Benedict College
Division of Academic Affairs
Proposed Curriculum Revisions
Dr. Janeen Witty, Vice President
Academic Year 2018 - 2019
Date: April 4, 2019

#### TYRONE BURROUGHS SCHOOL OF BUSINESS AND ENTREPRENUERSHIP

					Depai	rtment	Scl	hool	Aff	airs	Pres	sident
Course					Appı	roved	App	roved	Аррі	roved	Арр	rove
lumber	Course Name	Code	Proposed Change	Rationale	Yes	No	Yes	No	Yes	No	Yes	No
				expand the skill set the non-business major and provide them with a foundation in business concepts								
				(i.e., management, marketing, accounting, and finance) that can be applied in business settings.								
				"Business administration provides the general skills that can transfer into a wide array of careers in business.								
				Median Annual Salaries								
				Focused on the management and operational skills that are crucial to running a business, a business administration background can apply to almost any industry within the business world.								
				Here are some statistics on business administration salary ranges, job growth and employer types for administrators.								
				Take a look at some of the salaries for popular careers in business administration:								
				Business Administration Career Median Annual Salary*								
				Sales Management \$117,960								
				Financial Management \$121,750								
				Human Resources Management \$106,910								
				Food Service Management \$50,820								
				Health Care Administration \$83,810								
				Marketing Management \$131,180								
				Source: U.S. Bureau of Labor Statistics' 2018-19 Occupational Outlook Handbook								
				*The salary information listed is based on a national average, unless noted. Actual salaries may vary								
				greatly based on specialization within the field, location, years of experience and a variety of other								
				factors. National long-term projections of employment growth may not reflect local and/or short-term economic or job conditions, and do not guarantee actual job growth.								
				What is my earning potential?								
				It is difficult to know what to expect from a business administration salary, as the discipline opens up many possible career paths, each with varying levels of supply and demand.								
				As with almost all careers, the higher degree you hold, the higher your salary: A bachelor's degree in								
				business administration can add \$2,000 to \$5,000 or more per year in earning potential, while an MBA								
			Adding a Minor in Business	can add yet another \$7,000 to \$11,000, though many MBAs start out in higher-level management jobs								
	Business Administration Minor	PMN	Administration	with more responsibility, and consequently earn a larger salary that may include a bonus package"	Х		х		Х			

					Depar	rtment	Sch	ool	Aff	airs	Pres	sident
Course					Appr	roved	App	roved	Appr	oved	App	roved
Number	Course Name	Code	Proposed Change	Rationale	Yes	No	Yes	No	Yes	No	Yes	No
				This minor would be beneficial to students in other disciplines outside of								
				the business school. A business analyst scrutinizes sets of data looking for								
				ways to increase efficiency in an organization. In this way, the business								
				analyst often acts as a liaison between different departments in a								
				company, finding ways to streamline processes throughout the								
				organization. The business analyst must be able to communicate well with								
				these different groups in the organization, sometimes acting as a								
				diplomat, and presenting solutions in ways that colleagues and								
				stakeholders will understand.								
				According to U.S. Bureau of Labor Statistics (BLS) data, employment of								
				management analysts – including business analysts – is expected to grow								
				14% from 2014 to 2024, which is much faster than the average for all								
				occupations.								
				BLS reports for May 2016 showed that the average annual income for all								
				management analysts, including business analysts, was \$91,910. The								
				middle 50% earned between \$60,950 and \$109,170. Salaries for the								
				lowest 10% were around \$46,560, while the highest 10% brought in								
				upwards of \$149,720.								
	Business Analytics Minor	PMN	Adding a minor in business analytics		Х		Х		Χ			

					Depar	rtment	Sch	iool	Affa	airs	Presi	ident
Course					Аррі	roved	App	roved	Appr	oved	Appr	roved
Number	Course Name	Code	Proposed Change	Rationale	Yes	No	Yes	No	Yes	No	Yes	No
			Adding a minor in supply chain	This minor would be beneficial to students in other disciplines outside of the business school. According to Harvard Business Review, "The U.S. supply chain economy is large and distinct. It represents the industries that sell to businesses and the government, as opposed to business-to-consumer (B2C) industries that sell for personal consumption. The U.S. supply chain contains 37% of all jobs, employing 44 million people. These jobs have significantly higher than average wages, and account for much of the innovative activity in the economy" (Delgado and Mills, March 9, 2018).  According to the US Department of Labor Occupational Handbook, logisticians analyze and coordinate an organization's supply chain—the system that moves a product from supplier to consumer. They manage the entire life cycle of a product, which includes how a product is acquired, allocated, and delivered. The median annual wage was \$74,590 in May 2017, and the employment of logisticians is projected to grow 7 percent from 2016 to 2026. This growth will be driven by the need for logistics in the transportation of goods in a global economy.								
	Supply Chain Management Minor	PMN	management		X		Х		Х			

					Depar	tment	Sch	ool	Aff	airs	Pres	sident
Course					Appr	oved	Appr	oved	Appr	oved	App	roved
Number	Course Name	Code	Proposed Change	Rationale	Yes	No	Yes	No	Yes	No	Yes	No
				This concentration will offer students more career options and hence improve placement								
				A business analyst scrutinizes sets of data looking for ways to increase efficiency in an								
				organization. In this way, the business analyst often acts as a liaison between different departments in a company, finding ways to streamline processes throughout the								
				organization. The business analyst must be able to communicate well with these different								
				groups in the organization, sometimes acting as a diplomat, and presenting solutions in								
				ways that colleagues and stakeholders will understand.								
				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								
				According to U.S. Bureau of Labor Statistics (BLS) data, employment of management								
				analysts – including business analysts – is expected to grow 14% from 2014 to 2024, which								
				is much faster than the average for all occupations.								
				BLS reports for May 2016 showed that the average annual income for all management								
				analysts, including business analysts, was \$91,910. The middle 50% earned between \$60,950 and \$109,170. Salaries for the lowest 10% were around \$46,560, while the highest								
				10% brought in upwards of \$149,720.								
				10% blodgitt in apwards of \$145,720.								
				"According to Statistics Market Research Consulting, the Business Analytics Market is								
				estimated at \$44.5 billion in 2015 and is expected to reach \$71.1 billion by 2022 The								
				factors that are influencing the market growth include rising demand for the analytics by								
				the organizations due to the growing big data trend, quickly changing business environment								
				and customer choices. However, high execution costs and unwillingness in adoption of								
				business analytics are some factors hindering the market growth. Moreover, scarcity of								
			Adding a husiness analytics concentration	skilled workers with sound technical capabilities poses major challenge to the market"								
	Business Analytics Consentration	RM		(https://www.strategymrc.com/report/business-analytics-market-2017, Access 3.21.19).	х				X			
	Business Analytics Concentration	LINI	to business administration major		٨		٨		٨			

					Depar	tment	Sch	ool	Aff	airs	Pres	sident
Course					Appr	oved	Appr	oved	Appr	oved	App	roved
Number	Course Name	Code	Proposed Change	Rationale	Yes	No	Yes	No	Yes	No	Yes	No
				This concentration will offer students more career options and hence								
				improve placement								
				According to Hermand Dusiness Devices (The H.C. averals shair according								
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				is large and distinct. It represents the industries that sell to businesses and								
				the government, as opposed to business-to-consumer (B2C) industries that sell for personal consumption. The U.S. supply chain contains 37% of								
				all jobs, employing 44 million people. These jobs have significantly higher								
				than average wages, and account for much of the innovative activity in								
				the economy" (Delgado and Mills, March 9, 2018).								
				the economy (Deigado and Willis, Watch 3, 2016).								
				According to the US Department of Labor Occupational Handbook,								
				logisticians analyze and coordinate an organization's supply chain—the								
				system that moves a product from supplier to consumer. They manage								
				the entire life cycle of a product, which includes how a product is								
				acquired, allocated, and delivered. The median annual wage was \$74,590								
				in May 2017, and the employment of logisticians is projected to grow 7								
			Adding a supply chain management	percent from 2016 to 2026. This growth will be driven by the need for								
			concentration to business administration	logistics in the transportation of goods in a global economy.								
	Supply Chain Management Concentration	RM	major		X		Х		Χ			

					Depar	tment	Sch	ool	Aff	airs	Presi	ident
Course					Appr	oved	Аррі	oved	Аррі	roved	Appr	roved
Number	Course Name	Code	Proposed Change	Rationale	Yes	No	Yes	No	Yes	No	Yes	No
				This concentration will offer graduate students more career options and hence improve placement.								
				According to Harvard Business Review, "The U.S. supply chain economy is large and distinct. It								
				represents the industries that sell to businesses and the government, as opposed to business-to-								
				consumer (B2C) industries that sell for personal consumption. The U.S. supply chain contains 37% of all jobs, employing 44 million people. These jobs have significantly higher than average wages, and								
				account for much of the innovative activity in the economy" (Delgado and Mills, March 9, 2018).								
				According to the US Department of Labor Occupational Handbook, logisticians analyze and coordinate								
				an organization's supply chain—the system that moves a product from supplier to consumer. They manage the entire life cycle of a product, which includes how a product is acquired, allocated, and								
				delivered. The median annual wage was \$74,590 in May 2017, and the employment of logisticians is								
				projected to grow 7 percent from 2016 to 2026. This growth will be driven by the need for logistics in the transportation of goods in a global economy.								
				There is ample academic research suggesting that master's degrees in supply chain management give you a higher salary than with just a bachelor's degree in supply chain management. According to a								
				2015 study by Georgetown University, college graduates with a bachelor's earn an average salary of								
				\$61,000 over their entire career, while those with a master's degree earn \$78,000.								
				The Bureau of Labor Statistics also reports that logisticians – a supply chain management related job –								
			Adding a supply chain management	earn a \$54,000 median annual wage with a bachelor's and \$82,000 with a master's. Thus, the evidence suggests that earning a master's degree in a business related field such as supply chain management								
			concentration to the MBA program of	can net you a higher salary each year of your career.								
	Supply Chain Management Concentration	RM	study		Х		Х		Х			
				The proposed name is consistent with local competitors and we would								
				like to follow industry practices of peer institutions.								
				Institution Course Name								
				Webster University Managerial Economics								
				Strayer University Managerial Economics and Globalization								
				University of South Carolina Managerial Economics								
			Changing the name of ECON 5143	Claflin University Managerial Economics								
ECON 5143	Francis Andreis	CCN	Economic Analysis to ECON 5143						v			
(G)	Economic Analysis	CCN	Managerial Economic Analysis		Х	<u> </u>	Х	<u> </u>	Χ		<u> </u>	<u> </u>

					Donar	tment	Sch	ool		airs	Droc	ident
Course						oved		oved		oved		oved
Number	Course Name	Code	Proposed Change	Rationale					Yes		Yes	
Number	Course Name	Code	Proposed Change	Rationale	Yes	INO	res	INO	res	No	res	No
				This course does offer students the relevant content. Additionally, local competitors no longer offer this course in their core.								
BADM 5143			Deleting BADM 5143 Business	See attached.								
(G)	Business Information Systems	DCPS	Information Systems from the MBA Core	See attached.	Х		Х		Х			
(G)	Busiliess illiorillation systems	DCP3	Illiornation systems from the MBA Core		^		^		^			
BADM 5143	Business Analytics	ACPS	Adding BADM 5143 Business Analytics (This course introduces mathematical models that can be used to improve decision-making within an organization. Topics will include introductions to descriptive statistics, inferential statistics, optimization, simulation, regression analysis, time series analysis, and tools such as Microsoft Excel, Visual Basic for Applications (VBA) and R for problem solving and decision support in all areas of business, including supply chain networks, operations, finance, economics, and marketing. Students will make extensive use of Excel and several spreadsheet-based add-ins to solve real business problems, improve business processes, and help make important business decisions) to the MBA Core.	This course would expose students to the knowledge and issues of a rapidly growing industry. As a late entrant into the MBA market, our program would have a feature in its core that our local competitors (i.e., Webster University, Strayer University, Claflin University, SC State University, University of South Carolina) do not have. See attached for competitive analysis of MBA core.  According to U.S. Bureau of Labor Statistics (BLS) data, employment of management analysts – including business analysts – is expected to grow 14% from 2014 to 2024, which is much faster than the average for all occupations.  "According to Statistics Market Research Consulting, the Business Analytics Market is estimated at \$44.5 billion in 2015 and is expected to reach \$71.1 billion by 2022. The factors that are influencing the market growth include rising demand for the analytics by the organizations due to the growing big data trend, quickly changing business environment and customer choices. However, high execution costs and unwillingness in adoption of business analytics are some factors hindering the market growth. Moreover, scarcity of skilled workers with sound technical capabilities poses major challenge to the market" (https://www.strategymrc.com/report/business-analytics-market-2017, Access 3.21.19).	X		X		X			

					Depar	tment	Sch	ool	Aff	airs	Pres	ident
Course					Appr	oved	Appr	oved	Appr	oved	App	roved
Number	Course Name	Code	Proposed Change	Rationale	Yes	No	Yes	No	Yes	No	Yes	No
			Adding BADM 5000 Business Foundations (0 such). This course is designed for non-business majors who are seeking to complete MBA foundation coursework via online modules. There are six required foundation courses (18 sch) for non-business majors that cover the required undergraduate Common Professional Component (CPC) prerequisites needed for the MBA program and its courses. Students may take up to 6 online CPC modules through a third-party.									
			courses and the list of modules offered	majors. This course serves as an option for the College to offer the								
BADM 5000			by a third-party.	foundation courses through online modules offered by a third party at a								
(G)	Business Foundations	NEC	a, a ama part,	savings to the College and the student.	х		Х		Х			
MKTG 5313			Adding following course description for MKTG 5313 Marketing Management: This course will look at the role of the marketing function in the firm. This course will emphasize tactical and operating decisions and decision-making processes. Students will learn market and customer analysis, market segmentation, and marketing mix tactics	There is currently no course description for MKTG 5313 Marketing								
(G)	Marketing Management	RCD	and implementation.	Management.	Х		Χ		Χ			
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					Departr	nent	Sch	nool	Aff	fairs	Pres	sident
Course					Appro	ved	App	roved	Аррі	roved	App	proved
Number	Course Name	Code	Proposed Change	Rationale	Yes 1	No	Yes	No	Yes	No	Yes	No
SCHOOL OF E	DUCATION, HEALTH, AND HUMAN SERVICES											
Department:	Social Work	1	1				1					
SW 330	Human Behavior in the Social Environment I (HBSE I)	CCN	SW 330: Human Behavior in the Social Environment I (HBSE I) has been renamed Human Behavior in the Social Environment with Individuals.	This change is to bring us current with peer BSW programs who also no longer refer to the sequence as a stepwise; 1, 2, 3etc. process of learning how social workers must be knowledgeable of both micro (individual level) and macro (larger system level) theoretical perspectives when assisting clients.	x		X		X			
				This change is to bring us current with peer BSW programs who also no								
				longer refer to the sequence as a stepwise; 1, 2, 3etc. process of learning how social workers must be knowledgeable of both micro (individual level) and macro (larger system level) theoretical perspectives when assisting clients. By changing the name from SW 331 HBSE II to								
				HBSE w/ Larger Systems, SW 330 will no longer be a prerequisite for students to take the course. In addition to the name change of HBSE II, HBSE I has also been renamed. By renaming both courses students now								
				have a wider pathway that is more flexible for their degree completion by not being forced to be "off schedule" if they happen to be accepted into the major during a semester where HBSE I is not offered. Previously the								
				SW program only accepted students into the major once a year at the end of the fall semester. We now accept students on a rolling basis. This								
	Human Behavior in the Social Environment II		SW 331: Human Behavior in the Social Environment II (HBSE II) has been renamed Human Behavior in the Social	flexibility allows students who may transfer to Benedict College to be accepted into the major at any time as long as they meet our major requirements (completion of SW 130, SW 230 with grade of "C or higher",								
SW 331	(HBSE II)	CCN/DP	Environment with Larger Systems.	application, and interview).	Х		Х		Х			

					Depar	tment	Sch	ool	Aff	airs	Pres	ident
Course					Appr	oved	App	oved	Аррі	roved	App	roved
Number	Course Name	Code	Proposed Change	Rationale	Yes	No	Yes	No	Yes	No	Yes	No
				This change is to bring us current with peer BSW programs who also no								
				longer refer to the sequence as a stepwise; 1, 2, 3etc. process of								
				learning how social workers must be knowledgeable of both micro								
				(individual level) mezzo (combination of family and group dynamics), and								
				macro (larger system level) theoretical perspectives when assisting clients								
				with clinical social work practice. By changing the name to SW 333: Social								
				Work Practice with Individuals, SW 330 will no longer be a prerequisite for								
				students to take the course. Additionally, the course will no longer be								
				considered the "introductory" course to direct social work practice within								
				society. In addition to the name change of HBSE I, HBSE II has also been								
				renamed. By renaming both courses students now have a wider pathway								
			SW 333: Social Work Practice I has been	that is more flexible for their degree completion by not being forced to be								
			renamed Social Work Practice with	"off schedule" if they happen to be accepted into the major during a								
SW 333	Social Work Practice I	CCN/DP	Individuals.	semester where Practice I is not offered.	Х		Х		Х			

					Depar	tment	Sch	ool	Aff	airs	Presi	dent
Course					Appr	oved	Appı	oved	Appr	oved	Appr	oved
Number	Course Name	Code	Proposed Change	Rationale	Yes	No	Yes	No	Yes	No	Yes	No
				This change is to bring us current with peer BSW programs who also no								
				longer refer to the sequence as a stepwise; 1, 2, 3etc. process of								
				learning how social workers must be knowledgeable of both micro								
				(individual level) mezzo (combination of family and group dynamics), and								
				macro (larger system level) theoretical perspectives when assisting clients								
				with clinical social work practice. By changing the name to SW 334: Social								
				Work Practice with Families & Groups, SW 333 will no longer be a								
				prerequisite for students to take the course. In addition to the name								
				changes of SW 333 (formerly SW Practice I) and SW 435 (formerly SW								
				Practice III), SW 334 (formerly SW Practice II) has also been renamed. By								
				renaming each course students now have a wider pathway that is more								
				flexible for their degree completion by not being forced to be "off								
				schedule" if they happen to be accepted into the major during a semester								
				where Practice II is not offered. Previously the SW program only accepted								
				students into the major once a year at the end of the fall semester. We								
				now accept students on a rolling basis. This flexibility allows students								
			SW 334: Social Work Practice II has been	who may transfer to Benedict College to be accepted into the major at								
			renamed Social Work Practice with	any time as long as they meet our major requirements (completion of SW								
SW 334	Social Work Practice II	CCN/DP	Families & Groups.	130, SW 230 with grade of "C or higher", application, and interview).	Х		Х		Х			

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Course					App	roved	App	roved	Appı	roved	App	roved
Number	Course Name	Code	Proposed Change	Rationale	Yes	No	Yes	No	Yes	No	Yes	No
SW 435	Social Work Practice III	CCN/DP	SW 435: Social Work Practice III has been renamed Social Work Practice with Communities & Organizations.	This change is to bring us current with peer BSW programs who also no longer refer to the sequence as a stepwise; 1, 2, 3etc. process of learning how social workers must be knowledgeable of both micro (individual level) mezzo (combination of family and group dynamics), and macro (larger system level) theoretical perspectives when assisting clients with clinical social work practice. By changing the name to SW 435: Social Work Practice with Communities & Organizations, SW 334 will no longer be a prerequisite for students to take the course. In addition to the name changes of SW 333 (formerly SW Practice II), SW 334 (formerly SW Practice III), and SW 435 (formerly SW Practice IIII), has also been renamed. By renaming each course students now have a wider pathway that is more flexible for their degree completion by not being forced to be "off schedule" if they happen to be accepted into the major during a semester where SW 435 is not offered. Previously the SW program only accepted students into the major once a year at the end of the fall semester. We now accept students on a rolling basis. This flexibility allows students who may transfer to Benedict College to be accepted into the major at any time as long as they meet our major requirements (completion of SW 130, SW 230 with grade of "C or higher", application, and interview).			X		X			
377 433	Social Work Fractice III	CCIVIDI	Communices & Organizations.	130, 3W 230 With grade of C of higher , application, and interview).								+
SCHOOL OF A	ARTS AND SCIENCES	1	•	•	•							
Department:	Communication and Arts											
				This revision will strengthen students' foundation level skills to better								
				prepare them for Music Theory, Ear Training/Sight Singing, Applied								
MUS 120				Lessons, and upper level music courses. It will allow students to								
(from MUS				matriculate and graduate in four years, pending successful completion of								
100)	Fundamentals of Music	CCNU	Change from 0 SCH to 2 SCH	program requirements.	Х		Х		Х			

					Depai	rtment	Sch	nool	Affairs		Pres	ident
Course					Appı	Approved A		Approved Approved		oved	Арр	roved
Number	Course Name	Code	Proposed Change	Rationale	Yes	No	Yes	No	Yes	No	Yes	No
MUS 130 (from MUS 230)	Foundations: Music Appreciation	CCN CCNU	Change from Music Appreciation to Foundations: Music Appreciation; Move course from sophomore year to freshman year in the program of study.	This revision will strengthen students' foundation level skills to better prepare them for Music Theory, Ear Training/Sight Singing, Applied Lessons, and upper level music courses.	х		х		Х			
MUS 019B MUS 019D MUS 019P MUS 019V MUS 019W	Applied Brass Applied Percussion Applied Piano Applied Voice Applied Woodwind	ССИИ	In an effort to streamline grading and attendance reporting, it is recommended to list all levels of specific applied lessons as one course and to require the student to enroll and successfully complete the course 7 times. There may be several sections based on the number of applied instructors.		X		X		X			
MUS 010B MUS 010C MUS 010D MUS 010F MUS 010I MUS 010J MUS 010M MUS 010P MUS 010V MUS 010W MUS 010W	Brass Band Concert Choir Percussion Ensemble: Female Jazz Ensemble: Instrumental Ensemble: Jazz Combo Marching Band Pep Band Vocal Jazz Ensemble: Woodwind Ensemble: Jazz Ensemble	CCNU	to list all levels of each music ensemble	Music students are required to enroll in up to 8 sections of a music ensemble, beginning first semester freshman year and continuing through the first semester of the senior year for Music Industry Majors and through the second semester senior year for Music majors (currently MUS 113, MUS 114, MUS 213, MUS 214, MUS 313, MUS 314, MUS 413, MUS 414).	x		x		X			

					Depa	rtment	Sch	School Affairs		Pres	sident	
Course					App	roved	App	roved	Appı	oved	App	roved
Number	Course Name	Code	Proposed Change	Rationale	Yes	No	Yes	No	Yes	No	Yes	No
THE 120	Voice & Diction 2 SCH		Add a Theatre Minor, using existing	The proposed Minor in Theatre was developed to serve those students								
THE 231	Theatre Appreciation 3 SCH		courses and current faculty.	with a desire to study Theatre in the absence of a regular Theatre								
THE 230	Beginning Acting 3 SCH			Program of Study. There appears to be a tremendous amount of interest								
THE 330	Intermediate-Acting 3 SCH			in this minor based on feedback from college recruiters and inquiries from								
THE 334	African American Theatre History 3 SCH	AMN		current students.								
ART 235	Arts & Crafts 3SCH											
	Total 17 hours											
					Х		Х		Х			
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					Approved Approved Approved App			ident				
Course					Appr	roved	Appro	ved	Approv	ved	Appı	roved
Number	Course Name	Code	Proposed Change	Rationale	Yes	No	Yes N	No Y	es N	lo '	Yes	No
Department: C	Computer Science, Physics, and Engineer	ring										<u> </u>
New Major Industrial and Systems Engineering (ISE)	ISE	AM	Add a major	A new major in Industrial and Systems Engineering (ISE) is proposed. ISE is a major that originated from mechanical engineering and aimed to address technical side of shop floor management as well as general management in manufacturing and production facilities. Later, it transitioned into other engineering functions as enterprise resource planning and supply chains emerged. It is sometimes referred to or very close to engineering management and mathematical engineering. It lies within strong mathematics with heavy operations research, production, and computer science expertise.	X		×		X			
ISE 231	Operations Research I	ANRC	Add new required course	A new course on the fundamentals of Operations Research Models including linear programming and applications. This will be a required course in the newly proposed Industrial and Systems Engineering program of study.	x		x		х			
ISE 232	Operations Research II	ANRC	Add new required course	This will be a required new course on Dynamic Programming and Optimization. Markov processes and queuing theory for the newly proposed Industrial and Systems Engineering program of study.	х		х		х			
ISE 430	Operations Research III	ANRC	Add new required course	This will be a required new course on stochastic models and methodologies for analyzing and providing solutions to decision making problems with uncertainties for the newly proposed Industrial and systems Engineering program of study.	x		X		x			
ENGR 336	Engineering Materials	ANRC	Add new required course	Introduces overview of mechanical properties of ceramics, metals, and polymers, emphasizing the role of processing and microstructure in controlling these properties.	Х		х		х			
ISE 335	Human-Machines System Design	ANRC	Add new required course	Introduces concepts of assembly line balancing, process design, work measurement and study, time study and management techniques, ergonomics, anthropometry, and learning curves for the new proposed major of Industrial and Systems Engineering.	X		X		x			

							Departi		School Affair			airs	Presi	esident	
Course				Approved		Approved		Approved		Approve					
Number	Course Name	Code	Proposed Change	Rationale	Yes	No	Yes	No	Yes	No	Yes	No			
ISE/SCM 336	Production and Operations Mgt I	ANRC	Add new required course	The fundamentals of forecasting demand, scheduling production, and controlling the movement and storage of material associated with production are studied.	Х		Х		X						
ISE 337	Statistical Quality Control	ANRC	Add new required course	Presents the theory and applications of alternative systems for managing inventory for the proposed ISE major	Х		х		Х						
ISE/SCM 431	Facility Location and Planning	ANRC	Add new required course	Includes quantitative techniques for evaluation of facility design for better manufacturing, product flow, distribution, and services for the proposed ISE major.  The application of quantitative and heuristic methods to problems	х		х		х						
ISE/SCM 432	Production and Operations Mgt II	ANRC	Add new required course	of production, material, and capacity planning for the proposed ISE major.	Х		Х		Х						
ISE 433	Manufacturing Processes	ANRC	Add new required course	This course introduces fundamental principles associated with production processes to the manufacture of products from metals and nonmetals. Emphasizes the physical and quantitative aspects of processing, the selection of processes to manufacture products, and the identification of processes used to manufacture existing products.			X		х						
ISE 434`	Simulation	ANRC	Add new required course	This course will cover models for stationary and nonstationary time series, analysis of trends using regression methods, ARIMA model specification, transformations, parameter estimation, model diagnostics, forecasting, and seasonal ARIMA models. If time permits, we will discuss ARCH and GARCH models.	X		X		Х						
MATH 434	Time Series and Forecasting	ANRC	Add new required course	Students are going to be able to apply their knowledge from linear algebra and probability and statistics courses to real life problems. Much needed decision making skill of short and long term prediction will be taught to the students. The class also will include script writing section using Matlab, R, and Python libraries.	Х		X		X						
ISE/SCM 333	Intro to Supply Chain Management	NEC	New elective course	This will be a required new course on supply chain management for the newly proposed Industrial and systems Engineering program of study.	Х		х		Х						

					Department		nt School		Affairs		Pres	ident
Course	Course Name			Approved		Approved		Approved		Approve		
Number	Course Name	Code	Proposed Change	Rationale	Yes	No	Yes	No	Yes	No	Yes	No
				This will be a required new course on Time Series and Forecasting for the								
ISE/SCM 334	Scheduling	NEC	New elective course	newly proposed Industrial and Systems Engineering program of study.	Х		Х		Χ			
				Statistical quality control methods, tabular and control charts are								
ISE/SCM 338	Supply Change Inventory Management	NEC	New elective course	given for variables and attributes for the proposed ISE major.	Х		Χ		Χ			
				This required subject of the ISE is proposed to be included aligned with								
ISE/SCM 433	Logistics Management	NEC	New elective course	the fundamentals for FE and PE exams.	Х		Х		Χ			
				Introduces students to basic robotics. It will have script writing in C								
				and Python languages for Arduino and Raspberry Pi based systems								
ISE 435	Connected and Autonomous Systems	NEC	New elective course	for traffic to manufacturing systems for the proposed ISE major.	Х		X		Χ			
				This will be a required new course on Time Series and Forecasting for the								
ISE 436	Human Factors Engineering	NEC	New elective course	newly proposed Industrial and systems Engineering program of study.	Х		Х		Х			
	3 3			, , , , , , , , , , , , , , , , , , , ,								
				This will be a required new course on Senior design Project for the newly								
				proposed Industrial and systems Engineering program of study. The								
				course allows the student to apply knowledge attained from the various								
				courses of the undergraduate program to prepare the proper approach of								
ISE 438	Senior Design Project	ANRC	Add new required course	solution to her/his project.	Х		Х		Χ			