Supplemental Information
Course and Curriculum items
FS Academic Affairs Committee Review
December 6, 2016 Meeting

College of Technology and Aviation, K-State Polytechnic (11-4-16)

NON-EXPEDITED UNDERGRADUATE COURSE MODIFICATIONS
Courses Numbered 000-599

School of Integrated Studies

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FROM:

AVT 560. Airport ~~Master Planning and~~ Design. (4) Spring. ~~Requirements and resources used to plan, fund, and construct an Airport Master Plan (AMP) and an Airport Layout Plan (ALP) with emphasis on FAR Part 77 and AC 150/5300-13 requirements. Student case study research will be integrated to assess a project's feasibility. Three hours lecture and three hour lab per week.~~ Pr.: AVT 360, AVT 361, and AVT 462.
K-State 8:
- Global Issues and Perspective

TO:

AVT 560. Airport Design. (4) Spring. Student teams with faculty and industry advisors prepare to enter their work in the Airport Cooperative Research Program's (ACRP) national design competition for universities addressing issues relating to airports and the National Airspace System. The competition focuses on design solutions in the following broad areas: Airport Operation and Maintenance, Runway Safety/Runway Incursions/ Runway Excursions, Airport Environmental Interactions, and Airport Management and Planning. Pr.: AVT 360, AVT 361, and AVT 462.
K-State 8:
- Global Issues and Perspective

RATIONALE: The Airport Management Program's Industry Advisory Council suggests this would better prepare students within the design realm of the airport world since we already have an airport planning course AVT 462. And it would strengthen our brand nationally as almost every other major academic player in the airport curriculum world has students enter this competition each year.

IMPACT: No impact on any other unit.

EFFECTIVE DATE: Fall 2017

NON-EXPEDITED UNDERGRADUATE CURRICULUM MODIFICATIONS
Bachelor of Science in Aeronautical Technology, Airport Management option (BATN-AP)

CURRENT: Airport Management option, 124 Credit hours

Freshman

Fall Semester (16 credit hours)

AVT 100	Introduction to Aviation	3
CMST 108	PC Desktop Software	3
ENGL 100	Expository Writing I	3
MATH 100	College Algebra	3
PPIL 111	Private Pilot	4

Spring Semester (15 credit hours)

BUS 110	Introduction to Business	3
COMM 106	Public Speaking I	3
ECON 110	Principles of Macroeconomics	3
MATH 150	Plane Trigonometry	3
PSYCH110	General Psychology	3

Sophomore

Fall Semester (16 credit hours)

~~AVT 340~~	~~Human Factors in Aviation~~	~~3~~
ENGL 200	Expository Writing II	3
PHILO105	Introduction to Critical Thinking	3
PHYS 113	General Physics I	4
STAT 325	Introduction to Statistics	3

Spring Semester (16 credit hours)

AVT 250	Safety & Security of Airport Ground Operations	3
~~AVT 380~~	~~Airport Operations~~	~~4~~
BUS 251	Financial Accounting	3
BUS 315	Supervisory Management	3
	Natural Science Elective	3

Junior

Fall Semester (15 credit hours)

ENGL 302	Technical Writing	3
MANGT366	Information Technology for Business	3
MANGT390	Business Law	3
PHILO 390	Business Ethics	3
	Humanities/Social Science Elective	3

Spring Semester (16 credit hours)

AVT 461	Airport Management	4
AVT 480	Airport Global ~~Issues~~	3
MANGT420	Management Concepts	3
MKTG 400	Introduction to Marketing	3
	Humanities/Social Science Elective	3

Senior

Fall Semester (16 credit hours)

AVT 360	Airport Law	3
AVT 361	Airport Environmental Studies	3
AVT 462	Airport Planning	4
AVT 482	Aviation Ethics & Leadership	3
	~~*Restricted Elective~~	~~3~~

Spring Semester (14 credit hours)

AVT 464	Airport Certified Manager	1
AVT 560	Airport ~~Master Planning and~~ Design	4
~~AVT 498~~	~~Research Project~~	~~3~~
MANGT531	Human Resource Management	3

Choose one of the following:

AVT 448	Aviation Legislation	3

OR

COT 495	Industrial Internship	3

*Choose from BUS 252 or MANGT 530.

PROPOSED: Airport Management option 122 credit hours

Freshman

Fall Semester (17 credit hours)

AVT 100	Introduction to Aviation	3
CMST 108	PC Desktop Software	3
EDCEP 111	University Experience	1
ENGL 100	Expository Writing I	3
MATH 100	College Algebra	3
PPIL 111	Private Pilot	4

Spring Semester (15 credit hours)

BUS 110	Introduction to Business	3
COMM 106	Public Speaking I	3
ECON 110	Principles of Macroeconomics	3
MATH 150	Plane Trigonometry	3
PSYCH110	General Psychology	3

Sophomore

Fall Semester (17 credit hours)

AVT 380	Airport Operations	4
ENGL 200	Expository Writing II	3
PHILO105	Introduction to Critical Thinking	3
PHYS 113	General Physics I	4
STAT 325	Introduction to Statistics	3

Spring Semester (15 credit hours)

AVT 250	Safety & Security of Airport Ground Operations	3
AVT 340	Human Factors in Aviation	3
BUS 251	Financial Accounting	3
BUS 315	Supervisory Management	3
	Natural Science Elective	3

Junior

Fall Semester (15 credit hours)

ENGL 302	Technical Writing	3
MANGT366	Information Technology for Business	3
MANGT390	Business Law	3
PHILO 390	Business Ethics	3
	Humanities/Social Science Elective	3

Spring Semester (16 credit hours)

AVT 461	Airport Management	4
AVT 480	Airport Global Networks	3
MANGT420	Management Concepts	3
MKTG 400	Introduction to Marketing	3
	Humanities/Social Science Elective	3

Senior

Fall Semester (13 credit hours)

AVT 360	Airport Law	3
AVT 361	Airport Environmental Studies	3
AVT 462	Airport Planning	4
AVT 482	Aviation Ethics & Leadership	3

Spring Semester (14 credit hours)

AVT 464	Airport Certified Manager	1
AVT 560	Airport Design	4
MANGT531	Human Resource Management	3
	*Restricted Elective	3

Choose one of the following:

AVT 448	Aviation Legislation	3

OR

COT 495	Industrial Internship	3

*Choose from BUS 252 or MANGT 530.

RATIONALE: Members of the Airport Management Program Industry Advisory Council have suggested these changes to strengthen the pedagogy, insure students are enmeshed within the major curriculum by fall sophomore year, and offer an even stronger curriculum to prepare students for industry challenges. By

removing AVT 498, the revision of AVT 560 will satisfy the senior capstone requirement without duplication.

IMPACT: Moving the courses and/or renaming them should have no impact upon any other program.

EFFECTIVE DATE: Fall 2017

College of Business Administration (11-8-16)

Department of Management

New: Undergraduate Certificate in Data Analytics

Background & Educational Objectives:

Data analytics (DA) is the extensive use of analytical tools and technologies to develop insights from structured and unstructured data ("big data"). There is an increasing demand for managers and analysts with talents ("data savvy") in managing and analyzing data and applying the findings to fact-based decisions, action, and learning.

The purpose of the Certificate in DA is to provide an opportunity for K-State students to develop strong talent in such areas as data-driven problem understanding and solving, data collection and management, information visualization, and storytelling (Table 1). The proposed DA certificate will help K-State students to distinguish themselves as "data savvy" in their professional fields.

Areas	Examples
Data-driven business understanding	marketing analytics, finance analytics, supply chain analytics, sports analytics, health analytics, text analytics
Data-driven business problem identification	exploratory data analysis, customer sentiment analysis, Twitter analytics, Facebook analytics, market basket analysis, segmentation, performance monitoring through dashboard, trend analysis,
Data-driven business problem solving	financial optimization, customer churn management, demand forecasting, new product success, business optimization, simulation, revenue management, inventory optimization, predictive analysis, conjoint analysis, sabermetrics
Data collection & management	web scraping & crawling for data acquisition, data cleaning & preparation, data transformation & integration (merge/add/update datasets), data visualization, application programming interface (API) for data collection
Social media analytics & web mining	sentiment analysis, text classification, text clustering, topic modeling, natural language processing, text visualization
Social network analysis	network visualization, centrality analysis, node-level & network-level metrics, clustering (modularity) analysis
Business cases	Harvard Business cases, marketing engineering cases
Storytelling	data visualization & dashboard, communication with clients

Statement of Need:

In a severely competitive business environment, it can never be overemphasized that firms need to understand their business and customers better and make important business decisions with strong empirical evidence.

For example, firms collect a tremendous amount of customer information from various sources:

1) They have transaction information of their own customers and website visit/browsing information.
2) Firms communicate and build relationships with their customers using social media such as Facebook, Twitter, Instagram, and Snapchat. For example, 83% of Fortune 500 companies use social media to interact with their customers (Hameed 2011)[1]
3) Consumers share their experiences about purchasing and using firms' products (e.g., product reviews) with other consumers. Firms collect those types of data in large volumes, in a variety of types (e.g., number, text, voice, pictures, color, etc.) in real time (Dumbill 2012)[2].

Even though firms have massive datasets, there is one big problem. That is the ability to use, analyze, and make sense of the data, as Dr. Erik Brynjolfsson, Director of the MIT Initiative on the Digital Economy, said (Lohr 2009)[3]. Therefore, firms seek business analysts:

1) who have the advanced skills of collecting/managing data
2) who can visualize and analyze a large volume of digitally recorded consumer opinions and behaviors with solid quantitative skills
3) who can communicate, in both verbal and written presentations, the value of findings with those not involved in the analysis, including team members, external clients, and upper level managers.

Business and data analytics requires finding new ways of combining various knowledge and skills that can be obtained across various disciplines, such as MIS, Marketing, Finance, Econometrics, Computer Science, and Statistics. It requires a significant amount of time and effort for undergraduate students to complete a comprehensive and integrated program that covers such knowledge and skills.

Therefore, firms have experienced deficiencies of employees who have strong business and data analytics background. According to a study by McKinsey Global Institute[4], by 2018 the U.S. will face a potential shortage of between 140,000 and 190,000 professionals with deep analytical talents (Figure 1). The study

1 Hameed, Bial (2011), "Social Media Usage Exploding Amongst Fortune 500 Companies," *Social Times* [available at http://www.adweek.com/socialtimes/social-media-usage-exploding-amongst-fortune-500-companies/36377].

2 Dumbill, Edd (2012), "Volume, Velocity, Variety: What You Need to Know About Big Data," *Forbes* [available at http://www.forbes.com/sites/ewanspence/2016/02/26/android-news-digest-galaxy-s7-lg-g5-mwc-gmail-flux/#51d35e7d4447].

3 Lohr, Steve (2009), "For Today's Graduate, Just One Word: Statistics," *The New York Times* [available at http://www.nytimes.com/2009/08/06/technology/06stats.html?_r=0]

4 The McKinsey Global Institute, 2011. "Big Data: The Next Frontier for Innovation, Competition, and Productivity," pp. 1-143.

also projects that the U.S. needs 1.5 million data savvy managers and analysts who can manage and analyze large datasets, and utilize the findings in their decision making.

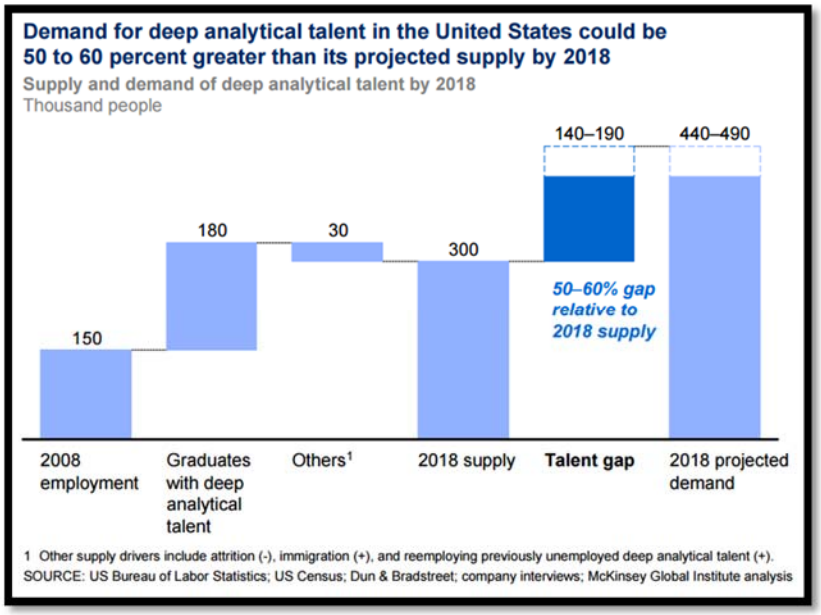

Figure 1. Data analytics talent gap

Industry surveys also show a significant gap between demand and supply of analytical talent. For example, an industry survey[5] of over 2,700 business executives and managers reports that 43% of the respondents view lack of analytical talent in their organizations as a key challenge in doing business. The employment and salary information of the graduates of a data analytics program from North Carolina State University also indicates that analytical talents are in high demand across industries (Appendix 1). The information shows that the graduates of a one-year master's program earn an average annual salary of over $100,000.

Many colleges and universities have already responded to this growing need for analytical talent. As of August 2016, 532 colleges and universities across the U.S. already have offered data analytics programs[6]. These programs are diverse in terms of target audiences (e.g., undergraduate, masters), delivery method (e.g., online, on campus), and objectives (e.g., data savvy, data scientist). Among the programs are a growing number of data analytics certificates, which require between 12 and 18 hours of course work in such areas as computer programming, data visualization, data management and mining, marketing analytics, and business intelligence (Appendix 2). In the region, the University of Kansas has started the undergraduate major (BS in BA) and the graduate DA certificate in fall 2016 (Appendix 3). A few other schools in Colorado, Missouri, and Oklahoma are currently offering graduate-level certificates in data analytics. However, there are no undergraduate certificates in data analytics in the region.

Catching up with the new trend of the data analytics era, CBA at K-State offers the analytics certificate program, aiming at becoming the number one institution in Kansas and the Midwestern United States to do so. CBA professors with top-class expertise and rich experience in business areas will provide K-State students high-quality analytics courses from traditional analysis (e.g., A/B test, regression, logistic regression), to state-of-the-art analysis including social media analytics (e.g., Twitter analytics, network

5 Ransbotham, S., Kiron, D., and Prentice, P., 2015, The Talent Divided: Analytics Talent is Driving Competitive Advantage at Data-oriented Companies, MIT Sloan Management Review
6 Colleges with Data Science Degrees [available at http://101.datascience.community/2012/04/09/colleges-with-data-science-degrees/]

analysis) and text mining (e.g., sentiment analysis). The program not only targets CBA students, but also all K-State students from different departments who want to be experts in data analytics in their professional areas. Campus wide, the data analytics certificate program will lead other programs and activities involving analytics by hosting various seminars, training workshops, and analytics competitions.

In addition, representatives from local and regional businesses in focus groups[7] indicated the growth of data in their organizations. The participants mentioned that there is a definite need in their organizations for people who can manage, mine, and visualize large datasets, and draw insightful conclusions from the analysis. They also noted that the need for data savvy will continue to grow. Therefore, we can expand the certificate program to collaborate with local businesses, which can offer good opportunities to students in terms of internships and jobs at local companies.

Learning outcomes are that students will be able to do the following:

- identify business issues and collect/manage relevant data to address those business issues
- choose correct quantitative analysis methods
- master data management/analysis software technologies including Python, MEXL, SPSS, Stata, SAS, R, Excel, Tableau, SQL, etc.
- make strategic decisions based on data analysis and communicate with internal and external clients.

As a result, K-State students with the data analytics certificate will have competitive advantages and secure jobs in the future.

Curriculum Overview:

The DA Certificate will consist of 15 credit hours, made up of three core courses and two electives.

A. Core courses
   1. MIS 665. Business Analytics & Data Mining
      This course offers an introduction to data analytics and covers diverse topics and techniques (e.g., data visualization, data collection, data management, data quality control, database concepts, business applications of regression, classification, clustering, association, SQL for data extraction) of data analytics for business and social problems. The focus is on understanding and analyzing structured data (e.g., the data in spreadsheets and relational databases).
      Prerequisite: MANGT366 (Information Technology for Business) or an equivalent introductory computing class

   2. MIS 670. Social Media Analytics and Web Mining
      This course teaches a broad range of emerging topics and techniques (e.g., text mining, text visualization, sentiment analysis/opinion mining, social media mining, Twitter analytics, Facebook analytics, Google analytics, social network analysis) in business analytics and data mining. The focus is on understanding and analyzing unstructured data (e.g., web data, online reviews, open-ended interviews, text data, network data).
      Prerequisite: MANGT366 (Information Technology for Business) or an equivalent introductory computing class

7 Global Campus conducted focus groups in 2015 to assess the need for analytical talents in the region. This assessment led to the launch of the Online Graduate Certificate in Data Analytics.

3. MKTG 580. Business Intelligence for Strategic Decision-Making
   This course, with a focus on marketing analytics and business intelligence, deals with how to collect and analyze data to develop insights and strategies from customer data and competitive information to enhance quality of decision-making. The course will be based on lectures, case analyses, and hands-on exercises to have students learn by doing and practicing, and to expose students to the software used for data analysis. Students will learn related concepts and apply those to decision-modeling for real business situations.
   Prerequisite: STAT350 or equivalent

B. Two Electives
   1. ECON 630. Econometrics
      An introduction to the analytical and quantitative methods used in economics. Applications to specific problems, with an emphasis on computer analyses.
      Prerequisite: ECON 120 or AGEC 120 or 121; MATH 205 or 220; STAT 351 or AGEC 501, or STAT 511 or 705.

   2. FINAN 498. Financial Modeling
      This course is both a skills course and an application course. The skills objective of the course is to give students an in-depth knowledge of the use of Excel. We expect that, by the time students leave the course, they will be proficient in the use of Excel. I teach them mid-level skills, such as Pivot Tables and Solver, but I also teach them higher level skills, such as SQL and Visual Basic programming and function creation in Excel. I also teach the students important financial market skills, such as integrating Bloomberg (and now Eikon) data into their spreadsheets.
      Prerequisite: FINAN 510, FINAN 520

   3. MANGT 521. Quantitative Management (Introduction to Business Optimization & Simulation). This course offers an introduction to business optimization and simulation and covers a broad set of topics and techniques (e.g., linear programming, simulation) to find the best course of action for business situations.
      Prerequisite: MANGT 420

   4. MKTG 642. Marketing Research
      This course deals with concepts, methods, and applications of marketing research to help students utilize qualitative and quantitative research in marketing. This course is a mixture of lectures on marketing/statistics, instructions on software programs, and discussions of marketing cases, to facilitate application of topics covered in class. For software programs, students will learn how to use Stata and R to analyze datasets and Qualtrics to create an online survey.
      Prerequisite: GENBA 166, MKTG 450, STAT 351

   5. MKTG 581 Marketing Analytics
      Marketing Analytics focuses on applications of quantitative analysis to understand dynamic marketing phenomena. This course is a mixture of lectures on essential marketing concepts/econometrics/text mining, instructions on software programs (Stata and R), and discussions of marketing cases to facilitate students' critical thinking and decision-making leveraged by analytical ability. To facilitate learning statistical software programs, students will practice hands-on projects in the computer lab.
      Prerequisite: STAT 350 or equivalent

   6. MIS 422 Business Database Systems

Examination of database theory, design, implementation and the value of data to an organization. Study of data query languages including the definition and creation of database objects, manipulation of data stores including entry, modification, removal and extraction, and database programming fundamentals.
Prerequisite: MANGT 366 or MIS 366 (or Permission from Instructor)

Recommended Course Sequence:

1st Semester	MKTG580. Business Intelligence for Strategic Decision-Making	MIS665. Business Analytics & Data Mining
2nd Semester	Elective 1	Elective 2
3rd semester	MIS670 Social Media Analytics & Web Mining	

Resource Implications:

The core and elective courses for the certificate already exist and are regularly offered by four departments: Management, Marketing, Finance, and Economics. All courses are expected to accommodate initial student demands in the coming semesters. There is no expectation of needing additional faculty/staff resources.

Other Requirements:

- Students must earn at least a 2.5 GPA on all courses taken to fulfill the requirements of the certificate program.
- The certificate will be issued by the K-State College of Business Administration and noted on the transcript.
- The certificate can be earned post-baccalaureate.
- Certificate can be completed by degree seeking students at Kansas State University or obtained as a credential on its own (free-standing). Students who do not intend to become a candidate for a bachelor's degree at Kansas State University must apply for admission as a non-degree, certificate-seeking student. Such students must submit the admission application, application fee, and transcripts. Applicants must provide documentation of high school or GED completion and, if college courses have been attempted, official transcripts demonstrating a cumulative GPA of 2.0 or higher for all post-secondary coursework. Students who later choose to pursue a bachelor's degree must apply for admission as a degree-seeking student.

Requested Effective Date:

Fall 2017

Student Learning Goals:

The Data Analytics Certificate has three broad goals[8]. A student completing the Data Analytics Certificate should:

1. be able to collect and manage large datasets for practical business problems
2. be able to explore, visualize, and analyze the data for problem formulation and solving
3. be able to relate patterns found in the data to real-world business situations and communicate with clients

Assessment Plan:

- Upon being admitted to the program, students' comprehension of data analytic concepts and techniques will be evaluated in the first class they are enrolled in. This evaluation will consist of multiple choice and short answer questions testing the students' knowledge of data analytics.
- All students in the program will take MIS670 Social Media Analytics & Web Mining. They will be working on a comprehensive data analytics project involving data collection, business understanding, data preparation, exploratory data analysis, predictive model building, model evaluation, and storytelling. These projects will be evaluated by a team of faculty to ensure that students are able to collect and manage real-world datasets, explore and analyze the data, and communicate the insights with others not involved in the projects.
- A survey will be conducted with students completing the program. The results of the surveys will be used to determine if the program goals are being met.

Appendix 1. Employment & Salary Information (A One-year Master's Program in Analytics at North Carolina State University)

Placement results for Class of 2016 reported as of May 15 (Graduation)	
Total number of graduates:	113
Graduates seeking new employment:	109
Candidates with one or more offers by graduation:	99%
Candidates placed by graduation:	95%
Median number of initial job interviews:	10
Median number of offers of employment:	2
Average ROI payback period:	22 months
Number of reported job offers:	280
Job placements based in North Carolina:	44%
Job placements based in U.S.:	100%

8 Adapted from the Proposal for Online Graduate Certificate in Data Analytics

Candidates reporting job offer data:	99%

	ANNUAL BASE SALARY			SIGNING BONUS
Experience Level:	All	0-2 Years	3+ Years	All
Mean:	$93,250	$89,400	$101,200	$10,500
Median:	$90,000	$87,700	$100,000	$10,000
75th Percentile:	$100,000	$92,900	$105,000	$15,000
25th Percentile:	$85,000	$85,000	$91,000	$5,000
Maximum:	$130,000	$120,000	$130,000	$45,000
Minimum:	$67,000	$67,000	$81,000	$1,500
N:	104	70	34	81
% Reporting:	100%	67%	33%	78%

http://analytics.ncsu.edu/?page_id=248

Appendix 2. Examples of DA Undergraduate & Graduate Certificates

Undergraduate DA Certificate Programs

- Lehigh University
  - One core course (Computer programming)
  - Three elective courses (choosing from Accounting Data and Analytics, Business Data Management, Application Development for Business, Business Intelligence, Introduction to Data Science, Consumer Insights through Data Analysis, Sabermetrics, …)
- Colorado State University
  - Five core courses (Database Concepts, Database Management, Cloud Computing and Big Data, Statistics and SPSS, Data Mining)
- Arizona State University
  - Five core courses (Advanced Excel in Business, Business Intelligence, Business Process Management, Business Project Management, Computer Applications and Information Technology)
  - One elective course in Statistics
- Georgia Tech
  - One core course (Business Analytics)
  - Three elective courses (choosing from Marketing Analytics, Computer Programming, Financial Analytics, Business Process Analysis & Design, Database Management Systems, …)
- Seton Hall University
  - Three core courses (Business Statistics, Business Intelligence, Big Data)
  - One elective course (choosing from Marketing Metrics, Financial Modeling, Advanced Software Business Tools, Data Visualization)

Graduate DA Certificate Programs

- Indiana University
- Oklahoma State University
- University of Connecticut
- University of Arkansas
- Southern Methodist University
- George Washington University

Appendix 3. Analytics Programs offered by the University of Kansas

Undergraduate Major in Business Analytics (B.S.B):

- This BA program consists of five core courses in the MIS area and two additional courses in advanced statistics. Students also take elective courses in MIS, marketing, and supply chain management areas.
- Starting year: Fall 2016

Graduate Certificate in Data Analytics:

- This graduate certificate consists of eight required courses in advanced statistics, data visualization, business analytics, data visualization, marketing research, prediction markets, and data-driven quality management.

Rationale:
The purpose of the Certificate in Data Analytics is to provide an opportunity for K-State students to develop strong talent in such areas as data-driven problem understanding and solving, data collection and management, information visualization, and storytelling (Table 1). The proposed certificate will help K-State students to distinguish themselves as "data savvy" in their professional fields.

Impact on Other Units:
The proposed undergraduate certificate in data analytics has received support from the Departments of Management, Marketing, Finance, and Economics. The Department of Management has committed to offering MIS665, MIS670, MIS422, and MANGT521 on a regular basis for the proposed program. The Department of Marketing provides MKTG580, MKTG581, and MKTG642 regularly. The Departments of Finance and Economics support the proposed certificate by providing FINAN498 (Financial Modeling) and ECON630 (Econometrics) respectively on a regular basis.

Effective Date:
Fall 2017

College of Arts and Sciences (11-10-16)

NON-EXPEDITED COURSE PROPOSALS
Courses Numbered 000-599

Geography

FROM: GEOG 100 – World Regional Geography. (3) I, II, S. Introduction to geography structured on a framework of major world regions and countries. With the regional approach is an explicit discussion of the essential concepts ~~of certain systematic specialties, such as political, social, economic, and urban geography~~. K-State 8: Global Issues and Perspectives; ~~Social Sciences.~~

TO: GEOG 100 – World Regional Geography. (3) I, II, S. Introduction to geography structured on a framework of major world regions and countries. Within the regional approach is an explicit discussion of essential concepts rooted in historical, cultural, social, political, economic, religious, gender, and urban geography. K-State 8: Global Issues and Perspectives; Historical Perspectives.

K-STATE 8 RATIONALE: In the past this class was taught by faculty who emphasized the Global Issues and Perspectives and Social Sciences perspectives of research. The Geography department has recently hired some new faculty members and today a larger component of this class now emphasizes Historical Perspectives content rather than the Social Sciences content.

RATIONALE: The department has hired new faculty members and the content of the course now emphasizes historical perspectives as a foundation for current cultural/geographic phenomena.

IMPACT: This change will provide K-State students in numerous programs/colleges with another option to earn the "historical perspective" tag.

EFFECTIVE DATE: Spring 2017

FROM: GEOG 310 – Geography of Kansas. (3) I. ~~Perceptions of Kansas, and a regional analysis of the state including discussion of climate, landforms, soil, water, and minerals as well as patterns of settlement, population, agriculture, industry, transportation, and urban development.~~ K-State 8: Human Diversity within the US; ~~Social Sciences.~~

TO: GEOG 310 – Geography of Kansas. (3) I, II, S. A regional and historical analysis of Kansas including discussion of the physical environment, historical development, and current geographic patterns. K-State 8: Human Diversity within the US; Historical Perspectives.

K-STATE 8 RATIONALE: The way the class has been taught recently places more emphasis on the historical development of Kansas and the impact that development has on current geographic patterns in the state.

RATIONALE: This course as currently taught emphasizes historical perspectives on the state of Kansas.

IMPACT: This change will provide K-State students in numerous programs/colleges with another option to earn the "historical perspective" tag.

EFFECTIVE DATE: Spring 2017

ADD: GEOG 497 – Undergraduate Research in Geography. (1-3) I, II, S. Independent research project conducted with the guidance of a faculty mentor. Pr.: Consent of instructor. K-State 8: None.

RATIONALE: There is a need to offer mentored undergraduate research experiences under close supervision of faculty members in the Department of Geography.

IMPACT: None

EFFECTIVE DATE: Fall 2017

Music, Theatre, and Dance

ADD: MUSIC 513 – Teaching Beginning Band and Jazz Techniques. (1) II. Students will learn and employ techniques and strategies for teaching beginning band and beginning through intermediate jazz ensemble.

RATIONALE: One hole in the curriculum at this time is adequate time spent on teaching techniques for the beginning band as well as a jazz ensemble. These are two sets of skills and knowledge that our students must have a broader and deeper knowledge of to be even more successful in the classroom. Currently there is 1-credit hour being set aside for a brief overview. This course would allow for a more comprehensive look into how to administer, design, and teach a beginning band course as well as an introduction to jazz techniques.

IMPACT: This course addition will not impact other units as the music education faculty will teach this course and teaching responsibilities will remain with the faculty member who is currently teaching the 1-credit section of MUSIC 511.

EFFECTIVE DATE: Spring 2017

Sociology, Anthropology, and Social Work

ADD: SOCIO 599 – Senior Thesis in Sociology. (3-6) I, II. Independent research in sociology. Students conduct original research and produce a senior thesis in sociology. Pr.: SOCIO 423; SOCIO 431, and instructor consent. K-State 8: Ethical Reasoning and Responsibility; Social Sciences.

K-STATE 8 RATIONALE: Students will learn ethics and responsibilities associated with conducting research with human subjects. They will learn how to identify a central research question,

intellectual rationale, and appropriate data collection and analysis methods. This may involve qualitative and/or quantitative methods. The work will have sociological relevance.

RATIONALE: This course will enable undergraduate sociology majors to gain further experience in conducting original research that will be supervised by faculty. This will be invaluable for majors who plan to attend graduate school or seek employment in professional occupations that require social science research skills. Students will need to indicate their interest in producing a senior thesis by the second semester of their junior year and obtain the consent of a sociology faculty member to direct the thesis. In consultation with the thesis director, the consent of two additional faculty members will be obtained to serve as members of an advisory committee. With the permission of the thesis director, eligible students will enroll in 6 credit hours of SOCIO 599; three in the first semester of their senior year and three in the second semester. The completed thesis will be due in week 14 of the second semester, and students will present their work orally in week 16. Pre-requisites include SOCIO 423 and SOCIO 431 (Methods of Social Research I and Comparative Social Theories, respectively).

IMPACT: This course will not impact other units.

EFFECTIVE DATE: Spring 2017

NON-EXPEDITED CURRICULUM PROPOSALS
Undergraduate

Music, Theatre, and Dance

Music Education (B.M.E.)

FROM:	TO:
The program of study leading to this degree is a nine-semester curriculum designed to prepare music teachers for grades pre K-12. With careful planning and enrollment during summer session(s) all requirements may be completed in four years. Within this curriculum there are two emphases-vocal/choral music, and instrumental music.	The program of study leading to this degree is a nine-semester curriculum designed to prepare music teachers for grades pre K-12. With careful planning and enrollment during summer session(s) all requirements may be completed in four years. Within this curriculum there are two emphases-vocal/choral music, and instrumental music.
Bachelor's degree requirements	**Bachelor's degree requirements**
Professional educational requirements	**Professional educational requirements**
• DED 075 - Orientation to Teacher Education at KSU **Credits:** 0 • DED 318 - Educational Technology for Teaching and Learning **Credits:** 1 • EDCEP 315 - Educational Psychology **Credits:** 3 • EDCEP 525 - Interpersonal Relations in the Schools **Credits:** 1 • EDSEC 200 - Teaching as a Career **Credits:** 1 • EDSEC 230 - Early Field Experience **Credits:** 1 • EDSEC 310 - Foundations of Education **Credits:** 3 • EDSEC 376 - Core Teaching Skills: Secondary/Middle **Credits:** 3 • EDSEC 455 - Teaching in a Multicultural Society **Credits:** 1 • EDSEC 477 - Content Area Literacies and Diverse Learners **Credits:** 2	• DED 075 - Orientation to Teacher Education at KSU **Credits:** 0 • DED 318 - Educational Technology for Teaching and Learning **Credits:** 1 • EDCEP 315 - Educational Psychology **Credits:** 3 • EDCEP 525 - Interpersonal Relations in the Schools **Credits:** 1 • EDSEC 200 - Teaching as a Career **Credits:** 1 • EDSEC 230 - Early Field Experience **Credits:** 1 • EDSEC 310 - Foundations of Education **Credits:** 3 • EDSEC 376 - Core Teaching Skills: Secondary/Middle **Credits:** 3 • EDSEC 455 - Teaching in a Multicultural Society **Credits:** 1 • EDSEC 477 - Content Area Literacies and Diverse Learners **Credits:** 2

- EDSEC 582 – Teaching Internship in Music **Credits:** 6–12
- EDSP 323 – Exceptional Students in the Secondary School **Credits:** 2
- FSHS 110 – Introduction to Human Development **Credits:** 3

For the College of Education licensure:

For admission to the teacher education program and licensure in the state of Kansas, please visit the College of Education website.

Music requirements for all options:

- Major performing organization each semester except the professional semester
- MUSIC 050 – Recital Attendance **Credits:** 0 (7 semesters)
- MUSIC 060 – Piano Proficiency **Credits:** 0
- MUSIC 210 – Music Theory I **Credits:** 3
- MUSIC 230 – Music Theory II **Credits:** 3
- MUSIC 231 – Aural Skills I **Credits:** 1
- MUSIC 232 – Fundamentals of Teaching Music **Credits:** 2
- MUSIC 249 – Introduction to Music of the World **Credits:** 3
- MUSIC 320 – Music Theory III **Credits:** 3
- MUSIC 321 – Aural Skills II **Credits:** 1
- MUSIC 322 – Aural Skills Proficiency **Credits:** 0
- MUSIC 360 – Music Theory IV **Credits:** 3
- MUSIC 361 – Aural Skills III **Credits:** 1
- MUSIC 417 – Conducting **Credits:** 2
- MUSIC 501 – Half Recital **Credits:** 0
- MUSIC 502 – Full Recital **Credits:** 0
- MUSIC 511 – Music in the Schools K–6 **Credits:** 3
- MUSIC 512 – Music Program in Junior/Senior High Schools **Credits:** 3

- EDSEC 582 – Teaching Internship in Music **Credits:** 6–12
- EDSP 323 – Exceptional Students in the Secondary School **Credits:** 2
- FSHS 110 – Introduction to Human Development **Credits:** 3

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- MUSIC 232 – Fundamentals of Teaching Music **Credits:** 2
- MUSIC 249 – Introduction to Music of the World **Credits:** 3
- MUSIC 320 – Music Theory III **Credits:** 3
- MUSIC 321 – Aural Skills II **Credits:** 1
- MUSIC 322 – Aural Skills Proficiency **Credits:** 0
- MUSIC 360 – Music Theory IV **Credits:** 3
- MUSIC 361 – Aural Skills III **Credits:** 1
- MUSIC 417 – Conducting **Credits:** 2
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- MUSIC 502 – Full Recital **Credits:** 0
- MUSIC 511 – Music in the Schools K–6 **Credits:** 3
- MUSIC 512 – Music Program in Junior/Senior High Schools **Credits:** 3

- MUSIC 525 – Instrumentation and Arranging **Credits:** 2
- MUSIC 530 – Music History I: Ancient Greece through 1700 **Credits:** 3
- MUSIC 531 – Music History II: 1700 to 1850 **Credits:** 3
- MUSIC 532 – Music History III: 1850 to the Present **Credits:** 3
- MUSIC 670 – Advanced Studies in Music Education **Credits:** 2

Applied lessons each semester except the professional semester

- MUSIC 255 – Lower-Division Performance **Credits:** 1-4
- and/or
- MUSIC 455 – Upper-Division Performance **Credits:** 0-4

Note:

A half recital or an extended "jury" recital is required before graduation. Divisional recommendation determines the methods of satisfying this requirement.

Piano proficiency requirements must be met one semester before scheduling student teaching.

Additional music requirements for instrumental emphasis

Instrumental majors (Winds and percussion only) are required to participate in marching band for at least two semesters (preferably during the freshman and sophomore years.

- MUSIC 112 – University Choir **Credits:** 0-1 (1 credit)
- or a large vocal organization
- MUSIC 113 – University Band **Credits:** 0-1 (as the lab for MUSIC 518 – Instrumental Conducting)

- MUSIC 525 – Instrumentation and Arranging **Credits:** 2
- MUSIC 530 – Music History I: Ancient Greece through 1700 **Credits:** 3
- MUSIC 531 – Music History II: 1700 to 1850 **Credits:** 3
- MUSIC 532 – Music History III: 1850 to the Present **Credits:** 3
- MUSIC 670 – Advanced Studies in Music Education **Credits:** 2

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- MUSIC 255 – Lower-Division Performance **Credits:** 1-4
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- or a large vocal organization
- MUSIC 113 – University Band **Credits:** 0-1 (as the lab for MUSIC 518 – Instrumental Conducting)

• MUSIC 203 – Vocal Techniques I **Credits:** 1 • MUSIC 204 – Vocal Techniques II **Credits:** 1 • MUSIC 206 – Piano Class I **Credits:** 1 • or • MUSIC 207 – Piano Class II **Credits:** 1 • ~~MUSIC 280 – Lower-Division Ensemble Performance **Credits:** 1~~ • ~~or~~ • ~~MUSIC 480 – Upper-Division Ensemble Performance **Credits:** 1~~ • ~~All other MUSIC 280/480 can be taken for 0 credits~~ • MUSIC 518 – Instrumental Conducting **Credits:** 2	• MUSIC 203 – Vocal Techniques I **Credits:** 1 • MUSIC 204 – Vocal Techniques II **Credits:** 1 • MUSIC 206 – Piano Class I **Credits:** 1 • or • MUSIC 207 – Piano Class II **Credits:** 1 • All MUSIC 280/480 can be taken for 0 credits • MUSIC 518 – Instrumental Conducting **Credits:** 2 • MUSIC 513 – Teaching Beginning Band and Jazz Techniques **Credits:** 1
Select an additional 8 semester credit hours according to the major instrument • MUSIC 234 – String Techniques and Materials **Credits:** 1 • MUSIC 235 – Percussion Techniques and Materials **Credits:** 2 • MUSIC 236 – Clarinet & Saxophone Woodwind Techniques and Materials **Credits:** 1 • MUSIC 237 – Double Reed and Flute Woodwind Techniques and Materials **Credits:** 1 • MUSIC 238 – High Brass Techniques and Materials **Credits:** 1 • MUSIC 239 – Low Brass Techniques and Materials **Credits:** 1 • MUSIC 427 – Advanced String Techniques and Materials **Credits:** 1–2 (1 credit)	**Select an additional 8 semester credit hours according to the major instrument** • MUSIC 234 – String Techniques and Materials **Credits:** 1 • MUSIC 235 – Percussion Techniques and Materials **Credits:** 2 • MUSIC 236 – Clarinet & Saxophone Woodwind Techniques and Materials **Credits:** 1 • MUSIC 237 – Double Reed and Flute Woodwind Techniques and Materials **Credits:** 1 • MUSIC 238 – High Brass Techniques and Materials **Credits:** 1 • MUSIC 239 – Low Brass Techniques and Materials **Credits:** 1 • MUSIC 427 – Advanced String Techniques and Materials **Credits:** 1–2 (1 credit)
Additional requirements for vocal/choral emphasis **If voice is the major performance area**	**Additional requirements for vocal/choral emphasis** **If voice is the major performance area**

• Keyboard **Credits:** 2 • Woodwind Techniques • Brass Techniques • Ensemble • ~~MUSIC 113 – University Band **Credits:** 0–1 (1 credit) or one additional instrumental techniques course~~ • MUSIC 112 – University Choir **Credits:** 0–1 (0 credit) as the lab for MUSIC 517 – Choral Conducting • MUSIC 234 – String Techniques and Materials **Credits:** 1 • MUSIC 235 – Percussion Techniques and Materials **Credits:** 2 • MUSIC 236 – Clarinet & Saxophone Woodwind Techniques and Materials **Credits:** 1 • or • MUSIC 237 – Double Reed and Flute Woodwind Techniques and Materials **Credits:** 1 • MUSIC 238 – High Brass Techniques and Materials **Credits:** 1 • or • MUSIC 239 – Low Brass Techniques and Materials **Credits:** 1 • MUSIC 475 – Opera Workshop **Credits:** 1–18 (1 credit) • or • MUSIC 490 – Collegium Musicum **Credits:** 1 • MUSIC 517 – Choral Conducting **Credits:** 2 **Total credit hours required for graduation, depending on emphasis: (141–142)**	• Keyboard **Credits:** 2 • MUSIC 513 – Beginning Band and Jazz Techniques **Credits:** 1 • Woodwind Techniques • Brass Techniques • Ensemble • MUSIC 112 – University Choir **Credits:** 0–1 (0 credit) as the lab for MUSIC 517 – Choral Conducting • MUSIC 234 – String Techniques and Materials **Credits:** 1 • MUSIC 235 – Percussion Techniques and Materials **Credits:** 2 • MUSIC 236 – Clarinet & Saxophone Woodwind Techniques and Materials **Credits:** 1 • or • MUSIC 237 – Double Reed and Flute Woodwind Techniques and Materials **Credits:** 1 • MUSIC 238 – High Brass Techniques and Materials **Credits:** 1 • or • MUSIC 239 – Low Brass Techniques and Materials **Credits:** 1 • MUSIC 475 – Opera Workshop **Credits:** 1–18 (1 credit) • or • MUSIC 490 – Collegium Musicum **Credits:** 1 • MUSIC 517 – Choral Conducting **Credits:** 2 **Total credit hours required for graduation, depending on emphasis: (141–142)**

RATIONALE: A course addressing beginning band techniques is being created to address a gap in knowledge of current music education students. Currently, the content is being covered during MUSIC 511; however, the use of that time is infringing on general music methods and not enough time to adequately prepare them to do both. Creating MUSIC 513 and putting it into the curriculum will address both needs while making no impact on total hours required for graduation or on faculty loads.

IMPACT: There will be no impact on other disciplines.

EFFECTIVE DATE: Spring 2017