

IV. Program Demand

Market Analysis

In recent years, the market for those holding a degree in supply chain management and related fields has grown significantly. The COVID pandemic highlighted the critical need to effectively manage the ever-increasing complexity of global supply chains and advancements in distribution and transportation technology. Within virtually every industry, the competitive pressures of the global economy have increased the demand for skilled professionals who can manage supply chain operations. As evidenced by the number of job vacancies and the level of competitive salaries (see Section VI below), there is a strong labor market for supply chain professionals in the state of Kansas. Two of the three research universities within the KBOR system currently offer supply chain undergraduate degrees, KU – BSB in Supply Chain Management, and KSU – BS in Operations & Supply Chain Management, while WSU offers a Masters in Management Science & Supply Chain Management. Other four-year campuses within the system offer coursework in the field and some two-year campuses such as WSU-Tech and JCCC offer certificates and/or an AA in supply chain management. However, supply chain management degrees are not offered currently at the three regional 4-year campuses. Recent initiatives through the Kansas Department of Commerce (2024) and highlighted by KBOR’s Workforce Development Staff (2024), indicate that there is a need to produce more in-state supply chain professionals. Likewise, at the national level, the U.S. Bureau of Labor Statistics (2024) estimated that there will be a 28% job growth for logisticians, including supply chain managers, between the years 2021 and 2031. Pitt State’s proposed Supply Chain Management and Industrial Distribution Program is designed to help meet these statewide and national workforce needs.

Pitt State is uniquely situated and equipped to supplement the talent pool for supply chain professionals in the state of Kansas. Located in the extreme southeast corner of the state, regional students do not have a local option to access training in supply chain management. The nearest four-year bachelor programs are in Lawrence, Manhattan, Springfield, Missouri, and Fayetteville, Arkansas – each of these options is two or more hours away and attracts a different demographic mix of students than Pitt State. Given these facts, the proposed program is not anticipated to be in direct competition with those programs at KU, KSU, Missouri State, or the University of Arkansas. In addition, Pittsburg has traditionally been a transportation hub since its days as the center of the southeast Kansas coal mining district a hundred years ago. Previously the location of a major Kansas City Southern railyard, Pittsburg is now home to Watco Companies, a major transportation service firm which integrates rail, water, road, and air to meet supply chain needs of businesses across the region, nation, and world. Watco is the second largest operator of short line railroads in the United States with operations in 27 states, Canada, and Australia. In addition, Pittsburg is less than one hundred miles from the headquarters of Walmart, in Bentonville, Arkansas. Due to corporate policies, numerous Walmart suppliers and their distribution centers are located in Northwest Arkansas, one of the fastest growing metropolitan areas in the country. Pitt State has a history of placing graduates with Watco, Walmart, and their affiliates, and we believe the proposed new supply chain major will enhance our relationships with them. As structured, there is a strong local and regional market for graduates of the proposed supply chain BBA.

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	5		150	
Year 2	15		450	
Year 3	25		750	

*Assumes 15 credit hour load per semester

Note: Projections above for Supply Chain Management BBA only; see separate proposal for the Industrial Distribution BST for additional student projections

VI. Employment

Graduates of supply chain management programs can pursue a wide range of careers, such as:

- **Procurement Manager:** Source and negotiate with suppliers to ensure the timely delivery of materials and components at competitive prices.
- **Logistics Manager:** Coordinate the movement of goods from suppliers to customers, including transportation, warehousing, and distribution.
- **Operations Manager:** Oversee the overall operations of a business, including production, inventory management, and quality control.
- **Supply Chain Analyst:** Analyze resource supply data to develop strategies to optimize sourcing and production operations.
- **Supply Chain Consultant:** Provide expert advice to businesses on how to improve their supply chain performance.

The market for supply chain professionals in Kansas is currently strong. At the time of this writing (10/01/24), online recruiting firm Indeed.com (2024) reported 410 openings in the state for “supply chain manager jobs” while Glassdoor (2024) listed 365, and ZipRecruiter (2024) reported 342. Many of these jobs are entry level and located in communities where Pitt State already has a substantial alumni base, including Johnson County which is the second largest feeder county for Pitt State students. We anticipate that the Supply Chain Management degree will present an attractive opportunity for those students desiring a professional business career in Kansas.

Salaries for supply chain professionals in Kansas are also attractive and above average. A review of all supply chain jobs in Kansas currently listed by ZipRecruiter reveal a range from \$36K to \$130K per year. According to the U.S. Bureau of Labor Statistics, the median annual salary is \$77K. Long-term salary prospects in the field are very bright as Salary.com reports that supply chain senior managers have a median annual income of \$165K.

Given the current state-wide demand for supply chain professionals, graduates of the program should face plentiful opportunities for gainful employment in Kansas.

VII. Admission and Curriculum

A. Admission Criteria

Students pursuing the proposed BBA in Supply Chain Management will be admitted to the university according to prevailing Pittsburg State campus-wide policies. Enrollment in the Supply Chain Management BBA also requires admission to the Kelce College of Business. Formal admission to the Kelce College of Business occurs upon completion of the following requirements:

- Completion of at least 30 credit hours applicable to the degree.
- Achievement of a 2.25 cumulative grade point average
- Completion of these courses with a C or better:

English Composition (ENGL 101 or ENGL 190)

Introduction to Research Writing (ENGL 299 or ENGL 190)

Speech Communications (COMM 207)

College Algebra or Elementary Statistics (MATH 113, MATH 143, or higher)

Computer Information Systems (DSIS 130)

Financial Accounting (ACCTG 201)

- Signing the Kelce College of Business Application for Admission Form and the Kelce College of Business Student Oath and Code of Ethics.

Admission to the Kelce College of Business is required prior to enrollment in all upper-level business courses numbered 400 and above.

B. Curriculum

Year 1: Fall

SCH = Semester Credit Hours

Course #	Course Name	SCH
ENGL 101	ENGLISH COMPOSITION (Gen Ed Bucket 1)	3
MATH 143 or MATH 113	ELEMENTARY STATISTICS or COLLEGE ALGEBRA (Gen Ed Bucket 3)	3
BUS 101	INTRODUCTION TO BUSINESS	3
UGS 150	GORILLA GATEWAY (Gen Ed Bucket 7)	2
TBD	Social & Behavioral Sciences Gen Ed (Gen Ed Bucket 5)	3
TBD	Pitt State Designated Requirement (Gen Ed Bucket 7)	1
	SEMESTER TOTAL	15

Year 1: Spring

Course #	Course Name	SCH
ACCTG 201	FINANCIAL ACCOUNTING	3
ENGL 299	INTRODUCTION TO RESEARCH WRITING (Gen Ed Bucket 1)	3
TBD	Pitt State Designated Requirement (Gen Ed Bucket 7)	3
TBD	Natural & Physical Sciences Requirement (Gen Ed Bucket 4)	4
TBD	Arts & Humanities Requirement (Gen Ed Bucket 6)	3
	SEMESTER TOTAL	16

Year 2: Fall

Course #	Course Name	SCH
ACCTG 202	MANAGERIAL ACCOUNTING	3
DSIS 130	COMPUTER INFORMATION SYSTEMS	3
QBA 210	BUSINESS STATISTICS	3
COMM 207	SPEECH COMMUNICATION (Gen Ed Bucket 2)	3
ECON 200	PRINCIPLES OF MICROECONOMICS	3
	SEMESTER TOTAL	15

Year 2: Spring

Course #	Course Name	SCH
ECON 201	PRINCIPLES OF MACROECONOMICS	3
GT 210	SURVEY OF TECHNOLOGICAL SYSTEMS	3
QBA 310	BUSINESS ANALYTICS I	3
TBD	Social & Behavioral Sciences Gen Ed (Gen Ed Bucket 5)	3
TBD	Arts & Humanities Requirement (Gen Ed Bucket 6)	3
	SEMESTER TOTAL	15

Year 3: Fall

Course #	Course Name	SCH
BUS 210	BUSINESS PROFESSIONALISM	3
ID 210	INDUSTRIAL DISTRIBUTION FUNDAMENTALS	3
QBA 410	BUSINESS ANALYTICS II	3
MGT 330	MANAGEMENT AND ORGANIZATIONAL BEHAVIOR	3
MKTG 330	PRINCIPLES OF MARKETING	3
	SEMESTER TOTAL	15

Year 3: Spring

Course #	Course Name	SCH
MGT 550	SUPPLY CHAIN MANAGEMENT	3
FIN 326	BUSINESS FINANCE	3
DSIS 420	MANAGEMENT INFORMATION SYSTEMS	3
GT 300	ENGINEERING DESIGN AND PROBLEM SOLVING	3
MGT 430	LEGAL AND SOCIAL ENVIRONMENT OF BUSINESS	3
	SEMESTER TOTAL	15

Year 4: Fall

Course #	Course Name	SCH
GT 340	POWER/ENERGY/TRANSPORTATION SYSTEMS	3
MKTG 430	RETAIL AND CHANNELS MANAGEMENT	3
MGT 510	OPERATIONS MANAGEMENT	3
ECON XXX	Upper Division Economics Elective	3
TBD	Open Elective	3
	SEMESTER TOTAL	15

Year 4: Spring

Course #	Course Name	SCH
MGT 520	QUALITY MANAGEMENT	3
GT 380	MANUFACTURING ENTERPRISE	3
MGT 671	INTERNSHIP IN SUPPLY CHAIN MANAGEMENT	3
MGT 690	BUSINESS STRATEGY	3
TBD	Open Elective	2
	SEMESTER TOTAL	14

Total Number of Semester Credit Hours 120

VIII. Core Faculty

As proposed, the Supply Chain Management and Industrial Distribution program is a collaboration between the KCOB and CCOT. Like all BBAs in the KCOB, the curriculum for the Supply Chain Management major is modular in design – students take the university’s General Education package, the foundational multi-disciplinary business core (known as the Kelce Core) and prerequisites, followed by the major core courses. As described above, the major core for Supply Chain Management consists of eight courses and an internship – equally split between the KCOB and the CCOT. Since all of the General Education and Kelce Core courses are already established and have adequate capacity to absorb the projected new Supply Chain Management majors, the table below lists only those individual faculty who will teach KCOB’s share of major core courses. (The remaining major core courses will be reflected in the proposal for the CCOT’s proposal for the BST in Industrial Distribution.)

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
SCM Major Courses					
Lee, Sang-Heui*	Professor	Ph.D.	Y	Management/Supply Chain	1.0

Frank, Phillip	Assistant Professor	Ph.D.	Y	Marketing	0.33
Melissa Weed	Courtesy Professor (Internship Director)	MBA	N	Entrepreneurship	.10
Kelce Core Courses					
24 Additional Full-time faculty members					

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

IX. Expenditure and Funding Sources

All faculty members who will teach the KCOB’s share of Supply Chain Management courses are already on staff. The salary and fringe benefits numbers below for the first year are taken from the Pitt State FY25 budget prorated by the share of their FTE assignment to the program. The corresponding numbers for the second and third year reflect an increase of two percent annual increase (the average wage increase for Pitt State faculty in recent years). The annual administrator cost reflects the annual stipend paid in the KCOB for program coordinators.

A. EXPENDITURES	First FY	Second FY	Third FY
Personnel – Reassigned or Existing Positions			
Faculty	\$151,964	\$155,003	\$158,103
Administrators (<i>other than instruction time</i>)	\$2,500	\$2,500	\$2,500
Graduate Assistants			
Support Staff for Administration (<i>e.g., secretarial</i>)			
Fringe Benefits (<i>total for all groups</i>)	\$41,675	\$42,506	\$43,359
Other Personnel Costs			
Total Existing Personnel Costs – Reassigned or Existing	\$196,139	\$200,009	\$203,962
Personnel – New Positions			
Faculty			
Administrators (<i>other than instruction time</i>)			
Graduate Assistants			
Support Staff for Administration (<i>e.g., secretarial</i>)			
Fringe Benefits (<i>total for all groups</i>)			
Other Personnel Costs			
Total Personnel Costs – New Positions	N/A	N/A	N/A
Start-up Costs - One-Time Expenses			
Library/learning resources			
Equipment/Technology			
Physical Facilities: Construction or Renovation			
Other			
Total Start-up Costs	N/A	N/A	N/A
Operating Costs – Recurring Expenses			

Supplies/Expenses	\$500	\$500	\$500
Library/learning resources			
Equipment/Technology			
Travel	\$2,000	\$2,000	\$2,000
Other			
Total Operating Costs	\$2,500	\$2,500	\$2,500
GRAND TOTAL COSTS	\$198,639	\$202,509	\$206,462

B. FUNDING SOURCES <i>(projected as appropriate)</i>	Current	First FY (New)	Second FY (New)	Third FY (New)
Tuition / State Funds	\$198,639	\$198,639	\$202,509	\$206,462
Student Fees				
Other Sources				
GRAND TOTAL FUNDING	\$198,639	\$198,639	\$202,509	\$206,462
C. Projected Surplus/Deficit (+/-) (Grand Total Funding <i>minus</i> Grand Total Costs)		\$0	\$0	\$0

X. Expenditures and Funding Sources Explanations

A. Expenditures

Personnel – Reassigned or Existing Positions

The proposed collaborative Supply Chain Management and Industrial Distribution Program is primarily a “repackaging” of existing courses and curricula within the KCOB and the CCOT. Only two new courses were created to complete the major core. Thus, virtually all of the courses are already available and being taught by existing faculty members on staff. Currently, due to the recent declines in campus enrollment, there is capacity within the current and planned schedule of course offerings to accommodate the new students projected to enroll in the proposed program. This program will allow the two colleges to more efficiently utilize their existing resources by filling currently empty seats.

Personnel – New Positions

No new positions are required to operate the proposed Supply Chain Management and Industrial Distribution Program. With the addition of the two new courses, all other courses and curricula are already in place and being taught by current KCOB and CCOT faculty members. Due to the recent declines in enrollment at Pitt State, classroom capacity exists to accommodate the number of new students projected to enroll in the proposed program. New positions will only be required in the long-run if enrollment in the program grows overall total enrollment in the colleges beyond previously experienced levels.

Start-up Costs – One-Time Expenses

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

Operating Costs – Recurring Expenses

It is estimated that approximately \$500 in supplies/commodities will be consumed each year to support the proposed program. We anticipate the cost of one faculty member to attend one supply chain management conference or professional development program each year at a cost of about \$2,000. Again, these expenditures are already within our budgets and only represent a reallocation of use into the proposed program. No new funds will be necessary to support these direct outlays.

B. Revenue: Funding Sources

All major core faculty positions in the Kelce College of Business are fully funded by Pittsburg State University through annual state appropriations and self-generated student tuition and fees revenue. Because the proposed Supply Chain Management major is built by repurposing existing courses and curricula, and because we currently have excess capacity due to recent enrollment declines, no new revenues will be required to operate the program. *The revenue to operate the program is already in our annual budget.* Thus, the revenues presented in the table above are shown to offset the expected personnel and operating expenses to produce net incremental cost of zero during the first three years. However, if the projected student enrollments in the program meet the targets listed in Table 5, a net surplus will be generated as described below.

C. Projected Surplus/Deficit

The proposed Supply Chain Management and Industrial Distribution Program is expected to break even for the first three years as described and reflected in the figures above. If we are able to meet our enrollment goals and then grow the program beyond these projections, the program will produce a net surplus for the university. Assume the following conditions; the program attracts new full-time students to Pitt State in accordance with our projections in Table 5, these students pay the flat-rate full-time in-state undergraduate tuition/fees rate which grows by three percent annually for the two years following the initial year of enrollment. Under these conditions, in Year 3 we will enroll 25 students who will pay an annual tuition/fees rate of approximately \$8,900 for the academic year. This results in $25 \times \$8,900 = \$222,500$ which exceeds the expected total cost of running the program by a little more than \$16,000. Obviously, any enrollment above the projected level adds to the program's "profit."

XI. References

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APPENDIX: MAP OF SUPPLY CHAIN MANAGEMENT AND INDUSTRIAL DISTRIBUTION DEGREES

Supply Chain and Industrial Distribution - Programs of Study

				BBA	BST	
				Hrs.	Supply Chain	Industrial Distribution
General Education (34 Hours)						
6 hours English	ENGL	101	English Composition	3	3	3
	ENGL	299	Introduction to Research Writing	3	3	3
3 hours Communications	COMM	207	Speech Communication	3	3	3
3 hours Mathematics	MATH	113	College Algebra, or	3	3	3
	MATH	143	Elementary Statistics, (Recommended) or			
	MATH	XXX	Higher level course			
4 hours Science	TBD	XXX	Restricted Student Choice	4	4	4
6 hours Social & Behavior Science	TBD	XXX	Restricted Student Choice (ECON 200 recommended)*	3	3	3
	TBD	XXX	Restricted Student Choice	3	3	3
6 hours Arts & Humanities	TBD	XXX	Restricted Student Choice	3	3	3
	TBD	XXX	Restricted Student Choice	3	3	3
6 hours University-designated	UGS	150	Gorilla Gateway	2	2	2
	TBD	XXX	Restricted Student Choice	1	1	1
	TBD	XXX	Restricted Student Choice (MECET 121, GT 210 or MGT 101 recommended)**	3	3	3
Kelce Core Prerequisites (9 Hours)						
	DSIS	130	Computer Information Systems	3	3	
	ECON	200	Principles of Microeconomics*	3	3	
	ECON	201	Principles of Macroeconomics	3	3	
Kelce Core (42 Hours)						
	ACCTG	201	Financial Accounting	3	3	
	ACCTG	202	Managerial Accounting	3	3	
	DSIS	420	Management Information Systems	3	3	
	ECON	XXX	Restricted Student Choice	3	3	
	FIN	326	Business Finance	3	3	
	BUS	101	Introduction to Business**	3	3	
	BUS	210	Business Professionalism	3	3	
	MGT	330	Management and Organizational Behavior	3	3	3
	MGT	430	Legal and Social Environment of Business	3	3	3
	MGT	690	Business Strategy	3	3	
	MKTG	330	Principles of Marketing	3	3	3
	QBA	210	Business Statistics	3	3	3
	QBA	310	Business Analytics I	3	3	3
	QBA	410	Business Analytics II	3	3	3
COT Prerequisites (3 Hours)						
	GT	210	Survey of Technological Systems**	3	3	3
COT BST Support Courses (30 Hours)						
	MECET	121	Engineering Graphics** (or CM CET 133 Construction Graphics)	3		3
	EET	141	Introduction to Electronics	3		3
	EST	293	Introduction to Industrial Safety (or EST 296 Intro. Construction Safety)	3		3
	GT	320	Communication Systems	3		3
	GT	350	Fundamentals of Coding and Robotics	3		3
	GT	360	Computer Aided Drafting for Automated Manufacturing	3		3
	AT	399	Professional Development in the Transportation Industry	3		3
	AT	400	Fluid Power	3		3
	TM	606	Industrial Supervision	3		3
Supply Chain & Industrial Distribution Major (27 Hours)						
	ID	210	Industrial Distribution Fundamentals	3	3	3
	GT	300	Engineering Design and Problem Solving	3	3	3
	GT	340	Power/Energy/Transportation Systems	3	3	3
	GT	380	Manufacturing Enterprise	3	3	3
	MGT	510	Operations Management	3	3	3
	MGT	520	Quality Management	3	3	3
	MGT	550	Supply Chain Management	3	3	3
	MKTG	430	Retail and Channels Management	3	3	3
	MGT	671	Internship in Supply Chain Management	3	3	
	ID	400	Internship for Industrial Distribution	3		3
Elective Courses (5 to 11 Hours minimum)						
	TBD	XXX	Approved Student Choices (minimum) (Total number of elective hours dependent upon Gen Ed choices.)		5	11
Total Hours					120	120