FORM A
Board of Regents, State of Iowa

REQUEST TO IMPLEMENT A NEW BACCALAUREATE,
MASTERS, DOCTORAL, OR FIRST PROFESSIONAL DEGREE
PROGRAM
January 28, 2015

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
CIP Discipline Specialty Title: Entrepreneurship
CIP Discipline Specialty Number (six digits): Will be added
Level: Bachelor’s
Title of Proposed Program: Major in Entrepreneurship
Degree Abbreviation (e.g., B.S., B.A., M.A., Ph.D.): B.S.
Approximate date to establish degree: Month August Year 2016
Contact person: (name, telephone, and e-mail)
   Danny Johnson 294-0629 danjohns@iastate.edu
   Howard Van Auken 294-2478 vanauken@iastate.edu

College that will administer new program: College of Business
Please provide the following information (use additional pages as needed). Do not use acronyms without defining them.

1. Describe the proposed new degree program, including the following:

   a. A brief description of the program. If this is currently being offered as a track, provide justification for a standalone program.

   The field of entrepreneurship focuses on creating, recognizing and exploiting opportunities by either individuals, start-up organizations or existing businesses. Managing innovation processes and growing growth organizations are at the core of the discipline. Entrepreneurship is currently being offered as a track in the Management major in the College of Business. Assessment of US colleges with leading entrepreneurship programs revealed that they tend to offer both a major and minor in entrepreneurship to undergraduate students. ISU is currently only offering a university-wide entrepreneurship minor, but does not offer an undergraduate major specifically focused on entrepreneurship.

   b. A statement of academic objectives;

   The goal of the entrepreneurship major is to provide students with an in-depth and rigorous study of the field of entrepreneurship. The specific objectives are that, upon graduation, students are better prepared to:
   - Start a new business or non-profit organization.
   - Assist others in launching or operating a business.
   - Manage and contribute to entrepreneurial activities in established organizations.

   Achieving the objectives requires providing students with a broad base of conceptual knowledge, personal skills, and competencies. The required courses in the major will provide a variety of rich developmental experiences that include applied learning, case analysis, research projects, team-based active learning projects, and guest speakers, in addition to traditional classroom lectures and discussions. The proposed major places a strong emphasis on written and oral communications skills, teamwork, and personal initiative.

   c. What the need for the program is and how the need for the program was determined;

   The demand for entrepreneurship courses is expected to continue to increase over the next several years. The Kauffman Foundation estimates that more than 5,000 entrepreneurship classes were offered by U.S. Universities with over 400,000 students enrolling in these classes in 2008, and this number is expected to grow significantly in the future.¹ The main findings from an analysis of leading US entrepreneurship programs indicated that all programs have a major in entrepreneurship; some programs have a minor, several programs have multiple track options, many programs include courses taught by other departments, and most programs offer some type of practicum and/or experiential learning opportunity. Please see Appendix B for a description of the entrepreneurship majors offered at ISU’s peer institutions.

d. The relationship of the proposed new program to the institutional mission and how the program fits into the institution’s and college’s strategic plan;

The entrepreneurship major will clearly align with ISU’s mission and strategic plan, as well as the strategic plan of the College of Business (shown below).

ISU’s Mission – “We will design tools and infrastructure that will create entrepreneurial opportunities.”

ISU’s Strategic Plan – Priorities: Iowa State will be a magnet for attracting outstanding students who seek an education that prepares them to make a difference in the world.

College of Business Strategic Plan – “Strategic Priority 1: Advancing innovative, high-quality, and high-impact academic programs.” One of the goals under this priority is to “provide innovative and effective educational opportunities.”

e. 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. Will the proposed program duplicate existing programs at the university?

The proposed major in entrepreneurship does not duplicate existing programs, but will complement existing entrepreneurship initiatives that include, for example, the entrepreneurship minor, CyBIZ Lab, and the entrepreneurship learning community. Iowa State has always taken pride in the fact that its academic and business development programs are well integrated, providing unique educational opportunities for students. The proposed entrepreneurship major fills a need to expand learning opportunities for an increasing number of students that are interested in entrepreneurial issues. The proposed major is anticipated to create a larger and more diverse pool of students interested in exploiting the many entrepreneurship opportunities offered across campus at ISU.

Furthermore, one of the Board of Regents Strategic Plan Goals states: “The public universities shall contribute to the expansion and diversification of the Iowa economy.” Through academic training and experiential learning, students in the entrepreneurship program at Iowa State will be better prepared to pursue business entrepreneurial opportunities or start their own business in Iowa.

f. 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.

No other public university in Iowa offers a stand-alone major in entrepreneurship (i.e., not a track within a management program) that is housed entirely within and integrated into a college of business program. The proposed major complements and is anticipated to positively influence existing academic and non-academic programs at ISU through creating more visibility to entrepreneurship across the entire ISU community. Increased visibility should increase the number of students who are enrolled in the entrepreneurship minor and students who participate in non-academic entrepreneurship programs. Iowa State currently participates in a number of collaborative entrepreneurial opportunities with other schools through the John Pappajohn Entrepreneurial Center network; however, a major in entrepreneurship at Iowa State will significantly enhance its current program by offering a more in-depth program of study for students interested in entrepreneurship.
The following universities in Iowa offer entrepreneurship programs:

<table>
<thead>
<tr>
<th>University</th>
<th>Program</th>
<th>Numbers of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Iowa</td>
<td>Certificate in Entrepreneurial Management</td>
<td>539 (Spring 16)</td>
</tr>
<tr>
<td></td>
<td>Certificate in Technology Management</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Certificate in Performing Arts Entrepreneurship</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Enterprise Leadership (College of Liberal Arts)</td>
<td>273 (Spring 16)</td>
</tr>
<tr>
<td></td>
<td>BBA in Management (Entrepreneurial Management Track)</td>
<td>N/A</td>
</tr>
<tr>
<td>University of Northern Iowa</td>
<td>Certificate in Entrepreneurship</td>
<td>42</td>
</tr>
<tr>
<td>(2014)</td>
<td>University-Wide minor to be launched in fall 2015</td>
<td></td>
</tr>
<tr>
<td>Drake</td>
<td>Major in Entrepreneurship</td>
<td>50</td>
</tr>
<tr>
<td>(2015)</td>
<td>Minor in Entrepreneurship</td>
<td>15</td>
</tr>
</tbody>
</table>

**g.** Special features or conditions that make the institution a desirable, unique, or appropriate place to initiate such a degree program.

Iowa State University was one of the first institutions in the country to offer an interdisciplinary academic program in entrepreneurship. The Pappajohn Center for Entrepreneurship offers a wide variety of entrepreneurship programs that include, for example, the Entrepreneurship and Innovation Learning Community, Internships/Experiential Learning Opportunities, Entrepreneur Forums, Innovation Pitch Competitions, Entrepreneurship Clubs, the Okoboji Entrepreneurship Institute, Business Plan Competitions, and the Reiman Scholars Program. A solid foundation has been developed and was acknowledged by the United States Association for Small Business and Entrepreneurship (USASBE) in selecting Iowa State University as “Model Undergraduate Entrepreneurship Program” in 2009. Expansion and fine tuning of the current academic programs would allow us to continue to build upon the recognized program currently in place at Iowa State.

**h.** Are the university’s personnel, facilities, and equipment adequate to establish and maintain a high quality program?

Yes. The infrastructure is currently in place to offer a strong major for undergraduate students. If the proposed major grows as we anticipate, we will need additional classroom space and faculty. The faculty will be paid for through the tuition revenue generated by the program. Classroom space is tight all over campus, and the Gerdin Business Building is no exception. We are currently scheduling classes to get as much classroom capacity out of our building as possible and we are prepared to find additional space if needed.

**i.** How does student demand for the proposed program justify its development?

In December 2014, we surveyed undergraduate students enrolled in BusAd 250, a required course for all business majors with an enrollment of approximately 650 students each semester (please see survey results in Appendix C). We received 213 usable responses (Response Rate = 33%). These responses indicate strong interest in entrepreneurship courses among current CoB students.

Of the students surveyed who had not yet declared majors, 30% stated “yes” they would consider an entrepreneurship major as their first major and another 51% stated they would “maybe” consider it as their first major. An additional 20% of these students would consider entrepreneurship as their second major and 48% would "maybe" consider this option. These responses indicate a strong demand as at least 50% of the students will consider entrepreneurship as their first or second major. In the fall of 2015, the undergraduate
students at the College of Business have declared a total of 2500 specific majors – including second majors. We estimate conservatively based on the survey results and enrollment numbers of entrepreneurship majors at ISU peer universities (such as Oklahoma State) that in the fourth year of the proposed program 175 students will have declared entrepreneurship as either their first or second major. This will represent 7% of all declared majors. Our survey suggests a 3/2 split between first and second majors. For the first year of the program, we predict about 75 of the students will choose an entrepreneurship major. For the second year, we expect the number of students to increase by 50 students to 125 (or 5% of all declared majors). In the third year, we expect 150 students (6% of the all declared majors). This growth pattern is consistent with growth patterns experienced at other universities that introduced an entrepreneurship major.

Currently, 40% of business undergraduate students intend to declare the university-wide entrepreneurship minor and another 55% will “maybe” consider this option. We expect this number to drop somewhat as students will now have the opportunity to declare an entrepreneurship major. We anticipate substantially increased demand for the core courses (such as MGMT 310).

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

Entrepreneurship is a growth area for both academic and applied jobs. Several years ago, the Kaufman Foundation reported that entrepreneurship was the fastest growing academic area in terms of program, faculty and courses. Over 95% of firms in both Iowa and the US are small firms, and more than 500,000 new small firms are created each year. According to discussions with the College of Business Career Center, an entrepreneurship major coupled with another functional major promises to also be very attractive to large companies in Iowa and across the US.

The American Management Association identified 4 critical skills for the 21st Century workforce: 1) Critical thinking and problem solving—including the ability to make decisions, solve problems, and take action as appropriate; 2) Effective communication—the ability to synthesize and transmit your ideas both in written and oral formats; 3) Collaboration and team building—the ability to work effectively with others, including those from diverse groups and with opposing points of view; 4) Creativity and innovation—the ability to see what’s NOT there and make something happen. An Entrepreneurship major would be well positioned to develop all four of these skills.


The American Association of American Colleges & Universities conducted a survey suggesting that innovation is a priority among today’s employers.

https://www.aacu.org/publications-research/periodicals/it-takes-more-major-employer-priorities-college-learning-and

Entrepreneurship can also be positioned as a skill building major, which fosters collaboration, communication, creativity and flexibility, which were mentioned as being important in the study below.


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.)

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

This will be the first stand-alone entrepreneurship major offered within a College of Business by a public university in Iowa. The University of Iowa has an Enterprise Leadership Major in the College of Liberal Arts and an Entrepreneurial Management track within its BBA Management Major. The University of Northern Iowa has a certificate program in entrepreneurship. Drake has a major and minor in entrepreneurship. However, the number of students is rather small and the program differs in content from the proposed program at Iowa State.

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

Students must declare a major in entrepreneurship to be enrolled in the entrepreneurship program in the College of Business. The number of students projected to be in the major is shown in the “Majors” row in the table below. The forecasted number of majors and expected growth projections are based on three primary sources of information. (1) Discussion with leading entrepreneurship faculty who have either launched entrepreneurship majors or are associated with leading entrepreneurship programs in the United States (such as Indiana University); (2) Typical growth and enrollment numbers of entrepreneurship majors at ISU peer universities (such as Oklahoma State); and (3) The experiences of an ISU faculty member who launched an entrepreneurship major at a previous university comparable in size to ISU. We strongly feel that ISU is well positioned to experience solid numbers of majors because of the long history and visibility of entrepreneurship across campus.

In addition, College of Business students from other majors within the College of Business (e.g. Finance, Marketing, Management, etc.) and students from other Colleges at ISU currently comprise about ½ of course enrollment. This trend is expected to continue in that non-majors are expected to continue to comprise about ½ of course enrollment for the introductory courses. These students are shown in the “Non-Majors” row in the table below.

<table>
<thead>
<tr>
<th>Undergraduate</th>
<th>Yr 1</th>
<th>Yr 2</th>
<th>Yr 3</th>
<th>Yr 4</th>
<th>Yr 5</th>
<th>Yr 6</th>
<th>Yr 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Majors</td>
<td>75</td>
<td>125</td>
<td>150</td>
<td>175</td>
<td>200</td>
<td>225</td>
<td>225</td>
</tr>
<tr>
<td>Non-Majors</td>
<td>75</td>
<td>125</td>
<td>150</td>
<td>175</td>
<td>200</td>
<td>225</td>
<td>225</td>
</tr>
</tbody>
</table>

b. Graduate

Since the major is for undergraduate students only, graduate students are not expected to enroll in the courses in the major.

<table>
<thead>
<tr>
<th>Graduate</th>
<th>Yr 1</th>
<th>Yr 2</th>
<th>Yr 3</th>
<th>Yr 4</th>
<th>Yr 5</th>
<th>Yr 6</th>
<th>Yr 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Majors</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Non-Majors</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

c. What are the anticipated sources of these students?

A large percentage of the students will be those who are interested in one day starting their own business or working within a company that focuses on organizational innovation. Other potential sources will be students who have been exposed to the various existing entrepreneurship programs at ISU, including for example the Entrepreneurship and Innovation Learning Community and the Entrepreneurship Club. As suggested by the student survey, there is significant potential interest from current ISU students in the proposed major.
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. Will off-campus delivery require additional HLC accreditation?

The entrepreneurship major is not intended to be offered off campus.

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

This proposal will go through the required processes for faculty and administrative review.

7. List date the program proposal was submitted to the Iowa Coordinating Council for Post High School Education (ICCPHSE) and results of listserv review.

Provost office will add this date as the approval process continues.

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

The entrepreneurship major will fall under the overall College of Business accreditation process.

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

No

10. Will there be opportunities for student internships?

Yes; a significant number of internships already exist through the Pappajohn Center. Providing students with applied entrepreneurial learning opportunities would help to enhance the student learning processes that are developed through the major.

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

Four existing tenure-track faculty (Howard Van Auken, Patrick Kreiser, Andreas Schwab, and Andreea Kiss) and existing College of Business advisors will help to support this program. Additional faculty (both tenure-track and non-tenure track) will be added as the number of students majoring in the program grows.

12. 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)?

Based on our analysis, the Student Credit Hour (SCH) tuition generated from the students taking the entrepreneurship classes will be enough to hire the tenure-track and non-tenure track faculty needed to teach the classes. Thus, all of the financial resources will come from student tuition. The projected revenue for the first seven years from student tuition is shown below.
<table>
<thead>
<tr>
<th>SOURCES</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1 student tuition</td>
<td>$165,000</td>
</tr>
<tr>
<td>Year 2 student tuition</td>
<td>$363,000</td>
</tr>
<tr>
<td>Year 3 student tuition</td>
<td>$363,000</td>
</tr>
<tr>
<td>Year 4 student tuition</td>
<td>$495,000</td>
</tr>
<tr>
<td>Year 5 student tuition</td>
<td>$495,000</td>
</tr>
<tr>
<td>Year 6 student tuition</td>
<td>$627,000</td>
</tr>
<tr>
<td>Year 7 student tuition</td>
<td>$627,000</td>
</tr>
</tbody>
</table>

13. Estimate the total costs/total new costs (incremental increases in expenditures) that will be necessary for the next seven years as a result of the new program. Be as specific as possible.

The total costs and the new costs are related to the additional tenure-track and non-tenure track faculty we will have to hire to support the additional classes that will need to be offered as enrollment grows. These costs are shown below.

<table>
<thead>
<tr>
<th>Year</th>
<th>TOTAL COSTS</th>
<th>TOTAL NEW COSTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>$44,533</td>
<td>$44,533</td>
</tr>
<tr>
<td>Year 2</td>
<td>$249,647</td>
<td>$205,114</td>
</tr>
<tr>
<td>Year 3</td>
<td>$249,647</td>
<td>$0</td>
</tr>
<tr>
<td>Year 4</td>
<td>$436,948</td>
<td>$187,301</td>
</tr>
<tr>
<td>Year 5</td>
<td>$436,948</td>
<td>$0</td>
</tr>
<tr>
<td>Year 6</td>
<td>$624,249</td>
<td>$187,301</td>
</tr>
<tr>
<td>Year 7</td>
<td>$624,249</td>
<td>$0</td>
</tr>
</tbody>
</table>

14. Describe the marketing plan developed to communicate the new program and recruit students.

The new major will be marketed through the College of Business Undergraduate Programs Office, as well as through the extensive networking capabilities of the Pappajohn Center for Entrepreneurship. We expect that the reach of these marketing efforts will be rather extensive.

15. Describe the program evaluation plan to determine if the program is meeting the intended objectives, if the expected student enrollment has occurred, funding for the program, and any other components that affect the effective operation of the program.

Like all new program at ISU, this new major will be reviewed yearly to assess the need for future curriculum changes. Key stakeholders will be consulted in determining the future direction of the program.

16. Include any additional information that justifies the development of this program.

Please see attached appendices. Appendix A details the proposed curriculum, Appendix B outlines the entrepreneurship majors offered at peer universities, and Appendix C reports the results of the undergraduate survey.
Appendix A: Proposed Curriculum

The proposed major in entrepreneurship will have course requirements similar to all other majors in the College of Business, and will require a minimum of 122 credits of coursework. This includes 43 credits of general education courses, 22 credits of foundation courses, 7 credits of supporting courses, 21 credits of business core/professional program courses, 18 credit of major specific courses, and 11 credits of elective courses. The major specific courses are shown below. Details on the general education, foundation, supporting, and business core/professional program courses can be found on the next page.

Required Courses [9 credits]:
- MGMT 310: Fundamentals of Entrepreneurship
- MGMT 313: Opportunity Creation, Feasibility Analysis and Business Planning
- MGMT 320: Corporate Entrepreneurship, Innovation and Technology Management

Select One Capstone [3 credits]:
- MGMT 485: Trends and Theories of Entrepreneurship

Elective Courses [6 credits]:
Courses Currently Taught in the College of Business
- MGMT 367: International Entrepreneurship
- MGMT 410: Social Entrepreneurship

Other Elective Courses Approved on a Case-by-Case Basis
- ECON 334: Entrepreneurship in Agricultural
- AESHM 474: Entrepreneurship in Human Sciences
- BUSAD 490E: Independent Study in Entrepreneurship

Potential Future Elective Courses
- XXXX 460: Entrepreneurial Finance, Law and Accounting
- XXXX 450: Entrepreneurial Marketing & New Product Development
- XXXX 470: Intellectual Property and Technology Commercialization
- XXXX 330: Franchising
- XXXX 340: Family Business
International Perspective: [3]  
Select course from approved list  
(May count toward global perspective)  

(Courses from this area may also be used to fulfill another area requirement)  

Communications: [13]  
ENGL 150 Critical Thinking and Communication  
ENGL 250 Written, Oral, Visual and Electronic Composition  
ENGL 302 Business Communication  
SP CM 212 Fundamentals of Public Speaking  
LIB 160 Information Literacy  

Humanities: [9]  
PHIL 230 Moral Theory and Practice  
Select from approved list  

Global Perspectives: [6] Select from approved list  
3 credits of International Perspective may count here  

Social Science: [6] Select from approved list  

Natural Science: [3] Select from approved list  

Pre-Professional Program--Foundation: [22]  
BUSAD 102/103 Orientation  
COM S 113 Intro. To Spreadsheets and Databases  
*MATH 150 Discrete Math for Business and Soc. Sci.  
Or MATH 160 Survey of Calculus (BUSEC Majors)  
ECON 101 Principles of Microeconomics  
BUSAD 250 Introduction to Business  
ECON 102 Principles of Macroeconomics  
& STAT 226 Intro to Business Statistics I  
ACCT 284 Financial Accounting  

Supporting Courses: [7 - 11]  
BUSAD 203 Business Careers and Employment Preparation  
*MATH 151 Calculus for Business and Social Science  
Or ECON 207 Applied ECON Optimization (BUSEC Majors)  
ACCT 215 Legal Environment of Business  
STAT 326 intro to BUS STAT II (ACCT, FIN, BUSEC majors only)  
MIS 207 Fund of Computer Programming (MIS majors only)  
ACCT 301 The ACCT Cycle (Pre-req for all 300 level ACCT courses)  

Professional Program - Business Core: [21]  
#ACCT 285 Managerial Accounting  
MIS 301 Management Information Systems  
FIN 301 Principles of Finance  
MGMT 370 Management of Organizations  
MKT 340 Principles of Marketing  
SCM 301 Supply Chain Management  

Above courses are prerequisites for and must be taken prior to:  
%MGMT 478 Strategic Management  

Professional Program - Business Major: [18 - 23]  
See individual major guides for specific required and elective major courses.  

Electives: [6-15]  
Take additional electives to fulfill the minimum graduation requirement of 122 credits.  
Some elective credits may need to be taken at the 300+ level to meet degree requirements.  

Notes Pertaining to the Curriculum:  
* Business Economics students will take MATH 160 & ECON 207 instead of MATH 150 & 151.  
& Stat 226 is required for all majors; transfer coursework may be a substitute for Stat 226 in the MGMT, MIS, MKT and SCM majors, if approved.  
# With the exception of ACCT 285, Pre-Bus students cannot take Professional Program Courses.  
% MGMT 478 must be taken in the graduating term & requires prior completion of all Core Courses.  

Pre-Professional (Pre-Bus) students must apply for admission to the Professional Program.  
Admission requires:  
Completion of at least 30 credits, all Foundation courses; all ENGL 101 and 99 courses, if required, and ENGL 150; Cumulative or Foundation GPA of 2.50. Early admission is allowed for Honors eligible students. (See your advisor for specific information)  

Other Graduation Requirements:  
1. 42 credits of 300 level or higher coursework from a four year institution;  
   Some majors may require elective courses at the 300 level.  
2. Grade of “C” or better in two of the three required English courses;  
3. Grade of “C” or better in at least 30 credits applied to the business core and major;  
4. 50% of required business courses must be earned at Iowa State University.  
5. The last 32 credits applied to a degree must be taken at ISU.  
   Exceptions for Study Abroad and Internship may be requested.  
6. All 300 level and higher business credits must be earned at a four-year college;  
7. Cumulative ISU grade point of at least 2.0 with no Quality Point Deficiencies.  
8. Multiple business majors/degrees must have 15 distinct credits in each of the major requirements.  
9. Up to 9 credits of free electives (courses not used to meet any other graduation requirement except total credits) may be taken Pass/Not Pass. See the General Catalog for details. Business and Economics courses may not be taken Pass/not Pass.
Appendix B: Entrepreneurship Majors at Peer Universities

### Entrepreneurship Majors at ISU Peer Institutions (based on web search 04-22-2015)

<table>
<thead>
<tr>
<th>University</th>
<th>ENT Major</th>
<th>Bus. Major/ENT Conc.</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Minnesota</td>
<td>Yes</td>
<td>--</td>
<td>Major in Entrepreneurial Management</td>
</tr>
<tr>
<td>University of Arizona</td>
<td>Yes</td>
<td>--</td>
<td>Senior-year only program for selected students</td>
</tr>
<tr>
<td>University of Illinois-Urbana</td>
<td>No</td>
<td>Yes</td>
<td>Major in Management with Entrepreneurship concentration</td>
</tr>
<tr>
<td>North Carolina State University</td>
<td>No</td>
<td>Yes</td>
<td>Major in Science of BusAdm with Entrepreneurship concentration</td>
</tr>
<tr>
<td>Texas A&amp;M University</td>
<td>No</td>
<td>Yes</td>
<td>Major in Management with Entrepreneurial Leadership focus; Certificate in Entrepreneurship</td>
</tr>
<tr>
<td>University of Wisconsin-Madison</td>
<td>No</td>
<td>Yes</td>
<td>Major in Management &amp; HR with Entrepreneurship concentration; Certificate in Entrepreneurship</td>
</tr>
<tr>
<td>Michigan State University</td>
<td>No</td>
<td>No</td>
<td>Specialization in Entrepreneur</td>
</tr>
<tr>
<td>Ohio State University</td>
<td>No</td>
<td>No</td>
<td>Minor in Entrepreneurship and Innovation</td>
</tr>
<tr>
<td>University of California-Davis</td>
<td>No</td>
<td>No</td>
<td>Minor in Technology Management</td>
</tr>
<tr>
<td>Purdue University-Main Campus</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

### Entrepreneurship Majors at Big XII Institutions (based on web search 04-23-2015)

<table>
<thead>
<tr>
<th>University</th>
<th>ENT Major</th>
<th>Bus. Major/ENT Conc.</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Oklahoma</td>
<td>Yes</td>
<td>No</td>
<td>Majors in Entrepreneurship and Venture Mgmt, Entrepreneurship &amp; IT Mgmt; Minor in Entrepreneurship</td>
</tr>
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<td>Oklahoma State University</td>
<td>Yes</td>
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<td>Baylor University</td>
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<td>Major and Minor in Entrepreneurship; Certificates in Technology ENT and Media Technology ENT</td>
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<td>Kansas State University</td>
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Appendix C: Survey Results for CoB Student Interest in Entrepreneurship Programs

December 2014

In December 2014, we surveyed undergraduate students enrolled in BusAd 250, a required course for all business majors with a stable enrollment of approximately 650 students each semester. We received 213 usable responses (Response Rate = 33%). These responses indicate strong interest in entrepreneurship courses among current CoB students.

Of the students surveyed who had not yet declared majors, 30% stated “yes” they would consider an Entrepreneurship Major as their first major and another 51% stated “maybe” they would consider it as their first major (please refer to Figure 1). Extending this to the entire population of 650 students enrolled in BusAd 250, and after reviewing the numbers of students enrolled in other majors across the College of Business, we are confident that approximately 125-150 students would choose entrepreneurship to become their major over the first two to three years of implementation. We consider this to be a conservative estimate.

Career Services considers entrepreneurship an attractive option as a second major. Of the students surveyed who were interested in a second major, 20% of responding students would definitely consider Entrepreneurship as their second major and 48% would "maybe" consider it (see Figure 2). For the entire population of BusAd students, this implies 115 additional students would consider declaring Entrepreneurship as their second major and 285 students would "maybe" consider it every semester.
Currently, 40% of business undergraduate students intend to declare the university-wide Entrepreneurship Minor and another 55% will “maybe” consider this option (see Figure 3). We expect this number to drop somewhat as students will now have the opportunity to declare an Entrepreneurship Major. As the Major and the Minor involve some overlapping core courses, no cannibalization effect is expected. Instead, we anticipate substantially increased demand for the core courses (such as MGMT 310). This may create scheduling challenges if offering the Major increases the overall number of business students taking these courses. Offering too few sections of these core courses has the potential to frustrate students who are unable to enroll in required classes for their declared major or minor. We will have to monitor this demand to ensure enough sections are available to prevent this from happening.

Finally, students indicated the elective courses that they considered most interesting (see Figure 4). Students tended to favor two courses that we are currently offering: MGMT 410 Social Entrepreneurship (21%) and MGMT 367 International Entrepreneurship (15%). Of the proposed additional new electives, students generally favored: MGMT 340 Family Business (12%), MGMT 450 ENT Marketing & New Product Development (10%) and MGMT 460 ENT Finance, Law & Accounting (10%). This information provides important guidance with regard to priorities for future entrepreneurship program development.
Figure 4
Which of these Elective Courses do you find most interesting?

- No Response
- AESHM 474: ENT in Human Sciences
- ECON 331/334: Agricultural Entrepreneurship
- AESHM 222: Creative Thinking and Problem Solving
- MGMT 340: Family Business
- MGMT 330: Franchising
- MGMT 480: IP and Technology Commercialization
- MGMT 460: ENT Finance, Law and Accounting
- MGMT 450: ENT Marketing & New Product Develop
- MGMT 410: Social Entrepreneurship
- MGMT 367: International Entrepreneurship

Percent
This memo provides evidence of support of the College of Agriculture and Life Sciences administration for the new major in Entrepreneurship proposed by the College of Business. The College of Business has done an excellent job in managing the minor in Entrepreneurship. The establishment of a major is the next logical step.

Our college Curriculum Committee voted unanimously to support the proposal for this new major. Thus, I feel very comfortable stating that our college supports this new major.
Date: 2 December 2015

To: Danny Johnson, Associate Dean for Undergraduate Programs
   College of Business

From: Mark Chidister, Associate Dean for Academic Programs

Re: Proposed Undergraduate Major in Entrepreneurship

The College of Design’s Academic Affairs Council discussed the new undergraduate major in Entrepreneurship proposed by the College of Business and unanimously supported the proposal.

Council members believe that this is a viable new undergraduate major, anticipate that some design students will choose it as a double major, and that the new courses proposed for the major will benefit all students interested in entrepreneurship.

Cc: Carl Rogers, Chair, College of Design Academic Affairs Council
Date: November 16, 2015

To: Associate Dean Danny Johnson

From: Associate Dean Linda Serra Hagedorn

Re: Proposed B.A. program in Entrepreneurship

The College of Human Sciences is pleased to support the request from the College of Business to initiate a bachelor degree in Entrepreneurship. We have discussed the proposal in our College’s Curriculum Committee and have assured that our faculty both sees a need for this degree and could not identify any significant overlap in the courses or programs within our college. We do see a possibility of students in our programs taking a course(s) in the new proposed major and anticipate that majors in the new program may identify a CHS course(s) that will be beneficial to their program as well.

We are pleased to see the proposal and unequivocally support the program.

Sincerely,

Linda Serra Hagedorn

Professor and Associate Dean
Dear Dr. Johnson:

The Iowa State University College of Engineering is happy to offer support for the proposed “Major in Entrepreneurship.” We see no conflict between your proposed major and our college’s current courses and programs.

Sincerely,

Dr. Gary A. Mirka, PhD
The John Ryder Professor of Engineering
Associate Dean for Academic Affairs
College of Engineering
Iowa State University
January 15, 2016

Dear Dean Spalding,

The College of Liberal Arts and Sciences has reviewed the proposal for the Entrepreneurship Major to be offered by the College of Business. This is an exciting development for the College of Business and has good potential to be attractive to students and to employers. The College of Liberal Arts and Sciences supports the Entrepreneurship Major with the understanding that this new major within the College of Business will not compromise the availability of the existing Entrepreneurial Studies Minor that is open to all ISU students.

Best wishes for the success of your proposal,

Amy R. Slagell
Associate Dean for Academic Programs
College of Liberal Arts and Sciences
202 Catt Hall
Iowa State University
Ames, IA 50011
(515) 294-7270
February 19, 2016  
Dr. Danny J. Johnson  
Associate Dean for Undergraduate Programs  
Iowa State University College of Business  
2200 Gerdin Business Building  
Ames, IA 50011-1350

Dear Dr. Johnson,

The College of Business Administration at the University of Northern Iowa has NO objection to the development of the proposed undergraduate major in Entrepreneurship. I wish you the best with this new endeavor.

Sincerely,

Lisa K. Jepsen, Ph.D.
Associate Professor, Economics  
Associate Dean  
MBA Program Director
21 March, 2016

Board of Regents, State of Iowa
11260 Aurora Ave
Urbandale, IA 50322

Dear Members of Board of Regents,

I am writing to endorse the Iowa State University proposal to add an entrepreneurial major. Here at the University of Iowa we have a number of entrepreneurial programs coordinating by our John Pappajohn Entrepreneurial Center (JPEC). We have a popular inter-disciplinary certificate program, which like the Iowa State program is a USASBE model program winner, along with 2 niche certificate programs. We also have a major track within the Tippie College of Business and a new major in the College of Liberal Arts and Sciences. These programs are all robust and demand is increasing.

Across all programs coordinated over the 2015 fiscal year by the University of Iowa JPEC, we have had over 3,883 undergraduate and 299 graduate course enrollments. We also served nearly 9,000 individuals in other programs, seminars, and workshops. Over 21,000 children were reached with a BizInnovator online curriculum provided to high schools and a STEM Innovator program. We have a Founder’s Club to support student entrepreneurial teams here in Iowa City and we also coordinate Venture Schools around the state to help entrepreneurs launch their businesses. To learn more, I encourage you to read the 2015 Annual report available online: https://www.iowajpec.org/about/fy2015-annual-report.

Given the strength and growth of our program, we do not believe that the introduction of a major at Iowa State will negatively influence our campus or our programs. In fact, I personally believe that entrepreneurial education is in the best interests of the state and should not be limited to one campus.

If you have questions, please do not hesitate to contact me directly via email (kenneth-g-brown@uiowa.edu) or phone (1-319-335-0924).

Sincerely,

Kenneth G. Brown, Ph.D., SPHR
Associate Dean, Undergraduate Program
Professor of Management and Organizations and Tippie Research Fellow
**Academic Program Approval Voting Record**

This document is to be appended as the last page of the proposal for any new or revised academic program to record the successive votes of approval as the proposal moves through its required review and approval steps. Consult Faculty Handbook Section 10.8 or the Faculty Senate Curriculum Committee website for information regarding Committee review and voting requirements for each action.

Curricular Action: (check appropriate boxes below)

1. √ New Program  □ Name Change  □ Discontinuation  □ Concurrent Degree for:
2. √ Undergraduate Major  □ Graduate Major  □ Undergraduate Minor  □ Graduate Minor  □ Undergraduate Certificate  □ Graduate Certificate  □ Other: __________________________
3. Name of Proposed Change: Major in Entrepreneurship ________________
4. Name of Contact Person: Danny Johnson  e-mail address: danjohns@iastate.edu
5. Primary College: College of Business  Secondary College: __________________________
6. Involved Department(s): __________________________  __________________________
   __________________________  __________________________

**Voting record for this curricular action:**

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[FSCC – November 2013]