarial*)*	$37,286	$38,032	$38,792
Fringe Benefits *(total for all groups)*	$117,487	$117,487	$117,487
Other Personnel Costs	$0	$0	$0
Total Existing Personnel Costs – Reassigned or Existing	$529,812	$534,161	$548,741
Personnel – – New Positions			
Faculty	$0	$0	$0
Administrators *(other than instruction time)*	$0	$0	$0
Graduate Assistants	$0	$0	$0
Support Staff for Administration (*e.g., secretarial*)	$0	$0	$0
Fringe Benefits *(total for all groups)*	$0	$0	$0
Other Personnel Costs	$0	$0	$0
Total Existing Personnel Costs – New Positions	$0	$0	$0
Start-up Costs - - One-Time Expenses			
Library/learning resources	$0	$0	$0
Equipment/Technology	$0	$0	$0
Physical Facilities: Construction or Renovation	$0	$0	$0
Other	$0	$0	$0
Total Start-up Costs	$0	$0	$0

Operating Costs – Recurring Expenses			
Supplies/Expenses	$35,000	$35,000	$35,000
Library/learning resources	$0	$0	$0
Equipment/Technology	$30,000	$30,000	$30,000
Travel	$4,000	$4,000	$4,000
Other	$0	$0	$0
Total Operating Costs	$69,000	$69,000	$69,000
GRAND TOTAL COSTS	$598,812	$603,161	$617,741

*Includes 2% increase in salary each year.
**The program will continue to fall under the direction of the Department of Applied Human Sciences head, so no direct administrative support is needed.
***Includes tuition assistance and assumed 4% increase in tuition assistance each year.

B. FUNDING SOURCES *(projected as appropriate)*	First FY	Second FY	Third FY
Tuition*	$409,632	$421,680	$433,728
College Revenue Center Funds**	$83,615	$73,576	$73,735
Student Fees***	$24,310	$25,025	$25,740
Other Sources****	$81,255	$82,880	$84,538
GRAND TOTAL FUNDING	$515,197	$529,585	$544,006
C. Projected Surplus/Deficit (+/-) (Grand Total Funding *minus* Grand Total Costs)	(-$83,615)	(-$73,576)	(-$73,735)

* Represents tuition returned to college/department via KSU RCM budget model based on 2022 tuition rates.
** Represents funding received from College of Health and Human Services Revenue Center Investment
*** Represents $28.60/SCH college course fee.
****Revenue generated from clinic fees projected to increase by 2% annually.

X. Expenditures and Funding Sources Explanations

A. Expenditures
Personnel – Reassigned or Existing Positions
All faculty are currently employed in the Department of Applied Human Sciences, which will not change with the new degree proposal. A modest pay increase of 2% was included for each year. The program will continue to fall under the direction of the Department of Applied Human Sciences head, so no direct administrative support is needed exclusive to the CSD program.

Personnel – – New Positions

No new positions are projected.

Start-up Costs – One-Time Expenses

This is an existing program that is housed within the M.S. in Family Studies and Human Services degree program as a specialization. No new costs are anticipated.

Operating Costs – Recurring Expenses

The program spends approximately $35,000 on student hourly expenses, clinic supplies, office supplies, phone usage, etc. Approximately $30,000 is needed each year for equipment upgrades and/or maintenance. A member of the faculty must attend annual accreditation meetings, which is estimated at $4,000 annually.

B. Revenue: Funding Sources

The Kansas State University responsibility centered management (RCM) budget model returns the tuition generated by graduate programs to the college. Tuition calculations are based on the projected enrollment table in section V above. Tuition calculations of $481.92/SCH is obtained by calculating 90% Kansas resident and 10% non-resident tuition rates for graduate tuition, as this is the 5-year average resident breakdown among CSD MS students. Kansas resident graduate tuition rate = $428.90/SCH; nonresident graduate tuition rate = $959.10/SCH.

C. Projected Surplus/Deficit

Any deficit or surplus in tuition generated directly from the Communication Sciences and Disorders degree program has been and will continue to be covered or used by the Department of Applied Human Sciences, which houses the degree in Communication Sciences and Disorders.

Because the Communication Sciences and Disorders program is an existing sub-plan within the Family Studies and Human Services master's degree program, and will continue to operate within the same department, the remaining funds needed to break-even are generated by other programs within the Department and College of Health and Human Sciences. Conversely, any excess funds are used to support other programs within the department.

XI. References

American Speech-Language-Hearing Association, (2020) *EdFind*, at https://find.asha.org/ed/#sort=relevancy&f:@degreeprogram=[Master's%20Degree%20in%20Speech-Language%20Pathology]&f:@areaofstudy=[Speech-Language%20Pathology]&f:@state=[Kansas]

Bureau of Labor Statistics (January 22, 2022). U.S. Department of Labor, *Occupational Outlook Handbook*, Speech-Language Pathologists, at https://www.bls.gov/ooh/healthcare/speech-language-pathologists.htm

Kansas Department of Labor, *Kansas 10 Year Job Outlook* 2018-2028, https://www.dol.ks.gov/ At:https://klic.dol.ks.gov/vosnet/GSIPub/documentView.aspx?enc=RN+fslva0bSwyMCAu6NoOTP6o8sPnBG0fibYYPfUVTQ=

Program Approval

Summary

Universities may apply for approval of new academic programs following the guidelines in the Kansas Board of Regents Policy Manual. Kansas State University has submitted an application for approval and the proposing academic unit has responded to all of the requirements of the program approval process.

March 16, 2022

I. General Information

A. Institution	Kansas State University Salina Aerospace and Technology Campus
B. Program Identification	
Degree Level:	Master's
Program Title:	Integrated Systems Design and Dynamics
Degree to be Offered:	Master of Science
Responsible Department or Unit:	College of Technology and Aviation Department of Integrated Studies
CIP Code:	30.0601
Modality:	Online, Hybrid
Proposed Implementation Date:	Fall 2022

Total Number of Semester Credit Hours for the Degree: 32 total credits

II. Clinical Sites: Does this program require the use of Clinical Sites? No

III. Justification

This new graduate degree in Integrated Systems Design and Dynamics (ISDD) was developed to support the development of senior "system-level" demands found within the high-tech aerospace industry. This graduate program greatly enhances, replaces and builds upon the prior Professional Master's degree of Technology at Kansas State University Salina (KSUS). KSUS's prior graduate degree - the Professional Master of Technology - was not a recognizable graduate degree within the broader STEM industry and did not market well to prospective students and employers alike. Recent industry workforce development research conducted at KSUS has determined that professional senior level skills in systems design and dynamics is in high demand. Leveraging 6,034 data samples, this research looked at market and job data from the aviation and aerospace industries to determine what types of jobs, skills, and qualifications are in demand. Using technical cybernetics, the graduate degree is focused on the planning, architecture, design, and development of highly integrated machine learning systems, autonomous systems, aerospace systems, space systems, cybernetic systems, cyber and cyber-physical systems.

The cybernetic foundations of the Salina-based program are unique within the region. Further enhancing the ISDD graduate degree, graduate engineering course options at KSU's College of Engineering are also available to students within the elective portion of the ISDD program. Industrial demand for the skillsets developed in this new graduate degree have grown rapidly especially within the "Industrials: Aerospace & Defense" market sector. The employment outlook for graduate degree holders in the *integrated systems design and dynamics* field is very positive at all geographic levels. Much like our Machine Learning and Autonomous Systems (MLAS) bachelor's degree offering, our market research has determined that there is a distinct opportunity for graduate degrees offered within ***Integrated Systems Design and Dynamics (ISDD)***. This indicates an opportunity for KSUS to compete in this integrated systems niche.

IV. Program Demand:

A. Market Analysis

In January of 2021, KSUS embarked on a workforce development study. The primary goal was focused on developing talent to serve the needs of the broader aerospace industry. The workforce development research highlighted a demand (and gap) of skills that exist beyond that of aviation pilots and mechanics. The industrial financial market data collected from various investment institutions illustrates a market sector approaching $1.2 trillion dollars in market capitalization (Aerospace & Defense, Air Freight & Logistics, and Airlines) (Fidelity, 2021). The largest corporate players in this space consist of Boeing, Lockheed Martin, Raytheon, and Textron. While the total aviation portion of the aviation and aerospace industry has been hit hard due to COVID, the more technologically focused aerospace portion of the industry segment has illustrated strong growth (Deloitte, 2021). This suggests a viable ecosystem for the ISDD graduate degree program (Duke, 2018).

In the workforce development study conducted by KSUS, the word "systems" showed up in roughly 13% of the total job titles pulled (n = 6,034) and was found roughly 16% of the time in the listed skills required for the job (Werner & Pritchard, 2021). A quick search on Indeed of "systems science" jobs requiring a graduate degree yields over 100,000 hits. Similarly, positions in systems engineering requiring a graduate degree yields 70,629 postings. According to a 2018 study conducted by the American Society of Engineering Education (Roy et al., 2021), only 5,260 individuals were enrolled in an Industrial/Manufacturing/Systems graduate program and 1,587 were enrolled in an aerospace graduate program. Furthermore, the demand for graduates who pose aerospace-based skill sets is outpacing the annual number of graduates from US academic organizations (Ward, 2021). This illustrates an addressable market potential for the ISDD program, especially since the ISDD program is able to offer upskilling services for aerospace and non-aerospace students alike.

Additionally, we surveyed our larger ISDD industry advisory board to review the attractiveness of this new graduate degree proposal and after being surveyed they estimated that the target learner audience for this program works best for Junior-Level and Mid-Level industry professionals (81%). In a follow-up question within that survey, the ISDD industry advisory members overwhelmingly listed "System Engineer" as the top job title for graduates coming out of this program. Lastly, 90% of the ISDD industry advisory board members stated that they would be interested in hiring graduates from this program, with 40% saying they would be "very interested" in hiring students from this program. The nearest graduate degree programs are offered by the more business-oriented options found at Worcester Polytechnic Institute (Worcester Polytechnic Institute, 2022) and Massachusetts Institute of Technology (Massachusetts Institute of Technology, 2022). This degree is a technologically oriented degree grounded in technical cybernetics and system dynamics; making the ISDD program a truly unique option within the State as well as the region.

V. Projected Enrollment for the Initial Three Years of the Program

	Headcount Per Year			Semester Credit Hours Per Year		
	Full Time	**Part Time**	**Total**	**Full Time**	**Part Time**	**Total**
Year 1 (Start)	4	7	11	96	105	201
Year 2	8	12	20	192	180	372
Year 3	14	18	32	336	270	606

PT = 6 hrs per/sem, 12 hrs per/year + 3 for summer | Annual Estimated Total: 15 Hrs
FT = 12 hrs per/sem, 24 per/year | Annual Estimated Total: 24 Hrs

VI. Employment

The employment outlook for integrated systems-related occupations is positive. Federal data projects a faster-than-average employment growth for system developers, engineers and other related occupations over a ten-year period in Kansas, the region, and the nation (Bureau of Labor Statistics, 2020a). Additionally, the program contains two specialization programs (cybersecurity and machine learning), where employment growth in these areas are expected to grow by more than 30% over the next ten years (Bureau of Labor Statistics, (2020b). Current job listings underscore this trend in substantial labor demand, especially for senior-level professionals who are versed in integrated systems design and architecture. An understanding of systems and the ability to think and work systematically when approaching industry problems is becoming increasingly vital for employees hired in a variety of technical, engineering, science, and business positions. Additionally, comprehension of system dynamics is frequently sought after for research and education in many different fields, as well as for analysis by large companies, governments, international agencies, and consulting companies.

A survey of aerospace industry data obtained from the Kansas Department of Commerce (Emsi, 2020) indicates the following:

1. Over 87% of the jobs advertised in this sector required at least a B.S. with 37% requiring an M.S. or Ph.D.
2. The average number of nationwide job postings at any one time is approximately 2,500 with an average salary of over $116,000/year.
3. Over 56% of current employees in this sector are over age 45.
4. Average number of job postings in the sector for the year ending in July 2020 was 6,451 with only 1,479 of those being filled.

Additional industry demand research indicates the following: (Werner & Pritchard, 2021)

1. Of 6,034 jobs analyzed in 2021, the top interdisciplinary "*system-based*" job skills in the aerospace industry are Cyber Security, Machine Learning, Artificial Intelligence; and Systems Management, Systems Engineering, Smart Materials and Manufacturing.
2. The demand is high for senior level "systems" level personnel with experience in designing and developing highly integrated systems. This skillset was determined to be the highest when comparing aviation job titles to that of aerospace job titles.

While this new degree is open to all student learner types, this program will favor post-high school professionals. Our recent industry analysis illustrates that many students matriculating into this program will come with existing STEM degrees. Our expectation is that many students will be coming from various technologically-intense industries with between three to six years of experience who see reskilling/upskilling as critical to their future success.

VII. Admission and Curriculum

A. Admission Criteria

Candidates complete an application, and provide a resume, a personal statement, a writing sample, three letters of academic (or professional reference) positioned to comment on the candidates' ability to succeed in the MS program, and undergraduate and graduate transcripts (if applicable). An undergraduate GPA of 3.0 or above on a 4.0 scale is preferred. The criteria for admission to the program must include an earned bachelor's degree and three years of technical industry practice experience beyond the bachelor's degree. International candidates can provide evidence of English language proficiency through a TOEFL exam or the English Language Program. The program seeks candidates that illustrate strong visual, oral, and written communication skills, a commitment to diversity, equity and inclusion, and potential for applied research. Students may enter in a part-time or full-time capacity.

B. Curriculum

The program consists of 32 semester hours of graduate credit. This is comparable to other Master of Science programs housed within research-intensive (R1) universities (30~36 hours) and two credit hours above the minimum graduate credit hours required at Kansas State University.

Year 1: Summer **SCH = Semester Credit Hours**

Course #	Course Name	SCH 6
CYBR 601	Introduction to Cybernetic Modeling and Simulation	3
CYBR 603	Integrated Systems Architecture	3

Year 1: Fall **SCH = Semester Credit Hours**

Course #	Course Name	SCH 6
COT 682	Open Source Cyber Surveillance	3
CYBR 708	Cybernetic Systems Design and Dynamics	3

Year 1: Spring **SCH = Semester Credit Hours**

Course #	Course Name	SCH 8
COT 684	Advanced Topics in Cyber Data Fusion	3
CYBR 707	Research Methods, Design, and Analysis	5

Year 2: Summer **SCH = Semester Credit Hours**

Course #	Course Name	SCH 2
COT 839	Integrated Systems Thesis	2

Year 2: Fall **SCH = Semester Credit Hours**

Course #	Course Name	SCH 5
CYBR 751	Cyber Defense Methods	3
COT 839	Integrated Systems Thesis	2

Year 2: Spring **SCH = Semester Credit Hours**

Course #	Course Name	SCH 5
CYBR 760	Aerospace Cybersecurity Studio	3
COT 839	Integrated Systems Thesis	2

Total Number of Semester Credit Hours ……. 32

VIII. Core Faculty

Note: * Next to Faculty Name Denotes Director of the Program, if applicable
FTE: 1.0 FTE = Full-Time Equivalency Devoted to Program

Faculty Name	Rank	Highest Degree	Tenure Track Y/N	Academic Area of Specialization	FTE to Proposed Program
1. Michael Pritchard*	Assistant Professor	Ph.D.	Y	Cybernetics, Machine Learning & Autonomous Systems	0.5
Siny Joseph	Associate Professor	Ph.D.	Tenured	Economics & Systems Management	0.5

3. Mark Jackson	Professor	Ph.D.	Tenured	Mechanical Engineering & Aerospace Materials	0.5
4. Paul Thomas	Assistant Professor	Ph.D.	Y	Data Engineering, Systems Integration, & Management	0.5
5. Kurt Barnhart**	Professor	Ph.D.	Tenured	Aviation & Aerospace Systems	0.1
6. Austin Walden**	Assistant Professor	Ph.D.	Y	Aviation & Aerospace Systems	0.1
7. Randall Nichols**	Professor of Practice	M.S.	N	Uncrewed Aerial Systems & Cyber Defense	0.2
8. New Hire (2024)	Assistant Professor	M.S./Ph.D.	Y	Cyber Operations & Defense	0.5
9. Various (2024)	PT Adjunct (As Needed)	M.S./Ph.D.	N	Space Systems, Engineering, Orbital Mechanics, etc.	0.25
***The topics being taught in another program are also used in this program.*				*FTE Estimate Total ->*	3.15

Number of graduate assistants assigned to this program **0**

*(**Note:** We do not anticipate the need for graduate assistants during the initial rollout of the ISDD program; however, we do plan on expanding on this as the curriculum becomes more mature.)*

IX. Expenditure and Funding Sources *(List amounts in dollars. Provide explanations as necessary.)*

A. EXPENDITURES	***First FY***	***Second FY***	***Third FY***
Total Existing Personnel Costs – Reassigned or Existing	$112,266	$274,428	$274,428
Personnel – New Positions			
Faculty	$0	$0	$60,000
Administrators *(other than instruction time)*	$0	$0	$0
Graduate Assistants	$0	$0	$0
Support Staff for Administration	$3,150	$6,300	$6,300
Fringe Benefits *(total for all groups)*	$21,168	$82,656	$81,900
Other Personnel Costs	$0	$0	$0
Total Existing Personnel Costs – New Positions	$24,318	$88,956	$148,200
Start-up Costs – One-Time Expenses			
Library/learning resources	$0	$0	$0
Equipment/Technology	$150,000	$2,520	$5,040
Physical Facilities: Construction or Renovation	$0	$0	$0
Other (Marketing)	$80,000	$30,000	$30,000
Total Start-up Costs	$230,000	$32,520	$35,040

Operating Costs – Recurring Expenses			
Supplies/Expenses	$126	$252	$252
Library/learning resources	$0	$0	$0
Equipment/Technology	$2,000	$2,000	$2,000
Travel	$1,487	$2,974	$2,974
Other	$0	$0	$0
Total Operating Costs	$3,613	$5,226	$5,226
GRAND TOTAL COSTS	$370,197	$401,130	$462,894

B. FUNDING SOURCES	***First FY***	***Second FY***	***Third FY***
(projected as appropriate)	(New)	(New)	(New)
Tuition / State Funds	$137,856	$255,136	$415,625
Student Fees	$9,650	$17,860	$29,094
Industry & Government Funding	$70,000	$70,000	$70,000
Other Sources	$0	$0	$0
GRAND TOTAL FUNDING	$217,506	$342,996	514,719
C. Projected Surplus/Deficit (+/-) (Grand Total Funding *minus* Grand Total Costs)	($152,691)	($58,134)	$51,825

X. Expenditures and Funding Sources Explanations

A. Expenditures

Personnel – Reassigned or Existing Positions: A combined 3.15 FTE will come from faculty members as depicted in section VIII of this document. Faculty will be reassigned in the second half of the 2022-23 Academic Year.

Personnel – New Positions: A single faculty position is anticipated by year 3 of the program; 50% of the FTE shall be assigned to the ISDD, the other remaining shall be used to support undergraduate program (see "Faculty Name #9", Page 12, section VIII). A varying number of adjunct instructors will be critical to the success of this program from the standpoint of content currency and relevancy and will share the teaching load and we currently estimate this need at 0.25 of an FTE per semester.

Start-up Costs – One-Time Expenses: Limited to computer and office equipment. We may incur a $150K equipment cost for an additive 3D metal printer; this cost may be deferred via additional equipment grant funding streams we plan on pursuing to help augment the ISDD program cost structure.

Operating Costs – Recurring Expenses: Limited to office costs and travel

B. Revenue: Funding Sources

In addition to annual tuition and student fees, we expect Industry & Government Funding streams to chip in annually to the program as well. As of 2021, we have tentative commitments from various corporate donors. Of course, our primary funding stream will be generated from student tuition.

	Headcount Per Year			Semester Credit Hours Per Year			Revenue Forecast	ROI Estimate
	Full Time	Part Time	Total	Full Time	Part Time	Total		
Year 1	4	7	11	96	105	201	$217,506	**($152,691)**
Year 2	8	12	20	192	180	372	$342,996	**($58,134)**
Year 3	14	18	32	336	270	606	$514,719	**$51,825**

PT = 6 hrs per/sem, 12 hrs per/year + 3 for summer | Annual Estimated Total: 15 Hrs
FT = 12 hrs per/sem, 24 per/year | Annual Estimated Total: 24 Hrs

Part time students are calculated at 15 hours annually (6 hour per semester twice per year, plus a single 3 credit hour course over the summer); whereas full time are estimated at 24 hours (12 hours per semester twice per year). And using a blended tuition rate of $685.85 (Simple Average: $421 (in-state rate) + $949 (out-of-state rate)), we then take the total estimated credit hours for full time and part time students. We assume that more part time students, than full time students, will be enrolled in this program; additionally, we also assume more out-of-state students will be enrolling in this program due to the audience we will be marketing towards. We estimate – in the first year – based on 11 total students enrolled in 201 credit hours multiplied times the estimated blended rate, $9,650 in student fees, $70,000 for industry and government funding, and given these assumptions, we estimate that we will bring in roughly $217K of total revenue for the starting year. As enrollment increases, while considering ISDD program expenditures, we estimate that we will break even in the third year.

C. Projected Surplus/Deficit

The campus intends to develop a digital marketing campaign for this program largely modeled after the Machine Learning and Autonomous Systems (MLAS) digital marketing campaign. We expect program enrollments to increase after the second year of the program. These early cash marketing expenditures will help us to realize the estimated ROI. Additionally, we recognize that the blended tuition rate might not be the only approximation method for forecasting ROI, therefore, we have simulated a worst-case revenue model that relies strictly on gross in-state tuition and does not consider other possible funding streams (e.g., government grants, corporate research funding, or private donations). Even under this worst-case scenario, the program is estimated to break even in five to six years; however, in the most realistic scenario, we estimate a healthy return on investment within three to four years.

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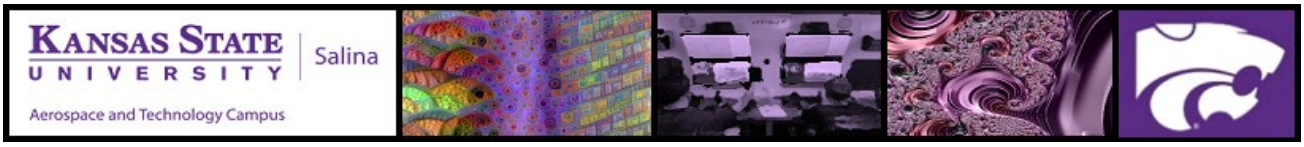
Appendix A - ISDD Industry Advisory Board



Industry Advisory Board for Integrated Systems Design and Dynamics, 10/4/2021				
Name	**Title**	**Company**	**Email**	**Phone**
Kendy Edmonds	Test & Evaluation Specialist, McCain Strategic Defense Fellow	United States Space Force	edmondskendy@gmail.com	(785) 640-6923
Paul Schultz	Lead Systems Engineer, Nuclear Network Security System	United States Air Force	paul.schultz09@gmail.com	(501) 358-3394
Jimmy Standaert	Chief Innovation Officer, Emerging Technologies, AI & Prescriptive Insights	RiGi Group	Jimmy@RiGiGroup.com	(913) 221-3137
Kelvin Quinonez	Software Engineer, Aerospace Systems Development	Boeing Corporation	kesqui7@gmail.com	(913) 424-9965
Kale Tarrant	Senior Manager & Systems Engineer	Boeing Corporation	kktarrant@att.net	(316) 393-0337
Jamie Adams	Senior Program Manager, Autonomous Sytems Division	Lockheed Martin	jamie.e.adams@lmco.com	(214) 801-4931
Catherine Fitkar	Aerospace Systems Engineer, HLS Mission Systems and Flight Ops	Blue Origin	catherine.fitkar@gmail.com	(206) 228-2480
Nabin Mishra, PhD	Principal Data Scientist, Computer Vision & Operations Research	T-Mobile Corporation	nabin.mishra@gmail.com	(618) 407-5950
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Dan Eastman	Project Manager, Information Technology	General Dynamics	eastmand411@gmail.com	n/a
Claudeliah J. Roze	Director, Aerospace & Defense Industry	Raytheon Technologies	claudeliah.roze@gmail.com	(817) 528-2629
Kyri Barton	Director of Artificial Intelligence & Machine Learning	DRAIVER	kyribarton@gmail.com	(785) 829-3455
Tony Foster	Principal Technical Marketing Engineer	Dell EMC	tony.foster@wondernerd.net	(785) 819-6793

Active Industry Advisory Board Members List
Kansas State University, College of Technology and Aviation *Create Date: 6/15/2021*
Program: Master of Science, Integrated Systems Design and Dynamics *Last Modified: 10/4/2021*

Appendix B – Five Year Projection

Summary

	Headcount Per Year			Semester Credit Hours Per Year			Revenue Forecast	ROI Estimate
	Full Time	Part Time	Total	Full Time	Part Time	Total		
Year 1	4	7	11	96	105	201	$217,506	**($152,691)**
Year 2	8	12	20	192	180	372	$342,996	**($58,134)**
Year 3	14	18	32	336	270	606	$514,719	**$51,825**
Year 4	19	23	42	456	345	801	$657,821	**$164,993**
Year 5	24	30	54	576	450	1026	$822,940	**$300,012**

PT = 6 hrs per/sem, 12 hrs per/year + 3 for summer | Annual Estimated Total: 15 Hrs
FT = 12 hrs per/sem, 24 per/year | Annual Estimated Total: 24 Hrs

Detail

A. EXPENDITURES	***First FY***	***Second FY***	***Third FY***	***Fourth FY***	***Fifth FY***
Total Existing Personnel Costs – Reassigned or Existing	$112,266	$274,428	$274,428	$274,428	$274,428
Personnel – New Positions					
Faculty	$0	$0	$60,000	$70,000	$80,000
Administrators *(other than instruction time)*	$0	$0	$0	$0	$0
Graduate Assistants	$0	$0	$0	$0	$0
Support Staff for Administration	$3,150	$6,300	$6,300	$7,000	$8,000
Fringe Benefits *(total for all groups)*	$21,168	$82,656	$81,900	$90,000	$95,000
Other Personnel Costs	$0	$0	$0	$0	$0
Total Existing Personnel Costs – New Positions	$24,318	$88,956	$148,200	$167,000	$183,000
Start-up Costs – One-Time Expenses					
Library/learning resources	$0	$0	$0	$0	$0
Equipment/Technology	$150,000	$2,520	$5,040	$6,000	$7,000
Physical Facilities: Construction or Renovation	$0	$0	$0	$0	$0
Other (Marketing)	$80,000	$30,000	$30,000	$30,000	$30,000
Total Start-up Costs	$230,000	$32,520	$35,040	$36,000	$37,000

Operating Costs – Recurring Expenses					
Supplies/Expenses	$126	$252	$252	$400	$500
Library/learning resources	$0	$0	$0	$0	$0
Equipment/Technology	$2,000	$2,000	$2,000	$10,000	$20,000
Travel	$1,487	$2,974	$2,974	$5,000	$8,000
Other	$0	$0	$0	$0	$0
Total Operating Costs	$3,613	$5,226	$5,226	$15,400	$28,500
GRAND TOTAL COSTS	$370,197	$401,130	$462,894	$492,828	$522,928

B. FUNDING SOURCES	***First FY***	***Second FY***	***Third FY***	***Fourth FY***	***Fifth FY***
(projected as appropriate)	(New)	(New)	(New)	(New)	(New)
Tuition / State Funds	$137,856	$255,136	$415,625	$549,366	$703,682
Student Fees	$9,650	$17,860	$29,094	$38,456	$49,258
Industry & Government Funding	$70,000	$70,000	$70,000	$70,000	$70,000
Other Sources	$0	$0	$0	$0	$0
GRAND TOTAL FUNDING	$217,506	$342,996	514,719	657,821	822,940
C. Projected Surplus/Deficit (+/-) (Grand Total Funding *minus* Grand Total Costs)	($152,691)	($58,134)	$51,825	$164,993	$300,012

Program Approval

Summary

Universities may apply for approval of new academic programs following the guidelines in the Kansas Board of Regents Policy Manual. Kansas State University has submitted an application for approval and the proposing academic unit has responded to all of the requirements of the program approval process.

March 16, 2022

I. General Information

A. Institution Kansas State University

B. Program Identification

Degree Level:	Bachelor's
Program Title:	Advertising and Public Relations
Degree to be Offered:	Bachelor of Arts and Bachelor of Science
Responsible Department or Unit:	College of Arts & Sciences, A.Q. Miller School of Journalism and Mass Communications
CIP Code:	09.0900
Modality:	Face-to-Face
Proposed Implementation Date:	Summer 2022

Total Number of Semester Credit Hours for the Degree: 120

II. Clinical Sites: Does this program require the use of Clinical Sites? no

III. Justification

The proposed undergraduate major in advertising and public relations represents a degree program that responds to (1) strong industry demand for skilled media professionals and communications strategists, (2) student desire for highly focused curriculum that provides opportunities to sharpen professional and personal skills necessary for a competitive job market, and (3) changing media consumption patterns and societal communications trends.

Increased reliance on social and digital media platforms to communicate with consumers and technical advances in advertising tools, tracking, and targeting capabilities continue to drive career growth in advertising and public relations. An advertising and public relations (Ad & PR) degree prepares students to influence and inform key audiences and publics through results-driven approaches to communications and content strategies. It provides students with industry-focused knowledge and skills in strategic writing, content creation and distribution, relationship management, data-driven decision-making, account management, media planning, media relations, and reputation management. Students are immersed in a culturally rich, highly interactive environment to prepare for a range of careers in agency, nonprofit, corporate, government, community, advocacy, and start-up environments.

Ad & PR graduates accept positions as advertising account executives, public relations and communications specialists, brand managers, fundraising and development officers, publicists, social media managers, copywriters, and more. Some will even start their own businesses and consulting agencies.

Currently, education in advertising and public relations at Kansas State University is deeply embedded within the

BA/BS degrees in mass communications offered by the A.Q. Miller School of Journalism and Mass Communications. This proposal highlights the need for an Ad & PR degree that stands on its own utilizing student and industry-recognized terminology and employer-demanded curriculum and training.

Recent studies spotlight the importance of course relevance and job readiness to students contemplating postsecondary education (Greeley, 2019; Marcus, 2021; Tran & Royal, 2021). To attract students to this highly specialized and technical career field, the need exists for a career-focused Ad & PR degree prioritizing knowledge and skills in promotional and public image communications strategies. The new degree would prioritize practical training through internship experience and credentialing from industry-recognized certifications in high career growth areas. Additionally, a career-focused degree would ultimately pave the way for industry professionals to come back for training and re-tooling that enhances their knowledge and skills at any age.

The Ad & PR degree program outlined in this document represents a good investment for Kansas State University, for students, and for the demands of a future workforce.

IV. Program Demand: Market Analysis

Interest Among High School Students is High
Nearly 22,000 9th - 12th graders in Kansas, Missouri, Oklahoma, Nebraska, and Colorado have expressed an interest in studying advertising, public relations, and digital media (Exact Data, 2021).

A Competitive Advantage for Students
With the approval of this degree proposal, Kansas State University will be the only major university in Kansas to offer an advertising and public relations degree. While a few universities, including The University of Kansas, Washburn University, and Emporia State University, offer concentrations or emphasis areas in advertising, public relations, or strategic communications, they are part of a journalism, mass communications, or mass media degree. Students with an advertising and public relations degree will signal their precise knowledge and skills to potential employers in areas of strategic planning, creativity and campaign ideation, branding, consumer behavior and insight research, and digital and social media management.

Workforce Demand is High
The employment section below details a strong workforce demand for students with career-focused advertising and public relations training both nationally and within Kansas.

V. Projected Enrollment for the Initial Three Years of the Program

The table below shows the estimated number of cohorts for each year. The numbers are on the higher side because a version of this program already exists as a concentration within the BA/BS in Mass Communications. Given university enrollment patterns, we estimate total enrollment by AY23 to be 130.

Year	Total Headcount Per Year		Total Sem Credit Hrs Per Year	
	Full- Time	Part- Time	Full- Time	Part- Time
Implementation (2022-2023)	130		3,900	
Year 2	134		4,020	
Year 3	138		4,140	

The estimates for years two and three are based on 3% growth beginning in AY24. Student and industry demand reveals that if the program is marketed and promoted strategically and appropriately, such growth can be achieved.

VI. Employment

Today more than ever, communities, organizations, and businesses need professionals who can effectively communicate with diverse audiences across a variety of mediums. There is a strong workforce demand for students with advertising and public relations education both nationally and within Kansas and Missouri.

- Advertising, public relations, and related services are experiencing record month-over-month increases in employment opportunities. Robust job growth areas include media coordination, brand strategy, social media management, digital adverting, digital content creation, media buying, and outdoor advertising (Johnson, 2021).

- Public relations specialists rank #3 in 'Best Creative and Media Jobs' (U.S. News & World Report, 2021).

- Data available from the U.S. Department of Labor, Bureau of Labor Statistics (BLS) demonstrate strong job prospects for advertising and public relations professionals:
    - Growth in advertising and public relations-related jobs are projected to be high nationally and within Kansas/Missouri. BLS reported over 678,000 in 2020 with projected workforce growth for 2020 – 2030 ranging between 10% - 13% (faster than average). (US Bureau of Labor Statistics Occupational Outlook Handbook, 2020) In Kansas/Missouri, state workforce projections for 2020-2030 report 40,210 advertising and public relations-related jobs with growth ranging between 4% - 25% (U.S. Bureau of Labor Statistics Occupational Employment and Wage Statistics, 2020). **Missouri is included due to the prevalence of advertising & public relations agencies in the Kansas City, MO metro.*

- Recent job reports and industry outlooks highlight (1) must-have workplace skills prioritized in advertising and public relations education, including corporate communications, content creation, content management, brand awareness, digital advertising, branding, social media management, customer experience management, graphic design, press release writing, and data analytics (Institute for Public Relations, 2020; Southern, 2021; Sy, 2021; Tesseras, 2021; World Economic Forum, 2021, and (2) emerging demand for durable power skills inherent to advertising and public relations education such as critical thinking, communications, collaboration, creativity, adaptability, innovation, and problem solving (America Succeeds, 2021; Morby, 2021; Orrell, 2021).

VII. Admission and Curriculum

A. Admission Criteria

Admission criteria will be consistent with those of the College of Arts & Sciences at Kansas State University. Admission to K-State is test optional and requires achieving either:

- A high school GPA (weighted or unweighted) of 3.25 or higher OR
- ACT composite score of 21 OR an SAT ERW+M of 1060 or higher

AND, if applicable, achieve a 2.0 GPA or higher on all college credit taken in high school.

B. Curriculum - Bachelor of Science

The table below demonstrates how a student can progress through the 120-credit hour degree in four years. Briefly, students will complete a core set of courses in advertising and public relations foundations, writing, strategic planning, brand strategy, content development and campaign building, with knowledge enhanced through courses in diverse communication, media innovations, media law and ethics, consumer behavior, marketing, and

economics. Students will also be able to tailor their degree through a combination of six credit hours of electives in various topics such as social media management, persuasion, and strategic communications in tourism, entertainment, health, and sports industries. Finally, students will put into practice their conceptual knowledge and experiential learning through internship experience and a campaigns capstone in which students work with a real-world client to solve a brand or organization challenge with advertising and public relations strategies and tactics.

The advertising and public relations curriculum plan was developed from the following:

- Competitive research looking at top advertising and public relations programs across the country, as well as neighboring universities in Kansas and Missouri, thus identifying gaps, similarities, and competitive advantages for the program at Kansas State University.
- 60 years combined faculty industry experience and expertise and understanding industry's desire for graduates who have multi-dimensional knowledge and skill in advertising, public relations, marketing, and brand communications.
- Recognition of the proposed degree program's competitive advantages over other advertising and public relations programs such as (1) career and industry-focused curriculum and programming built by industry professionals, (2) well-rounded curriculum in advertising, public relations, marketing, and brand and media-focused communications strategies, and (3) a digital content creator studio – courses in video, photo, audio, design, podcasting, content management, and social media - that will generate buzz and excitement among students, alumni, and industry professionals.

It is the mission of the advertising and public relations degree program to train students to support and deliver value (in revenue and reputation) for brands, businesses, and professional organizations. Graduates will be steeped in industry-focused courses and programming to be highly employable in a competitive field.

Year 1: Fall **SCH = Semester Credit Hours**

Course #	Course Name	12 SCH
MC 100	Orientation	0
MC 130-132	Writing Academy	3
MC 194	Social Media Essentials in the Content Creator Studio	1
MC 195	Creative Design in the Content Creator Studio	1
MC 196	Content Management & Distribution in the Content Creator Studio	1
ENGL 100	English Composition 1	3
MC 120	Principles of Advertising	3

Year 1: Spring

Course #	Course Name	15 SCH
ENGL 200	English Composition 2	3
COMM 106	Public Speaking	3
MC 180	Principles of Public Relations	3
MATH 100	College Algebra (Quantitative #1)	3
MKTG 400	Introduction to Marketing (Elective)	3

Year 2: Fall

Course #	Course Name	16 SCH
MC 280	Writing for Ad & PR	3
MC 370	Social Media Management & Strategy (Ad & PR Elective 1)	3
ENG 455	Exploring Creativity (Literary/Rhetorical Arts)	3
GEOL 100 & 103	Earth in Action w/ Lab (Physical Science w/ Lab)	4

ART 200	3-Dimensional Design (Fine Arts Humanities)	3

Year 2: Spring

Course #	Course Name	15 SCH
COMM 311	Business & Professional Speaking (Elective)	3
CIS 111	Intro to Computer Programming (Quantitative #2)	3
AMETH 160	Intro to American Ethnic Studies (Western Heritage Humanities)	3
MC 265	Innovations in Media & Communication	3
PSYCH 110	General Psychology (Social Science 1)	3

Year 3: Fall

Course #	Course Name	16 SCH
MC 396	Research for Ad & PR	3
MC 445	Digital Brand Strategy	3
BIO 101	Concepts of Biology (Life Science w/ Lab)	4
PHILO 135	Intro to Social & Political Philosophy (Philosophy Humanities)	3
PSYCH 350	Experimental Methods in Psychology (Social Science 2)	3

Year 3: Spring

Course #	Course Name	15 SCH
MC 380	Ideation, Strategy & Planning for Ad & PR	3
MC 446	Media Planning (Ad & PR Elective 2)	3
COMM 470	Building Cultural & Social Connections (Multicultural Overlay)	3
PSYCH 470	Psychobiology (Life or Physical Science 1)	3
PSYCH 545	Consumer Psychology (Elective)	3

Year 3: Summer

Course #	Course Name	2 SCH
MC 491	Internship	2

Year 4: Fall

Course #	Course Name	16 SCH
MC 612	Diversity in Media	3
MC 581	Campaigns in Advertising & Public Relations	3
STAT 100	Statistical Literacy in the Age of Information (Quantitative 3)	3
KIN 220	Biobehavioral Bases of Physical Activity (Life or Physical Science 2)	4
MC 466	Media Law & Ethics	3

Year 4: Spring

Course #	Course Name	13 SCH
MC 491	Internship	1
MC 374	Social Media Content Development (Elective)	3
MC 623	Communicating in Global Markets (International Overlay)	3
MC 331	Commercial Image Storytelling (Social Science 3)	3
COMM 526	Persuasion (Social Science 4)	3

Total Number of Semester Credit Hours ……. 120

VIII. Core Faculty

Note: * Next to Faculty Name Denotes Director of the Program, if applicable
FTE: 1.0 FTE = Full-Time Equivalency Devoted to Program

Faculty Name	Rank	Highest Degree	Tenure Track Y/N	Academic Area of Specialization	FTE to Proposed Program
Jana Thomas*	Professor of Practice	M.S.	N	Advertising, Marketing, Digital Media, Social Media Management& Strategy, Media Audiences, Campaign Strategy & Planning, Creative Development	1
Dani LaGree	Assistant Professor	PhD	Y	Public relations, strategic planning, leadership, corporate communication, consumer insights and behavior	1
Katie Olsen	Assistant Professor	PhD	Y	Advertising, public relations, marketing, strategy & planning, diversity in media, gender in strategic communications, early-career development, higher education	1
Anan Wan	Assistant Professor	PhD	Y	Advertising, Branding, Media Technology, Social Media, International Communication	1
Nancy Muturi	Professor	PhD	Y	Health Communication Risk/Crisis Communication, Communication Theory Gender/Diversity Issues Strategic Planning and Project Implementation Qualitative Research/Community-Based Participatory Communication	.5
Sean Eddington	Assistant Professor	PhD	Y	Technology, Gender, Organizational Communication, Research Methods	.125
Heather Woods	Assistant Professor	PhD	Y	Technology, Gender, Artificial Intelligence, Interpretive Research	.125
Greg Paul	Professor	PhD	Y	Conflict Management, Organizational Communication, Research Methods	.125
Colene Lind	Associate Professor	PhD	Y	Persuasion, Rhetoric	.125

Jacob Groshek	Associate Professor	PhD	Y	Online and Mobile Media Technologies, Media Content Analysis, User Influence in Social Media, Media Bubbles	.5

Number of graduate assistants assigned to this program **0**

IX. Expenditure and Funding Sources *(List amounts in dollars. Provide explanations as necessary.)*

A. EXPENDITURES	First FY	Second FY	Third FY
Personnel – Reassigned or Existing Positions			
Faculty - Include DL Salary	$504,126	$504,126	$504,126
Administrators *(other than instruction time)*	$0	$0	$0
Graduate Assistants	$0	$0	$0
Support Staff for Administration (*e.g., secretarial*)	$21,478	$21,478	$21,478
Fringe Benefits *(total for all groups)*	$137,972	$137,972	$137,972
Other Personnel Costs			
Total Existing Personnel Costs – Reassigned or Existing	$663,576	$663,576	$663,576
Personnel – New Positions			
Faculty -- Add PoP	$30,000	$30,000	$30,000
Administrators *(other than instruction time)*	$0	$0	$0
Graduate Assistants	$0	$0	$0
Support Staff for Administration (*e.g., secretarial*)	$0	$0	$0
Fringe Benefits *(total for all groups)*	$5,760	$5,760	$5,760
Other Personnel Costs	$0	$0	$0
Total Existing Personnel Costs – New Positions	$35,760	$35,760	$35,760
Start-up Costs - One-Time Expenses			
Library/learning resources	$0	$0	$0
Equipment/Technology	$30,000	$0	$0
Physical Facilities: Construction or Renovation	$30,000	$0	$0
Other	$0	$0	$0
Total Start-up Costs	$60,000	$0	$0
Operating Costs – Recurring Expenses			
Supplies/Expenses	$	$	$
Library/learning resources	$16,000	$16,000	$16,000
Equipment/Technology	$	$	$
Travel	$	$	$
Other	$30,000	$30,000	$30,000
Total Operating Costs	$46,000	$46,000	$46,000

GRAND TOTAL COSTS	$805,336	$745,336	$745,336

B. FUNDING SOURCES *(projected as appropriate)*	Current	First FY (New)	Second FY (New)	Third FY (New)
Tuition / State Funds	$1,423,350	$1,233,570	$1,271,526	$1,309,482
Student Fees	$78,300	$67,860	$69,948	$72,036
Other Sources				
GRAND TOTAL FUNDING	$1,501,650	$1,301,430	$1,341,474	$1,381,518
C. Projected Surplus/Deficit (+/-) (Grand Total Funding *minus* Grand Total Costs)		$496,094	$596,138	$636,183

X. Expenditures and Funding Sources Explanations

A. Expenditures
Personnel – Reassigned or Existing Positions
All personnel are currently part of the A.Q. Miller School of Journalism and Mass Communications (JMC) or the Department of Communication Studies. JMC faculty already teach to advertising and public relations in the strategic communications sequence of the Mass Communications degree.

Personnel – New Positions
This proposal includes a half-FTE of a strategic hire of one professor of practice beginning in the first fiscal year.

Start-up Costs – One-Time Expenses
Start-up costs are for student-learning oriented technology and software and for the creation of student learning spaces and facilities upgrades to enhance recruitment, program marketing, and retention.

Operating Costs – Recurring Expenses
Recurring costs are for software licenses to be purchased to support student learning ($6,000), a subscription to the social media and data analytics software Meltwater ($10,000) and recruiting and marketing activities to draw students to the degree ($30,000).

B. Revenue: Funding Sources
We include only those dollars that are state-fund or fee-related sources. This revenue is based on enrollment estimates reflected in the table in Section V, which in turn are based on historical enrollments in the Mass Communications – Strategic Communication BA/BS for the past 5 academic years. We anticipate flat enrollment going into year 1 and then increase for years 2 and 3 on the basis of recruitment and marketing investments. For each year, we assume a steady tuition of $316.30 per credit hour and a fee of $17.40 per credit hour.

C. Projected Surplus/Deficit

As is evident, the program is anticipated to generate a profit for the university. This profit is contingent on successful recruiting and marketing activities, as well as local, regional, and national attendance and matriculation trends.

XI. References

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Program Approval

Summary

Universities may apply for approval of new academic programs following the guidelines in the Kansas Board of Regents Policy Manual. Kansas State University has submitted an application for approval and the proposing academic unit has responded to all of the requirements of the program approval process.

March 16, 2022

I. General Information

A. Institution: Kansas State University

B. Program Identification

Degree Level:	Bachelor's
Program Title	Cybersecurity
Degree to be Offered:	Bachelor of Science in Cybersecurity
Responsible Unit:	Department of Computer Science
CIP Code:	11.1003
Modality:	Hybrid
Proposed Implementation:	Fall 2022

Total Number of Semester Credit Hours for the Degree: 120

II. Clinical Sites: Does this program require the use of Clinical Sites? No

III. Justification

The demand for cybersecurity specialists is at an all-time high and growing rapidly. In December 2021, a report from Enterprise KC named "Establishing the State of Kansas as a Cybersecurity Center of Excellence" was prepared for the Kansas Department of Commerce (Kansas Department of Commerce). The report argues that the state of Kansas should establish itself as a leader in cybersecurity due to its unique position and growing tech and cybersecurity sectors. Some of the report's key findings were that the workforce supply has not kept pace and that increasing the educational pathways in cybersecurity across the state is critical.

According to data from cyberseek.org, the US employs 956,341 cybersecurity professionals, with 464,420 openings as of September 2021 (Cyber Seek). In Kansas, there are 6,543 employed cybersecurity professionals with 2,535 open jobs. The KC metro area (including Missouri) has 7,350 employed with 3,149 openings, and the Wichita area has 1,148 employed with 476 openings. When we compare these numbers to 2019 Cyber Seek data that showed there were 4,789 cybersecurity professionals employed in Kansas with 1,785 open positions, we see that the number of cybersecurity professionals employed and the number of open positions have increased by 27.8% and 40.9%, respectively.

Cyber Seek data also shows very high demand. Across all occupations, there are currently 3.9 employed workers for every job opening, but within cybersecurity, there are only 2.1 workers for each job opening. This translates into difficulty in hiring.

In their 2019 *State of Cybersecurity* report, ISACA found that most organizations' open cybersecurity positions are for technical professionals as opposed to nontechnical or managerial (ISACA). However, only 24% of those organizations reported that they believed that recent university graduates in cybersecurity are well prepared for the challenges in their organizations, and only 20% of organizations felt that 50% or more of their applicants

were actually qualified for those positions. These facts indicate a need for higher quality technically trained graduates such as will be provided by an accredited degree.

Cybersecurity degrees have been poorly accepted by hiring managers due mostly to insufficient general Computer Science background. Great strides were made as ABET, the international accrediting body for engineering and computer science, has recently begun accrediting Cybersecurity degree programs through their Computing Accreditation Commission (ABET, 2018). Upon approval of this program, we will seek accreditation from this ABET commission. The accreditation process occurs every six years. It includes the preparation of a self-study by each program, review of randomly selected transcripts of recent graduates to ensure that degree requirements are being enforced, and a site visit by evaluators, who review materials collected from courses, and interview students, faculty, and administrators. We plan to synchronize this process with the review of the B.S. in Computer Science and the Engineering degree programs accredited through the Engineering Accreditation Commission. Hence, we would submit the self-study in the summer of 2023, and the site visit would occur that fall. We would then expect to receive accreditation in the summer of 2024.

Fortunately, the accreditation requirements for a Cybersecurity degree are very close to our existing Cybersecurity Option for our BS in Computer Science. In the Fall of 2019 (when it was first offered), the Cybersecurity Option enrolled 2 students, while in Fall 2021 there were 11 students enrolled.

The proposed B.S in Cybersecurity has the following educational objectives for our graduates to have accomplished within a few years of their graduation:

- Graduates will have progressed in the cybersecurity field by either obtaining an advanced technical or management position, exhibiting entrepreneurial activities or obtaining a graduate degree.
- Graduates will have contributed to societal needs by working with others to develop resilient and secure software systems.
- Graduates will be committed to lifelong learning and contributing back to the profession.
- Graduates will be committed to professional and ethical standards established by related professional societies.

IV. Program Demand: Market Analysis

The primary markets for this major are students who wish to work in the cybersecurity field long-term, thus requiring a baseline knowledge of computer science with a specialization/focus in cybersecurity, information security, information assurance, etc.

Currently, there are only 13 accredited cybersecurity programs in the US (ABET, 2021). Of these, only three are in the central plains region: the University of Central Missouri, Fontbonne University, and Southeast Missouri State University. Within the state of Kansas, there are no other cybersecurity degree programs – accredited or not – at the undergraduate level. The University of Kansas has MS and PhD programs in cybersecurity, but none at the undergraduate level. Wichita State University has a BS in Engineering Technology with a Cybersecurity option, but no computer science-based cybersecurity undergraduate programs. Fort Hays State University has a BA/BS in Information Networking and Telecommunications with a concentration in Computer Networking and Telecommunications with an Information Assurance Emphasis. Emporia State University and Pittsburg State University do not have any type of cybersecurity degrees. Thus, not only would a computer science-based BS in Cybersecurity at Kansas State University be unique in Kansas, but K-State would only be one of two Research 1 universities offering a BS in Cybersecurity in the plains region and the only Research 1 university with a computer science-based BS in Cybersecurity in the plains region.

The demand among students for Cybersecurity courses has been strong for several years. Since 2018, the K-

State computer science introductory undergraduate cybersecurity course has averaged over 27 students each year, while the overall enrollment in all cybersecurity courses has averaged 84 students a year.

We expect this program to be popular with incoming freshmen interested in security-specific jobs in the tech industry. We also expect this to be a popular double-major with Computer Science. Few institutions currently have accredited Cybersecurity degrees, and we expect a formally accredited program to be well-perceived by industry. Furthermore, we are in a unique position, having already established the Cybersecurity Option, to be one of the first major universities to offer an accredited Cybersecurity degree.

V. Projected Enrollment:

The numbers above suggest that we could have 25-50 students enrolled in the program within four years. For this reason, we have prepared a scalable set of courses for all of our requirements that can accommodate a large influx of students as needed.
We have also performed several budget simulations based on low enrollment numbers to minimize our risk and analyze program viability. We believe the numbers presented below are conservative estimates for the students, given that there were 13 computer science students enrolled in the Cybersecurity option of our Computer Science degree program in Spring 2021. Our estimates of enrollment are as follows:

Year	Total Headcount Per Year		Total Sem Credit Hours Per Year	
	Full-Time	Part-Time	Full-Time	Part-Time
Implementation	15	2	450	24
Year 2	25	4	750	48
Year 3	35	5	1,050	60

VI. Employment

As shown below in Table 1, the Bureau of Labor Statistics predicts that the job market for information security analysts (cybersecurity specialist requiring a bachelor's degree) is expected to grow 31% from 2019 to 2029 (Bureau of Labor Statistics). This demonstrates the phenomenal growth of cybersecurity at the national level. When coupled with the median pay of $103,590 per year, the field will be very enticing to students.

Table 1. Bureau of Labor Statistics for Information Security Analysts (Bureau of Labor Statistics, 2019)

2020 Median Pay	$103,590 per year
Typical Entry-Level Education	Bachelor's degree
Work Experience in a Related Occupation	Less than 5 years
On-the-job Training	None
Number of Jobs, 2019	131,000
Job Outlook, 2019-2029	31% (Much faster than average)
Employment Change, 2019-29	40,900

As discussed above, Kansas currently employs over 6,500 cybersecurity professionals while there are over 2,500 open jobs, and these number have increased by 27.8% and 40.9% respectively in one year. Those numbers, coupled with the limited accredited Cybersecurity degree options available will make our graduates highly sought after.

VII. Admission and Curriculum

A. Admission Criteria

Students must first be admitted to the Carl R. Ice College of Engineering, which has admission requirements of

3.25 high school GPA for first-year students and 2.75 cumulative GPA on transfer courses for transfer students. All new students will be initially admitted to the Computer Science pre-professional program and must subsequently be admitted to the professional program before completing the Cybersecurity degree. (*This pathway mirrors the B.S. in Computer Science degree program.*)

In order to be considered for admission to the professional program, a student must have:

1. Passed all pre-professional program courses with a C or better;
2. Achieved at least a 2.3 GPA on all pre-professional courses (including transfer courses); and
3. Received credit in CIS 015 Undergraduate Seminar.

Additionally, an application to the professional program must be submitted to the Department of Computer Science by the end of the eighth week of either the Spring or Fall semester. This submission will be immediately prior to the student's pre-enrollment into any of the professional program courses.

All courses in the pre-professional program must be completed and all grade criteria must be met by the end of the semester that the application is submitted. An exception to this rule is the student who expects to complete these criteria during the summer term. Those students should also make application in the Spring semester prior to pre-enrollment. All eligible applicants will be allowed to pre-enroll into professional program courses with the understanding that they will be dropped if they are not accepted for admission to the professional program prior to the beginning of the subsequent semester.

Applications will be reviewed by the Curriculum Committee of the Department and accepted or rejected as soon as possible after semester grades are issued. The number of students admitted in any given semester will be limited by the number of seats available. If the number of applicants who meet the grade requirements listed above exceeds the number of seats available, then in addition to the minimum grade requirements listed above, the admission will be determined a holistic evaluation of the following factors:

- Grades in college-level courses, particularly computing courses;
- Communication skills;
- Activities and service;
- Socioeconomic disadvantage;
- Status as first-generation college student; and
- History of overcoming personal hardship.

Students who have completed the pre-professional program with the required grades but are denied admission may re-apply in a later semester. Students who have been dismissed from the Computer Science professional program must be readmitted to that program prior to being admitted to the Cybersecurity professional program.

B. Curriculum

The semester-by-semester curriculum is as follows:

Year 1: Fall Semester Credit Hours

Course #	Course Name	SCH=15-16
ARCH 301	Appreciation of Architecture	3
CIS 015	Undergraduate Seminar	0
CIS 115	Introduction to Computing Science	3
COMM 105/106	Public Speaking I	2-3
ENGL 100	Expository Writing	3
MATH 220	Analytic Geometry and Calculus I	4

Year 1: Spring

Course #	Course	SCH = 15
CHM 210	CHM 210 Chemistry I	4
CIS 200	Programming Fundamentals	4
ECE 241	Introduction to Computer Engineering	3
MATH 221	Analytic Geometry and Calculus II	4

Year 2: Fall

Course #	Course	SCH = 15
COMM 322	Interpersonal Communication	3
CIS 300	Data and Program Structures	3
CIS 301	Logical Foundations of Programming	3
ECON 110	Principles of Macroeconomics	3
ENGL 200	Expository Writing II	3

Year 2: Spring

Course #	Course	SCH = 16
SOCIO 211	Introduction to Sociology	3
MATH 506	Introduction to Number Theory	3
THTRE 261	Fundamentals of Acting	3
CIS 400	Object-Oriented Design, Implementation and Testing	3
MATH 510	Discrete Mathematics	3
CIS 308	C Language Laboratory	1

Year 3: Fall

Course #	Course	SCH = 16
SOCIO/CRIM 550	Technocrime, Security, and Society	3
CHM 230	Chemistry II	4
CIS 501	Software Architecture and Design	3
CIS 415	Ethics and Conduct for Computing Professionals	3
CIS 560	Database Systems	3

Year 3: Spring

Course #	Course	SCH = 15
PHILO 120	Introduction to Philosophy of Art	3
CIS 450	Computer Architecture and Operations	3
CIS 575	Introduction to Algorithmic Analysis	3
ENGL 415/516	Written Communications for Engineers/Written Communications for the Sciences	3
STAT 510	Introduction to Probability and Statistics	3

Year 4: Fall

Course #	Course	SCH = 15
CIS 551	Fundamentals of Computer and Information Security	3
CIS 525	Introduction to Computer Networks	3
CIS 505	Introduction to Programming Languages	3
CIS 655/755	Security and Reliability of Computing Systems / Systems Security	3
MATH 551	Applied Matrix Theory	3

Year 4: Spring

Course #	Course	SCH=12
CIS 553	Fundamentals of Cryptography	3
CIS 599	Cybersecurity Project	3
STAT 511	Introductory Probability and Statistics II	3
CIS 580	Fundamentals of Game Programming	3

Total Number of Semester Credit Hours..... 120

VIII. Core Faculty **FTE: 1.0 FTE = Full-Time Equivalency Devoted to Program**

The core faculty for the Cybersecurity program consists of three faculty members from the Department of Computer Science in the Carl R. Ice College of Engineering who specialize in cybersecurity. There will be many other faculty involved who are already teaching other degree courses as part of existing programs. The faculty listed below represent the core faculty who will meet regularly to guide and assess the program.

Faculty Name	Rank	Highest Degree	Tenure Track Y/N	Academic Area of Specialization	FTE to Proposed Program
* Eugene Vasserman	Assoc Professor	PhD	Y	Computer Science	0.125
George Amariucai	Assoc Professor	PhD	Y	Computer Science	0.125
Arslan Munir	Assoc Professor	PhD	Y	Computer Science	0.125

* Denotes Program Coordinator

Number of graduate assistants assigned to this program …… 0 additional from Computer Science Cybersecurity classes are also offered as part of the Computer Science B.S. and therefore no *additional* graduate assistant hours are needed.

IX. Expenditure and Funding Sources

A. EXPENDITURES	First FY	Second FY	Third FY
Personnel – Reassigned or Existing Positions			
Faculty	$40,750	$41,565	$42,397
Administrators *(other than instruction time)*	$0	$0	$0
Graduate Assistants	$8,000	$16,320	$16,646
Support Staff for Administration (*e.g., secretarial*)	$0	$0	$0
Fringe Benefits *(total for all groups)*	$14,320	$15,912	$16,230
Other Personnel Costs	$0	$0	$0
Total Existing Personnel Costs – Reassigned or Existing	$63,070	$73,797	$75,273
Personnel – New Positions			
Faculty	$0	$0	$0
Administrators *(other than instruction time)*	$0	$0	$0
Graduate Assistants	$0	$0	$0
Fringe Benefits *(total for all groups)*	$0	$0	$0
Other Personnel Costs	$0	$0	$0
Total Existing Personnel Costs – New Positions	$0	$0	$0

Start-up Costs – One-Time Expenses			
Library/learning resources	$0	$0	$0
Equipment/Technology	$0	$0	$0
Physical Facilities: Construction or Renovation	$0	$0	$0
Program Accreditation and Upkeep	$0	$3,285	$0
Total Start-up Costs	$0	$0	$0
Operating Costs – Recurring Expenses			
Supplies/Expenses	$0	$0	$0
Library/learning resources	$0	$0	$0
Equipment/Technology	$0	$0	$0
Program Accreditation and Upkeep	$0	$0	$700
Total Operating Costs	$0	$0	$700
GRAND TOTAL COSTS	$63,070	$77,082	$75,973

B. FUNDING SOURCES (projected as appropriate)	Current	First FY (New)	Second FY (New)	Third FY (New)
Tuition / State Funds		$149,926	$252,407	$351,093
Student Fees		$24,565	$41,315	$57,505
Other Sources		$0	$0	$0
GRAND TOTAL FUNDING		$174,491	$293,722	$408,598
C. Projected Surplus/Deficit (+/-) (Grand Total Funding minus Grand Total Costs)		$111,421	$216,640	$332,625

X. Expenditures and Funding Sources Explanations

A. Expenditures

Personnel – Reassigned or Existing Positions

All core faculty are currently employed by Kansas State University in the College of Engineering. These faculty members already teach the cybersecurity courses required for the Cybersecurity degree as part of their normal load.

No new faculty or instructor hires are required to initiate or maintain the new program. The percent time dedicated to the program varies by faculty member and the courses taught each year by applying a general rule of 0.125 FTE per in-person course or 0.0625 FTE per online course. As Program Coordinator, Dr. Eugene Vasserman will assist the Department of Computer Science Head (Dr. Scott DeLoach) and Undergraduate Program Director (Dr. Rod Howell) in administering the program within the Department of Computer Science. For budgeting purposes, all salary (faculty, graduate teaching assistants, and administrative support) include a modest 2% pay increase after the first fiscal year.

B. Personnel – New Positions

No new positions are required to initiate the proposed program.

C. Start-Up Costs – One-Time Expenses

There are no additional one-time startup expenses associated with the program. When we seek ABET accreditation there will be a one-time fee of $3,285 (ABET, 2022).

D. Operating Costs – Recurring Expenses

There are no additional recurring costs. Laboratories used for teaching cybersecurity courses are used in conjunction with other computer science courses and will be kept up to date by the Department of Computer Science. The department will use the current revenue sources used for supporting all computer science laboratories, namely part of the College of Engineering fee amount, which is approximately $19 per student credit hour. As the number of cybersecurity students grows, they will be contributing to the computer science fund for each computer science course they take. ABET charges a $700 yearly program upkeep fee to maintain accreditation between site visits (ABET, 2022).

E. Revenue: Funding Sources

The following revenue table uses an in-state, on-campus tuition figure of $316.30 per credit hour and assumes that approximately 61% of all semester credit hours (SCH) are generated by the College of Arts and Sciences (COAS) and 39% are generated by the Carl R. Ice College of Engineering (COE) respectively.

This analysis is limited in scope to on-campus students so the overall revenue is expected to be higher when this degree is offered, i.e., any students taking the course online will generate even more revenue than projected here as additional online fees are collected for both COAS and COE courses.

COAS has a general fee of $17.40 per credit hour for on-campus courses, while the COE has a general fee of $105.60 per credit hour. All funds generated by fees will be retained by the generating college.

Tuition & Fees	Tuition per SCH	YR 1 SCH	Sub-Totals	YR 2 SCH	Sub-Totals	YR 3 SCH	Sub-Totals
In-State On-Campus Tuition	$316.30	474	$149,926	798	$252,407	1110	$351,093
COE Fees	$105.60	185	$19,536	311	$32,842	433	$45,725
COAS Fees	$17.40	289	$5,029	487	$8,474	677	$11,780
Total Revenue			**$174,491**		**$293,723**		**$408,598**

F. Projected Surplus/Deficit

Our estimate suggests that this program will be highly profitable from the first year due to the use of existing courses and the program similarity to the existing Computer Science major with Cybersecurity Option. Projected surpluses are also sufficient to maintain appropriate IT support infrastructure throughout the lifetime of the program at no additional cost to the university.

XI. References

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Program Approval

Summary

Universities may apply for approval of new academic programs following the guidelines in the Kansas Board of Regents Policy Manual. Pittsburg State University has submitted an application for approval and the proposing academic unit has responded to all of the requirements of the program approval process.

March 16, 2022

I. General Information

A. Institution Pittsburg State University

B. Program Identification

Degree Level:	Bachelor's
Program Title:	Business Studies
Degree to be Offered:	Bachelor of Business Administration
Responsible Department or Unit:	Kelce Undergraduate School of Business
CIP Code:	52.0101 (Business/Commerce, General)
Modality:	Face-to-Face
Proposed Implementation Date:	Fall Semester 2022

Total Number of Semester Credit Hours for the Degree: 120

II. Clinical Sites: Does this program require the use of Clinical Sites? No

III. Justification

Many institutions successfully offer undergraduate generalist business degrees, including those accredited by AACSB. Some smaller schools do not designate disciplinary majors but rather grant degrees in "business" or "business administration." Larger business schools that do offer disciplinary majors often also offer a generalist major under a varity of titles. Such programs are structured whereby students choose from a menu of upper-division business courses selected across traditional disciplinary boundaries after completing a business college core and the university's general education requirements. These programs are attractive to students for a variety of reasons, including:

- Generalist business programs allow students to customize their education to fit their career plans. For example, students who plan to start their own firm or enter a family business will need to "wear multiple hats" on the job. A generalist business major may be more appropriate than highly specialized disciplinary training for such students.

- Today's work environment requires greater flexibility and adaptability than in the past. Most employees will face multiple changes in job responsibilities over their career, and breadth of knowledge is as essential as depth of knowledge to navigate an upward career path.

- Many students may be uncertain of their future career path and seek the ability to explore alternative possibilities. A generalist major does not lock them into a specific niche of the job market and provides the ability to explore divergent opportunities.

Pittsburg State University has not offered a generalist business degree since the formation of the Kelce College of Business (KCOB) in the mid-1970s. We propose offering an innovative B.B.A. in "Business Studies" to satisfy the needs of students outlined above by "repackaging" existing courses and curricula by "stacking" them to create the new major.

The proposed BBA in Business Studies will consist of four components: (1) Pitt State Pathways Requirements (General Education), (2) Kelce College Core and Prerequisites, (3) Business Studies Major Requirements, and (4) Open Electives.

To satisfy the Business Studies Major Requirements, students will select a combination of at least two disciplinary minors and/or certificate course sequences offered by the Kelce College of Business. The minors or certificates chosen must comprise at least 21 *unique* upper-division credit hours. (Unique credit hours are those earned for courses that are not included elsewhere within a student's plan of study. Note that some minors and certificates include courses which are also part of the Kelce Core and Prerequisites sequence and that some minors and certificates share common courses – such courses are thus not unique.) Therefore, the proposed Business Studies program will allow students to "stack" existing minors and certificates and thereby build a customized interdisciplanary major to suit their career goals. The KCOB currently offers seven disciplinary minors and three certificate programs:

- Current Disciplinary Minors: Accounting, Business Economics, Computing, Fraud Examination, Internal Auditing, Marketing, International Business

- Current Certificate Programs: Internal Auditing, Professional Sales & Sales Management, Kansas Insurance Certificate

See the Pitt State *University Course Catalog* for specific required courses and details on each of these previously established credentials: https://www.pittstate.edu/registrar/catalog/

As new minors and certificates are added to our curriculum portfolio, additional options will naturally become available for students choosing the Business Studies major.

IV. Program Demand: Select one or both of the following to address student demand:

A. Survey of Student Interest

Number of surveys administered: ……	98
Number of completed surveys returned: …….	40
Percentage of students interested in program: …	95%

First-year students enrolled in sections of Pitt State's Gorilla Gateway course (our common freshman and transfer experience class) reserved for students declaring a business major were surveyed via email during the second week of the Fall 2021 semester. The survey provided a brief overview of the proposed Business Studies major and described how stacking existing minors and certificates would provide students with the option to tailor a multidisciplinary degree to meet their own individual career goals. Students were asked the following question: "*How appealing do you find this idea of combining minors and certificates together to create your own interdisciplinary major?*" Using a four-point Likert scale, 50 percent responded "very appealing" and another 45 percent responded "somewhat appealing." Only five percent of those responding found the idea "very unappealing" or "somewhat unappealing." Thus, 95 percent of those completing the survey expressed a positive personal interest in the Business Studies major. The results were similar when the respondents were asked how they thought other students would view the program – 92.5 percent believed other students would find the proposed Business Studies major appealing.

The survey results clearly indicate that new students with a desire to major in business find the proposed Business Studies major an option worthy of their consideration. The ability to individualize a program of study is an attractive idea for many students at the beginning of their college experience. We believe these findings indicate that the program will be successful and provide a new avenue for student recruitment.

B. Market Analysis

The proposed B.B.A. in Business Studies major is primarily designed for those students who will work in small businesses or for themselves. The program is not tied to or dependent upon the prospects for any one specialized business occupation or industry. It is intended to support the overall Kansas business economy, and that economy is dominated by small businesses. At the end of last year, only 627 businesses in the state employed more than 250 workers. That was less than one percent of the 88,501 Kansas businesses (Kansas Department of Labor, 2021). (The federal government uses a variety of definitions to classify small businesses based on revenues and employment. However, in practice it is common to define small businesses as those that employ less than 250 workers (U.S. Bureau of the Census, 2021).) Approximately 70 percent of all business employees across our state are employed by small businesses with less than 250 workers (Kansas Department of Labor, 2021). The same employment structure is apparent within Pittsburg State's primary service region. For example, 98.7 percent of the businesses in Crawford county, home to Pittsburg State, are small businesses with less than 250 workers, and 97 percent of local firms employ less than 100 workers (Kansas Department of Labor, 2021). These firms require employees who are educated and skilled across multiple business disciplines. Small firms do not have the capacity to employ specialists to oversee each important business function. It is common for a small business employee to routinely handle multiple tasks, such as keeping the financial books as well as managing marketing and customer relations. By providing an opportunity for students to build a strong multi-disciplinary business major, the proposed Business Studies program is uniquely designed for Kansans and Kansas businesses.

Graduates of the program will be able to demonstrate a multi-disciplinary business education that will support multiple-proficiencies that are expected by small business employers. Given the relative size of the small business economy in Kansas, as well as the importance of small business in the neighboring states within Pitt State's primary service region, the employment prospects for graduates of the program are very strong.

V. Projected Enrollment for the Initial Three Years of the Program

Year	Total Headcount Per Year		Total Sem Credit Hrs Per Year*	
	Full- Time	Part- Time	Full- Time	Part- Time
Implementation	15		450	
Year 2	30		900	
Year 3	40		1200	

*Assuming students enroll in 15 hours per semester.

VI. Employment

As noted above, the potential market for graduates of the proposed Business Studies program encompasses approximately 70 percent of the private business firms within the state of Kansas. The unique structure of the proposed Business Studies major will ensure that it remains current and responsive to market dynamics. Students entering the program will be able to choose from a portfolio of disciplinary minors and certificates to tailor the degree not only to their personal career aspirations, but also to what the job market is currently demanding. We expect that as the Kansas economy and job market continue to evolve, the popular minors and certificates chosen by students in the major will also change accordingly. For example, as salaries continue to

rise in areas such as financial services, it is likely that more students will pursue the Accounting minor and Kansas Insurance Certificate options for their Business Studies major. The ability to mix and match minors and certificates will allow students greater flexibility in preparing for post-graduation employment opportunities.

The proposed Business Studies degree will also support the ability of graduates to build successful lifetime careers. In today's economy, the average American worker will change jobs 12 times before retirement (U.S. Bureau of Labor Statistics, 2019). Often these job changes include not only a new employer, but a new industry, and/or a new occupation. Those who have a multi-disciplinary business education will be more prepared for the natural progression of careers in today's dynamic economy.

Given the diversity of industries and occupations that graduates of the proposed program will pursue it is difficult to forecast salary prospects. However, one recent national study found that employees of small businesses averaged $45,000 in annual salary (JP Morgan Chase & Co., 2017). These data are four years old and not broken down by educational background and experience. However, it does indicate that financially rewarding careers are available for small business employees.

The unique design and nature of the proposed Business Studies program will not only provide ample employment prospects for graduates but will also prepare them for job changes and opportunities for advancement and professional growth over their careers. Graduates of the program will contribute and support the growth of the Kansas small business economy.

VII. Admission and Curriculum

A. Admission Criteria

Students pursuing the proposed Business Studies major will be admitted to the university according to prevailing Pittsburg State campus-wide policies. Student majoring in Business Studies will also be required to satisfy admission to the Kelce College of Business before enrollment in upper-division major courses.

Formal admission to the Kelce College of Business occurs upon completion of the following requirements:

- Completion of at least 30 credit hours applicable to the degree.
- Achievement of a 2.25 cumulative grade point average (note, a 2.5 cumulative grade point average is required for Accounting and Computer Information Systems majors).
- Completion of these courses with a C or better:
  English Composition (ENGL 101 or ENGL 190)
  Introduction to Research Writing (ENGL 299 or ENGL 190)
  Speech Communication (COMM 207)
  College Algebra or Calculus (MATH 110, MATH 113, MATH 126, or MATH 150)
  Elementary Statistics (MATH 143)
  Computer Information Systems (CIS 130)
  Financial Accounting (ACCTG 201)

B. Curriculum

The following plan of study is representative of a Kelce College of Business student who chooses two minors or concentrations that sum to 21 unique upper division credit hours. In this case, Minor or Concentration #1 includes 12 unique credit hours (e.g. Accounting), and Minor or Concentration #2 includes 9 unique credit hours (e.g. Business Economics). Different combinations of minors and concentrations may result in more than 21 unique credit hours to satisfy the Business Studies major. As the number of credit hours rises above 21, the

number of open elective credit hours falls. Also, note that the Pitt State Pathway general education course choices include some business courses which provide additional options and flexibility for students.

Year 1: Fall **SCH = Semester Credit Hours**

Course #	Course Name	SCH….
ENGL 101	ENGLISH COMPOSITION	3
MATH113	COLLEGE ALGEBRA	3
MGT 101 or MGT 105	INTRODUCTION TO BUSINESS or INTRODUCTION TO ENTREPRENEURSHIP	3
PSYCH 155	GENERAL PSYCHOLOGY	3
HHP 150	LIFETIME FITNESS	1
UGS150	GORILLA GATEWAY	2
	SEMESTER TOTAL	15

Year 1: Spring

Course #	Course Name	SCH….
ACCTG 201	FINANCIAL ACCOUNTING	3
CIS 130	COMPUTER INFORMATION SYSTEMS	3
ENGL 299	INTRODUCTION TO RESEARCH WRITING	3
	ESSENTIAL STUDIES/PITT STATE PATHWAY	4
	OPEN ELECTIVE	2
	SEMESTER TOTAL	15

Year 2: Fall

Course #	Course Name	SCH….
ACCTG 202	MANAGERIAL ACCOUNTING	3
COMM 207	SPEECH COMMUNICATION	3
ECON 200	PRINCIPLES OF MICROECONOMICS	3
MATH 143	ELEMENTARY STATISTICS	3
	ESSENTIAL STUDIES/PITT STATE PATHWAY	3
	SEMESTER TOTAL	15

Year 2: Spring

Course #	Course Name	SCH….
ECON 201	PRINCIPLES OF MACROECONOMICS	3
MGT 330	MANAGEMENT & ORGANIZATIONAL BEHAVIOR	3
MGT 310	BUSINESS STATISTICS	3
	ESSENTIAL STUDIES/PITT STATE PATHWAY	3
	ESSENTIAL STUDIES/PITT STATE PATHWAY	3
	SEMESTER TOTAL	15

Year 3: Fall

Course #	Course Name	SCH….
FIN 326	BUSINESS FINANCE	3
MGT 320	BASIC QUANTITATIVE METHODS	3
MKTG 330	PRINCIPLES OF MARKETING	3
MGT 210	BUSINESS PROFESSIONALISM	3
	ESSENTIAL STUDIES/PITT STATE PATHWAY	3
	SEMESTER TOTAL	15

Year 3: Spring

Course #	Course Name	SCH….
MGT 420	QUANTITATIVE DECISION MAKING	3
	ESSENTIAL STUDIES/PITT STATE PATHWAY	3
	ESSENTIAL STUDIES/PITT STATE PATHWAY	3
	MINOR or CONCENTRATION #1 / COURSE #1	3
	MINOR or CONCENTRATION #2 / COURSE #1	3
	SEMESTER TOTAL	15

Year 4: Fall

Course #	Course Name	SCH….
MGT 430	LEGAL & SOCIAL ENVIRONMENT OF BUSINESS	3
ECON 300+	UPPER DIVISION ECONOMICS ELECTIVE	3
CIS 420	MANAGEMENT INFORMATION SYSTEMS	3
	MINOR or CONCENTRATION #1 / COURSE #2	3
	MINOR or CONCENTRATION #2 / COURSE #2	3
	SEMESTER TOTAL	15

Year 4: Spring

Course #	Course Name	SCH….
MGT 690	BUSINESS STRATEGY	3
	MINOR or CONCENTRATION #1 / COURSE #3	3
	MINOR or CONCENTRATION #2 / COURSE #3	3
	MINOR or CONCENTRATION #1 / COURSE #4	3
	OPEN ELECTIVE	3
	SEMESTER TOTAL	15

Total Number of Semester Credit Hours ……. [120]

VIII. Core Faculty

Note: * Next to Faculty Name Denotes Director of the Program, if applicable

FTE: 1.0 FTE = Full-Time Equivalency Devoted to Program

As proposed, the Business Studies major will be comprised of courses taken across all disciplinary fields represented within the KCOB (through the Kelce Core and Prerequisites and through the chosen minors and concentrations). Therefore, given the unique design, it is not possible to assign specific course responsibilities to this major as virtually all courses within the college could potentially be used as part of a Business Studies program of study. The table below shows all 32 current full-time faculty members within the college with 3 FTE prorated equally across each (3 FTE / 32 Faculty = 0.09375). 3 FTE represents the long-term commitment once the program is mature. During start-up, the per faculty member FTE will be less.

Faculty Name	Rank	Highest Degree	Tenure Track Y/N	Academic Area of Specialization	FTE to Proposed Program
Donald Baack	Professor	Ph.D.	Y	Management	0.09375
Alexander Binder	Assistant Professor	Ph.D.	Y	Economics	0.09375
Jae Choi	Associate Professor	Ph.D.	Y	Computer Information Systems	0.09375

Bienvenido Cortes	Professor	Ph.D.	Y	Economics	0.09375
Maeve Cummings	Professor	Ph.D.	Y	Computer Information Systems	0.09375
Linden Dalecki	Associate Professor	Ph.D.	Y	Marketing	0.09375
Michael Davidsson	Associate Professor	Ph.D.	Y	Economics	0.09375
Chris Fogliasso	University Professor	J.D.	Y	Management	0.09375
Mary Jo Goedeke	Assistant Professor	J.D., LLM	Y	Accounting	0.09375
Stephen Horner	Associate Professor	Ph.D.	Y	Management	0.09375
Anil Lal	Professor	Ph.D.	Y	Economics	0.09375
Justin Lallemand	Assistant Professor	Ph. D.	Y	Finance	0.09375
Choong Lee	University Professor	Ph.D.	Y	Management	0.09375
Sang-Hei Lee	Associate Professor	Ph.D.	Y	Management	0.09375
Fang Lin	Associate Professor	Ph.D.	Y	Finance	0.09375
Matthew Lunde	Assistant Professor	Ph.D.	Y	Marketing & Sustainability	0.09375
Kristen Maceli	Professor	Ph.D.	Y	Marketing	0.09375
Michael McKinnis	Instructional Professor	MBA	N	Economics	0.09375
Lynn Murray	Associate Professor	Ph.D.	Y	Marketing	0.09375
Mary Judene Nance	Assistant Instructional Professor	MBA	N	Marketing	0.09375
David O'Bryan	Professor	Ph.D.	Y	Accounting	0.09375
Shipra Paul	Instructional Professor	MBA	N	Management	0.09375
Ashlee Phillips	Assistant Instructional Professor	MAcc	N	Accounting	0.09375
Theresa Presley	Associate Professor	Ph.D.	Y	Accounting	0.09375

Wei Sha	Associate Professor	Ph.D.	Y	Computer Information Systems	0.09375
Connie Shum	Professor	DBA	Y	Finance	0.09375
Dwight Strong	Instructional Professor	MBA	N	Computer Information Systems	0.09375
Jay van Wyk	Professor	Ph.D., D. Phil	Y	International Business	0.09375
Mary Wachter	Instructional Professor	MBA	N	Marketing	0.09375
David Weaver	Assistant Instructional Professor	MBA	N	Accounting	0.09375
Gail Yarick	Associate Professor	Ph.D.	Y	Accounting	0.09375
Open Position To be filled	Assistant Instructional Professor	M.S.	N	Computer Information Systems	0.09375

Number of graduate assistants assigned to this program ..... **[0]**

IX. Expenditure and Funding Sources *(List amounts in dollars. Provide explanations as necessary.)*

A. EXPENDITURES	First FY	Second FY	Third FY
Personnel – Reassigned or Existing Positions			
Faculty – Approximately 1 FTE added each year	$85,000	$170,000	$255,000
Administrators *(other than instruction time)* - Advisor	$3,500	$3,500	$3,500
Graduate Assistants			
Support Staff for Administration (*e.g., secretarial*)			
Fringe Benefits *(total for all groups)*	$17,000	$34,000	$51,000
Other Personnel Costs			
Total Existing Personnel Costs – Reassigned or Existing	$105,500	$207,500	$309,500
Personnel – New Positions			
Faculty			
Administrators *(other than instruction time)*			
Graduate Assistants			
Support Staff for Administration (*e.g., secretarial*)			
Fringe Benefits *(total for all groups)*			
Other Personnel Costs			
Total Personnel Costs – New Positions			
Start-up Costs - One-Time Expenses			

Library/learning resources			
Equipment/Technology			
Physical Facilities: Construction or Renovation			
Other			
Total Start-up Costs			
Operating Costs – Recurring Expenses			
Supplies/Expenses	$500	$1,000	$1,500
Library/learning resources			
Equipment/Technology			
Travel	$500	$1,000	$1,500
Other			
Total Operating Costs	$1,000	$2,000	$3,000
GRAND TOTAL COSTS	$106,500	$209,500	$312,500

B. FUNDING SOURCES *(projected as appropriate)*	Current	First FY (New)	Second FY (New)	Third FY (New)
Tuition / State Funds	Existing	$106,500	$209,500	$312,500
Student Fees				
Other Sources				
GRAND TOTAL FUNDING*		$106,500 (Existing)	$209,500 (Existing)	$312,500 (Existing)
C. Projected Surplus/Deficit (+/-) (Grand Total Funding *minus* Grand Total Costs)		$0	$0	$0

*The Grand Total Funding shown here reflects the required pro-rated funding that is already budgeted and allocated to teach the minors and certificates that make up the proposed Business Studies program. ***No additional funding beyond current allocations is required to start the program.*** See X. B. below for projected tuition revenue based on anticipated enrollments.

X. Expenditures and Funding Sources Explanations

A. Expenditures

Personnel – Reassigned or Existing Positions

The proposed Business Studies program is a "repackaging" of existing courses and curricula. All of the courses, minors, and concentrations are already available and being taught by existing faculty members on staff. Currently, due to the recent decline in campus enrollment, there is capacity within the current and planned schedule of course offerings to accommodate the new students projected to enroll in the proposed program.

This program will allow the college to more efficiently utilize its existing resources by filling currently empty seats.

Given the proposed curriculum, we anticipate that approximately 1 FTE faculty member's worth of credit hours will be needed to teach the courses in support of the projected enrollment in the first year. If enrollment grows as anticipated, an approximate additional 1 FTE worth of courses would be reallocated in year two and again in year 3.

As the courses for the proposed program are spread throughout the college, the expenditure figures reported here are based on the mean salary for the Core Faculty. The program will be coordinated by the Director of the Kelce Academic Advising Center. It is anticipated that five percent of this position's time will be devoted to the program. The cost of this administration is therefore a reallocation of five percent of this already-budgeted 12-month position. The fringe benefits costs for all personnel are calculated at 20 percent. All numbers are rounded.

Personnel – New Positions

No new positions are required to operate the proposed Business Studies program. All courses and curricula are already in place and being taught by current KCOB faculty members. Due to the recent declines in enrollment at Pitt State, classroom capacity exists to accommodate the number of new students projected to enroll in the proposed program. New positions will only be required in the long-run if enrollment in the program grows overall total enrollment in the college beyond previously experienced levels.

Start-up Costs – One-Time Expenses

Again, no additional one-time start-up costs are anticipated. Needed resources and facilities are already in place to support the existing courses and curricula that are being repackaged to create the Business Studies program. By spreading the costs of these existing fixed resources over more students, financial and operational efficiencies will be realized.

Operating Costs – Recurring Expenses

It is estimated that each FTE faculty member on average consumes $500 in supplies/commodities and utilizes $1,000 in travel per academic year. These costs are reported for one FTE in year one, two FTE in year two, and three FTE in year three. Again, these expenditures are already budgeted and represent a reallocation of use into the proposed program. No new funds will be necessary to support these direct outlays.

B. Revenue: Funding Sources

All Core Faculty positions in the Kelce College of Business are fully funded by Pittsburg State University through annual state appropriations and self-generated student tuition and fees revenue. Because the proposed Business Studies program is built by repurposing existing courses and curricula, and because we currently have excess capacity due to recent enrollment declines, **no new revenues will be required to operate the program**. The revenue to operate the program is already in our annual budget.

To provide a sense for the tuition revenues that will be generated from the proposed Business Studies program based on the projected enrollments noted earlier, the following is provided:

Year 1: 450 credit hours x $274 per credit = $123,300
Year 2: 900 credit hours x $274 per credit = $246,600
Year 3: 1200 credit hours x $274 per credit = $328,800

If enrollments are within approximately 90% of our targets, the program will more than cover the already budgeted expenditures required to teach the program.

C. Projected Surplus/Deficit

The proposed Business Studies program is expected to approximately break even for the first three years as reflected in the figures above. If we are able to grow the program beyond our projections, in the long-run the program should produce a net surplus for the university. Our recent campus-wide return on investment analysis reveals that Pitt State business programs on the margin generate more revenue than costs. Thus, the university and college both have an incentive to support and grow this program over time.

XI. References

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