



**Department of  
Higher Education**

**John R. Kasich**, Governor  
**John Carey**, Chancellor

# **Analysis of Pathways by Cluster**

## **Business**

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## Analysis of Pathways by Cluster Business

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### Abstract

The purpose of this study into pathways is to investigate if there are any common courses in a cluster in the five main areas of General Education/Ohio Transfer Module (OTM), Core (Pre-major Requirements), Foreign Language (if applicable), Major Courses, and Electives (Technical and General Electives) among Ohio's public institutions of higher education, including 23 two-year institutions and 13 four-year institutions. Research findings from this study should be used as a resource toward creating clear pathways from an Associate to a Baccalaureate degree.

### Definitions

- General Education/OTM: Courses used to satisfy the OTM in the areas of English and Oral Composition, Mathematics, Arts & Humanities, Social Sciences, and Natural Sciences. A category of "Other General Education" is used to show the institution-specific general education courses that a student is required to take to meet that institution's general education requirements.
- Core (Pre-major Requirements): Courses that a student is required to take before he or she may formally be accepted into or apply for a specific major. This varies by institutions.
- Foreign Language (if applicable)
- Major Courses: Courses that are listed by the institution as required for a major, which may be within the same discipline area as the major or outside of the discipline major.
- Technical Electives: Courses within the same discipline area as the major but are not required and a student has the choice to choose from several options.
- General Electives: Courses from any area that a student may take to fulfill remaining credit hours.<sup>1</sup>

### Research Questions

1. What are the most common courses for various majors<sup>2</sup> and clusters<sup>3</sup>?
2. Which majors within a cluster have different or similar courses?

### Methodology

#### *Initial Research*

The first step into the research was to locate an institution's catalog or webpage that included its list of majors and course descriptions. In several cases, a catalog or webpage dedicated to majors was not

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<sup>1</sup> General Electives are not shown in the comparison tables due to the large and varied range of credit hours required by each institution. The range of credit hours is shown on the final overall table.

<sup>2</sup> Major is defined as a concentration of study chosen by a student

<sup>3</sup> Cluster is defined as an academic category or a field of study. It may also be known as the meta-major.

available. When that occurred, the process was to simply search for a major on an institution's website. Once a major's information was located, all courses were inputted into an excel sheet under the appropriate main area. In many cases, several courses were listed, and a student has the choice of which one to choose. The following items were taken into consideration in the initial research process:

- When a program refers to Ohio Transfer Module (OTM) approved general education course(s) in general, simply "OTM req" is listed, instead of listing every single course and is notated as "Any Course" in the comparison tables.
- When several general education courses are listed in the research results for one institution, it is assumed that a student would have the option to choose among the courses, unless otherwise noted.
- Minor and certificate information is included, although most do not require general education courses; therefore they are not used toward the counting of the base count or of any courses they require.<sup>4</sup>

The final process to assure the accuracy of information was conducted prior to the analysis of the results for the report. It should be noted that the accuracy of the data collected is a reflection of the accuracy of the information presented in an institution's website or catalog. When there was ambiguity of where a course should be placed in the main areas, best judgement was used in deciding where to place the course. This can be used as an exercise of how a new student would be able to access information about a major and how he/she would understand and view the results one was able to find.

### *Analysis*

For the analysis, the following steps were taken:

- A. Count the number of a type of course for each major under each area
- B. Compare the numbers of the types of courses to determine which courses were the most common courses
- C. List the courses in order of commonality in the tables to compare between two- and four-year programs
- D. Take the most common course from each area for each major and compare across each major to see if there are any commonalities between majors

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<sup>4</sup> Minors and certificates are not included in the count in order to have the most similar types of credentials (i.e. associate and bachelor degrees) being compared. This is to ensure as much as possible that the counts are not skewed since minors and certificates do not typically require general education courses. It is still important to note that some institutions offer these credentials since they may decide to partake in the pathways.

*The summarized data tables under Findings are organized and presented using the following aspects:*

- In the tables, in the left column under the title of the program, counts are shown of how many two- and four-year institutions offer that program. This is the base count<sup>5</sup>.
- In the tables, the most common courses are listed for two- and four-year institutions for each major.
- When counting the number of a type of course for a major, if one institution offers multiple types of one kind of course, e.g., Calculus I, II etc., only one is counted.
- In the tables, the order of the courses, if there are multiple, is from the most common to the next most common. Courses that were least common are not included.
- In the tables, the courses in bold are those that the two- and four-year programs have in common.
- Percentages in the tables may add to more or less than 100%. This is due to two reasons.
  - Reason 1 is because some institutions allow a student to choose among several mathematics courses. That institution would be counted more than once towards the counts for the types of courses but only once for the base count.

Example:

- Institution B requires College Algebra, Statistics, or Calculus as the general education course for mathematics for a major. Institution B will be counted 3 times for the mathematics counts, once in the count for College Algebra, once in the count for Statistics, and once in the count for Calculus. It will only be counted once towards the base count.
- Reason 2 is because the least common courses are not included in the table so their percentages are not shown.

The purpose of the comparison between types of institutions against a major is to see the types of common courses two- and four-year institutions require and the degree of commonality among two- and four-year institutions, which will help determine which course should be selected as the course in its respective area in the cluster pathway when comparing courses across the majors.

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<sup>5</sup> Base count is defined as the number of institutions that offer the specific major.

## Findings

### Cluster: Business

Accounting		Most Common Courses	Two-Year Institutions	Four-Year Institutions
Two-year Institutions 22 majors  Four-year Institutions 12 majors	General Education	Math	Statistics Related: 45% - <b>Statistics for Business/ Business Statistics: 14%</b> - <b>Statistics: 22%</b> - <b>Intro to Statistics: 9%</b> Business Math: 41% Finance : 9% Applied Math: 9% <b>College Math/Algebra: 14%</b> Finite Math: 5% Business Analysis: 5% Survey Math: 5% Contemporary Math: 5% Quantitative Reasoning: 5% Any course: 23 %	Calculus Related: 100% - Calculus with Applications: 17% - Calculus 1: 33% - Business Calculus: 17% - Analytic Geometry and Calculus: 17% - Calculus and Analytics: 8% - Intuitive Calculus: 8% Statistics Related: 50% - <b>Business Statistics: 17%</b> - Applied Business Statistic: 8% - <b>Statistics: 8%</b> - Intro to Probability and Statistics: 8% - <b>Intro to Statistics: 8%</b> Applied Finite Math: 33% <b>College Algebra: 25%</b>
		Arts & Humanities	<b>Any course: 59%</b> Art Appreciation: 5% Logic: 5% Intro to Philosophy: 5% Ethics: 9% American History: 5% Critical thinking : 9%	<b>Any course: 83%</b>
		Social Sciences	<b>Microeconomics: 86%</b> <b>Macroeconomics: 59%</b> <b>Intro to Psychology: 9%</b> <b>Intro to Sociology: 9%</b> Any course: 9%	<b>Microeconomics: 67%</b> <b>Macroeconomics: 67%</b> <b>Intro to Psychology: 17%</b> <b>Intro to Sociology: 8%</b> Any course: 58% Intro to Anthropology: 8%
		Natural Sciences	<b>Any course: 18%</b>	<b>Any course: 75%</b>
		Other Gen Ed	First Year Experience Management Orientation	Ethics Elective Diversity Elective Global Elective Cross-Cultural Gen Ed African-American Experience
	Core	Pre-Major	N/A	Microeconomics: 50%



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	Requirements		<p>Macroeconomics: 50%</p> <p>Managerial Accounting: 33%</p> <p>Accounting 1: 25%<sup>6</sup></p> <p>Accounting 2: 25%</p> <p>Financial Accounting 1: 25%</p> <p>Business Communication: 17%</p> <p>Business Survey:17%</p> <p>Intro to Business: 17%</p>
Foreign Language	If applicable	Survival Spanish: 5%	Language Course:25%
Major Courses		<p><b>Tax Accounting: 100%</b></p> <p><b>Managerial Accounting:95%</b></p> <p><b>Intermediate Accounting 1: 95%</b></p> <p><b>Intermediate Accounting 2: 95%</b></p> <p>(Intro) Financial Accounting 1: 86%</p> <p>Business Law: 68%</p> <p><b>Cost Accounting: 63%</b></p> <p><b>Applications/Apps: 59%</b></p> <p>Spreadsheets: 59%</p> <p><b>Legal Environment of Business: 36%</b></p> <p>Computerized Accounting: 36%</p> <p>Payroll: 36%</p> <p>Marketing: 31%</p> <p>Principle Management: 31%</p> <p>Accounting 2: 31%</p> <p>Gov't or Nonprofit Related: 27%</p> <p><b>Business Finance: 23%</b></p> <p>QuickBooks: 23%</p> <p>Accounting 1: 18%</p> <p>Excel: 18%</p> <p>Business Introduction: 18%</p> <p>Capstone:18%</p> <p>Co-Op: 18%</p> <p>Seminar:14%</p> <p>Business Communication:14%</p> <p>Internship/Field Experience:14%</p> <p>Practicum: 9%</p>	<p><b>Tax 1 or Income Tax Related:100%</b></p> <p><b>Legal Environment of Business 92%</b></p> <p>Management Organizational Behavior Related: 83%</p> <p><b>Cost Accounting: 75%</b></p> <p>Marketing Concepts &amp; Related:75%</p> <p>Auditing:75%</p> <p>Information Systems Related:67%</p> <p>Financial Accounting 1: 58%</p> <p><b>Intermediate Accounting 1: 58%</b></p> <p><b>Intermediate Accounting 2: 50%</b></p> <p>Financial Management: 42%</p> <p>Strategic Management: 42%</p> <p><b>Applications/App Related: 33%</b></p> <p>Business Analytics 1: 33%</p> <p>Business Statistics: 33%</p> <p>Business/Professional Communication: 33%</p> <p>Accounting Systems:33%</p> <p>Advanced Accounting: 33%</p> <p>Business Ethics: 33%</p> <p><b>Business Finance: 33%</b></p> <p>Business Professionals: 33%</p> <p><b>Managerial Accounting: 33%</b></p> <p>Operation Management 33%</p> <p>Operations &amp; Supply Chain Management: 33%</p> <p>Strategy Related: Domestic &amp; Global: 33%</p>

<sup>6</sup> Neither Cleveland State, OSU, or Wright State's Accounting 1 & 2 described financial or managerial accounting



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	Electives		N/A	<u>In the areas of:</u> Government and Non-Profit Taxation Information Systems International Accounting Tax Accounting 2
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<b>Business Management</b>		<b>Most Common Courses</b>	<b>Two-Year Institutions</b>	<b>Four-Year Institutions</b>
Two-year Institutions: 23 majors  Four-year Institutions: 13 majors	General Education	Math	Statistics Related: 48% - General Statistics/Statistics: 22% - <b>Intro to Statistics: 14%</b> - <b>Business Statistics: 4%</b> - Statistical Concepts: 4% College Algebra: 17% Business Math: 17% Any course: 13%	Statistic Related: 38% - <b>Business Statistics: 15%</b> - Statistics for Business Science: 8% - <b>Intro to Statistics: 8%</b> - Intro to Probability & Statistics: 8%
		Arts & Humanities	<b>Any course: 43%</b> Intro to Philosophy: 9% Intro to Ethics: 9%	<b>Any course: 54%</b>
		Social Sciences	<b>Microeconomics: 91%</b> <b>Macroeconomics: 39%</b> General Psychology: 22% <b>Any course: 17%</b> General Sociology: 13% Intro to Psychology: 4% Intro to Sociology: 4%	<b>Microeconomics: 46%</b> <b>Macroeconomics: 46%</b> <b>Any course: 31%</b>
		Natural Sciences	<b>Any course: 22%</b>	<b>Any course: 80%</b>
		Other Gen Ed	First Year Success Other 1 <sup>st</sup> Year Initiatives	African-American Experience Global Studies Ethics & Ethical Issues Cross-Cultural Perspectives
	Core	Pre-Major Requirements	N/A	Microeconomics: 38% Macroeconomics: 31% Human Resource Management: 15%
	Foreign Language	If applicable	N/A	Foreign Language Any course: 23%
	Major Courses		<b>(Intro) Principles of Marketing: 83%</b> Financial Accounting: 78% <b>(Intro) Principles of Management: 70%</b> <b>Human Resources Management: 57%</b> Managerial Accounting: 48% Business Law: 43% Introduction to/Principles of Business: 43%	<b>Legal Environment of Business: 61%</b> <b>Management and Organizational Behavior: 46%</b> <b>Human Resource Management: 31%</b> Macroeconomics: 31% <b>Business Finance: 31%</b> <b>(Intro) Operations Management: 31%</b> <b>(Intro) Principles of</b>





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			Business Communication: 39% <b>Organization Behavior: 39%</b> Speech or Public Speaking:35% Computer Applications: 30% <b>Legal Environment of Business:30%</b> Excel: 26% Supervision:26% Entrepreneurships: 22% International Business: 22% <b>Business Finance: 17%</b> Ethics:17% Leadership: 17% <b>Operations Management: 17%</b> Sales/Selling: 17% Small Business Management: 17% Spreadsheets : 17%	<b>Management: 31%</b> <b>(Intro) Principles of Marketing: 31%</b> (Intro) International Business:23% Microeconomics: 23%
	Electives		N/A	<u>In the areas of:</u> Independent Study Internship Staffing



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<i>Business Administration</i>		<i>Most Common Courses</i>	<i>Two-Year Institutions</i>	<i>Four-Year Institutions</i>
Two-year Institutions 6 majors  Four-year Institutions 10 majors  2 minors	General Education	Math	College Algebra: 50% Business Math:33% Business Calculus:33% <b>Business Statistics: 17%</b>	Statistic Related: 40% - Introduction to Statistics:10% - Intro to Probability & Statistics: 10% - <b>Business Statistics: 20%</b>
		Arts & Humanities	<b>Any course: 67%</b> American History: 17%	<b>Any course: 90%</b>
		Social Sciences	<b>Macroeconomics: 67%</b> <b>Microeconomics: 50%</b> Intro to Psychology: 33%	<b>Microeconomics : 60%</b> <b>Macroeconomics: 60%</b> Any course: 40%
		Natural Sciences	<b>Any course: 50%</b>	<b>Any course: 100%</b>
		Other Gen Ed	First Year/College Success: 33%	African American Experience:20%
	Core	Pre-Major Requirements	N/A	Microeconomics: 60% Macroeconomics : 50% Financial Accounting: 30% Managerial Accounting: 20%
	Foreign Language	If applicable	Survival Spanish: 17%	Foreign Language: 20%
Major Courses		Computerized Applications: 83% Business Law: 50% <b>Intro to Financial Accounting:50%</b> <b>Human Resource Management: 33%</b> Intro to Managerial Accounting: 33% <b>Organizational Behavior:33%</b> <b>Principles of Management:33%</b> Seminar: 33%	(Intro) Principles to Marketing: 60% <b>(Intro) Principles to Management: 60%</b> Operations Management: 60% Legal Business Environment: 60% (Intro) Business Finance : 40% Leadership Related Courses: 40% Macroeconomics:40% (Intro) Principles of Finance: 30% Business Statistics: 30% <b>(Intro) Principles to Financial Accounting: 30%</b> Business Analytics: 30% Business Communication: 30% <b>Human Resource Management: 30%</b> (Business) Information Systems Related: 30% <b>Organizational Behavior: 30%</b> Intro to International Business: 30%	



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	Electives			<u>In the areas of:</u> International Trade and Finance Money and Banking
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<b>Business Economics</b>		<b>Most Common Courses</b>	<b>Four-Year Institutions</b>
Two-year Institutions None  Four-year Institutions 11 majors	General Education	Math	Calculus 1: 27% Applied Calculus 1: 18% <b>College Algebra: 18%</b>
		Arts & Humanities	<b>Any course: 91%</b>
		Social Sciences	Any course: 45% <b>Microeconomics: 45%</b> <b>Macroeconomics: 35%</b>
		Natural Sciences	<b>Any course:100%</b>
		Other Gen Ed	<b>First Year Experience/Intro to University Life: 18%</b> Health: 18%
	Core	Pre-Major Requirements	Principles of Macroeconomics: 18% Principles of Marketing:18% Principles of Microeconomics: 18%
	Foreign Language	If applicable	<b>Language Requirement: 36%</b>
	Major Courses		Intermediate Microeconomics: 55% <b>Principles of Macroeconomics: 55%</b> Intermediate Macroeconomic Theory: 45% Intermediate Macroeconomics: 45% Intermediate Microeconomic Theory: 45% <b>Principles of Microeconomics: 45%</b> Legal Business Environment:35% Business Finance: 27% Applied Econometrics: 18% Business Communication: 18% Business Statistics18% Exploring Business: 18% Introduction to Econometrics:18% Introduction to Managerial Accounting: 18% Operations Management:18% Principles of Management:18% Principles of Marketing: 18% Senior Seminar: 18%
	Electives		<u>In the areas of:</u> Economics



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<i>Finance</i>		<i>Most Common Courses</i>	<i>Two-Year Institutions</i>	<i>Four-Year Institutions</i>
Two-year Institutions 7 majors	General Education	Math	Statistics: 28% Any: 28% Applied Math: 14% Business Math for AAB: 14%	Calculus 1/Business Calculus: 46% Algebra: 23% Business Statistics: 15.4% Elementary Statistics 1 & 2: 7%
Four-year Institutions 13 majors		Arts & Humanities	<b>Any: 71%</b> Intro to Humanities: 42%	<b>Any: 85%</b> Business Ethics: 8%
		Social Sciences	<b>Microeconomics: 71%</b> <b>Macroeconomics: 43%</b>	<b>Microeconomics: 77%</b> <b>Macroeconomics: 69%</b> Psychology: 23% Any: 23%
		Natural Sciences	<b>Any: 57%</b> None: 43%	<b>Any: 100%</b>
		Other Gen Ed	First-Year Experience	Global Diversity US Diversity
Core	Pre-Major Requirements	N/A	Accounting 1 & 2: 23% <b>Financial Accounting: 15%</b>	
Foreign Language	If applicable	N/A	N/A	
Major Courses		<b>Financial Accounting: 100%</b> <b>Managerial Accounting: 71%</b> <b>Management: 57%</b>	Investments: 62% <b>Management: 62%</b> Legal Environment of Business: 54% Corporate Finance: 46% Financial Institutions: 46% <b>Financial Accounting I: 39%</b> <b>Managerial Accounting: 31%</b>	
Electives			<u>In the areas of:</u> General business courses Risk management Financial Modeling Securities	



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<i>Human Resources</i>		<i>Most Common Courses</i>	<i>Two-Year Institutions</i>	<i>Four-Year Institutions</i>
Two-year Institutions 12 majors  1 certificate  Four-year Institutions 10 majors  1 minor	General Education	Math	Business Math (AAB program): 58% <b>Intro to Statistics: 25%</b> Contemporary Math: 17% Any: 17%	Business Statistics: 20% Business Calc: 20% College Algebra: 20%
		Arts & Humanities	<b>Any: 58%</b> <b>None: 33%</b> US History Since 1877: 8%	<b>Any: 100%</b> Business Ethics: 10% Humanities in Western Trad: 10%
		Social Sciences	<b>Microeconomics: 75%</b> <b>Macroeconomics: 50%</b> <b>Intro to Psych: 42%</b> Intro to Sociology: 42%	<b>Microeconomics: 80%</b> <b>Macroeconomics: 60%</b> <b>Intro to Psych: 20%</b>
		Natural Sciences	<b>Any: 25%</b>	<b>Any: 100%</b>
		Other Gen Ed	First-year course	First-year experience Global Diversity US Diversity
	Core	Pre-Major Requirements	N/A	Accounting 1 & 2: 20% Financial Accounting: 10% Managerial Accounting: 10%
	Foreign Language	If applicable	N/A	N/A
	Major Courses		Computer Applications: 100% Principles of Management: 100% <b>Business Law: 92%</b> <b>Human Resource Management: 92%</b> <b>Labor Relations: 75%</b> <b>Staffing: 33%</b>	<b>Human Resources Management: 100%</b> Compensation: 80% <b>Legal Environment of Business: 70%</b> Organizational Behavior: 60% <b>Labor Relations: 60%</b> <b>Selection &amp; Staffing: 60%</b>
Electives			<u>In the areas of:</u> Hiring/Firing Training/Development Conflict Management Other Management courses Other Business courses	



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<i>Information Systems</i>		<i>Most Common Courses</i>	<b>Two-Year Institutions</b>	<b>Four-Year Institutions</b>
Two-year Institutions 7 majors  Four-year Institutions 13 majors	General Education	Math	Intro to Statistics: 29% <b>College Algebra: 29%</b> College Math: 29%	Calculus: 62% <b>Algebra: 23%</b> Business Math 1 & 2 (BBA): 8%
		Arts & Humanities	<b>Any: 71%</b>	<b>Any: 100%</b>
		Social Sciences	<b>Microeconomics: 28%</b> <b>Macroeconomics: 28%</b> Any: 28%	<b>Microeconomics: 69%</b> <b>Macroeconomics: 69%</b> Any: 54%
		Natural Sciences	<b>Any: 57%</b>	<b>Any: 100%</b>
		Other Gen Ed	First-year courses	First-year courses Global Diversity US Diversity
	Core	Pre-Major Requirements	N/A	Accounting 1 & 2: 31%
	Foreign Language	If applicable	N/A	Third-level foreign language course: 8%
	Major Courses		<b>System Analysis: 43%</b> Intro to Computer Concepts: 43% HTML: 43%	<b>Systems Analysis &amp; Design: 85%</b> Legal Environment of Business: 77% Information Management: 62% Accounting: 62%
	Electives		<u>In the areas of:</u> Applications Networking	<u>In the areas of:</u> E-Commerce Big Data Security Logistics Supply Chain Management Networking General business courses



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<i>International Business</i>		<i>Most Common Courses</i>	<i>Two-Year Institutions</i>	<i>Four-Year Institutions</i>
Two-year Institutions 2 majors	General Education	Math	Contemporary Math: 50% Any: 50%	Calculus: 30% College Algebra: 20% Business Statistics: 10% Statistics: 10%
Four-year Institutions 10 majors		Arts & Humanities	Foreign language elective: 50%	<b>Any: 100%</b>
		Social Sciences	<b>Microeconomics: 100%</b> <b>Macroeconomics: 50%</b>	<b>Microeconomics: 70%</b> <b>Macroeconomics: 60%</b>
		Natural Sciences	Any: 50%	Any: 100%
2 minors		Other Gen Ed	N/A	US Diversity Global Diversity
Core		Pre-Major Requirements	N/A	Intro to Business Comm: 50% Accounting 1 & 2: 40%
Foreign Language		If applicable	Foreign language elective: 50%	Varying requirements: 60%
Major Courses			Intro to Business: 100% Financial Accounting: 100% <b>Business Law: 100%</b> Marketing: 100% <b>International Trade: 100%</b> Management: 100%	International Business: 90% Global Management: 80% International Finance: 70% International Marketing: 50% <b>Legal Environment of Business: 50%</b> <b>International Trade: 40%</b>
Electives		Business courses	In the areas of: International logistics International sales International business law Cultural Courses General upper division business course	



<b>Logistics Management</b>		<b>Most Common Courses</b>	<b>Two-Year Institutions</b>	<b>Four-Year Institutions</b>
Two-year Institutions 4 majors  Four-year Institutions 1 major	General Education	Math	<b>Intro Statistics: 75%</b> Business Math: 25% Data Analytics: 25% Business Statistics: 25% College Algebra: 25% Finite Math: 25% Business Statistics : 25%	<b>Statistics: 100%</b> Calculus for Business: 100% Calculus I: 100%
		Arts & Humanities	<b>Any Course: 75%</b> Principles of Ethics: 25%	Any Course: 100%
		Social Sciences	<b>Microeconomics: 100%</b> Intro to Psych: 50% Intro to Sociology: 50% <b>Macroeconomics: 25%</b>	<b>Microeconomics: 100%</b> <b>Macroeconomics: 100%</b>
		Natural Sciences	None: 75% <b>Any Course: 24%</b>	<b>Any Course: 100%</b>
		Other Gen Ed	Comp. and Software. App: 50% Micro App: 25% Micro Excel: 50%	Diversity Course: 100% Global Studies: 100%
	Core	Pre-Major Requirements	N/A	Intro Acct I: 100% Intro Acct II: 100% Business Analytics: 100% Stat. Techniques: 100%
	Foreign Language	If applicable	N/A	N/A
Major Courses		Mgmt Prog/ Mgmt: 100% <b>Legal. Envi. Business/ Business Law: 100%</b> Intro Finance Acct: 75% <b>Mkt Mgmt: 75%</b> Mgmt Acct: 75% <b>Oper. Mgmt: 75%</b> Purch. Supply Mgmt: 50% Log. Physic. Distr: 50% Business Strategy/ Intro Business: 50% SC Mgmt: 50% Business Comm: 50% <b>Log. Mgmt: 50%</b> Contin. Improv: 25% Idust/Org. Psych: 25% Stat. Quality. Control: 25% <b>Org. Behav :25%</b> Negotiations Skills: 25% Warehouse Mgmt: 25% Inventory Mgmt: 25%	Business Finance: 100% <b>Log. Mgmt: 100%</b> <b>Legal Envi. Business: 100%</b> Intro Intern. Business: 100% App. Business Skills: 100% <b>Intro Oper. Mgmt: 100%</b> <b>Mkt Mgmt: 100%</b> <b>Org. Behav: 100%</b> Strategic Mgmt: 100%	



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			Log & SC Mgmt: 25% Prob Business: 25% Intern. Log Mgmt: 25% Leadership: 25% Transport Mgmt: 25%	
	Electives		<u>In the areas of:</u> Co-op Ed Intro SC Mgmt Quality Mgmt Human Relations	



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<b>Marketing</b>		<b>Most Common Courses</b>	<b>Two-Year Institutions</b>	<b>Four-Year Institutions</b>
Two-year Institutions 14 majors	General Education	Math	<b>Statistics: 42.8%</b> Business Math: 35.7% <b>College Algebra: 21.4%</b> Any Course: 21.4% Quantitative Reasoning: 17.1% Finite Math: 14.2%	Calc: 53.8% Any Course: 23% <b>Statistics: 15.4%</b> Calc. & Analytic Geo: 15.4% Math for Business: 15.4% <b>College Algebra: 7.69%</b>
		Arts & Humanities	<b>Any Course: 57%</b> Intro to Human: 14.2% Amer. Hist: 14.2%	<b>Any Course: 78%</b>
		Social Sciences	<b>Microeconomics: 64%</b> <b>Macroeconomics: 43%</b> <b>Intro to Psych: 36%</b> <b>Intro to Sociology: 36%</b>	<b>Microeconomics: 84%</b> <b>Macroeconomics: 54%</b> Any Course: 46% <b>Intro to Psychology: 23%</b> <b>Intro to Sociology: 15.4%</b>
		Natural Sciences	<b>Any Course: 42.8%</b> None: 57%	<b>Any Course: 100%</b>
		Other Gen Ed	Comp. & Software App FYE Management Program Human Wellness Comp. Elec	Global Studies Intro to Uni Life: Explore Business: Social Diversity: Physical Ed: Historical Perspective: Ethnic Insight and Reason Health Cultural Diversity in US: Social & Personal Awareness Computer Skills Human Comm Af.Amer. Exp
Four-year Institutions 13 majors	Core	Pre-Major Requirements	N/A	Marketing: 15.4% Intro to Business: 15.4% Business Comm: 15.4% Microecon: 7.69% Macroecon: 7.69% Stats I: 7.69% Business Stats: 7.69% Business Pathways: 7.69% Acct. & Business concepts: 7.69% Quantitative Business Model: 7.69% Acct I: 7.69% Intro to MIS: 7.69% Advertising: 7.69% Marketing Mgmt: 7.69% Intro to COOP for Business: 7.69%



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			Fin. Mgmt: 7.69%
Foreign Language	If applicable	<b>None: 100%</b>	<b>None: 38.5%</b> Foreign Lang or Study Abroad: 7.69%
Major Courses		<b>Mrkt Mgmt: 100%</b> Business Mang/ Mang: 78.6% <b>Intro Finc Acct: 78.6%</b> <b>Promo. Strag/ Ad: 78.6%</b> Custmr Serv/ Sales: 71.4% <b>Legal Business: 71.4%</b> <b>Org. Behav: 50%</b> <b>Intro Mang. Acct: 36%</b> <b>Consmr Anlyis: 36%</b> <b>Intro Business: 36%</b> Intro to S. Media: 28.6% <b>Accounting: 28.6%</b> HR Mgmt: 28.6% Retailing: 28.6% Graphic Design: 28.6% <b>Spreadsheet: 28.6%</b> Ed. Prep: 21.4% <b>Digital Mrkt: 21.4%</b> Business Strategy: 14.2% Micro: 35% <b>E-Commerce: 14.2%</b> <b>Info Tech: 14.2%</b> <b>SC Mgmt: 14.2%</b> Intro Micro App: 14.2% <b>Business Comm: 14.2%</b> <b>Capstone: 14.2%</b> <b>Ethics: 14.2%</b> Case Studies in Business: 14.2% Excel: 14.2% Mrkt Seminar: 14.2% <b>Software App: 14.2%</b> Web pg. Authoring: 14.2% Service Mrkt: 7.14% <b>Mrkt Research: 7.14%</b> Adv. Database: 7.14% <b>Branding: 7.14%</b> Corp. Fin: 7.14% Intro Purch: 7.14% <b>Entrepreneur: 7.14%</b> <b>International Business: 7.14%</b> Mrkt Practicum: 7.14% Team Leadership: 7.14% Team Building: 7.14% Supervision: 7.14% Prof Comm: 7.14%	<b>Legal Business Envi: 92.3%</b> <b>Consumr Behav: 92.3%</b> <b>Mkt Research: 84.6%</b> <b>Marketing: 69.2%</b> Global/Mkt Strategy: 61.5% <b>Intro. Oper. Mgmt: 54%</b> Management: 54% <b>Business Comm I: 54%</b> <b>Business Policy &amp; Strategy: 54%</b> <b>Mkt Mgmt: 46%</b> <b>Fin. Acct: 46%</b> Sales & Serv. Mkt: 38.5% App. Business Stats: 38.5% Business Finance: 38.5% <b>Intro to Acct: 38.5%</b> <b>Info Tech: 38.5%</b> <b>International Business: 30.8%</b> <b>Org. Theory &amp; Behav: 30.8%</b> Intro Acct II: 30.8% Intro Business Analytic: 30.8% <b>Mgmt Acct: 30.8%</b> Macro: 30.8% Decision in Mkt: 30.8% Intro Comp. App: 23% Career in Mkt: 23% Fin. Mgmt: 23% Prof. Devpmt: 15.4% Intro to Mkt. Mgmt: 15.4% Intro to Mgmt Science: 15.4% Business Professional: 15.4% Writing in Business: 15.4% Log. Mgmt: 15.4% <b>Spreadsheet: 15.4%</b> <b>SC and Oper. Mgmt: 15.4%</b> Global Envi of Business: 15.4% <b>Business Ethics: 15.4%</b> Business Comm II: 7.69% Business Calc: 7.69% Business Soc & Gov: 7.69% Amer. Business: 7.69% Microeconomics: 7.69% <b>Advertising: 7.69%</b> <b>Business Admin: 7.69%</b> Business Admin II: 7.69% Int.Ops & SCM: 7.69%



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			<p>GIS: 7.14%          Business Analysis W Alg: 7.14%  <b>Business Admin: 7.14%</b>          Mrkt Planning: 7.14%          Product Mang: 7.14%          Accounting II: 7.14%          Pricing Strtgy: 7.14%          Elect. Business. App: 7.14%  <b>Oper. Mang: 7.14%</b>          Log. Phys. Distr: 7.14%</p>	<p>Int.Ops &amp; SCM: 7.69%          Internship: 7.69%          Econ of Global Money:7.69%          Calc W/ Business App: 7.69%  <b>E-Commerce: 7.69%</b>          Mkt Project: 7.69%  <b>Entrepreneurial Mkt: 7.69%</b>          Special Topics Mkt: 7.69%          Consulting: 7.69%  <b>Digital Branding: 7.69%</b>          Data Analysis: 7.69%          Product Mgmt: 7.69%  <b>Capstone: 7.69%</b>          Media Stud. Pract: 7.69%  <b>Brand Mgmt: 2</b>          Mkt Practicum: 7.69%          Creat. Cust. Val. Mkt: 7.69%          App. Business Skills and Envi:          7.69%  <b>Software: 7.69%</b>          World of Business: 7.69%</p>
	Electives		<p><u>In the area of:</u>          Marketing</p>	<p><u>In the areas of:</u>          Marketing          E-Commerce &amp; Retailing          Entrepreneurship          Market Research &amp; Decision          Making          Emerging Tech in Marketing          Market Strategy,          Problem Solving and          Communication</p>



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<b>Operations Management</b>		<b>Most Common Courses</b>	<b>Four-Year Institutions</b>		
Two-Year Institutions None  Four-Year Institutions 6	General Education	Math	Calc:33% Any Course: 33%		
		Arts & Humanities	Any Course: 50%		
		Social Services	Non- US Social Science Course: 33% Microeconomics:50% Macroeconomics: :33%		
		Natural Sciences	Any Course:83%		
		Other Gen Ed	<b>Social Diversity: :33%</b> US Diversity Course: 16%		
	Core	Pre-Major Requirements	Intro to Acct: 50% Intro to Acct II: 33% World of Business:33% Software: 33% Business Comm: 33% Business Stats: 33% Micro: 16% Intro Oper. Mgmt: 16%	Mgmt, Strg, Policy: 16% Supply Chain & Op. Mgmt: 16% Fin. Mgmt: 16% Macro: 16% Org. Behav: 16% Marketing: 16% Business, Society, Gov: 16%	Business Stats II: 16% Business Law: 16% Fin. Acct: 16% All 100 and 200 Level Business Courses: 16% Career Development:16% Data analysis: 16% Global Envi. Business: 16% Orientation for Business Students: 16%
	Foreign Language	If Applicable	None: 16%	Language or Study Abroad: 16%	
	Major Courses		Business Analytics: 50% Legal Envir: 50% Marketing: 50% Production Plan & Cntrl: 33% Log. Mgmt: 33% Supply Chain Mgmt: 33% Strategic Source and Purch. Mgmt: 33% International Business: 33% Productivity Improve: 33% Org, Behav: 33% Special Topics in Oper. Mgmt: 33% Lean Six Sigma: 33% Serv. Oper. Mgmt:	Oper. Strategy:16% Quality Mgmt: 16% Intro to Business: 16% Business Pathways I: 16% Special Prob:16% Business Stats: 16% Acct: 16% Business Strategy: 16% Oper. Strategy: 16% Business Info Systems: 16% Supply Chain & Op. Analysis: 16% Supply Chain Log Plan:16% Supply Chain Oper. Strategy: 16%	Pro. Mgmt for Business and Tech: 16% International Oper. Mgmt: 16% Trans. Mgmt: 16% Design Surv. Samples:16% App. Business Forecasting: 16% Internl Field Exp. In Supply Chain Mgmt: 16% Business Professionalism: 16% Business Finance: 16% Innovation Mgmt: 16% App. Business Skills and Envi: 16% Spreadsheet: 16% Strategic Mgmt: 16% Business Policy Forum:



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			<p>33%</p> <p>Intern. Supply Chain Mgmt: 16%</p> <p>Supply Chain Analytics:16%</p> <p>Inventory Mgmt: 16%</p> <p>Supply Chain Modeling: 16%</p>	<p>Supply Chain Sourcing:16%</p> <p>Data Analysis: 16%</p> <p>Legal &amp; Ethical Envi: 16%</p> <p>Strategic Sourcing:16%</p> <p>Statistical Tech: 16%</p> <p>Business Finance: 16%</p> <p>Mrk Mgmt: 16%</p> <p>Finance: 16%</p> <p>Enterprise Systems: 16%</p> <p>Mkt Org: 16%</p> <p>Global Envi of Business: 16%</p> <p>Management: 16%</p>	<p>16%</p> <p>Career Development II: 16%</p> <p>Fin. Mgmt: 16%</p> <p>Info Tech Mgmt: 16%</p> <p>Oper. Plan &amp; Control: 16%</p> <p>Supply Chain Model &amp; Decision Making: 16%</p> <p>Queuing &amp; Simulation: 16%</p> <p>Operations Plan and Sched: 16%</p> <p>Manufacturing &amp; Serv: 16%</p> <p>Independent Study: 16%</p> <p>Global Strategic: 16%</p> <p>Material &amp; cap. Requir. Plan: 16%</p> <p>Case Studies in Oper. Mgmt: 16%</p> <p>Oper. Mgmt: 16%</p> <p>Fin. Acct: 16%</p> <p>Mgmt Acct: 16%</p> <p>Business Analytics I: 16%</p> <p>Digital Tech: 16%</p>
	Electives		<p><u>In the areas of:</u></p> <p>Urban Sustainability</p> <p>Knowledge Management GIS</p> <p>Intro to International Business</p> <p>Intermediate Microeconomics</p> <p>Negotiation and Conflict Management</p> <p>Business Analysis</p> <p>Business Process Model and Design</p> <p>Data Mining</p> <p>Operation Management</p>		



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<b>Supply Chain Management</b>		<b>Most Common Courses</b>	<b>Two-Year Institutions</b>	<b>Four-Year Institutions</b>
Two Year Institutions 5 majors  Four-year Institutions 4 majors	General Education	Math	<b>Stats I: 80%</b> Business Math: 20% Finite Math: 20% Data Analytics: 20%	Quantitative lit: 25% Any Courses: 25% <b>Stats for Business: 25%</b> Business Calc: 25% Elementary Math: 25%
		Arts & Humanities	<b>Any Course: 60%</b> Business Ethics: 20% History Course: 20%	<b>Any Course: 75%</b>
		Social Sciences	<b>Macroeconomics: 40%</b> <b>Microeconomics: 40%</b> <b>Intro to Psych: 20%</b> Intro to Sociology: 20%	Any Course: 50% <b>Macroeconomics: 50%</b> <b>Microeconomics: 25%</b> <b>General Psych: 25%</b>
		Natural Sciences	<b>Any Course: 20%</b> None: 60%	<b>Any Course: 50%</b>
		Other Gen Ed	Intro to Software App:40% <b>College 101/ 1<sup>st</sup> yr. Experience: 20%</b> <b>Career Exploration: 20%</b> Job Search Strategies: 20%	African Amer. Exper: 25% <b>Intro to College Life: 25%</b> Personal Fin. Decision: 25%
	Core	Pre-Major Requirements	Intro to Business Admin: 20% Microcomputer: 20% Acct. Fin I: 20% Acct Fin. II : 20% Intern. Business: 20% <b>Marketing: 20%</b> Management: 20% Business Fin: 20% <b>Business Comm: 20%</b> <b>Legal Envi: 20%</b>	Acct. & Business Concept I: 50% Macroeconomics: 50% Microeconomics: 50% Intro to Acct I: 50% Intro to Business: 50% <b>Intro to Marketing: 50%</b> Stats Method I: 50% <b>Business Comm: 50%</b> Fin. Acct: 50% <b>Business Law: 50%</b> Org. Behavior: 25% Business Society & Gov:25% Intro to MIS: 25% Software Tools: 25% Intermediate Micro: 25% Mgmt Acct: 25% Mgmt Acct Spreadsheet: 25% Fin. Mgmt: 25% Explor Business: 25% Intro to Oper. Mgmt: 25% Mgmt & Strategy & Policy: 25%
		Foreign Language	If applicable	N/A
Major Courses		<b>Business Law/ Legal Envi: 60%</b> <b>SC Mgmt. &amp; App: 60%</b> Fin. Acct: 60%	<b>Org. Theory &amp; Behav: 50%</b> Intro to Mgmt: 50% Global Strategy: 50%	





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			<p>Negotiation Techniques: 60%</p> <p>Intro/Foundation to Business: 40%</p> <p>Marketing: 60%</p> <p><b>Mgmt. Acct: 40%</b></p> <p>Intro to Proj. Mgmt.: 40%</p> <p><b>Mgmt. &amp; Org. Behav: 40%</b></p> <p>Info Tech. Mgmt.: 40%</p> <p>Mgmt. &amp; Purchasing: 40%</p> <p><b>database systems: 40%</b></p> <p><b>Oper. Mgmt.: 40%</b></p> <p>Logistics Mgmt.: 40%</p> <p>Intro to Mgmt: 20%</p> <p>Business Comm: 20%</p> <p>SC Mgmt Practicum: 20%</p> <p>SC Mgmt Seminar: 20%</p> <p>Manufacturing. Mgmt.: 20%</p> <p>Business Policy: 20%</p> <p>Quality Mgmt.: 20%</p> <p>Microeconomics: 20%</p> <p>Macroeconomics: 20%</p> <p>Microcomputer: 20%</p> <p>Warehouse Mgmt: 20%</p> <p>Intro to Purchasing: 20%</p> <p>Inventory Mgmt: 20%</p> <p>Intro to Im/Ex: 20%</p> <p>SC Oper. &amp; Log: 20%</p> <p>Intro to Radio Freq. Id: 20%</p> <p>Mgmt. Info System: 20%</p> <p>Produc. Plan. &amp; Schedul: 20%</p> <p>Computer Programing: 20%</p> <p>Contemporary topics: 20%</p> <p>Small Business database systes: 20%</p> <p>Customer serv./Sales: 20%</p> <p>Performance Mgmt: 20%</p> <p>Strategic Procurement: 20%</p> <p>Mgmt. Program Orientation: 20%</p> <p>Business Strategy/Policy Seminar: 20%</p> <p>Intern. Commerce: 20%</p>	<p>Intro ops &amp; SCM: 50%</p> <p><b>Legal Envi: 50%</b></p> <p>Business Finance: 50%</p> <p>Quality &amp; Process Mgmt: 50%</p> <p>Business Ethics and Leadership: 50%</p> <p>Applied Business Exper 1: 25%</p> <p>Business Writing: 25%</p> <p>Econ Global Money Mkts: 25%</p> <p>Intro Info Systems: 25%</p> <p>Intro to SCM: 25%</p> <p>Plan &amp; Cotrl SCM: 25%</p> <p>Global SCM: 25%</p> <p><b>SC info Mgmt: 25%</b></p> <p>Suppy Mgmt: 25%</p> <p>SMC Projects: 25%</p> <p><b>Mgmt Acct: 25%</b></p> <p>Mgmt Info Systems: 25%</p> <p><b>Oper. Mgmt: 25%</b></p> <p>International Business: 25%</p> <p>Business Professionalism: 25%</p> <p>30 Hrs of OSM Course: 25%</p> <p>Prof. Internship in SCM: 25%</p> <p>Programing: 25%</p> <p>System Configuration: 25%</p> <p>Mgmt individuals in Org: 25%</p> <p>S. Media &amp; E-commerce: 25%</p> <p>System Design &amp; Analysis: 25%</p> <p><b>Database Mgmt Systems: 25%</b></p> <p>Business Admin: 1</p> <p>Intro to Mkt. Mgmt: 1</p>
	Electives		Technical electives	<u>In the areas of:</u> Business

## Conclusions

### **Analysis of Accounting, Business Management, Business Administration, and Business Economics**

Accounting, Business Management, and Business Administration consistently had course overlap while Business Economics established itself as a cluster outlier. Within the Accounting, Business Management, and Business Administration majors, the most common math requirement was business statistics while calculus 1 was favored for Business Economics. Notably, four-year institutions fulfilled their math requirements with fewer math course types. For example, in the Business Management major, four-year institutions only shared commonality between statistic-related courses while two-years additionally found commonality between college algebra and business math. Mirroring the cluster patterns, all four majors require microeconomics and macroeconomics within their social science requirements. A wider range of courses can be found within two-year institutions for Accounting and Business Management, while a wider range of courses can be found within four-year institutions for Business Administration and Business Economics due to two-year institutions offering these majors less often. The greatest overlap occurs between Business Management and Business Administration where courses in organization behavior, human resource management, and principles of management are found most commonly within two-year and four-year institutions; however, no major courses overlap between all four majors.

### **Analysis of Finance, Human Resource, Information Systems, and International Business**

Two- and four-year institutions differ in a variety of areas. Four-year institutions tend to have more rigorous math requirements than two-year institutions. Four-year institutions, however, often required statistics courses within their major requirements. This may provide an opportunity for students to complete statistics requirements at two-year institutions and complete the more rigorous math courses like calculus at the four-year institutions. Many two-year institutions required either microeconomics or macroeconomics for the social science general education category and most of the four-year institutions required both. Both the natural sciences and arts and humanities categories allowed for any courses to fulfill these requirements. Accounting courses at institutions are often significantly different. Information Systems major courses overlap very little between institutions. International business courses offered at two-year institutions often lack the global perspective that four-year institutions offer. For example, two-year institutions may require a management course but four-year institutions require a *global* management course. This emphasis on a global perspective may pose a barrier to transfer.

### **Analysis of Logistics Management, Marketing, Operations Management, and Supply Chain Management**

Two- and four-year institutions offering a degree in Logistics Management, Marketing, Operations Management, and Supply Management value statistics as a requirement or preferred choice. A number of core courses overlap in all four majors. For example, legal environment of business/business law is found in all majors in both two-year and four-year institutions. This pattern is not limited to just legal environment of business/business law. Overlaps between two- and four-year institutions are also found in the additional general education requirement of a computer software application/Microsoft application/excel course. Although a computer skills course is not always required it appears in two-year institutions more often than in four-year institutions in either pre-major requirements or as a general education requirement. Microeconomics and to a lesser degree macroeconomics are popular social science required general education courses in all four majors at both the two-year and four-year level. This is due to the fact that microeconomics is a pre/co-requisite to the marketing TAG course. These overlaps in general education requirements and core courses can provide easier transfer.

### **Future State**

In order to create coherent, uniform pathways, two- and four-year institutions would need to further discuss what type of courses may be most appropriate for a certain major.

### **Limitations**

The ambiguity of the information found could lead to skewed percentages in the research.

### **Further Considerations**

#### *The Use of This Research*

This research is meant as a guide for institutional faculty and the Ohio Department of Higher Education to use in further discussing and creating clear pathways in a cluster.



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	<b>Math</b>	<b>AH</b>	<b>SS</b>	<b>NS</b>	<b>Pre-Major</b>	<b>For. Lang.</b>	<b>Major Courses</b>	<b>Electives</b>
<b>Accounting</b>	Business Statistics Statistics Intro to Statistics College Algebra	Any	Microeconomics Macroeconomics Intro to Psychology Intro to Sociology	Any	N/A	N/A	Tax Accounting/Income Tax Related Legal Environment of Business Cost Accounting Intermediate Accounting 1 Intermediate Accounting 2 Applications Business Finance Managerial Accounting Legal Environment of Business	<u>In the areas of:</u> Government Non-Profit Information Systems International Accounting Tax Accounting
<b>Business Mngmnt</b>	Intro to Statistics Business Statistics	Any	Microeconomics Macroeconomics Any	Any	N/A	N/A	Legal Environment of Business Organizational Behavior Human Resource Management Business Finance (Intro) Operations Management (Intro) Principles of Management (Intro) Principles of Marketing	<u>In the areas of:</u> Independent Study Staffing Internship
<b>Business Admin</b>	Business Statistics	Any	Microeconomics Macroeconomics	Any	N/A	N/A	(Intro) Principles of Management (Intro) Principles to Financial Accounting Human Resource Management Organizational Behavior Legal Environment of Business	<u>In the areas of:</u> International Trade and Finance Money and Banking
<b>Business Econ</b>	College Algebra	Any	Microeconomics Macroeconomics	Any	N/A	N/A	Principles of Microeconomics Principles of Macroeconomics Intermediate Microeconomics Intermediate	<u>In the areas of:</u> Economics Business



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							Macroeconomics Legal Environment of Business Econometrics Business Finance	
<b>Finance</b>	Calculus Statistics	Any	Microeconomics Macroeconomics	Any	N/A	N/A	Management Managerial Accounting Financial Accounting	<u>In the areas of:</u> General business courses Risk management Financial Modeling Securities
<b>HR</b>	Statistics	Any	Microeconomics Macroeconomics Intro to Psychology	Any	N/A	N/A	Human Resource Management Legal Environment of Business Labor Relations Computer Applications	<u>In the areas of:</u> Hiring/Firing Training/Development Conflict Management Other Management courses Other Business courses
<b>Info Systems</b>	Calculus College Algebra	Any	Microeconomics Macroeconomics	Any	N/A	Ohio University only	Systems Analysis Accounting (little overlap, every school offers unique programming courses)	<u>In the areas of:</u> E-Commerce Big Data Security Logistics Supply Chain Management Networking General business courses
<b>Int'l Business</b>	Calculus Statistics	Any	Microeconomics Macroeconomics	Any	N/A	Various depending on institution	Accounting Legal Environment of Business International Trade Intro to Business	<u>In the areas of:</u> International logistics International sales International business law Cultural Courses General upper division business course
<b>Logistics Mngmnt</b>	Statistics	Any	Microeconomics	Any	N/A	N/A	Legal environment of Business Marketing Management Operations Management Organization behavior	<u>In the areas of:</u> Co-op Ed Intro SC Mgmt Quality Mgmt Human Relations



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<b>Marketing</b>	Statistics	Any	Microeconomics	Any	N/A	N/A	Legal environment of Business Marketing Management Business Communications Financial Accounting	In the areas of: Marketing
<b>Operations Mngmnt</b>	Calculus	Any	Microeconomics	Any	N/A	N/A	Legal Environment of Business Business Analytics Marketing Production Plan & Control Logistics Management	In the areas of: Urban Sustainability Knowledge Management GIS Intro to International Business Intermediate Microeconomics Negotiation and Conflict Management Business Analysis Business Process Model and Design Data Mining Operation Management
<b>Supply Chain Mngmnt</b>	Statistics	Any	Macroeconomics	Any	Intro to Marketing	N/A	Legal environment of business Supply Chain Management and Application Management Accounting Database Management Systems Management and organization Behavior	In the areas of: Technical electives Business