

## Board of Regents, State of Iowa

### REQUEST TO IMPLEMENT A NEW BACCALAUREATE, MASTERS, DOCTORAL OR FIRST PROFESSIONAL DEGREE PROGRAM

THE PURPOSE OF ACADEMIC PROGRAM PLANNING: Planning a new academic degree program provides an opportunity for a Regent University to demonstrate need and demand as well as the university's ability to offer a quality program that is not unnecessarily duplicative of other similar programs offered by colleges and universities in Iowa.

Institution: **Iowa State University**

Departments involved: Economics

CIP Discipline Specialty Title: Business/Managerial Economics

CIP Discipline Specialty Number (six digits): 52.0601

Level: Baccalaureate

Title of Proposed Program: Major in Business Economics

Degree Abbreviation (e.g., Minor, B.S., B.A., M.A.): B.S.

Approximate date to establish degree: September, 2006

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Please provide the following information (use additional pages as needed).

1. Describe the proposed new degree program, including the following:
  - a. A brief description of the program and a statement of objectives including the student learning outcomes and how the learning outcomes will be assessed;
  - b. The relationship of the proposed new program to the institutional mission and how the program fits into the institution's, college's, and department/program's strategic plan;
  - c. The relationship of the proposed new program to other existing programs at the institution; describe how the proposed program will enhance other programs at the university.
  - d. The relationship of the proposed new program to existing programs at other colleges and universities in Iowa, including how the proposed program is different or has a different emphasis than the existing programs; and
  - e. Special features or conditions that make the institution a desirable, unique, or appropriate place to initiate such a degree program.
  - f. Does the proposing institution have personnel, facilities, and equipment adequate to establish and maintain a high quality program?
  - g. How does student demand for the proposed program justify its development?

The College of Business and the Department of Economics (which is administered jointly by the College of Liberal Arts and Sciences (LAS) and the

College of Agriculture) propose to offer a new Bachelor of Science degree with a major in Business Economics, beginning fall semester, 2006. The College of Business and the Department of Economics perceive a strong demand for graduates with a balanced set of skills in both business and economics, and the proposed new major is aimed at meeting the demand for individuals with such expertise. Further, despite the fact that the disciplines of business and economics are fundamentally linked, at the present time there is no major at Iowa State University (ISU) adequately focusing on the intersection of both academic subjects. Therefore, the proposed new major will also fill a significant gap in the current curriculum. In addition, business economics degrees are relatively common at other universities; hence, the new major should enable ISU students interested in the interface of business and economics to compete more effectively in the marketplace with graduates from other institutions. The Business Economics major is expected to grow to become a well-established and popular major at Iowa State University.

*Relationship of the proposed new program to other existing programs*

Majors in the College of Business seeking stronger background in economics, and Economics majors looking for additional business instruction, may currently add electives to supplement their education as desired. However, this unstructured approach can lead to problems with course sequencing wherein students enter upper-division courses without adequate preparation. Another problem with this approach is that students who choose to strengthen their education through electives receive transcripts that indicate either a major in Economics or a major in one of the programs in the College of Business, without adequately reflecting cross-disciplinary education in business and economics.

The main alternatives to the Business Economics major available now are (a) a major in Economics with a Business track, (b) a major in Economics with a minor in Business, (c) one of the majors offered by the College of Business with a minor in Economics, and (d) a double major in Economics and in one of the curriculums in the College of Business. As explained next, none of the aforementioned alternatives is a good substitute for the advocated new major.

As suggested by their titles, alternatives (a) and (b) have a heavier emphasis in economics than in business, whereas the opposite is true of alternative (c). The major in Business Economics has a purposely more balanced focus on the two disciplines. Alternative (a) of an Economics major with a Business track requires only six credits in business. Hence, among other differences, it entails far less instruction in business (24 credits) than the Business Economics major. Further, the Business track is not reported in the students' transcripts. Compared to alternative (b) of a major in Economics with a minor in Business, the advocated new major requires (six) more credits in business and, more importantly, students taking it will have to meet the general education requirements of the College of Business. In contrast, students majoring in Economics with a Business minor must fulfill the general education requirements of the College of LAS. In addition, an important limitation for students pursuing alternatives (a) or (b) is that they often cannot enroll in the desired business classes because such

courses are in high demand and registration priority is given to majors in the College of Business.

Alternative (c) of majoring in one of the seven curriculums offered by the College of Business with a minor in Economics requires 12 fewer credits in economics and less coursework in mathematics and statistics than the new major. In addition, with the exception of the secondary major in International Business, none of the majors in the College of Business bears the name “business” as the advocated major does.

Finally, alternative (d) of a double major in Economics and in one of the curriculums in the College of Business involves, at the very least, a significantly higher load of courses (18 or more credits) in business. Further, as with alternative (c), majors from the College of Business do not carry the “business” name except for the secondary major in International Business.

#### *Description and Objectives of the Proposed New Major*

The objective of the Business Economics major is to provide a high quality education with a balanced emphasis in both business and economics. Such an education should equip graduates with a unique set of skills distinguishing them from other graduates. In particular, they will have the ability to use both business and economic reasoning to think critically and address complex issues using tools and decision making models of economics, business, mathematics, statistics, as well as concepts from the biological, physical, and social sciences; and to make decisions and to communicate effectively.

The proposed new major will provide students with (a) the ability to communicate economic and business concepts to other professionals, collective organizations, governments, and the general public using a variety of means; (b) an appreciation of the evolution of the business profession and an awareness of the ethical, global, technological, economic, political and social forces shaping its future; (c) an understanding of the interaction of technology, human activity, and the environment; (d) the ability to apply concepts associated with making “optimal” choices among economic alternatives; (e) an understanding of the major functional areas of business with the opportunity for specialization for a career in business; (f) an ability to recognize and appreciate the effect of diversity in the work place; and (g) an opportunity for advanced study. Students will develop the human relations skills that are essential in the workplace and the community; will learn to be ethical; to respect the environment, and to be multi-culturally and internationally aware.

Graduates from the Business Economics major will possess a unique mix of analytical and applied business skills well-suited for employment in upper level management and public service positions. Graduates will also have solid preparation for graduate studies in law, economics, and in Master of Business Administration (MBA) programs. The strong economics foundation of Business Economics majors will be appealing to students interested in pursuing an MBA, as business schools often have a preference for applicants with such a background.

The aforementioned student learning outcomes will be assessed in a way consistent with the outcome assessment models in place at the Department of Economics and the College of Business (for more details, see websites [http://www.bus.iastate.edu/HLC/LearningTeaching/outcome\\_model.asp](http://www.bus.iastate.edu/HLC/LearningTeaching/outcome_model.asp) and <http://www.econ.iastate.edu/faculty/kilkenny/OA/portfolio.htm>, respectively). Outcomes assessment instruments designed and administered by the Department of Economics include (a) tabulated surveys of all seniors, (b) career tracking of alumni, (c) periodic surveys of alumni, (d) surveys of Directors of Undergraduate Programs in other ISU departments, and (e) periodic surveys of employers. There are other instruments and indicators developed for other purposes that are also used to assess student outcomes, such as (a) admission and matriculation statistics, (b) academic progress, (c) program persistence, (d) records of scholarships, fellowships, awards and honors received by students, (e) student performance on graduate/professional school admission tests, (f) student participation in ISU's Honors Program, (g) student membership in academic honor societies, (h) student participation in and performance at regional/national meetings and contests, and (i) job placement records. Other modes of feedback used to assess the effectiveness of our undergraduate degree programs consist of (a) discussions with employers who have hired graduates, (b) feedback from the department's student club members, (c) informal reports on student performance in internships, and (d) periodic external evaluations by colleagues from other institutions (Departmental External Reviews).

To achieve the proposed objectives, the Business Economics major will have a strong curriculum in both business and economics, thereby providing a clear signal to employers seeking individuals with a balanced set of skills business and economics. The major will require 124.5 total credits. These credits will include the courses for the general education requirements of the university and the College of Business, the pre-business/economics foundation, the professional courses, the business education core, and the economics education described below. Coursework will be sequenced to enhance student learning and successful completion of the program.

#### General Education Requirements [24 credits]

	Credits
Global/International Perspectives	6
Humanities (3 credits of Phil 230, 3 credits of History course(s), and 3 credits from courses in the approved list)	9
Natural science	3
Behavioral Science (Anthropology course(s) and/or selected course(s) from Psychology and Sociology)	6
U.S. Diversity course (3 credits that may also be used to fulfill other curriculum requirements or electives)	

#### Communications [12.5 credits]

	Credits
Engl 104 First-Year Composition I	3

Engl	105	First-Year Composition II	3
Engl	302	Business Communication	3
Sp Cm	212	Fundamentals of Public Speaking	3
Lib	160	Library Instruction	0.5

Pre-Business/Economics Foundation [16 credits]

			Credits
Com S	103	Computer Applications	3
Econ	101	Principles of Microeconomics	3
Math	160	Survey of Calculus	4
Acct	284	Financial Accounting	3
Stat	226	Introduction to Business Statistics I	3

Supporting Courses [12 credits]

			Credits
Acct	215	Business Law	3
Econ	102	Principles of Macroeconomics	3
Econ	207	Applied Economic Optimization	3
Stat	326	Introduction to Business Statistics II	3

Business Core [24 Credits]

			Credits
Acct	285	Managerial Accounting	3
Fin	301	Principles of Finance	3
LSCM	360	Business Logistics	3
Mgmt	370	Management of Organizations	3
MIS	330	Management Information Systems	3
Mkt	340	Principles of Marketing	3
OSCM	320	Production/Operations Management	3
Mgmt	478	Strategic Management	3

Economics Education [18 Credits]

			Credits
Econ	301	Intermediate Microeconomics	3
Econ	353	Money, Banking, and Fin. Institutions	3
Econ	300+	Other Economics electives (excluding 397, 398)	3
Econ	431	Managerial Economics	3
Econ	400-489	Economics electives	6
Econ	492	Graduating Senior Survey	0

Elective Courses [18 credits]

			Credits
Electives from outside the College of Business and the Departments of Economics and Statistics			9
Electives to broaden or complement the requirements (see adviser)			9

The general education requirement for the Business Economics major will be the one corresponding to the College of Business. The main reason for this is that the proposed new major is in most respects a business degree. Therefore, the

general education requirement for business students would be more appropriate. Another reason is that the general education requirement for business students is more consistent with the fact that the College of Business will be the issuer of the corresponding diploma (see next subsection). In addition, it is expected that most of the students pursuing it will be pre-business students who become attracted to economic issues as they take economics principles courses during their freshman and sophomore years. Furthermore, the proposed new major's College of Business general education requirement clearly differentiates it from the current alternative of a major in Economics with a minor in Business (otherwise, if the proposed major involved the College of LAS general education requirement, its only difference with the Economics major with a Business minor would be six additional credits in the College of Business).

The coursework for the Business Economics major will involve a comprehensive education in both business and economics, including a broad foundation in the liberal arts, courses in the major functional areas of business activity proficiency in analytical methods, and the ability to identify problems and arrive at solutions by means of economic reasoning and critical thinking.

Importantly, ISU already has the resources to establish and maintain the proposed new major. This is true because, as explained in more detail in Sections (10) and (11) below, the new program does not involve any new courses, course sections, modifications of existing courses, or additional advising resources. In essence, the proposed program combines existing resources at the College of Business and the Department of Economics in a new format that students already at ISU should find more appealing and useful, and that should send more clear signals to employers seeking personnel with a balanced formation in both business and economics. The new major should allow ISU graduates to compete more effectively in the marketplace with graduates from other institutions with backgrounds in business and economics. The College of Business and the Department of Economics are in excellent position to undertake the proposed endeavor, as the former has been the college experiencing the largest growth in enrollment at ISU over many years, and the latter is ISU's fourth highest-ranked department according to NRC rankings. By filling a significant gap in the present curricula related to business and economics, the proposed major should further enhance the overall standing of the College of Business and the Department of Economics. These special features make it highly desirable to initiate the proposed program at ISU.

#### *Relationship of Proposed New Program to Existing Programs at Iowa Institutions*

Because of their appeal to both students and employers, business economics degrees are now being offered at many universities. In fact, both the University of Iowa (UI) and the University of Northern Iowa (UNI) currently have programs similar to the one being proposed (see Section (3) below for a more detailed explanation). However, the proposed Business Economics major at ISU is highly unlikely to undercut the enrollment at either institution, as the business colleges at both UI and UNI are oversubscribed.

### *Administrative Issues Associated with the Proposed New Major*

The Business Economics major will be a degree from the College of Business, and the latter will issue the corresponding diploma. However, the new major will be located in the Department of Economics, which is not in the College of Business. The College of Business will only provide core courses to these students (i.e., entry-level course(s) in each department). Responsibility for advanced courses will be totally with the Department of Economics.

Consistent with the current advising procedures in the College of Business, advising for the Business Economics major will be performed initially by a pre-business advisor, and later by a declared major advisor. The pre-business advisor will be one of the professional advisors in the College of Business available to pre-business students. Upon declaring their major in Business Economics, students will switch to a declared major advisor in the Department of Economics.

Students will be enrolled in the College of Business (i.e., for the purposes of enrollment, they will be treated the same as students in any of the standard majors offered by the College of Business). However, to calculate the number of students enrolled in and graduating from individual colleges (e.g., for budgeting and resource allocation purposes), the Registrar's Office will assign one-half of the Business Economics majors to the College of Business and the other half to College of LAS. At the departmental level, the Registrar's Office will assign all of the Business Economics majors to the Department of Economics.

Upon approval of the proposed new major, the current Business track in the Economics major will be dropped.

### *Proposed New Major's Relationship with Institutional Mission and Strategic Plan*

The proposed new major should be a major step in achieving some of the goals regarding undergraduate education stated in the document prepared for the most recent external review of the Department of Economics. Among others, the proposed program should help advance the following goals: (a) increase the number of majors in the department, (b) place graduating students in high-value jobs fulfilling the needs of businesses and public agencies, (c) place top scholars in high-quality graduate and professional schools, and (d) attract high quality students from the College of Business. The proposed new major also fits well with the College of Business 2005-2010 Strategic Plan's goal of increasing analytical and creative thinking skills in undergraduate programs. In addition, one of the goals of the ISU 2005-2010 Strategic Plan is to "Strengthen undergraduate, graduate and professional education to enhance student success at Iowa State University and beyond." Suggestions for accomplishing this goal include, "Improve the rigor, challenge and international reputation of academic programs." The proposed Business Economics major addresses this objective. The Business Economics curriculum uniquely complements the analytical rigor of the existing business curriculum. It does so through a more intensive focus on economic theory. This focus provides a different approach to fostering critical thinking and problem solving from other theoretical and applied business

courses. This combination will make graduates of the program particularly well-suited to take on the challenges they will undoubtedly face throughout their careers and life. A balanced portfolio of analytical and business education is paramount to successful entrepreneurial endeavors, leadership in the business world and in public service, and success in the global economy of the 21st century.

2. Describe the state and/or national workforce need and/or demand for graduates of the proposed program currently and in the near future (provide documentation about the sources of data used to estimate need and demand.)

There is a strong demand for the proposed new major. According to the National Association of Colleges and Employers (NACE) Fall 2005 Salary Survey, the average annual starting salary of economics/finance majors with bachelor's degrees is \$42,802, which is higher than the average starting salaries of graduates with majors in business administration and management, other social sciences, humanities, and most natural sciences (<http://www.naceweb.org/default.asp>). NACE surveys show that the average starting salary for economics majors has not only been higher than for almost all of the majors within business and the social sciences over recent years, but also that it increased at a faster rate than most of them. In a 2004 NACE survey of employers, economics and business majors were ranked among the five most-desirable majors. A 2002 survey by the National Association of Business Economists found that the median annual base salary of business economists was \$94,000 (*Careers in Business Economics*, Washington: National Association of Business Economists, p. 55, 2004). This compares to median annual wage and salary earnings for all economists of \$72,780 in May 2004 (U.S. Department of Labor, <http://stats.bls.gov/oco/ocos055.htm>).

3. List all other public and private institutions of higher education in Iowa currently operating programs similar to the proposed new degree program. (For comparison purposes, use a broad definitional framework, e.g., such identification should not be limited to programs with the same title, the same degree designation, having the same curriculum emphasis, or purporting to meet exactly the same needs as the proposed program.)

Both UI and UNI currently operate programs similar to the proposed new degree program. UI offers a Bachelor of Business Administration (B.B.A.) degree in Economics. This degree requires 24 credits in the Business core and 18 credits of intermediate and upper-level economics courses. Since this program is similar to the advocated new Business Economics major, we requested Prof. Beth Ingram, DEO of the Department of Economics at UI, her comments regarding the proposed major. Her response is included as Appendix E.



UNI offers a Bachelor of Arts degree with an Economics major and a Business Analysis Emphasis that is similar to the proposed Business Economics major. Students choosing the Business Analysis Emphasis take 39 credit hours of business courses. Additional information about the UNI program is provided in the response by Prof. Fred Abraham, Head of the Department of Economics at UNI, to our request for comments regarding the proposed Business Economics major (see email reproduced in Appendix F).

If the same or similar program exists at another public or private institution of higher education in Iowa, respond to the following questions:

- a. Could the other institution reasonably accommodate the need for the new program through expansion? Through collaboration?

It is not feasible that the need for the new program be met through expansion at UI or UNI. This is true because, as explained in Sections (1), (4b), and (10), the new program aims at better meeting the needs of ISU students who currently major in related programs, but who would enroll in the proposed new major if it were available. Such students currently prefer to stay at ISU in a related major rather than move to another university so as to enroll in a major like the one being proposed. The reason for this is that moving to another university often involves large monetary and non-monetary costs (among others, the latter include the need to develop new social networks, having to leave friends in the old institution, the need to learn and adapt to the workings of the new institution, etc.).

- b. With what representatives of these programs has there been consultation in developing the program proposal? Provide a summary of the response of each institution consulted.

In developing the program proposal, there has been consultation with Prof. Beth Ingram, DEO of the Department of Economics at UI, and Prof. Fred Abraham, Head of the Department of Economics at UNI. Their responses are shown in Appendices (E) and (F), respectively. Both Prof. Ingram and Prof. Abraham are supportive of the new program. Prof. Ingram points out that the proposed new major is similar to the Economics major at UI, but the former requires more specific courses than the latter. According to Prof. Ingram, the major has proven to be a valuable option for many students at UI, and she thinks that the new program will find similar success at ISU. Prof. Abraham states that the proposed Business Economics major closely resembles the Business Analysis Emphasis in the Economics major at UNI. Prof. Abraham considers the Business Analysis Emphasis to have been a success at UNI, as it is the most popular emphasis among Economics majors, accounting for about half of the students in economics. Prof. Abraham concludes that the proposed new major is likely to be as successful at ISU as it has been at UNI.

- c. Has the possibility of an inter-institutional program or other cooperative effort been explored? What are the results of this study? (Consider not only the possibility of a formally established inter-institutional program, but also how special resources at other institutions might be used on a cooperative basis in implementing the proposed program solely at the requesting institution.)

The possibility of an inter-institutional program or other cooperative effort has not been explored, as any such effort would be less efficient than the proposed new program. The reason for this assertion is that, as explained below in Sections (10) through (12), the proposed new program should more fully utilize existing teaching resources in the Department of Economics and the College of Business, without requiring any new resources at ISU.

4. Estimate the number of majors and non-majors students that are projected to be enrolled in the program during the first seven years of the program.
- a. Undergraduate

Undergraduate	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
Majors	20	30	40	50	50	50	50
Non-Majors	0	0	0	0	0	0	0

Note: No additional non-majors are expected as a result of the proposed new program, because it does not involve the offering of any new courses (see Section (10) below).

- b. What are the anticipated sources of these students?

It is anticipated that most of the students pursuing the Business Economics major will be students with an interest in business who become attracted to economic issues as they take economics principles courses during their freshman and sophomore years (as it has been the experience at the University of Northern Iowa). It is also expected that some students who will major in Economics under the current curriculum will opt for the Business Economics major if it is being offered, and that students from other disciplinary backgrounds will find the new major appealing.

In Fall 2005, there were ten students with a declared major in the College of Business and an Economics minor, one student with an Economics major and a Business minor, and 13 students with double majors in Economics and the College of Business. The number of students majoring in Economics with a Business track was not available.

Based on the anticipated profile of students choosing the proposed new major, the aforementioned enrollment figures for related degrees, the number of students enrolled in similar majors at the University of Iowa and the University of Northern Iowa, and the College of Business' assessment of students with business-oriented majors expressing a strong interest in economics, it is estimated that there will be a long-term average of approximately fifty students enrolled in the proposed new major. It is expected that the number of students enrolled will steadily increase for the first three years before stabilizing at the estimated long-term average (see table above) because it will take some time to promote the new major among prospect students and to have it well established as a desirable alternative in its own right, and relatively few juniors and seniors will be enrolled in the program in the first two years.

5. If there are plans to offer the program away from the campus, briefly describe these plans, including potential sites and possible methods of delivery instruction.

There are no plans to offer the program away from the campus.

6. Has the proposed program been reviewed and approved by the appropriate campus committees and authorities? List them:

The proposed program been reviewed and approved by the following campus committees and authorities:

Arne Hallam, Professor and Chair, Department of Economics

Curriculum Committee, Department of Economics

Curriculum Committee, College of LAS

Curriculum Committee, College of Business

Faculty, Department of Economics

Assembly of Representatives, College of LAS

Faculty, College of Business

Labh Hira, Dean, College of Business

Michael Whiteford, Dean, College of LAS

7. List date the program proposal was submitted to the Iowa Coordinating Council for Post High School Education (ICCPHSE) and the results of listserv review. (THIS WILL BE FILLED IN BY THE PROVOST OFFICE.)

8. Will the proposed program apply for accreditation? When?

The program will not apply for separate accreditation. It will be covered under the College of Business AACSB (Association to Advance Collegiate Schools of Business) accreditation.

9. Will articulation agreements be developed for the proposed program? With whom?

Existing relevant articulation agreements with Iowa community colleges will be honored with respect to business, economics, and general education courses.

10. Describe the faculty, facilities, and equipment that will be required for the proposed program.

As discussed in Section (1), the proposed program is intended to provide a better alternative to the following options currently available to ISU students interested in the interface of business and economics: (a) a major in Economics with a Business track, (b) a major in Economics with a minor in Business, (c) one of the majors offered by the College of Business with a minor in Economics, and (d) a double major in Economics and in one of the curriculums in the College of Business. Given the courses associated with the proposed program and the anticipated number and source of students enrolling in it, no additional faculty, facilities, and/or equipment above and beyond the existing resources in the Department of Economics and the College of Business should be required.

First, the new major does not involve the offering of any new courses. Second, the number of totally new students is not expected to be large enough to warrant the offering new sections of existing courses, or the addition of new advisors. As pointed out in Section (4b) above, some of the students opting for the new program are likely to be students who would otherwise have been Economics majors with a business minor. Any associated increase in the number of students taking business core classes should be easily handled by the College of Business without adding additional sections. Another source of students is expected to be business students (most likely Finance and Logistics/Supply Chain Management) opting to take Business Economics as a second major. Since such students must take the business core anyway, they will not require any additional resources from the College of Business. Overall enrollment in upper-level economics courses is expected to increase above current levels as a result of the new program. However, there is sufficient absorption capability in currently offered upper-level economics classes to accommodate the projected increase in enrollment without

having to add new sections of existing courses. Furthermore, existing advising resources in the College of Business and the Department of Economics should be sufficient to handle the projected increase in the number of advisees stemming from the new major.

11. From where will the financial resources for the proposed program come (list all that apply, e.g., department reallocation, college reallocation, grants, new to the university)?

As explained in Section (10) above, the proposed new program should not require any additional faculty, facilities, and/or equipment above and beyond the existing resources in the Department of Economics and the College of Business. Succinctly, the new program should increase enrollment in currently offered courses (in particular, core business and upper-level economics courses) without requiring the addition of new courses and/or course sections, thereby increasing the efficiency of existing teaching resources. Consequently, no additional expenditures are expected due to the proposed new major.

12. Estimate the total costs/total new costs (incremental increases each year in expenditures) that will be necessary for the next seven years as a result of the new program:

As explained in Sections (10) and (11) above, the new program is anticipated to involve no additional costs.

	<b>TOTAL COSTS</b>	<b>TOTAL NEW COSTS</b>
Year 1	0	0
Year 2	0	0
Year 3	0	0
Year 4	0	0
Year 5	0	0
Year 6	0	0
Year 7	0	0

The complete proposal is found on the Faculty Senate Curriculum Committee web page at:

[www.iastate.edu/~catalog/fsccl/reports.shtml](http://www.iastate.edu/~catalog/fsccl/reports.shtml)