COUNCIL OF CHIEF ACADEMIC OFFICERS

Conference Call Agenda

October 16, 2019

9:00 am

Conference Call Information
Dial: 785-422-6104
Conference Code: 715547354

I.	**Call To Order**		
	A. Approve minutes from September 18, 2019	*David Cordle, Chair*	*p. 3*
II.	**Requests**		
	A. First Readings		
	1. Master of Science in Business Analytics	*KU*	*p. 6*
	2. Bachelor of Interdisciplinary Studies in Ethnic, Gender, and Identity Studies	*ESU*	*p. 15*
	B. Second Readings		
	1. Associate of Applied Science in Aviation Maintenance	*KSU*	*p. 24*
	2. Associate of Applied Science in Professional Pilot	*KSU*	*p. 30*
	3. Master of Industrial Design	*KSU*	*p. 36*
	4. Bachelor of Science in Diagnostic Science	*KUMC*	*p. 47*
III.	**Adjournment**		

COUNCIL OF CHIEF ACADEMIC OFFICERS

The Council of Chief Academic Officers, 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 meet 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:

David Cordle, Chair	ESU	Daniel Archer	KBOR
Jill Arensdorf	FHSU	Robert Klein	KUMC
Charles Taber	KSU	JuliAnn Mazachek	Washburn
Carl Lejuez	KU	Rick Muma	WSU
Howard Smith	PSU		

Council of Chief Academic Officers (COCAO)

AY 2019-2020 Meeting Schedule

Meeting Dates	**Location**	**Lunch Rotation**	**Institution Materials Due**	**New Program Requests due**
September 18, 2019	Topeka	WSU	August 30, 2019	July 19, 2019
October 16, 2019	*Conference Call for degree programs only*			
November 20, 2019	Pittsburg State University	PSU	November 1, 2019	September 20, 2019
December 18, 2019	Topeka	ESU	November 29, 2019	October 18, 2019
January 15, 2020	Topeka	KU	December 27, 2019	November 15, 2019
February 19, 2020	Topeka	FHSU	January 31, 2020	December 20, 2019
March 18, 2020	University of Kansas Medical Center	KUMC	February 28, 2020	January 17, 2020
April 15, 2020	Kansas State University	KSU	March 27, 2020	February 14, 2020
May 20, 2020	Topeka	Washburn	May 1, 2020	March 20, 2020
June 17, 2020	Topeka	ESU	May 29, 2020	April 17, 2020

Council of Chief Academic Officers

MINUTES

Wednesday, September 18, 2019

The September 18, 2019, meeting of the Council of Chief Academic Officers was called to order by Chair David Cordle at 8:49 a.m. The meeting was held in Suite 530, located in the Curtis State Office Building, 1000 S.W. Jackson, Topeka, KS.

In Attendance:

Members:	David Cordle, ESU	Jill Arensdorf, FHSU	Charles Taber, K-State
	Carl Lejuez, KU	Robert Klein, KUMC	Howard Smith, PSU
	Rick Muma, WSU	JuliAnn Mazachek, Washburn	Daniel Archer, KBOR
Staff:	Karla Wiscombe	Sam Christy-Dangermond	Erin Wolfram
	Cynthia Farrier		
Others:	Jon Marshall, Allen CC	Elaine Simmons, Barton CC	Kim Krull, Butler CC
	Lori Winningham, Butler CC	Aron Potter, Coffeyville CC	Brad Bennett, Colby CC
	Michelle Schoon, Cowley CC	Steve Loewen, FHTC	Adam Borth, Fort Scott
	Marc Malone, Garden City CC	Erin Shaw, Highland CC	Cindy Hoss, Hutchinson CC
	Michael McCloud, JCCC	Rick Moehring, JCCC	Brian Niehoff, K-State
	Nathan Howe, K-State	Tim de Noble, K-State	Jean Redeker, KU
	Robert Klein, KUMC	Debra Sullivan, KUMC	Troy Brockway, K-State Polytechnic
	Matt Pounds, NWK Tech	Kevin Bracker, PSU	Andrew Smith, K-State Polytechnic
	Mike Calvert, Pratt CC	Stanton Gartin, SATC	Joe McCann, Seward CC
	Jennifer Ball, Washburn	Linnea Glenmaye, WSU	Larisa Genin, WSU
	Coleen Pugh, WSU	Dennis Livesay, WSU	Heather Morgan, KACCT

Chair David Cordle welcomed everyone.

Approval of Minutes

Rick Muma moved to approve the June 19th minutes. Following the second of Carl Lejuez, the motion carried.

First Program Readings

- Charles Taber presented the information for the Associate of Applied Science in Aviation Maintenance, Associate of Applied Science in Professional Pilot, and Master of Industrial Design for Kansas State University. Troy Brockway and Andrew Smith, K-State Polytechnic, were available to answer questions for the Associate program proposals. Nathan Howe and Tim de Noble, K-State, were available to answer questions for the Master of Industrial Design program proposal.

If there are further comments or questions, please contact Charles Taber. These programs are a first reading and no action is required.

- Robert Klein introduced Dave Burnett, KUMC. Dr. Burnett presented the information for a Bachelor of Science in Diagnostic Science for the University of Kansas Medical Center. WSU stated they are supportive of this program.

If there are further comments or questions, please contact Robert Klein. This program is a first reading and no action is required.

Second Program Readings

- WSU – Doctor of Philosophy in Biomedical Engineering was presented by Rick Muma. There have been no further comments from COCAO members. An external review team conducted a review over the summer and made suggestions to strengthen the program. Those suggestions have been taken into consideration and implemented. Dennis Livesay and Michael Jorgenson were available to answer any questions.

  By unanimous consent, COCAO approved the above doctorate program for WSU.

- KUMC – Doctorate in Clinical Nutrition was presented by Robert Klein. The external review team was supportive of the program and made suggestions to enhance the doctorate program. Deborah Sullivan was available to answer any questions.

The doctoral programs listed above will be presented to the Council of Presidents at its meeting today.

Other Requests

- KSU requested approval to change the name of the Department of Geography to the Department of Geography and Geospatial Sciences.

Following discussion, Rick Muma moved to approve the above degree name change at KSU. Jill Arensdorf seconded, and the motion carried.

Council of Faculty Senate Presidents (CoFSP) Update

Due to unforeseen circumstances, the Faculty Senate President was not available to give an update.

OTHER MATTERS

- WSU is working on a Master of Materials Engineering program and an undergraduate degree in chemical engineering.

- K-STATE and WSU signed a Memorandum of Understanding to establish a Nursing cohort on the K-State campus with conjunctive degree programs. This is tentatively scheduled to start Fall 2021, pending approvals from the appropriate accreditation and certification boards.

- ESU submitted a Bachelor of Ethnic Gender and Individuality Studies program to KBOR.

- KU is working on a Master of Science in Business Analytics program.

- WSU is working on a Master of Science in Business Analytics and eventually a Bachelor of Science in Business Analytics program.

- Daniel Archer reminded COCAO of the September 27th deadline for the Spoken English Language Competency Report. Two institutions have submitted their information; if you have not submitted your information please do so before the deadline.

- Daniel Archer informed COCOAO that instructions for the Academic Calendars will be sent in October to COCAO members.

- The update on Program Inventory for 120 Semester Credit Hour was presented by Samantha Christy-Dangermond. Universities put in a great deal of work to reduce degree programs to 120 Semester Credit Hours. Each institution received a list of degrees that have not been updated in Program Inventory. Please review the list and contact the appropriate personnel to make the necessary changes in Program Inventory for your university.

- COCAO discussed the Conference Call for October. By consensus, the conference call will be held October 16th at 9:00 am.

- Carl Lejuez informed COCAO that the Tilford Conference planning is going well. Registration is now open; please inform the appropriate personnel at your institution.

- Carl Lejuez requested for the University Press of Kansas Board of Trustees to meet after the conclusion of the COCAO meeting.

The Chair recessed the meeting at 9:50 am and reconvened at 12:00 pm.

Rick Muma introduced two new deans at WSU. Larissa Genin is the Dean of the W. Frank Barton School of Business, and Coleen Pugh is the Dean of the WSU Graduate School and Associate Vice President for Research and Technology Transfer.

Carl Lejuez will send the link for further information and registration for the Tilford Conference to COCAO members. The information at the Tilford conference is relevant for all levels of attendees, from students to administration.

With no further business, Howard Smith moved to adjourn the meeting. Following the second of Charles Taber, the motion carried. The meeting adjourned at 12:07 pm.

University of Kansas

Master of Science in Business Analytics

Program Approval

I. General Information

A. Institution University of Kansas

B. Program Identification

Degree Level:	Master's
Program Title:	Business Analytics
Degree to be Offered:	Master of Science
Responsible Department or Unit:	School of Business
CIP Code:	52.1301
Modality:	Face-to-Face
Proposed Implementation Date:	Fall 2020

Total Number of Semester Credit Hours for the Degree: 30

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

III. Justification

Business analytics aims to turn big data into actionable intelligence. To that end, data analysts use a variety of statistical and quantitative methods, computational tools, and predictive models – as well as their knowledge of finance, the corporate world, and the economy – to make data-driven decisions. With the emergence of today's data-driven revolution, the Business Analytics Master's program trains participants in how to uncover highly relevant data insights using advanced analytics and technologies.

Unlike Business Intelligence (BI) degrees, which are often concerned with measuring past performance, Business Analytics (BA) programs tend to focus more on prescriptive and predictive techniques (e.g. "what should we do?" and "what happens next?"). This program is different from traditional data science programs; the MS in Business Analytics degree adds the business domain knowledge necessary to understand how to apply the science of data analytics and apply it to achieve specific business goals and insights (e.g. more profits).

The goal of the Business Analytics program is to prepare students with the requisite knowledge to implement data gathering, cleansing, integration, and modeling tasks as well as data asset analysis for business applications. The program will build on the basic business core courses by adding the necessary advanced courses in the Statistics, Data, and Business Analytics Domains. These courses will cover statistical methods, data warehousing, dimensional modeling, big-data analytical methods, and visualization tools and techniques and will introduce topics such as machine learning and predictive analytics. Students will have the skills and experience to create and manage big data initiatives as well as associated business processes facilitating large-scale business data analytics in organizations. Program graduates will not only drive decision-making across companies and government agencies, but will also act as catalysts for growth.

The School of Business started offering a Bachelor's of Science degree in Business Analytics in the Fall of 2016. The program has been highly successful and demand has continued to grow at a rate of over 50% annually. The proposed Master of Science – Business Analytics graduate degree program extends the existing

BS major and supports the demand for higher levels of education and experiential learning provided at the graduate level.

The missions of the University and the School of Business intersect with educating leaders who positively contribute to business and society. This highly-competitive, high-quality program supports these missions because it has been specifically designed to meet the needs of the State of Kansas by attracting regional and national working professionals seeking the knowledge to build and maintain the mindset and key data analytic skills necessary to lead today's insight driven companies.

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

A. Survey of Student Interest

A survey was conducted which included 55 Ernst & Young (EY) staff and senior associates (typically individuals 1 – 5 years after college graduation) to identify interest in business analytics. EY is one of the most consistent recruiters of KU Business School graduates. The Analytics and Information Systems Advisory Board administered the survey to EY employees in the regional office. The individuals surveyed would have graduated with a business degree major primarily in the areas of accounting, finance, and information technology. The following are select questions and results from that survey:

Question	Response
How beneficial do you consider having a Business Analytics skillset in your career? *(0 = Not Beneficial to 10 = Very Beneficial)*	8.4
Would you be interested in a Business Analytics training to grow your skillset? *(0=Not Interested to 10= Very Interested)*	8.3
Would you be interested in seeking work that involves Business Analytics? *(0 = Not Interested to 10 = Very Interested)*	8.1
While in college, would you have been (or are currently) interested in pursuing a Masters of Business Analytics	20 (36%) replied Yes

B. Market Analysis

The launch of this program means that, of the 32 public higher education institutions in the Kansas Board of Regents system, the University of Kansas will be the **first** to offer the trifecta of a Bachelors, Masters, and Ph.D. programs in Business Analytics that are AACSB accredited. The MS program is the logical extension of the very successful Bachelors of Science in Business Analytics, which is now in its fourth year, and will complement the Ph.D. program in Business Administration with specialization in Business Analytics.

There are, however, three closely related Master's programs with similar learning outcomes offered in the broader region. These are at Rockhurst University (MS in Business Intelligence and Analytics), Kansas State University College of Business (MS in Data Analytics) and University of Iowa Business School (MS in Business Analytics). While the MS program in Iowa is an AACSB accredited program built on a similar foundation of an undergraduate program, it is outside the area for the purpose of commutes. The Rockhurst program is at a small private university that does not have the research or breadth of knowledge that KU has.

While the K-State program is just outside commuting distance to KU, it is probably the only comparable one to KU's in the broader region. The K-State program is a collaborative program between Business, Computer Science, Economics, Mathematics, Industrial Management and Systems Engineering, Statistics, and Geography. The emphasis leans more toward the general science of data analysis with some courses covering business application.

KU's program is fully embedded within the Business School, builds on our strong undergraduate program in Business Analytics, and also builds on our already well-established connections to the business community. These connections include an Analytics and Information Systems (AI) Advisory Board made up of experienced industry professionals from leading companies in Kansas/Missouri and nationally. In addition, having a strong Ph.D. program adds strength to the teaching and experiential learning available to the Masters in Business Analytics.

The Iowa and Rockhurst programs have been available for a few years and have shown early success. There is little doubt that other local competing universities are exploring investment in similar degrees.

Potential Student Population

The program serves three primary groups: 1) recent graduates of business schools, engineering, economics, computer science or other quantitative disciplines interested in careers in business analytics; 2) professional working adults interested in advanced education already working in the field, or seeking a career change; (3) recent graduates of our own undergraduate program in Business Analytics. Since its Fall 2016 implementation, more than 80 students have graduated with a B.S. in Business Analytics, and the program enrollment increases 50% annually. These undergraduate students recently met with the AI Advisory Board and the students showed a high level of enthusiasm for a Master's program. In the last two graduating classes for the major, there were six students going on to Master's programs, and most were looking at programs that offered analytics specializations.

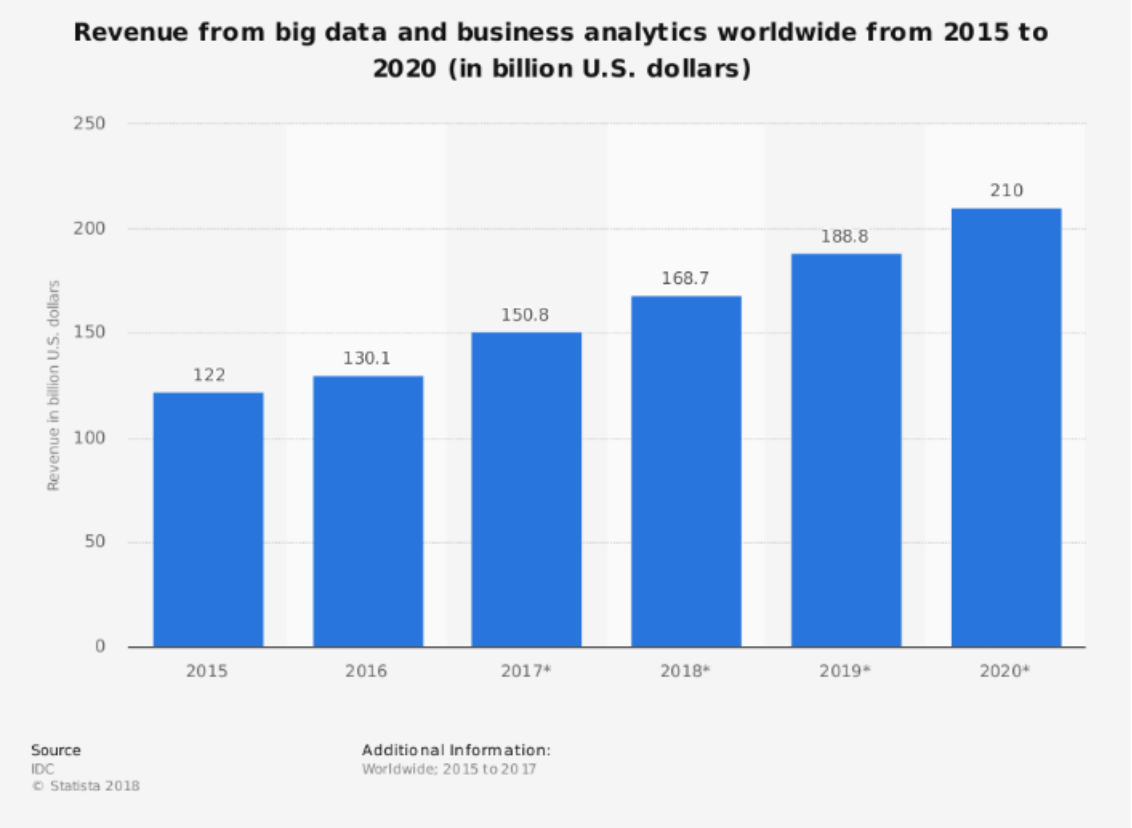
V. Projected Enrollment for the Initial Three Years of the Program

Year	Headcount Per Year		Sem Credit Hrs Per Year	
	Full- Time	Part- Time	Full- Time	Part- Time
Implementation	25	-	750	-
Year 2	50	-	1,500	-
Year 3	65	-	1,950	-

VI. Employment

Like big data itself, the business need for Business Analytics expertise is increasing faster than universities are able to support. A joint report by PwC and the Business-Higher Education Forum indicates that data science and analytics job postings will rise to 2.72 million by 2020, and revealed that by 2021, 69 percent of employers will seek candidates with data science and analytics skills. The report also stated that one in three positions in Business Analytics goes unfilled as the demand continues to outpace qualified candidates.

Business complexity continues to grow with new business models, devices, channels, competitors and customer requirements driving the growth of data. Business Analytics is transforming these big data sets into information – leading to better decision-making and growth in business revenue. Revenues from big data and business analytics, and hence the need for Business Analytics experts, will continue to rise, outpacing most jobs globally.



Program graduates can expect to find employment in the following positions, among others:

- Data Consultant
- Business Analyst
- Business Analytics Consultant
- Business Intelligence Analyst
- Business Reporting Manager
- Chief Analytics Officer
- Data Analyst
- Data Scientist
- Data Engineer
- Data Strategist
- Director of Analytics
- E-Commerce Analyst
- Enterprise Resource Planning (ERP) Analyst

According to the recent (2017) Graduate Management Admission Council (GMAC) Corporate Recruiters Survey, 49% of Fortune Global 100 companies plan to hire analytics Master's students. With base salaries averaging 44% higher than those with a Bachelor's degree alone, business analytics graduates are entering a job market eager to pay a premium for their skills.

The Analytics and Information Systems Advisory Board that advises the KU School of Business, which is made up of leaders from companies including Black and Veatch, Cerner, Koch Industries, Accenture, EY, KPMG, PwC, KC Royals, Tradebot, VML, Security Benefit, Grant Thornton, YRC and many others, concur with the

national trends. An additional data point supporting the strong employment prospects of Master's graduates is that 96% of recent graduates of our Bachelor's program were professionally engaged within six months of graduation, at an average starting salary of $59,237.

VII. Admission and Curriculum

A. Admission Criteria

Prospective students must:

- complete a KU Graduate Application.
- demonstrate an aptitude for quantitative analysis. This could be either from completing an undergraduate degree with a strong quantitative component (e.g., in business, economics, engineering, mathematics, statistics, or the physical sciences), or taking intermediate/advanced courses in business, computer science, mathematics, or statistics.
- submit official transcripts from each college or university attended.
- submit a copy of a resume or equivalent.
- students are encouraged to submit Graduate Management Admission Test (GMAT) or Graduate Records Exam (GRE) results.
- international students must also meet KU's English proficiency, visa/I20, and financial support requirements.

Application Deadline: The application deadline for prospective students is August 5. A new cohort begins every Fall semester.

B. Curriculum

The Business Analytics program is designed on the fundamental principles of Business Analytics. Themes include: hands-on learning, projects and real world case studies and working with leading companies to solve business problems and challenges with Business Analytics. Also, graduates will not only learn to work with multiple tools, data sets, and solutions, but will learn to tell the value of Business Analytics to improve business decision-making and overall business success.

While the program does not require an internship, students may articulate up to three hours of credit for relevant internship experiences. Through our strong Analytics and Information Systems Advisory Board, representing the top firms regionally, we are actively working to create a pipeline for projects, jobs and internships that will benefit students in both the Undergraduate and Graduate Business Analytics Programs.

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

Course #	Course Name	SCH….
BSAN 726	Data Management and Data Warehousing	3
BSAN 710	Statistical Modelling	3
BSAN 720	Data and Visual Analytics	3
BSAN 740	Analytical Optimization	3
	MSBA Elective	3

Year 1: Spring

Course #	Course Name	SCH….
BSAN 730	Large Scale Data Analysis	3
BSAN 750	Data Mining and Machine Learning	3

BSAN 710	Data Driven Business Strategy	3
	MSBA Elective	3
BSAN 780	Business Analytics Capstone / Internship	3

Total Number of Semester Credit Hours ……. 30

Elective Course List (choose 2)

- BSAN 735: Data Security and Analytics (3 cr.)
- BSAN 715: Analytics Application Development (3 cr.)
- BSAN 745: Advanced Machine Learning and AI (3 cr.)
- BSAN 760: Accounting Analytics (3 cr.)
- BSAN 770: Healthcare Analytics (3 cr.)
- BSAN 775: Financial Risk Analytics (3 cr.)
- BSAN 777: Marketing Analytics (3 cr.)

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
Steve Hillmer	Professor	Ph.D.	Y	Business Analytics	0.25
Jide Wintoki*	Professor	Ph.D.	Y	Finance	0.25
Scott Bronson	Associate Professor	Ph.D.	Y	Accounting	0.25
Gilbert Karuga	Associate Professor	Ph.D.	Y	Information Systems	0.25
Michael Lash	Assistant Professor	Ph.D.	Y	Business Analytics	0.25
Shaobo Li	Assistant Professor	Ph.D.	Y	Business Analytics	0.25
Ben Sherwood	Assistant Professor	Ph.D.	Y	Business Analytics	0.25
Karthik Srinivasan	Assistant Professor	Ph.D.	Y	Business Analytics	0.25
Chris Claterbos	Lecturer	MSCE	N	Business Analytics	0.25
Brian Salmans	Lecturer	Ph.D.	N	Business Analytics	0.25
Greg Storm	Lecturer	Ph.D.	N	Business Analytics	0.25

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	318,000	318,000	318,000
Administrators *(other than instruction time)*	-	-	-
Graduate Assistants	-	-	-
Support Staff for Administration (*e.g., secretarial*)	-	-	-
Fringe Benefits *(total for all groups)*	95,400	95,400	95,400
Other Personnel Costs	-	-	-
Total Existing Personnel Costs – Reassigned or Existing	413,400	413,400	413,400
Personnel – – New Positions			
Faculty	-	-	-
Administrators *(other than instruction time)*	-	-	-
Graduate Assistants	-	-	-
Support Staff for Administration (*e.g., secretarial*)	40,000	40,000	40,000
Fringe Benefits *(total for all groups)*	12,000	12,000	12,000
Other Personnel Costs	-	-	-
Total Existing Personnel Costs – New Positions	52,000	52,000	52,000
Start-up Costs - - One-Time Expenses			
Library/learning resources	-	-	-
Equipment/Technology	-	-	-
Physical Facilities: Construction or Renovation	-	-	-
Other	2,500	-	-
Total Start-up Costs	2,500	-	-
Operating Costs – Recurring Expenses			
Supplies/Expenses	-	-	-
Library/learning resources	-	-	-
Equipment/Technology	-	-	-
Travel	-	-	-
Other	2,500	2,500	2,500
Total Operating Costs	5,000	2,500	2,500
GRAND TOTAL COSTS	470,400	467,900	467,900

B. FUNDING SOURCES *(projected as appropriate)*	Current	First FY (New)	Second FY (New)	Third FY (New)
Tuition / State Funds		398,010	796,020	1,034,826
Student Fees		172,650	345,300	448,890
Other Sources		-	-	-
GRAND TOTAL FUNDING		570,660	1,141,320	1,483,716
C. Projected Surplus/Deficit (+/-) (Grand Total Funding *minus* Grand Total Costs)		100,260	673,420	1,015,816

X. Expenditures and Funding Sources Explanations

A. Expenditures

Personnel – Reassigned or Existing Positions

We plan to reassign the following faculty from our undergraduate program to launch the program:

Faculty Name	**FTE Assigned**	**Faculty Name**	**FTE Assigned**
Steve Hillmer	0.25	Ben Sherwood	0.25
Jide Wintoki	0.25	Karthik Srinivasan	0.25
Scott Bronson	0.25	Chris Claterbos	0.25
Gilbert Karuga	0.25	Brian Salmans	0.25
Michael Lash	0.25	Greg Storm	0.25
Shaobo Li	0.25		

We are also in the process of recruiting full-time tenure track faculty to fill two *existing* positions, and we expect to assign 0.25 FTE of these positions to the program.

Personnel – – New Positions

Administrative and Advising Support: The program will require hiring a staff member whose position will be 0.5 FTE dedicated to administrative support, and 0.5 FTE dedicated to student advising.

Start-up Costs – One-Time Expenses

We anticipate minimal start-up costs for initial wave of program advertising, student recruitment, and development of new course material for faculty who may have to adapt their current teaching material for the Master's level.

Operating Costs – Recurring Expenses

We expect minimal operating expenses for ongoing program advertising, employer outreach, and career services activities.

B. Revenue: Funding Sources

Funding for the program will be through tuition and student fees. Based on historical enrollment in other Business School Master's programs (e.g., the MBA), we estimate admitted students will consist of 80% in-state and 20% out-of-state.

C. Projected Surplus/Deficit

We expect the program to achieve a surplus of over $100,000 right from the first year based on our conservative enrollment projection (the program "breaks even" with an enrollment of 22 students). In subsequent years, we expect the program to generate annual surpluses in excess of $600,000.

XI. References

GMAC Corporate 2017 Corporate Recruiters Survey. https://www.gmac.com/market-intelligence-and-research/research-library/employment-outlook/2017-corporate-recruiters-survey-report

"Investing in America's Data Science and Analytics Talent." http://www.bhef.com/publications/investing-americas-data-science-and-analytics-talent

Emporia State University

Bachelor of Interdisciplinary Studies in Ethnic, Gender, and Identity Studies

Program Approval

I. General Information

A. Institution Emporia State University

B. Program Identification

Degree Level:	Bachelor's
Program Title:	Major in Ethnic, Gender, and Identity Studies
Degree to be offered:	Bachelor of Interdisciplinary Studies
Responsible Department or Unit:	Department of Interdisciplinary Studies
CIP Code:	05.0299
Modality:	Face-to-Face, Online, Hybrid
Proposed Implementation Date:	August 2020

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 Ethnic, Gender, and Identity Studies major at Emporia State University is an interdisciplinary program offering students the opportunity to investigate, analyze, and understand personal and social identities, including, but not limited to, race, ethnicity, sex, sexuality, gender, class, age, and ability. Through the coursework for the Ethnic, Gender, and Identity Studies major, students will study and come to understand how multiple identities intersect and influence one another. Students completing the program are expected to be socially aware critical thinkers, advocates of social justice, and agents for change regarding the complex issues of modern society.

Emporia State University's strategic plan states "develop[ing] and maintain[ing] a campus climate and culture in which embracing diversity, equity, and inclusion is a core value" and Goal 5 of Emporia State University's strategic plan is to "Become a model for diversity, equity, and inclusion". The Ethnic, Gender, and Identity studies program would show ESU's dedication to this goal through educational opportunities that expressly further diversity, equity, and inclusion. Students in the EGIS major will be positioned to directly affect the campus environment and generate a culture of equity and inclusion through the student body. As this program aligns with a specifically stated goal for the university, institutional priority for developing the major is high. In addition, no other Kansas universities or any of ESU's peer or aspirational institutions offer a program which explores social identities in the way the proposed major will. The proposed EGIS major aligns with a more contemporary approach to the study of critical identities and their intersections.

Emporia State University is already home to an Ethnic and Gender Studies minor, which combines the studies of multiple identities and is unique in the Kansas Board of Regents' schools. This minor is an interdisciplinary area of study, made up of courses designated as Ethnic-and-Gender-Studies intensive courses. The designation is done by the Ethnic and Gender Studies Steering Committee, a committee made up of representative faculty from across the University. As this foundation for intersectional study is already in place at ESU, and the process for identifying and classifying Ethnic and Gender Studies courses has been established and tested over time, ESU is the ideal home for crafting an interdisciplinary and intersectional study of ethnic, gender, and identity studies.

In addition, due to the construction of the major and the framework already in place, it will require no additional courses and little to no additional funding to implement. The required courses for the major are already being taught on a regular basis, and the resources needed to support administrative tasks are currently available.

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

A. Market Analysis

Figure 1: Completers of Bachelor's Degrees in U.S. Universities with Majors Related to Ethnic, Gender and Identity Studies, 2013-2017. Source: IPEDS Database (nces.ed.gov/ipeds/datacenter/)

Major	2013	2014	2015	2016	2017
Ethnic Studies	87	93	98	105	107
EGMGGS*	209	212	212	N/A	N/A
Gay/Lesbian Studies	13	16	16	16	18
Latin American Studies	318	323	331	337	340
Women's Studies	645	676	703	713	734
TOTAL	**1272**	**1320**	**1360**	**1171**	**1199**

*Ethnic, Cultural Minority, Gender, and Group Studies. Not included in 2016 or 2017 IPEDS list of majors.
**When the ECMGGS major is removed, the total number goes down. It could be said that this major is closest to the Ethnic, Gender and Identity Studies major, so the approval of this major would seem to be a way to build those numbers again.

IPEDS's database shows there is a strong interest in similar programs to Ethnic, Gender, and Identity Studies. Because the EGIS proposed major would incorporate the various majors tracked by IPEDS, the EGIS major would appeal to different kinds of students who seek various fields of study within identity studies.

Studies of sex, gender, race, ethnicity, sexuality, age, class, religion and other critical social identities have evolved well beyond the localized or targeted study of a single identity, and scholars and private sector representatives are increasingly aware of the ways in which one identity may affect another. The need for a program of study that offers students the opportunity to examine and focus on identities and the ways in which they intersect is apparent in the movement of scholarly research, as well as in the complex social problems requiring examination of intersectional identities (Crenshaw 2017, e.g.). Kansas Regents universities currently offer programs in Women's Studies, African American Studies, Native American Studies, Religious Studies, and Ethnic Studies; however, no KBOR university offers a program of study whose main intent is an examination of multiple, intersecting, diverse social identities combining perspectives from different disciplines.

Generation Z – those born in the late 1990s and early 2000s – is the most diverse generation in U.S. history (Dimock 2019). Attracting and retaining this widely diverse group of students is key to continuing success as an academic institution, now and into the future. Programs such as the proposed Ethnic, Gender, and Identity Studies major at ESU will provide students the opportunity to explore their own diverse identities and to understand the identities of others. The EGIS major will attract diverse students interested in social issues and will contribute to creating a campus environment that is welcoming to all students.

A recent article regarding Generation Z and the workplace stated that "[d]iversity, inclusion and belonging should be core values of [an] organization and can impact [the] ability to attract and retain an entire generation of talent" (Florentine 2018). A survey of 1,000 students conducted by Door of Clubs, a startup dedicated to connecting university student clubs to private sector sponsors, found that equality was the "No. 1 cause Generation Z cares about in the workplace" (Florentine 2018). The incoming generation of college students cares deeply about causes surrounding diversity and inclusion and seeks out communities that have this core

value. A major in Ethnic, Gender, and Identity Studies demonstrates the University's dedication to these social concerns and will prepare and empower graduates to carry these values forward into their careers.

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

Figure 2:

Year	Headcount Per Year		Sem Credit Hrs Per Year	
	Full- Time	Part- Time	Full- Time	Part- Time
Implementation	10		300	
Year 2	10	5	600	90
Year 3	10	5	900	180

VI. Employment

A recent search shows a wide variety of open positions labeled "diversity officer" or something similar:

Figure 3:

Jobs Website	**Number of Diversity Jobs Listed**
LinkedIn	223
Indeed	3,751
Career Website of Nat'l Association of Diversity Officers in Higher Education	36
SimplyHired	3,115
Glassdoor	859
HigherEdJobs	251
ZipRecruiter	7, 362
InsideHigherEd	106

These listings include positions in private industry--such as persons who evaluate compliance with state and federal regulations regarding contracting—and jobs in various offices of federal, state, county and local government.

More and more companies and institutions are seeking employees who specialize in diversity and inclusion: such postings by employers have increased 18% from 2017-2018 and increased 35% from 2016-2018 (Culbertson, 2018). In addition, diversity has "gained momentum as a topic in more than 70% of the [1,700] enterprises surveyed" (Lorenzo and Reeves, 2018). Employers are examining diversity and inclusion at their places of employment and see the value of increasing their equity among different groups within their workforce. Students who major in EGIS will be able to meet this need within the workforce.

Job positions will also be available in academic institutions; many of KBOR universities have offices centered on diversity and equity:

Figure 4:

Institution	Name of Office
Kansas State University	Department of Diversity and Multicultural Student Affairs
University of Kansas	Office of Diversity and Equity
Wichita State University	Office of Diversity and Inclusion
Emporia State University	Office of Diversity, Equity and Inclusion
Fort Hays State University	Office of Diversity Affairs
Pittsburg State University	Office of Student Diversity and Office of Institutional Equity
Washburn State University	Office of University Diversity and Inclusion

KBOR universities recognize that diversity and inclusion are an important part of college work life and student life, so positions in diversity and inclusion are represented.

In addition, job seekers looking for jobs in diversity and inclusion have been growing since 2015; the number has increased 8% from 2016-2018 (Culbertson, 2018). This increase, however, does not meet the need of employers who are seeking people qualified in diversity and inclusion; by offering a degree in Ethnic, Gender, and Identity Studies, ESU will be able to help close this gap and get more qualified employees into the workplace. This will not only benefit the EGIS graduates and companies seeking a diversity officer or other job, but also the general workforce: "[a] full two thirds (67 percent) of active and passive job seekers said that a diverse workforce is an important factor when evaluating companies and job offers" (Glassdoor Team, 2014).

According to a 2018 job outlook survey by the National Association of Colleges and Employers (NACE, 2018), the most valued attributes in potential employees are communication skills, problem-solving skills, and the ability to work in a team. One key principle in working in an effective team is building an environment of inclusivity where diversity is appreciated and encouraged. EGIS graduates will be uniquely positioned to create these environments in the multicultural workforces of the future, as their knowledge of diverse cultures and peoples, as well as comfort with difference, will allow for more effective communication within these teams. The EGIS program's interdisciplinary approach to learning and embedded leadership principles will provide students with the skills to address multi-faceted and complex problems with unique perspectives, as well as take on leadership roles in diverse groups and situations. In addition, EGIS graduates will be positioned to effect positive change in the areas of diversity, inclusion, and belonging, which are key issues for Generation Z students and employees (Florentine, 2018).

VII. Admission and Curriculum

Admission Criteria

Students applying for the Bachelor in Interdisciplinary Studies (BID) with a major in Ethnic, Gender, and Identity Studies will meet ESU's requirements for admission as an undergraduate, including ACT composite score of 21 or higher or rank in the top third of the high school graduating class, and a grade point average of 2.00 on a 4.00 scale in the recommended core curriculum courses. Details may be found in ESU's University Catalog (https://www.emporia.edu/regist/catalog/documents/2019-2020%20ESU%20Catalog.pdf).

Curriculum – Suggested courses for full-time students

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

Course #	Course Name	SCH…. 15
EG 101	Composition 1	3
MA 110	College Algebra	3
	Other general education courses to reach 15 credit hours	9

Year 1: Spring

Course #	Course Name	SCH…. 15-16
EG 102	Composition II	3
SP 100 **OR** 101	Interpersonal Communication **OR** Public Speaking	3
	Technology Course	2-3
	Other general education or elective courses to reach 15 hours	6-7

Year 2: Fall

Course #	Course Name	SCH…. 15
ID 301	Issues in Ethnic and Gender Studies	3
ID 302	Introduction to Interdisciplinary Studies	3
	6 hours of general education courses	6
	3 hours of EGIS electives	3

Year 2: Spring

Course #	Course Name	SCH…. 15
	General education courses	
	Electives in EGIS	

Year 3: Fall

Course #	Course Name	SCH…. 15
SO 540	Identity and Intersectionality	3
	Any remaining general education requirements	
	Electives in EGIS	

Year 3: Spring

Course #	Course Name	SCH…. 15
	Electives in EGIS	15

Year 3: Summer

Course #	Course Name	SCH…. 3-6
	Internship or practicum (elective but highly recommended)	3-6

Year 4: Fall

Course #	Course Name	SCH…. 15
	Electives in EGIS	15

Year 4: Spring

Course #	Course Name	SCH…. 15
ID 490	Interdisciplinary Studies Capstone	3
	Electives in EGIS	12

Year 4: Summer

Course #	Course Name	SCH…. varies
	Any remaining course work required, additional internship or practicum (elective but highly recommended)	3-6

Total Number of Semester Credit Hours ……. 120
[Plus any hours accrued in elective internship and/or practicum]

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
*Mallory Koci	Instructor	MA	N	Ethnic & Gender Studies	1.0 (0.25 administrative, 0.75 instruction)
Alfredo Montalvo (Acting Chair, Interdisciplinary Studies)	Associate Professor	PhD	Y	Sociology, Crime & Delinquency Studies	0.5 (administrative)
Heidi Hamilton	Professor	PhD	Y	Gender & Communication	0.25
Ellen Hansen	Professor	PhD	Y	Cultural Geography, Gender	0.25
Maire Johnson	Assistant Professor	PhD	Y	Ancient & Medieval History, Early Women's History	0.25
Sheryl Lidzy	Associate Professor	PhD	Y	Intercultural Communication	0.25
Amanda Miracle	Associate Professor	PhD	Y	Colonial History, Women's History	0.25
Gregory Robinson	Associate Professor	PhD	Y	Spanish Language Literature, Ethnic Literature	0.25
Rochelle Rowley	Associate Professor	PhD	Y	Gender, Identity, Sociology	0.25
Susan Zubber-Chall	Instructor	PhD	N	Social Justice, Crime & Delinquency Studies	0.25
Rachael Spaulding	Assistant Professor	PhD	Y	Spanish Language Literature, Ethnic and Gender Literature	0.25
C. Edward Emmer	Professor	PhD	Y	Philosophy	0.25

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

IX. Expenditures 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	160,502	163,712	166,986
Administrators *(other than instruction time)*	49,975	50,975	51,994
Graduate Assistants	0	0	0
Support Staff for Administration (*e.g., secretarial*)	0	0	0
Fringe Benefits *(total for all groups) (18.26%)*	38,433	39,202	39,986
Other Personnel Costs			
Total Existing Personnel Costs – Reassigned or Existing	248,910	253,889	258,966
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 Existing Personnel Costs – New Positions	0	0	0
Start-up Costs - - One-Time Expenses			
Library/learning resources			
Equipment/Technology			
Physical Facilities: Construction or Renovation			
Other			
Total Start-up Costs	0	0	0
Operating Costs – Recurring Expenses			
Supplies/Expenses			
Library/learning resources			
Equipment/Technology			
Travel			
Other (Programming, Women's History Month)			
Total Operating Costs	0	0	0
GRAND TOTAL COSTS	248,910	253,889	258,966

B. FUNDING SOURCES *(projected as appropriate)*	Current	First FY (New)	Second FY (New)	Third FY (New)
Tuition / State Funds		51,543	118,549	185,555
Student Fees		16,434	39,405	63,244
Other Sources				
GRAND TOTAL FUNDING		67,977	157,954	248,799
C. Projected Surplus/Deficit (+/-) (Grand Total Funding *minus* Grand Total Costs)		(180,933)	(95,935)	(10,167)

X. Expenditures and Funding Sources Explanations

A. Expenditures

Personnel – Reassigned or Existing Positions

The director, Mallory Koci, is a current ESU instructor in the Department of Interdisciplinary Studies and has 0.25 FTE assigned to directorship of the EGS program, of which the new major will be a part. Alfredo Montalvo is Acting Chair of the Department of Interdisciplinary Studies and will have administrative responsibilities over the program. All other faculty teach in departments across campus.

Personnel – – New Positions

The program will require no new faculty; all required and elective courses are currently being taught on campus.

Start-up Costs – One-Time Expenses

No start-up costs are requested.

Operating Costs – Recurring Expenses

No new funding is requested.

B. Revenue: Funding Sources

Funding from tuition is based on $5,154.30 per year for full-time students and $3,092.58 per year for part-time students. Funding from mandatory fees is based on $1,643.38 per year for full-time students and $1,394.25 per year for part-time students.

C. Projected Surplus/Deficit

The apparent deficits projected above are mitigated by the fact that the only required resources are existing personnel.

XI. References

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Kansas State University Technology and Aviation (Polytechnic)

Associate of Applied Science in Aviation Maintenance

Program Approval

I. General Information

A. Institution Kansas State University

B. Program Identification

Degree Level:	Associate of Applied Science
Program Title:	Aviation Maintenance
Degree to be Offered:	Associate of Applied Science in Aviation Maintenance
Responsible Department or Unit:	College of Technology and Aviation/School of Integrated Studies
CIP Code:	47.0607
Modality:	Face-to-Face
Proposed Implementation Date:	Spring 2020

Total Number of Semester Credit Hours for the Degree: 70

II. Justification

The aviation industry is experiencing a human resource shortage of qualified aviation maintenance personnel; this need will continue into the foreseeable future. This shortage is affecting related organizations in their ability to provide services to growing customer (aircraft operators) needs. Upon completing the Federal Aviation Administration certification requirements, this proposal will allow our students to earn an associate's degree in two years and be eligible for work force employment earlier.

Kansas has a long history of fulfilling the needs of the aviation industry. As the one of two Aviation Maintenance Technician Schools (FAA Part 147) in Kansas that offers this training, Kansas State University Polytechnic Campus (KSUPC) has done its part in producing quality aviation maintenance graduates to serve this stable, yet growing industry. KSUPC offers a BS degree in Aviation Maintenance, and has found that students leave the program before completion because they have the technical knowledge to find good jobs in the industry without a BS degree. Therefore, in order to provide these students with the opportunity to earn a credential prior to leaving, the development of an associate degree seems prudent. As the aviation industry is undergoing shortages that are forecasted to worsen before improving, KSUPC has an opportunity to move quickly and aid in providing skilled aviation personnel that will be ready for the workforce with a shorter degree plan.

III. Program Demand: Select one or both of the following to address student demand: Option B selected.

A. Survey of Student Interest

Number of surveys administered: …… _____ Number of completed surveys returned: ……. _____ Percentage of students interested in program: … _____

Include a brief statement that provides additional information to explain the survey.

B. Market Analysis

Boeing Technician Outlook: 2018 – 2037 www.boeing.com
"As new generation airplanes become more prominent in the global fleet, advances in airplane technology will drive an increased need for technicians skilled in avionics, composites, and digital troubleshooting… The need for maintenance personnel is largest in the Asia Pacific region, which will require 257,000 new technicians.
Airlines in North America will require 189,000, Europe 132,000, the Middle East 66,000, Latin America 55,000, Africa 28,000, and Russia / Central Asia 27,000."

In addition, the Aviation Technician Education Council supports the Coalition in Support of Workforce Grant Program to advance aviation maintenance education; ATEC (March 2019 annual conference www.atec-amt.org) shared that the need for maintenance technicians is high, and looming workforce retirements coupled with nationwide low school enrollments are holding up industry progress and advancements. The ATEC Pipeline Report for 2018 (https://www.atec-amt.org/pipeline-report.html) projects that the mechanic population will decrease by 5% in the next 15 years, and that technical schools have the capacity to help close that gap. Textron Aviation Workforce Development has indicated hiring challenges for aviation maintenance professionals now.

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

Year	Headcount Per Year		Sem Credit Hrs Per Year	
	Full- Time	Part- Time	Full- Time	Part- Time
Implementation	12	0	432	0
Year 2	15	0	948	0
Year 3	22	0	1302	0

V. Employment

The demand by industry partners for our aviation maintenance graduates has never been higher than what it is now; there is a big need for replacement employees throughout aviation maintenance and aircraft servicing areas. The industry is facing a looming retirement of large numbers of people. Also, our current student enrollment is far from our capacity limit, as is the same for many more aviation maintenance programs across our nation. Our placement rates for students earning the BS degree is over 90%, and even students who leave the program early are able to obtain jobs. See the Market Analysis above for the needs facing the industry.

VI. Admission and Curriculum

A. Admission Criteria

University Admission Requirements:

Complete the precollege curriculum with at least a 2.0 GPA (2.5 for non-residents) **AND** achieve one of the following:

- A 21 or higher composite score on the ACT assessment **OR**
- A 1060 or higher on the SAT ERW+M if taken after March 2016 **OR**
- A 980 or higher on the SAT CR + M if taken before March 2016 **OR**
- Rank in the top third of your graduating class

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

B. Curriculum

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

Course #	Course Name	SCH = 18
AVM 101	Introduction to Aircraft Materials and Tooling Standards	3
AVM 102	Aviation Regulations, Compliance and Operations	2
AVM 111	Basic Aircraft Electricity	4
AVM 214	Introduction to Aircraft Propulsion Theory, Design and Systems	3
MET 111	Technical Graphics	3
	Humanities/Social Science elective	3

Year 1: Spring

Course #	Course Name	SCH = 18
AVM 201	Aircraft Metallic Primary Structures	3
AVM 203	Aircraft Environmental and Fire Protection Systems	3
AVM 205	Aircraft Landing Gear and Fluid Power Systems	3
AVM 207	Aircraft Electrical Systems	3
AVM 305	Introduction to Aircraft Avionics and Instrument Systems	3
ENGL 100	Expository Writing I	3

Year 2: Fall

Course #	Course Name	SCH = 18
AVM 216	Aircraft Propulsion Drive Systems	3
AVM 303	Introduction to Aircraft Composite Structures	3
AVM 306	Rotary and Fixed Wing Aircraft Design and Assembly	3
AVM 370	Advanced Aircraft Avionics and Instrument Systems	3
COMM 106	Public Speaking I	3
MATH 100	College Algebra	3

Year 2: Spring

Course #	Course Name	SCH = 16
AVM 301	Advanced Reciprocating Powerplant Technology	3
AVM 304	Aircraft Fuel Management and Metering Systems	3
AVM 322	Powerplant Operations and Troubleshooting	3
AVM 402	Advanced Gas Turbine Powerplant Technology	3
PHYS 113	General Physics I	4

Total Number of Semester Credit Hours.....70

VII. 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
*Andrew Smith	Professor	MS	Y	Aviation Maintenance, Flight, Airport Management	1.0
Steven Locklear	Instructor	MS	N	Aviation Maintenance	1.0
Monty Root	Lab Technician	BS	N	Aviation Maintenance	1.0

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

VIII. 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 (3)	$200,303	$200,303	$200,303
Administrators *(other than instruction time)*			
Graduate Assistants			
Support Staff for Administration (*e.g., secretarial*)			
Fringe Benefits *(total for all groups)*	$ 61,636	$ 61,636	$ 61,636
Other Personnel Costs			
Total Existing Personnel Costs – Reassigned or Existing	$261,939	$261,939	$261,939
Personnel - New Positions			
Faculty (1/2-time, then full-time)		$ 33,384	$ 66,768
Administrators *(other than instruction time)*			
Graduate Assistants			
Support Staff for Administration (*e.g., secretarial*)			
Fringe Benefits *(total for all groups)*		$ 10,273	$20,546
Other Personnel Costs			
Total Existing Personnel Costs – New Positions	0	$ 43,657	$ 87,314
Start-up Costs - One-Time Expenses			
Library/learning resources			
Equipment/Technology			
Physical Facilities: Construction or Renovation			
Other			
Total Start-up Costs	0	0	0

Operating Costs - Recurring Expenses			
Supplies/Expenses			
Library/learning resources			
Equipment/Technology			
Travel			
Other			
Total Operating Costs	0	0	0
GRAND TOTAL COSTS	$261,939	$305,596	$349,253

B. FUNDING SOURCES *(projected as appropriate)*	Current	First FY (New)	Second FY (New)	Third FY (New)
Tuition / State Funds		$126,144	$276,816	$380,184
Student Fees				
Other Sources				
GRAND TOTAL FUNDING	0	$126,144	$276,816	$380,184
C. Projected Surplus/Deficit (+/-) (Grand Total Funding *minus* Grand Total Costs)		($135,795)	($28,780)	$30,931

IX. Expenditures and Funding Sources Explanations

A. Expenditures

Personnel – Reassigned or Existing Positions
Currently, three faculty/staff positions support the Aviation Maintenance Management bachelor's degree option. There are seats available in existing classes to support the expected number of new enrollments in the associate's degree for the first year.

Personnel – New Positions
To meet the need for increased enrollment in the second year, additional sections for two courses will need to be added each semester. This will be possible with a half-time position. The following year, an additional two courses per semester will be added, taking the faculty position from half-time to full-time.

Start-up Costs - One-Time Expenses
No start-up costs are necessary, as equipment/technology is already available and being used for the bachelor's degree.

Operating Costs – Recurring Expenses
Additional recurring expenses are minimal, as equipment/technology is already available and being used for the bachelor's degree.

B. Revenue: Funding Sources

Tuition will be the primary funding source for the program. Using current K-State Polytechnic Kansas resident tuition rates ($292 per SCH), and the SCH table in Section IV Projected Enrollments, we calculated the tuition dollars that would be generated from the program each year.

Student fees total $465 per student for all Aviation Maintenance courses in the associate's degree. These fees are used for consumable lab expenses and are not included in this analysis.

C. Projected Surplus/Deficit

Program should begin experiencing a surplus in the third year, possibly sooner. Estimates for revenues assume the program is comprised of 100% in-state students. While there is no easy way to estimate what percent of the students in the program will be out-of-state students, we believe that a portion will be from out-of-state. Non- resident tuition is $788 per credit hour, over 2.5 times the tuition for in-state students. For each credit hour taken by an out-of-state student, there will be an increase of $496 to revenues generated. This will likely decrease the projected deficits in the first two years.

X. References

a. Aviation Technician Education Council (ATEC) March 2019 annual conference www.atec-amt.org
b. ATEC Pipeline Report for 2018 (https://www.atec-amt.org/pipeline-report.html)
c. Boeing Technician Outlook: 2018 – 2037 www.boeing.com

Kansas State University Technology and Aviation (Polytechnic)

Associate of Applied Science in Professional Pilot

Program Approval

I. General Information

A. Institution Kansas State University

B. Program Identification

Degree Level:	Associate of Applied Science
Program Title:	Professional Pilot
Degree to be Offered:	Associate of Applied Science in Professional Pilot
Responsible Department or Unit:	College of Technology and Aviation/School of Integrated
Studies CIP Code:	49.0102
Modality:	Face-to-Face
Proposed Implementation Date:	Spring 2020

Total Number of Semester Credit Hours for the Degree: 60

II. Justification

The aviation industry is experiencing a human resource shortage of skilled pilots and this will continue into the foreseeable future. The lack of human resources is causing many employers to no longer require a bachelor's degree for their pilot employees. Upon completion of the Federal Aviation Administration's certification requirements, this proposal will allow students to earn an associate's degree in 2 years and qualify for reduced aviation experience requirements for their Airline Transport Pilot Rating.

Kansas has a long history in fulfilling the needs of the aviation industry. As the only university in Kansas that offers pilot training (FAA Part 61 and 141), Kansas State University Polytechnic Campus has done its part in producing quality aviators to operate in the global airspace. As the aviation industry is undergoing pilot shortages that are expected to worsen, Kansas State University has an opportunity to aid in providing skilled aviators that are ready for the workforce. Kansas State University Polytechnic Campus has traditionally offered associates degrees and revitalizing this degree will lead to increased enrollment in a field that needs skilled workers.

III. Program Demand: Select one or both of the following to address student demand: Option B selected.

A. Survey of Student Interest

Number of surveys administered: …… _____ Number of completed surveys returned: ……. _____ Percentage of students interested in program: … _____

Include a brief statement that provides additional information to explain the survey.

B. Market Analysis

In their Pilot Supply and Air Service Update from May 2019, the Regional Airline Association reports that the expected pilot shortage is here and is impacting the air service to communities that are serviced by regional airlines. Regional airlines provide the only source of air service for 217 regional airports around the country. In a survey of the 22 airlines represented by the Regional Airline Association, not a single one requires a traditional 4 year degree. The associate's degree proposed will provide a structured training environment that will ensure the immediate success of its graduates while serving as a recognized "building block" for individuals seeking to further their education in the future.

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

Year	Headcount Per Year		Sem Credit Hrs Per Year	
	Full- Time	Part- Time	Full- Time	Part- Time
Implementation	20		600	
Year 2	25		1,350	
Year 3	35		1,800	

V. Employment

Pilot Outlook: 2018-2037

The 2018 Boeing Pilot & Technician Outlook, a respected industry forecast of personnel demand, projects that 790,000 new civil aviation pilots, 754,000 new maintenance technicians, and 890,000 new cabin crew will be needed to fly and maintain the world fleet over the next 20 years. The forecast is inclusive of the commercial aviation, business aviation, and civil helicopter industries.

The demand will stem from a mix of fleet growth, retirements, and attrition. Meeting this extraordinary demand will require proactive planning and collaboration within the global aviation industry. As several hundred thousand pilots and technicians reach retirement age over the next decade, educational outreach and career pathway programs will be essential to inspiring and recruiting the next generation of personnel. The aviation industry will need to adopt innovative training solutions to enable optimum learning and knowledge retention. Immersive technologies, adaptive learning, schedule flexibility, and new teaching methods will be needed to effectively meet a wide range of learning styles. The growing diversity and mobility of aviation personnel will also require instructors to have cross-cultural, cross-generational, and multilingual skills to engage with tomorrow's workforce.

VI. Admission and Curriculum

A. Admission Criteria

University Admission Requirements:

Complete the precollege curriculum with at least a 2.0 GPA (2.5 for non-residents) **AND** achieve one of the following:

- A 21 or higher composite score on the ACT assessment **OR**
- A 1060 or higher on the SAT ERW+M if taken after March 2016 **OR**
- A 980 or higher on the SAT CR + M if taken before March 2016 **OR**

- Rank in the top third of your graduating class

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

B. Curriculum

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

Course #	Course Name	SCH=14
AVT 100	Introduction to Aviation	3
Math 100	College Algebra	3
PPIL 111	Private Pilot	4
PPIL 113	Private Pilot Flight Lab	1
	Humanities/Social Science Elective	3

Year 1: Spring

Course #	Course Name	SCH=16
AVT 242	Aviation Meteorology	3
ENGL 100	Expository Writing I	3
Math 150	Plane Trigonometry	3
PPIL112	Professional Instrument Pilot	3
PPIL114	Professional Instrument Pilot Flight Lab	1
PSYCH 110	General Psychology	3

Year 2: Fall

Course #	Course Name	SCH=15
AVT 386	Aerodynamics	3
COMM 106	Public Speaking I	3
PHYS 113	General Physics I	4
PPIL 211	Professional Commercial Pilot	3
PPIL 212	Professional Commercial Pilot Flight Lab I	2

Year 2: Spring

Course #	Course Name	SCH=15
AVT 340	Human Factors in Aviation	3
PPIL 210	Aviation Safety	3
PPIL 213	Professional Commercial Pilot Flight Lab II	2
PPIL 262	Multi-Engine Ground School	1
PPIL 263	Multi-Engine Flight Lab	1
	Aviation Elective	2
	Economics Elective	3

Total Number of Semester Credit Hours.....60

VII. 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
William Gross	Professor	MS	Y	Pilot training, advanced aircraft operations	0.3
Eric Shappee	Professor	MS	Y	Pilot training, Safety	0.3
Troy Brockway	Professor	MS	Y	Pilot training, Safety	0.1
John Dahl	Teaching Assistant Professor	MS	N	Pilot training, Commercial Operations	0.3
Hugh Irvin	Instructor	BS	N	Pilot training	0.3

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

VIII. 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	$93,319	$93,319	$93,319
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)*	$26,623	$26,623	$26,623
Other Personnel Costs	0	0	0
Total Existing Personnel Costs – Reassigned or Existing	$119,942	$119,942	$119,942
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			
Equipment/Technology			
Physical Facilities: Construction or Renovation			
Other			
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
Travel	0	0	0
Other	0	0	0
Total Operating Costs			
GRAND TOTAL COSTS	$119,942	$119,942	$119,942

B. FUNDING SOURCES *(projected as appropriate)*	Current	First FY (New)	Second FY (New)	Third FY (New)
Tuition / State Funds		$288,712	$649,602	$866,136
Student Fees	0	0	0	0
Other Sources				
GRAND TOTAL FUNDING		$288,712	$649,602	$866,136
C. Projected Surplus/Deficit (+/-) (Grand Total Funding *minus* Grand Total Costs)		$168,770	$529,660	$746,194

IX. Expenditures and Funding Sources Explanations

A. Expenditures

Personnel – Reassigned or Existing Positions

No new courses will be offered for the two-year program and there are existing seats available in the professional pilot bachelor degree to support program growth during the first year. Additional sections of the required courses can be added during years 2 and 3 within the capacity of existing staff.

Personnel – New Positions

There is no anticipated need for additional personnel within the first three years.

Start-up Costs – One-Time Expenses

The bachelor's program in professional pilot currently has 27 flight training airplanes and 3 flight training devices (simulators) and has the capacity to handle the projected incoming students. There is no need for additional start-up costs.

Operating Costs – Recurring Expenses

Additional recurring expenses are minimal, as equipment/technology is already available and being used for the bachelor's degree.

B. Revenue: Funding Sources

Tuition will be the primary funding source for the program. Using current distribution of resident and non-resident (62% resident, 38% nonresident) enrollment in the bachelor degree, K-State Polytechnic Kansas resident tuition rates (resident = $292.65 per SCH, non-resident = $788.80 per SCH), and the SCH table in Section IV Projected Enrollments, we calculated the tuition dollars that would be generated from the program each year.

Flight training fees are billed separate from tuition and support all training operations through restricted fee accounts. These expenses are not included in this analysis as faculty and resources for classroom instruction are supported through tuition revenue.

C. Projected Surplus/Deficit

With no new faculty or resources needed, the program should experience a surplus from year one.

X. References

Boeing Commercial Airplanes. (2017). Pilot & Technician Outlook 2018-2037. Retrieved from http://www.boeing.com/commercial/market/pilot-technician-outlook/#/pilot-technician-outlook

Regional Airline Association Pilot Supply and Air Service Update. (May 2019). Pilot Supply & Air Service Update. Retrieved from https://www.raa.org/wp-content/uploads/2019/05/20190510-Pilot-Workforce-and-Training-Deck_May-Update_v3.pdf

Kansas State University

Master of Industrial Design

Program Approval

I. General Information

A. Institution Kansas State University

B. Program Identification

Degree Level:	Master
Program Title:	Industrial Design
Degree to be Offered:	Master of Industrial Design (M.INDD)
Responsible Department or Unit:	Interior Architecture and Product Design
CIP Code:	50.0404
Modality:	Face to Face
Proposed Implementation Date:	Fall of 2020

Total Number of Semester Credit Hours for the Degree: 170

II. Justification

Kansas State University proposes this new Master of Industrial Design program (M.INDD) be offered in collaboration with the established curriculum of the Master of Interior Architecture and Product Design (M.IAPD) program. While design is central to both 5-year programs, the M.IAPD is focused heavily on interior architecture, while the proposed M.INDD program focuses in on manufacturing and product development.

The Master of Industrial Design (M.INDD) program will:

- leverage 19 courses from the current M.IAPD curriculum for a total of 56 semester credit hours;
- utilize renovated, expanded, and existing architecture and design facilities; and
- incorporate current faculty strengths.

The proposed 5-year professional master's degree will be the only one of its kind in the country. Through the department's research of over 80 schools with industrial design degree programs, it was discovered that other schools with five-year degrees are 150+ hours to receive the bachelor's degree. Within this M.INDD curriculum, students will also be required (as in all the College of Architecture, Planning, and Design degree programs) to participate in a study abroad experience and/or complete a professional internship. The department also plans to develop opportunities for baccalaureate graduates from other Kansas Regents' institutions to transfer into this graduate program in order to attain this Master of Industrial Design degree while remaining in Kansas.

All programs in the College of Architecture, Planning and Design are accredited, and a few are ranked in the top 10 in the country. The College wants to assure that the new Master of Industrial Design will also be ranked highly. We looked at two schools - Georgia Tech and Iowa State University - as a comparison for the appropriate length and requirements for the program. Georgia Tech offers a Master's degree in Industrial Design, which is two years of course work over and above the 120 hours for completing a Bachelor's in Industrial Design. Those two years represent 50+ hours of course work in the Master's, which results in around 170 hours of credit at completion. The Master of Industrial Design at Iowa State is also a two-year program, adding 60+ hours of work on top of a 120 hour Bachelor's degree. It should also be noted that K-State's Master of Architecture program and its Master of Interior Architecture and Product Design are both at 170 hours for the total degree.

This M.INDD program bridges engineering, art, and business; these disciplines prepare the designer to:

- understand the manufacturing process (Industrial Engineering);
- best visually communicate ideas (Art); and
- bring the product to the market place (Entrepreneurship).

Capitalizing on existing expertise within the college, as well as with connections with key alumni and industry, this degree program will focus on products within interior environments (varied examples include designs of furniture, plumbing fixtures, and helicopter interiors – all current K-State industrial partners). These types of projects afford students great exposure to various industries, and there is potential to build an even broader base of industrial partnerships.

Additionally, the Kansas Department of Commerce has made Advanced Manufacturing a major initiative to entice manufacturers to Kansas (KDOC, 2017). This degree path will play a significant role in providing an industrial design talent pool for these manufacturers.

The National Association of Schools of Art and Design (NASAD), the accrediting agency for this program, establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and it provides assistance to institutions and individuals engaged in artistic, scholarly, educational, and other art/design-related endeavors. NASAD has been contacted and is aware of our seeking to add this degree. We are currently completing an application for New Program Approval in tandem with this proposal as is typical in their process.

III. Program Demand:

A. Survey of Student Interest

Number of surveys administered: ……	54
Number of completed surveys returned: …….	50
Percentage of students interested in program: …	24%

In Spring 2019, a survey was conducted of first-year students already interested in K-State's established Master of Interior Architecture and Product Design (M.IAPD) degree. The survey attempted to identify the number of students who might be interested in migrating to a new Master of Industrial Design (M.INDD) program when it is established. Of the 50 responses, 26 desired to pursue the M.IAPD degree track, 12 indicated a desire to pursue the M.INDD track, and 12 were undecided. These numbers indicate a significant desire for the M.INDD degree. This is particularly revealing since K-State has not advertised the proposed program during the recruitment of the surveyed cohort.

B. Market Analysis

Market Competition

From research of over 80 schools with industrial design programs, we created a map highlighting the locations of US institutions with industrial design programs (Figure 1). When viewed in consultation with Bureau of Labor Statistics job market demands map (Figure 2, located in Section V. Employment), one can see the need for greater education opportunities for industrial designers in the Midwest. The University of Kansas (BFA in Industrial Design) is the closest

Figure 1. Mapping of all Industrial Design schools in the US.
Source: Department of Interior Architecture & Product Design, K-State

institution with an industrial program to K-State, the southern 1-35 corridor and Kansas City. Iowa, Colorado, and Texas each have only one institution providing education opportunities to this field while Illinois has three. Of these programs, only Iowa State offers a master's degree. With the recent expansion of the Midwest Student Exchange Program (MSEP), K-State is uniquely positioned to draw students from not only Kansas and Missouri, but from MSEP states as well.

Potential Student Population

Currently, without advertising or having the degree in place, there is a significant number of students (12 to 16) ready to take the M.INDD degree. These numbers do not adversely impact the M.IAPD program; as proof, in 2018-19 the Interior Architecture and Product Design Department enrolled 18 more students into the M.IAPD's first-year curriculum than the entire college normally admits. This degree path is uniquely positioned to bring in a new population of design students.

The College of Architecture, Planning & Design and its alumni partners have been diligently working to develop relationships with Kansas high schools that have developed specialized curricula to introduce and mentor students toward careers in architecture, design, and engineering (e.g., Blue Valley Center for Advanced Professional Studies, Shawnee Mission Project Lead the Way, Olathe Environmental Design, KCK Sumner Academy, Topeka Center of Advanced Learning and Careers). These relationships will expand and also be valuable to the M.INDD degree program.

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

Year	Headcount Per Year		Sem Credit Hrs Per Year	
	Full- Time	Part- Time	Full- Time	Part- Time
Implementation	16	0	544	0
Year 2	16	0	1200	0
Year 3	16	0	1712	0

Please note, the implementation year of the degree program will start with second-year students due to the nature of the college's first-year program being a shared curriculum for all degree paths in the college.

V. Employment

From data provided by the Bureau of Labor Statistics, the regional locations needing Industrial Designers follow the major metropolitan areas of Denver, Dallas, Austin, Houston, Kansas City, Wichita, Omaha, St. Louis, Sioux Falls and Chicago. Only seven schools with industrial design degrees are in this region, and only one provides a master's degree. This means the majority of employees in this region are being educated outside of this state and region.

According to Nichols (2013) the industrial design field has a potential growth of 10.5% between 2010-2020 in the US. According to Job Outlook (2018, Figure 2), there is 5% growth in the US job market. Kansas specifically offers 60-150 industrial design jobs. A recent search of Indeed.com for job openings in this field totaled over 50, mostly in Kansas City metropolitan area, Wichita, Salina, and South Hutchinson. Two of the target states from which K-State recruits are Texas and California. California is one of the top states employing industrial designers, and California and Texas are two of the top states in payroll for industrial designers (Nichols 2013). The KSU degree also adds a robust furniture design curriculum allowing graduates alternative employment paths.

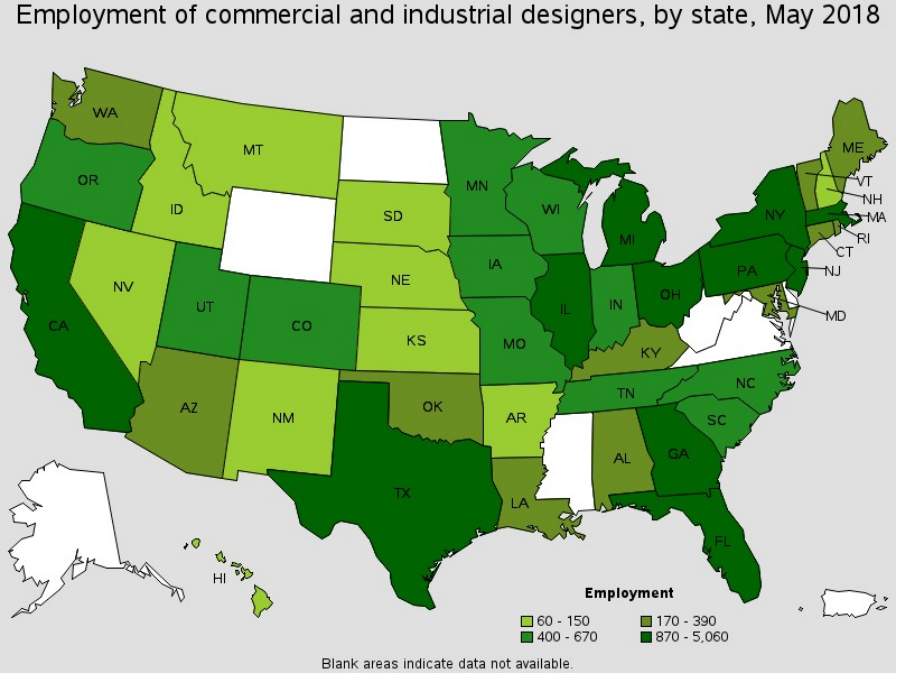

Figure 2. Employment of Commercial and Industrial Designers from the Occupational Employment Statistics (2018).

VI. Admission and Curriculum

A. Admission Criteria

Admission to the College

The College of Architecture, Planning and Design is a selective admission college that is based upon high school GPA and ACT/SAT scores; for transfer students, admission is based on transfer cumulative GPA.

An ACT score of 25 and a 3.5 GPA are requirements for guaranteed admission. Following the guaranteed admits, the department will then consider applications with a minimum score of 21 ACT and 3.0 GPA. During the first year of study and prior to being admitted to the M.INDD program, students are enrolled in Environmental Design Studies courses (refer to *B. Curriculum*: note the ENVD courses in the first and second semesters prior to being eligible for the M.INDD program). Here, approximately 180 students are exposed to foundational skills required for success in each of the college's master's programs. In the spring of their first year, after learning more about each program and profession, students apply to their desired master's program, continuing on this path until their attainment of a master's degree.

Approximately 3-6 transfer students are admitted each year; placement in the program depends on successful, prior educational coursework. Transfer students need a minimum of a 3.0 GPA for admission with a portfolio to decide on year level placement.

Noteworthy, the College of Architecture, Planning and Design maintains numerous articulation agreements with other educational institutions. Most transfers from these agreements come from UMKC. The UMKC agreement allows students from the KC Metro to begin coursework at UMKC in a duplicate curriculum. Students then transfer directly to K-State after their first or second year depending on degree path criteria, thus allowing

students the opportunity to remain closer to home to alleviate costs associated with degree completion. The M.INDD would require students from UMKC to transfer after the first year. We are now also articulating agreements with Johnson County Community College for similar transfer into the program.

Historically, this department has not had part-time students and does not foresee any in the future.

Admission to the Degree Program

Similar to existing majors in architecture, interior architecture and product design, landscape architecture, and regional and community planning, students will not declare a major in industrial design until early in the second semester of study. Progression to the degree-granting programs in the second year is based upon successful completion of the first year ENVD courses and cumulative K-State GPA. Because all graduate design programs are five-year master's degree programs and students in these programs will apply to the Graduate School mid-way through their third year, a strong cumulative GPA in the first year is important.

B. Curriculum: *Pre-Program Curriculum*

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

Course #	***Course Name***	***SCH***
ENVD 201	*Environmental Design Studio I*	*4*
ENVD 250	*History of Designed Environment I*	*3*
ENVD 203	*Survey of Design Professions*	*1*
ENVD 204	*Studio Seminar*	*1*
MATH 100	*College Algebra*	*3*
COMM 105	*Public Speaking 1A*	*2*
	General Elective	*3*
	TOTAL	***17***

Year 1: Spring

Course #	***Course Name***	***SCH***
ENVD 202	*Environmental Design Studio II*	*4*
ENVD 251	*History of Designed Environment II*	*3*
PHYS 115	*Descriptive Physics*	*5*
ENGL 100	*Expository Writing I*	*3*
	TOTAL	***15***

C. Curriculum: M.INDD Curriculum ***(****New Courses in* ***Bold)***

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

Course #	**Course Name**	**SCH**
IAPD 307	IAPD & INDD Design Studio I	5
IAPD 430	Visual Communication I	2
IAPD 456	Intro to Product/Industrial Design	2
IAPD 248	Fundamentals of Arch. Technology	3
ARCH 350	History of Designed Environment III	3
ENGL 200	Expository Writing II	3
	TOTAL	**18**

Year 2: Spring

Course #	**Course Name**	**SCH**
INDD 320	**INDD DESIGN STUDIO II**	5
IAPD 407	Design Workshop I	3
IAPD 412	Design Workshop Studio I	1

IAPD 431	Visual Communication II	2
IMSE 250	Intro. Manufacturing Processes & Systems	2
INDD 325	**Product Semantics**	3
	TOTAL	**16**

Year 3: Fall

Course #	Course	SCH
INDD 435	**INDD Studio III**	5
IAPD 803	Design Workshop II	3
IAPD 802	Design Workshop Studio II	1
INDD 310	**INDD Digital Applications**	2
INDD 350	**Human Factors**	3
IAPD 416	History of Furniture	3
	TOTAL	**17**

Year 3: Spring

Course #	Course Name	SCH
INDD 440	**INDD Design Studio IV**	5
INDD 500	**Materials & Manufacturing Processes**	3
LAR 311	Unlocking Creativity	3
IAPD 625	Lighting	3
ART 303	Graphic Design for Non-Majors	3
	TOTAL	**17**

Year 3: Summer

Course #	Course Name	SCH
IAPD 664/5	Summer Internship and Report	[7]
	OR	
	Study Abroad	[7]
	TOTAL	**7**

Year 4: Fall

Course #	Course Name	SCH
IAPD 644/5	Internship and Report	[14]
	OR	
	Study Abroad	[14]
	OR	
INDD 606	**INDD Design Studio V [5]** and Electives [9]	[14]
	TOTAL	**14**

Year 4: Spring

Course #	Course Name	SCH
INDD 811	**Design Research**	3
INDD 801	**INDD Design Studio VI**	5
INDD 813	**Design Workshop III**	3
INDD 814	**Design Workshop Studio III**	1
INDD 800	**Professional Practice**	3
ENTRP 340	Intro to Entrepreneurship	3
	TOTAL	**18**

Year 5: Fall

Course #	Course Name	SCH
INDD 810	**INDD Capstone Studio**	5
INDD 815	**Advanced Studio Programming**	2
ENTRP 350	Technology & Innovation Management	3
	General Electives	6
	TOTAL	**16**

Year 5: Spring

Course #	Course Name	SCH
INDD 822	**Advanced Industrial Design Studio**	[6]
	OR	
IAPD 824	Advanced Furniture Studio	[6]
IAPD 891	Contemporary Design Seminar	3
	General Electives	6
	TOTAL	**15**

Total Number of Semester Credit Hours.....170

VII. Core Faculty

Note: * Next to Faculty Name Denotes Director of the Program
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
David Brown	Assoc. Prof.	Masters	N	Furniture Design	.25
Steve Davidson	Assist. Prof.	Masters	N	Furniture Design	.25
Mekin Elçioğlu	Assist. Prof.	Ph.D.	Y	Industrial Design	1.0
Chris Fein	Assist. Prof.	Masters	N	Architecture	.25
Robyn Gibson	Instructor	Masters	N	Interior Architecture and Product Design	1.0
Aziza Cyamani	Visiting Prof.	Masters	Y	Industrial Design	.50
Hernan Gregorio	Instructor	Bachelors	N	Industrial Design	.75
Neal Hubbell	Assoc. Prof.	Masters	N	Interior Architecture and Contract Furniture	.50
Nathan Howe*	Assoc. Prof.	Masters	N	Architecture	.35
Katrina Lewis	Assoc. Prof.	Masters	N	Environmental Design	.50
Michael McGlynn	Assoc. Prof.	Masters	N	Architecture	.25
Kendra Kirchmer	Assist. Prof.	Masters	Y	Furniture Design	.50

Over the program's first three years we would be hiring three new faculty to support this degree path.
Number of graduate assistants assigned to this program..... **3**

VIII. Expenditure and Funding Sources

A. EXPENDITURES	First FY	Second FY	Third FY
Personnel – Reassigned or Existing Positions			
Faculty	86,697	173,394	260,092
Administrators *(other than instruction time)*	10,500	21,000	31,500
Graduate Assistants	5,625	11,250	16,875
Support Staff for Administration (*e.g., secretarial*)	5,000	10,000	15,000
Fringe Benefits *(total for all groups)*	33,020	73,324	106,344
Other Personnel Costs	0	0	0
Total Existing Personnel Costs – Reassigned or Existing	**140,842**	**288,968**	**429,811**
Personnel – New Positions			
Faculty	0	65,000	130,000
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)*	0	33,291	66,582
Other Personnel Costs - Fabrication Staff Position	0	28,000	56,000
Total Existing Personnel Costs – New Positions	**0**	**126,291**	**252,582**
Start-up Costs - One-Time Expenses			
Library/learning resources	2,000	2,000	2,000
Equipment/Technology	3,000	12,000	12,000
Physical Facilities: Construction or Renovation	0	0	0
Other	1,000	1,000	1,000
Total Start-up Costs	**6,000**	**15,000**	**15,000**
Operating Costs – Recurring Expenses			
Supplies/Expenses			
Library/learning resources	2,000	2,000	2,000
Equipment/Technology - Startup $6000 per faculty	2,000	2,000	2,000
Travel	4,000	4,000	4,000
Other	10,000	10,000	10,000
Total Operating Costs	2,000	2,000	2,000
	20,000	**20,000**	**20,000**
GRAND TOTAL COSTS	**166,842**	**450,259**	**717,393**

B. FUNDING SOURCES *(projected as appropriate)*	First FY (New)	Second FY (New)	Third FY (New)
Tuition / State Funds SCH from table times $339.06 UG	184,449	380,064	649,176
Student Fees Tech Fee times SCH	29,920	59,840	94,160
Other Sources	28,000	28,000	28,000
GRAND TOTAL FUNDING	242,369	467,904	771,336
C. Projected Surplus/Deficit (+/-) (Grand Total Funding *minus* Grand Total Costs)	75,527	17,645	53,943

IX. Expenditures and Funding Sources Explanations

A. Expenditures
Personnel – Reassigned or Existing Positions

Given the nature of the overlap between the current M.IAPD degree and the M.INDD degree, only a few faculty would need to be reassigned a portion of their FTE.

Reassigned to the Master of Industrial Design Program:

David Brown	.25 FTE	Mekin Elçioğlu	.50 FTE
Kendra Kirchmer	.50 FTE	Nathan Howe	.35 FTE

Existing Positions:

Steve Davidson	.25 FTE	Aziza Cyamani	.50 FTE
Chris Fein	.25 FTE	Neal Hubbell	.50 FTE
Hernan Gregorio	.75 FTE	Katrina Lewis	.50 FTE
Robyn Gibson	1.0 FTE	Michael McGlynn	.25 FTE

Regarding the instructor with the baccalaureate degree: as this Master's degree is a 5-year program, with no Bachelor's option, students take up to around 120 hours as undergraduate status; this faculty member will only be teaching in this undergraduate realm. The department does have a completed "equivalent experience" document filed with the Provost's office indicating that this instructor meets all criteria to teach.

Personnel – New Positions

Over the course of the first three years of the added Industrial Degree path, there would be increased income to the department due to added credit hour production and shared percentage of credit hours outside the department taken by the industrial design students. In the first year this would yield ~$100,000. The second and third year of the program the yield would increase by ~$150,000 for each year. Three additional faculty hires would need to be made, one in the second year and another two in the third year. This additional income from increased credit hour production would be used to justify the need for these hires.

With the addition of more Workshop courses we would need additional staffing in our fabrication lab. This would amount to a full-time technical staff position.

Start-up Costs – One-Time Expenses

There are few startup costs needed for this degree path. Seaton and Regnier Halls were designed to increase enrollment from 700-850. Impact of additional students would only add a need for additional studio desks, work benches in the workshop, and 10 additional seats in the computer lab.

The only other start-up costs would be seen in equipment and startup packages for the three new faculty. Over the course of the first three years, this would amount to $6,000 for each new faculty member.

Operating Costs – Recurring Expenses

The current department operating costs are approximately $50,000 per year; the additional $20,000 per year reflected above is an estimate of the general operating expenses the additional faculty and student body administration would incur.

B. Revenue: Funding Sources

The increased semester credit hour production is the major funding source. A few core courses taken by both design degree programs would increase semester credit hour production with no additional funding source.

Additionally, there is a $55 technology fee for each semester credit hour. The estimated technology fee produced with this new degree program would be: year one, $30,000; year two, $60,000; and year three,
$100,000. These funds would be targeted to defray the start-up costs.

C. Projected Surplus/Deficit

Given projected enrollment numbers, increase in semester credit hour production, and the leveraging of current courses within college and department, there is no perceived deficit. Over the course of 3 years the total projected surplus of approximately $150,000 is after the addition of new personnel expenses. If the entire 5- year program is considered with the additional semester credit hour production, the surplus would be approximately an additional $500,000.

X. References

Job Outlook. (2018). *Job outlook for: industrial designers.* Retrieved from https://job-outlook.careerplanner.com/Industrial-Designers.cfm

Kansas Department of Commerce. (2017). *Kansas data book 2017.* Retrieved from https://www.kansascommerce.gov/wp-content/uploads/2018/11/DB2017.pdf

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Occupational Employment Statistics (2018). *Occupational employment and wages, May 2018, 27-1021 Commercial and Industrial Designers.* Retrieved from https://www.bls.gov/oes/current/oes271021.htm#st

Figures

Figure 1. Interior Architecture and Product Design. (2019). *Map of United States industrial design degree programs.*

Figure 2. Occupational Employment Statistics (2018). *Occupational employment and wages, May 2018, 27-1021 Commercial and Industrial Designers.* Retrieved from https://www.bls.gov/oes/current/oes271021.htm#st

University of Kansas Medical Center

Bachelor of Science in Diagnostic Science

Program Approval

I. General Information

A. Institution KU Medical Center

B. Program Identification

Degree Level:	Bachelor's Degree
Program Title:	Diagnostic Science
Degree to be Offered:	BS
Responsible Department or Unit:	Department of Respiratory Care and Diagnostic Science
CIP Code:	#51.0999
Modality:	Face-to-Face
Proposed Implementation Date:	Fall 2020

Total Number of Semester Credit Hours for the Degree: 120 total and 42-60 concentration

II. Clinical Sites: Does this program require the use of Clinical Sites? [yes]

The proposed **Bachelor of Science (BS)** degree will transition the current three certificate programs (Cardiovascular Sonography, Diagnostic Ultrasound, and Nuclear Medicine) toward a bachelor's degree. These existing programs have a clinical site structure that is predominately within the University of Kansas Health System (UKHS). Also, there are 2-3 clinical sites in health facilities within the Kansas City metropolitan area. This BS program will serve as a collaborative degree offering between KUMC, KU-Edwards, and KU- Lawrence campuses.

III. Justification

The proposed BS degree is intended as an option for a diverse population of health care professionals. Health care systems are a large and complex industry composed of a wide collection of practice domains that must be integrated to deliver quality care across the lifespan, and in the context of rapidly changing knowledge. The BS program of study intentionally is designed to be flexible, to accommodate multiple content concentrations while providing enhanced academic training and the highest quality clinical experiences. The BS program will enable undergraduate students to specialize in a healthcare field leading to 100% job placement. Graduates from this program will be able to pursue further training in related health care and academic fields including graduate school, clinical doctorates, medical doctorates, or academic and administrative studies suited to their area of emphasis.

The BS degree will serve as a compelling option for academic preparation for many of the KU undergraduate students seeking health-related careers. Currently, students enroll in certificate programs (in Cardiovascular Sonography, Diagnostic Ultrasound, and Nuclear Medicine) consisting of 42-60 credit hours of didactic and clinical coursework. Further, these credit hours do not apply to transferrable college credit even though the curriculum is mandated by their respective medical-specialty accrediting agencies. Therefore, we have designed BS concentrations that are organized around a central core of undergraduate courses, and will build on current undergraduate prerequisite courses offered on KU Edwards or KU Lawrence campuses. The synergy between

KU Edwards, KU-Lawrence, and KUMC programs will help students matriculate into a unique BS upon completion of specialized courses and clinical training on the KUMC campus. This option will help prepare students to complete a degree leading to a job upon graduation, rather than graduating and then returning to complete a 12- 21 month certificate program.

The additional BS degree program will be housed in the existing Respiratory Care and Diagnostic Science (RCDS) department, expanding on the two current possible concentrations in respiratory care by addition of three concentrations in diagnostic science, as listed below. The RCDS department was formed on the foundation of a well-established Respiratory Care bachelor's degree program with a rich history of providing healthcare graduates to Kansas for over 40 years. Currently, approximately 90% of the students enrolling in the current Respiratory Care program are from Kansas, and most stay in the State upon graduation.

Current and Proposed degree programs and concentrations in RCDS:

A. Current: Bachelor's of Science in Respiratory Care
Current Respiratory Care Concentrations:
- Respiratory Care Education (Direct Entry Bachelor's Degree)
- Respiratory Care Education (Associates + RRT to Bachelor's Degree)

B. Proposed: Bachelor's of Science in Diagnostic Science
- Cardiovascular Sonography (Direct Entry Bachelor's Degree)
- Diagnostic Ultrasound & Vascular Technology (Direct Entry Bachelor's Degree)
- Nuclear Medicine Technology (Direct Entry Bachelor's Degree)

Creating a new bachelor's degree that includes these three content tracks will fortify the integrated healthcare education environment in Kansas. This rich interprofessional learning experience will enhance the training of the BS graduates, by providing the advanced technical and professional skills suited for the healthcare workplace of the future. This academic setting also will create an interprofessional environment for the faculty of this program, through expanded opportunities for professional development and for collaborations in research endeavors and clinical practice.

IV. Program Demand and Benefit: Including Past and Current Student Survey

Hospitals in Kansas have a consistent demand to fill job vacancies in the specialized areas of the three Diagnostic Science programs. A review of 11 remaining programs in the Midwest United States from varied specialties shows that 8 are degree granting and 3 are certificate programs. Two of the degree granting programs are at the associate degree level and six offer bachelor's degrees. Also, there are two programs offering a bachelor's degree that provides a master's degree option.

Results of a survey from 35 current students and recent graduates provides descriptive information regarding the attractiveness of a BS degree and can be found in *Appendix A.* Almost all (97%) indicated they currently hold a bachelor's degree. A majority (77%) currently enrolled in a certificate program indicated they would like to see that training offered as a bachelor's degree. Further, 86% of the current and past students reported they would have chosen to pursue a healthcare bachelor's degree over a certificate program if they were aware of such a degree program early in their academic career.

Many students graduate from four-year degree programs in Kansas with generalist undergraduate degrees, then later find they must return to educational programs and assume additional debt to be prepared to work in the healthcare field. Historically, over 60% of all students who have enrolled in the three existing certificate programs

already possessed a bachelor's degree. Some students choose to earn a second bachelor's degree focused in their specialization, and they are likely to spend over $25,000 on tuition and fees to obtain that training. Others choose a certificate program and enroll in 12 - 21 months of rigorous didactic and clinical curricula. Upon completion of a certificate program, however, a graduate does not earn an academic degree nor are any of these certificate credits transferable to other academic degrees, programs, or institutions. For instance, a post-baccalaureate who chooses to pursue a medical technology certificate may spend $6,000 - $17,000 and enroll in 40-60 hours of coursework. These course credits also, generally, are not transferrable toward a degree should this student subsequently choose to pursue an advanced academic degree. The proposed BS degree will provide a compelling, attractive, and viable option to undergraduate students planning healthcare careers. Upon completing the BS course of study, students will not only have the academic credentials, but will have met all criteria required to obtain the license and credentialing necessary to practice in a healthcare setting in Kansas.

From the financial aid perspective, the BS program has clear benefits for the students and for risk-reduction by the institution. Enrollment in a bachelor's degree rather than a certificate program simplifies the process for seeking financial aid and offers more options for obtaining support. Although eligible for financial aid, certificate students seeking federal aid are subject to specific requirements and, if all requisite documentation is not secured, the institution's financial aid status is placed at risk.

V. Projected Enrollment for the Initial Three Years of the Program Table 1. Projected Enrollment

Year		Headcount Per Year		Sem Credit Hrs Per Year	
		Full- Time	Part-Time	Full- Time	Part-Time
Implementation	(AY 2020-21)	15	0	450	0
Year 2	(AY 2021-22)	15	0	900	0
Year 3	(AY 2022-23)	15	0	900	0

***NOTE:** Students arrive for this degree program during their junior year.

VI. Employment

Job growth in the Diagnostic Science fields is expected to increase between 13% and 24% (depending on the specialty) over the next decade[1]. At this same time, some health professions accrediting agencies are eliminating certificate-only programs. Having KU Medical Center's current certificate programs shift to a degree-granting program proactively will anticipate the need for diagnostic technologists trained in an accredited program, fulfill the emerging needs in academic education, and allow our graduates to compete with other bachelor's degree specialists. Our graduates will possess a healthcare-related bachelor's degree and will be eligible for national certification in their area of health care concentration.

This degree option can improve the opportunity for a more rapid career advancement and markedly enhance the prospects for higher immediate salaries with a concurrent return on investment, as well as a greater life-time earning potential. There clearly are advantages to a rapid return on educational investment in an acknowledged growth profession. The Bureau of Labor Statistics report a median annual income of $49K (Cardiovascular Technologist;[2]), $65K (Medical Sonographer;[3]), and $70K (Nuclear Medicine Technologist;[4]) for the Kansas City region.

VII. Admission and Curriculum

A. Admission Criteria

Prior to entering the program students must complete two years of undergraduate college course work with an overall grade point average (GPA) of at least a 2.5 (on a 4.0 scale). Forty-six hours of prerequisite course work must be from an educational institution that is regionally accredited (Table 2). In addition, student transcripts must document an individual course grade of no less than "C" on each prerequisite course. Students will "shadow" a healthcare professional in the discipline they are applying for in order to learn more about the profession. The shadow experience should be at least two hours with a professional during clinical duties. A professional statement and 3 letters of professional reference will be required. Due to our current military degree advancement program, prior military experience in a medical capacity will be weighted favorably in admission decisions.

Table 2. Prerequisite Coursework (46 credit hours)

	Basic Sciences	
BIOL 240/241	Fundamentals of Human Anatomy *(w/ lab recommended)*	4 hrs
BIOL 246/247	Principles of Human Physiology *(w/ lab recommended)*	3 hrs
BIOL 200/203 or BIOL 400	Microbiology *(w/ lab recommended)*	3 hrs
CHEM 110 or CHEM 130	Introduction to Chemistry *(w/ lab recommended)*	3 hrs
PHSX 111 or PHSX 114	Introduction to Physics	3 hrs
	Mathematics	
MATH 101	College Algebra	3 hrs
MATH 365	Elementary Statistics	3 hrs
	English	
ENGL 101	English Composition	3 hrs
ENGL 102 or BUS 105	Critical Reading & Writing or Business Writing	3 hrs
	Oral Communication	
COMS 130	Speaker-Audience Communication	3 hrs
	Humanities	
HWC 2014	Western Civilization (*preferred*)	3 hrs
PHIL 140 or PHIL 160	Intro to Philosophy (*preferred*)	3 hrs
	Social Sciences	
PSYC 104	General Psychology (*preferred*)	3 hrs
SOC 104	Sociology (*preferred*)	3 hrs
	Other	
HEIM 230	Medical Terminology	3 hrs

B. Curriculum (3 specializations)

Cardiovascular Sonography Specialization - There are two tracks in the Cardiovascular Sonography specialization.

Adult Echocardiography & Vascular Track: The BS with an **Adult Echocardiography & Vascular Track** at KU Medical Center is an entry-level professional degree program, offered as a full-time, two-year (5 semester) course of study at the undergraduate level and includes academic, practicum, and clinical preparation. This is an entry-level program that has been designed to provide entering students with the additional skills necessary to prepare them for a successful career as a credentialed Registered Diagnostic Cardiac Sonographer (RDCS) and Registered Vascular Technologist (RVT). Practicum and clinical experiences are offered throughout the Kansas City metropolitan area.

Degree Requirements

- Successful completion of all listed prerequisites (Table 2).
- Cumulative grade-point average (GPA) of at least 2.5 for all KU undergraduate coursework.
- Successful completion of all required clinical hours.
- Successful completion of all listed courses (Table 3).
    - Clinical course credit hours (58)

Table 3: Cardiovascular Sonography (Adult Echocardiography & Vascular Track) Curriculum

Year 1 Fall	Year 1 Spring	Year 1 Summer
CVSG 400: Cardiovascular Anatomy & Physiology (1)	CVSG 530: Adult Echocardiography I (4)	CVSG 535: Adult Echocardiography II (5)
CVSG 500: EKG I (1)	CVSG 415: Physics II (2)	CVSG 610: Clinical Practicum III (2)
CVSG 505: Patient Care I (1)	CVSG 605: Clinical Practicum II (7)	CVSG 515: Congenital Heart Disease (1)
CVSG 410: Physics I (2)	CVSG 510: CV Assess. and Special Procedures (1)	
CVSG 600: Clinical Practicum I (7)		

Year 2 Fall	Year 2 Spring	
CVSG 405: Vascular Anatomy & Physiology (1)	CVSG 560: Vascular Ultrasound II (5)	
CVSG 550: Vascular Ultrasound I (4)	CVSG 620: Clinical Practicum V (7)	
CVSG 615: Clinical Practicum IV (7)		
	Pre-reqs = 46	
	Electives = 16	
	CVS hours = 58	
	Degree total hours =120	

Adult & Pediatric Echocardiology track: The BS with an **Adult & Pediatric Echocardiology track** at KU Medical Center is an entry-level professional degree program, offered as a full-time, two-year (5 semester) course of study at the undergraduate level and includes academic, practicum, and clinical preparation. This is an entry-level program that has been designed to provide entering students with the additional skills necessary for a successful career as a credentialed Registered Cardiac Sonographer with specialty training in pediatric echocardiography (PE) through ARDMS. Practicum and clinical experiences are offered throughout the Kansas City metropolitan area.

Degree Requirements

- Successful completion of all listed prerequisites (Table 2).
- Cumulative grade-point average (GPA) of at least 2.5 for all KU undergraduate coursework.
- Successful completion of all required clinical hours.
- Successful completion of all listed courses (Table 4).
    - Clinical course credit hours (58)

Table 4: Cardiovascular Sonography (Adult & Pediatric Echocardiology Track) Curriculum

Year 1 Fall	**Year 1 Spring**	**Year 1 Summer**
CVSG 400: Cardiovascular Anatomy & Physiology (1)	CVSG 530: Adult Echocardiography I (4)	CVSG 535: Adult Echocardiography II (5)
CVSG 500: EKG I (1)	CVSG 415: Physics II (2)	CVSG 610: Clinical Practicum III (2)
CVSG 505: Patient Care I (1)	CVSG 605: Clinical Practicum II (7)	CVSG 515: Congenital Heart Disease (1)
CVSG 410: Physics I (2)	CVSG 510: Assess. and Special Procedures (1)	
CVSG 600: Clinical Practicum I (7)		

Year 2 Fall	**Year 2 Spring**		**Professional Skills in Healthcare**
CVSG 420: Pediatric Anatomy and Physiology (1)	CVSG 575: Pediatric Echo II (5)		
CVSG 570: Pediatric Echo I (4)	CVSG 620: Clinical Practicum V (7)		
CVSG 615: Clinical Practicum IV (7)			
	Pre-reqs = 46		
	Electives = 16		
	APE hours = 58		
	Degree total hours = 120		

Diagnostic Ultrasound & Vascular Technology Specialization

The BS with and **Diagnostic Ultrasound & Vascular Technology** specialization at KU Medical Center is an entry-level professional degree program, offered as a full-time, two-year (5 semester) course of study at the undergraduate level and includes academic, practicum, and clinical preparation. This is an entry-level program that has been designed to provide entering students with the additional skills necessary for a successful career as a credentialed Registered Diagnostic Medical Sonographer (RDMS) with specialty training in Ultrasound and Vascular Sciences through ARDMS. Practicum and clinical experiences are offered throughout the Kansas City metropolitan area.

Degree Requirements

- Successful completion of all listed prerequisites (Table 2)
- Cumulative grade-point average (GPA) of at least 2.5 for all KU undergraduate coursework
- Successful completion of clinical hours
- Successful completion of all listed courses (Table 5)
    - Clinical course credit hours (60)

Table 5: Diagnostic Ultrasound & Vascular Technology curriculum

Year 1 Fall	Year 1 Spring	Year 1 Summer
DUVT 300: Intro to Sono Diagnostic & Medical Law Ethics (3)	DUVT 415: Advanced Sonography: Principles & Instrumentation (3)	DUVT 520: Vascular Technology I (3)
DUVT Sonography: Principles & Instrumentation (3)	DUVT 425: Women's Imaging II (3)	DUVT 410: Abdominal Sonography III (2)
DUVT 500: Abdomen and Small Parts I (3)	DUVT 405: Abdomen II (3)	DUVT 610: Clinical Internship III (3)
DUVT 420: Women's Imaging I (2)	DUVT 510: Small Parts Sonography (Breast) (1)	
DUVT 600: Clinical Internship I (3)	DUVT 605: Clinical Internship II (4)	

Year 2 Fall	Year 2 Spring		
DUVT 515: Vascular Technology II (2)	DUVT 655: Senior Seminar II (4)		
DUVT 650: Senior Seminar I (3)	DUVT 625: Clinical Internship V (8)		
DUVT 620: Clinical Internship IV (7)			
	Pre-reqs = 46		
	Electives = 14		
	DUVT hours = 60		
	Degree total hours = 120		

Nuclear Medicine Technology Specialization

The BS with **Nuclear Medicine Technology** specialization at KU Medical Center is an entry-level professional degree program, offered as a full-time, one-year (3 semesters) course of study at the undergraduate level and includes academic, practicum, and clinical preparation. This is an entry-level program that has been designed to provide entering students with the additional skills necessary to prepare them for successful careers as credentialed Registered Nuclear Medicine Technologists. Credentialing is through the American Registry of Radiologic Technologists (ARRT) and the Nuclear Medicine Technology Certification Board (NMTCB).
Practicum and clinical experiences are offered throughout the Kansas City metropolitan area.

Degree Requirements

- Successful completion of all listed prerequisites (Table 2)
- Successful completion of 42 hours of upper level course work
- Cumulative grade-point average (GPA) of at least 2.5 for all KU undergraduate coursework
- Successful completion of all required clinical hours
- Successful completion of all listed courses (Table 6)
    - Clinical course credit hours (42)

Table 6: Nuclear Medicine Technology curriculum

Year 1 Fall	Year 1 Spring	Year 1 Summer
NMED 305: Intro to Nu Med, Medical Law and Ethics (3)	NMED 520: Nuclear Instrumentation, Med. Informatics & Quality Assurance (2)	NMED 620: Seminar (2)
NMED 510: Nuc Chem & Physics (2)	NMED 405: Radiopharmacy II (1)	NMED 615: Clinical Internship III (6)
NMED 400: Radiopharmacy I (3)	NMED 505: Clinical Procedures II (5)	
NMED 500: Clinical Procedures (3)	NMED 610: Clinical Internship II (8)	
NMED 605: Clinical Internship (6)		
NMED 300: Intro to Healthcare (1)		
	Pre-reqs = 46	
	Electives = 32	
	Nuclear Med. hours = 42	
	Degree total 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
Turi Wiedner	Clinical Instructor	Masters	N	Program Director* Cardiovascular Sonography and Diagnostic Ultrasound & Vascular Technology	1.0
Kellee George	Adjunct Clinical Instructor	Masters	N	Program Director* Nuclear Medicine Technology	0.5
Vicky Martin	Adjunct Clinical Instructor	Masters	N	Clinical Coordinator Cardiovascular Sonography and Diagnostic Ultrasound & Vascular Technology	0.5
TBD	Adjunct Instructor	Masters	N	Instructor	0.5
TBD	Adjunct Instructor	Bachelors	N	Instructor	0.25
TBD	Adjunct Instructor	Bachelors	N	Instructor	0.25

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

IX. Expenditure and Funding Sources

A. EXPENDITURES	First FY	Second FY	Third FY
Personnel – Reassigned or Existing Positions			
Faculty	157,500	215,250	220,632
Administrators *(other than instruction time)*			
Graduate Assistants			
Support Staff for Administration (*e.g., secretarial*)			
Fringe Benefits *(total for all groups)*	45,164	61,185	62,175
Other Personnel Costs			
Total Existing Personnel Costs – Reassigned or Existing	202,664	276,435	282,807
Personnel – New Positions			
Faculty			
Administrators *(other than instruction time)*			
Graduate Assistants			
Support Staff for Administration (*e.g., secretarial*)	22,500	23,063	23,639
Fringe Benefits *(total for all groups)*	7,738	7,841	7,947
Other Personnel Costs			
Total Existing Personnel Costs – New Positions	30,238	30,904	31,586

Start-up Costs - One-Time Expenses			
Library/learning resources			
Equipment/Technology	4,000		
Physical Facilities: Construction or Renovation			
Other			
Total Start-up Costs			
Operating Costs – Recurring Expenses			
Supplies/Expenses		5,000	5,000
Library/learning resources			
Equipment/Technology		20,000	30,000
Travel		3,000	3,000
Other: (recruitment and advertising)		2,000	2,000
Total Operating Costs		30,000	40,000
GRAND TOTAL COSTS	236,902	337,339	354,393

B. FUNDING SOURCES *(projected as appropriate)*	Current	First FY (New)	Second FY (New)	Third FY (New)
Tuition / State Funds		150,750	281,400	301,500
Student Fees		30,990	57,848	61,980
Other Sources: (transfer current cert. program's RFF)		30,000		
Other Sources: (cert. program teach-out)		44,750	44,750	
GRAND TOTAL FUNDING		256,490	383,998	363,480
C. Projected Surplus/Deficit (+/-) (Grand Total Funding *minus* Grand Total Costs)		19,588	46,660	9,087

X. Expenditures and Funding Sources Explanations

A. Expenditures Personnel – Reassigned or Existing Positions

We plan to reassign current program directors and instructors to newly established state budget lines. We expect all faculty will possess the required degree per accreditation standards and practice credentials, with a background in relevant healthcare settings.

Personnel – New Positions

We plan to hire a single administrative staff position at 0.50 FTE. (Please see below.)

Pre-launch AY

1) There will not be a faculty cost associated with pre-launch, as the current Department Chair will work with current certificate program directors on developing bachelor's level curriculum from their current certificate course curriculum. This will be a planned and gradual process over an approximate one-year period.
2) Administrative staff (FTE 0.5): This individual is essential to support the Program Directors and Department Chair in organizing and development of the bachelor's curriculum and to interface with potential students. Also, this individual will communicate with additional clinical affiliate sites as needed. The pre-launch administrative staff cost can be covered by the current certificate program's RFF budget.

First AY

1) Program Director #1 (FTE 1.0): This non-tenure track, modified title (Clinical) faculty position will be the Program Director for the Cardiovascular Sonography and Diagnostic Ultrasound & Vascular Technology programs. A Program Director that serves two programs will be a cost-effective solution since both didactic and clinical courses can be taught by personnel from either specialty. Therefore, we can eliminate duplication of courses and instructors. The Program Director must possess certification as a Cardiovascular Sonographer with practice credentials to meet accreditation requirements. This person also will possess a master's degree.
2) Program Director #2 (FTE 0.5): This adjunct faculty position will be the Program Director for the Nuclear Medicine Technology program. This Program Director can serve in a mixed academic and clinical capacity; therefore, serving as an academic capacity of 0.5 FTE. The Program Director must possess certification as a Nuclear Medicine Technologist with practice credentials to meet accreditation requirements. This person also will possess a master's degree.
3) Clinical Coordinator (FTE 0.5): This adjunct clinical instructor position primarily will focus on developing relationships with clinical affiliates and supervisors and coordinating contracts with those sites according to institutional protocols. This faculty member will possess a master's degree; the role will involve a limited degree of teaching.
4) Faculty – other (FTE 0.25): This adjunct instructor position will provide foundation content for first year students. This content is essential to form a basic understanding of the principles needed prior to patient contact. This faculty member will possess a bachelor's or master's degree and be hired as an adjunct instructor.

Second AY:

1) Faculty – other (FTE 0.5): This adjunct instructor position will provide foundation content for first year students. Also, this instructor will provide clinical simulations and serve as a clinical instructor in clinical affiliate site(s). This faculty member will possess a bachelor's or master's degree and be hired as an adjunct instructor.
2) Faculty – other (FTE 0.25): This adjunct instructor position will provide foundation content for first year students. Also, this instructor will provide clinical simulations and serve as a clinical instructor in clinical affiliate site(s). This faculty member will possess a bachelor's or master's degree and be hired as an adjunct instructor.

Start-up Costs – One-Time Expenses

Existing computers and desks can be used for faculty and instructors during the first year. A personal computer ($2K) and desk ($2K) will be needed for the administrative assistant. Two sets of computers and desks will be purchased in the 2nd year for the 2 adjunct instructor positions.

Operating Costs – Recurring Expenses

1) Supplies: All 3 programs require medical supplies during all semesters. These supplies are used during practice with the diagnostic tests required for each discipline.
2) Travel: Funds will be needed to support faculty travel for on-site visits to potential clinical sites and later to attend professional meetings focused on best teaching and clinical practices for students.
3) Other – OOE:
   a. *Accreditation costs, clinical lab equipment, office supplies, office equipment*: Accreditation costs for annual renewal and periodic site visits. Ongoing expenses will be needed for clinical lab equipment, computers, and software. Regular office supplies and equipment will be required for routine operations.
   b. *TYPHON*: This comprehensive software platform allows for efficient tracking of student clinical placements, student performance at these placements, and feedback from supervisors about students. This documentation is useful in planning the clinical placements and also will provide a source for documentation required by the accreditation process.
   c. *Travel to recruit clinical sites/preceptor training*: Faculty will need to establish relations with clinical training sites, to engage regularly with on-going relations, and to train new preceptors prior to training of students at each site. These activities will be conducted virtually, when possible, although we anticipate a need for in-person contact during the initial phases of program implementation and when establishing a new clinical site.
   d. *Recruitment/advertising*: We will support recruiting of new students through visits to campuses and military bases, career fairs, and alumni publications, and we will purchase advertising in at least one nationally-visible venue.

B. Revenue: Funding Sources

The cost of the new degree program will be supported through a combination of funding sources. The SHP Dean's office is committed to providing some initial support for this program in Year 01, by means of the current certificate program's RFF funds. Current and on-going enrollment in the certificate programs will provide revenue during the pre-launch year. Subsequent costs will be offset by tuition revenue and student fees.

The tuition rate and student fees will be similar to other bachelor's-level courses in the School of Health Professions. Course fee revenue ($55 per credit hour) will be managed in a restricted fee (RFF) account set up for this specific purpose. Course fees will be used for maintaining equipment for students, clinical preceptor costs for students, and practice registry tests.

C. Projected Surplus/Deficit

Given these sources, the program is expected to have a positive revenue stream at the end of the 1st year (FY2022) as detailed in Section IX, Expenditures and Funding Sources.

XI. References

Employment:

1. Statistics, U.S.B.o.L. *Healthcare / Diagnostic Sonographers & Cardiovascular Technologists.…* 2015 12/17/2015 [cited 2015 Dec 11]; Available from: https://www.bls.gov/ooh/healthcare/diagnostic-medical-sonographers.htm.

2. Statistics, U.S.B.o.L. *Healthcare / CVTs in Kansas*. 2015 May 2016 [cited 2016 May]; Available from: https://www.bls.gov/oes/current/oes292031.htm.

Appendix A: Past and Current Certificate Program Survey Results
*NOTE: All survey results with responses to open-ended questions can be found in accompanying document, "*Survey Results*".