

Contact: Rachel Boon

**REQUEST FOR NEW PROGRAM AT IOWA STATE UNIVERSITY: MASTER OF  
ENTREPRENEURSHIP**

**Action Requested:** Consider approval of the request by Iowa State University for a Master of Entrepreneurship in the Ivy College of Business.

The Council of Provosts and Board office support approval of this program.

**Description of proposed program.** The Department of Management and Entrepreneurship proposes a Master of Entrepreneurship degree. This proposal furthers the strategic goals of the Ivy College of Business to advance entrepreneurship and innovation within the college; moreover, the proposal aligns with President Wintersteen's university-wide President's Initiative in Entrepreneurship and Innovation; and finally, the proposal supports Iowa State's Economic Development and Industry Relations goals of advancing technology commercialization and supporting new entrepreneurial venture creation at Iowa State and the community.

The Master of Entrepreneurship will complement the Ivy College of Business's existing offerings including a cross-disciplinary minor in entrepreneurship, an undergraduate major, a PhD program in entrepreneurship, and a Graduate Certificate in Entrepreneurship and Innovation. The one-year Master of Entrepreneurship program will offer an exciting blend of core curriculum and critical experiential learning components that together teach the most important entrepreneurial skill sets.

This proposed program is characterized by,

- Subject matter responsive to and driving trends in entrepreneurship
- Innovative pedagogical methods
- A learning environment that elevates student capacity for contribution and co-creation, collaboration, and pursuing entrepreneurial endeavors and social innovation
- Unique opportunities for students to contribute in the classroom and through applied learning opportunities
- Commitment to lifelong learning and advocacy relationships
- Access to experts, resources, and networks that advance students professionally and leverage their interest and engagement in entrepreneurship

Students who pursue the Master of Entrepreneurship will gain an understanding of entrepreneurship processes and practices both in and outside the classroom. Students will engage in networking within Iowa State's entrepreneurial environment and learn practical applications of entrepreneurship by participating in hands-on learning experiences with actual startup or community ventures. The curriculum for this proposed degree is designed to be somewhat flexible, to account for students' varying interests, background, and plans.

**Academic objectives.** Students in this degree will be provided with the knowledge, skills, entrepreneurial ecosystem, and practical experience to prepare them to start and manage new business ventures independently or within established organizations. Students will develop and practice the primary entrepreneurial skills needed to identify and evaluate market opportunities and think creatively to formulate and implement successful strategies for moving a business idea forward.

Experiential learning, defined as knowledge creation through active involvement in activities relevant to the desired skill or competency (Kolb, 2015), has long been viewed as a valuable tool in higher education and is a critical part of this proposed degree program. Learning through such experiences has been shown to enhance cognitive development (Burch et al., 2019), including the ability to think deeply and critically on a number of issues and apply knowledge to a wider range of real-life scenarios; it also better accommodates a wider range of learning styles, particularly among non-traditional learners (Cantor, 1997). The benefits of experiential learning are particularly relevant to the business classroom, and scholars have noted an increased need to provide this type of learning to business students (Kolb & Kolb, 2005).

Moreover, experiential learning is now among the standards on which the AACSB accredits schools (AACSB, 2017). Regarding entrepreneurship education specifically, "it is increasingly recognized that to be effective entrepreneurial learning has to be experiential... 'Teaching entrepreneurship... requires going beyond understanding, knowing and talking: it requires using, applying and acting. Entrepreneurship requires practice'" (Mason & Arshed, 2013, p. 450). Importantly, such experiential learning opportunities in entrepreneurship education complement and reinforce classroom learning through application (Mason & Arshed, 2013). [Full reference citations included at end of this document.]

#### **LEARNING OUTCOMES:**

Completion of the Master of Entrepreneurship will provide students a functional, competitive and strategic foundation for:

- Identifying and growing core capacity for entrepreneurship
  - Build capacity to identify and understand business risk, market volatility, cultural and political shifts and drivers, and assess resources and opportunities to create solutions to market or industry needs.
- Developing and testing business ideas
  - Create and develop business concepts, test market viability, and establish a framework to generate ideas, make decisions, and test business ideas.
- Identifying and securing key stakeholder relationships
  - Design, deploy and practice the entrepreneurship process by engaging and collaborating with key stakeholders from diverse technical, educational and functional backgrounds.
- Strategically positioning and launching new ventures
  - Identify, model and strategically position new ventures by creating and accessing technical and human resources and sources of capital.
- Designing and implementing strategic plans, processes and systems for innovation
  - Scope, create and launch competitive and differentiating organizational strategies for innovation, incorporating aligned components of hypothesis-driven experimentation, entry timing, innovation portfolio, innovation value-chain, collaboration strategies, marketing, and analysis of contingencies.

Need for program. In a recent survey of 1,800 Iowa State alumni, 80% of respondents answered yes to the question of whether it would be beneficial for everyone at Iowa State to take a course related to entrepreneurship, regardless of their major. Further, respondents indicated that having an entrepreneurial mindset is important in any industry. After introducing the major in entrepreneurship in 2017, first year enrollment surpassed its goal of 50 students, and the numbers have been steadily increasing, with the most recent semester at a count of 97 students.

With the growth in participation in the Pappajohn Center for Entrepreneurship programs, the success of the student and faculty entrepreneurship accelerators, and expansion of the ISU

Research Park, there is a recognized need to expand academic opportunities for graduate level students in the study and practical application of entrepreneurship. The proposed Master of Entrepreneurship addresses this need. Students pursuing this degree may pursue their individual venture concepts or fill needed positions in startup companies associated with Iowa State.

Demand for a Master of Entrepreneurship degree is further supported by results of a recent survey of 1,371 Iowa State students. The survey found that close to 800 students ranked a one-year master's degree as their preferred format for graduate-level entrepreneurship education. Further, desired aspects of a master's level entrepreneurship degree include networking, mentorship, experienced faculty and startup assistance. Of ranked schools in entrepreneurship at the graduate level, 53% of institutions offer a one-year master's degree in entrepreneurship, and 40% offer an MBA with entrepreneurship specialization.

The likely interest in a practical, "hands-on" graduate degree in entrepreneurship extends outside the Ivy College of Business. Iowa State's focus on agriculture, engineering, biosciences and other STEM-related disciplines provides a foundation that naturally cultivates entrepreneurial activity, and providing sufficient "business acumen" to especially the science and technology graduates at this university who have products to launch is an important aspect of this proposed degree. In addition, the university's (and the state's) focus on economic development aligns well with the establishment of a master's-level entrepreneurship program that requires engagement in entrepreneurship efforts at Iowa State.

Relationship to existing programs at the institution. The Master of Entrepreneurship degree will complement and enhance both existing academic programs focused on entrepreneurship and innovation as well as outside-the classroom activities. Specifically, the master's program, with its requirement for students to complete practical, hands-on experiences in entrepreneurship and new venture creation, will fill an important gap in the institution's ability to serve individuals interested in pursuing entrepreneurship as a career path. This enhancement is most clear in the case of the Graduate Certificate in Entrepreneurship and Innovation (GCEI). Students who complete the GCEI could benefit from the master's degree's experiential and other practical opportunities. The master's degree will also offer potential staff and partners the opportunity to participate in faculty startups, commercialization efforts, and other entrepreneurial businesses already operating within the university's economic development ecosystem.

Relationship to existing programs at other colleges and universities. No other Iowa institutions offer a Master of Entrepreneurship degree.

Resources to establish a high-quality program. ISU is well-positioned to offer this graduate degree program that will pair the Ivy College of Business faculty strengths in teaching and the scholarship of entrepreneurship with the practical learning opportunities offered through the Pappajohn Center for Entrepreneurship. These experiential, hands-on learning opportunities are facilitated through the university NSF I-Corps program, CYstarters and Startup Factory accelerator programs, and the ISU Research Park. Additionally, the opening of the Student Innovation Center provides additional learning opportunities through workshops, competitions and hands-on learning in an interdisciplinary, collaborative environment rich with tools and resources such as makerspaces, a digital media lab, and an entrepreneurship hub and coworking space.

The Department of Management and Entrepreneurship at Iowa State is well-prepared to offer the proposed degree program. The Gerdin Business Building has recently completed an expansion, which will allow more courses to be offered in the facility. Faculty members have scholarly expertise and practical experience in entrepreneurship, innovation and technology development. The department currently has 10 faculty members with expertise in these specific areas.

ISU's Pappajohn Center for Entrepreneurship is housed with other ISU economic development units within the Core Facility, a 40,000 sq. ft. collaborative facility at the ISU Research Park, which is home to more than 100 startup companies and organizations that will facilitate the experiential learning component of the master's degree program. Additionally, the university's \$81 million, four-story Student Innovation Center will provide a "learning laboratory" environment on campus to make it easy for student collaboration, creativity, and co-working. Both the Pappajohn Center and the rest of ISU already offer several formalized, mature programs that will form a large part of the experiential component of this new Master's degree.

Student demand. Numerous indications confirm demand for a Master of Entrepreneurship degree at ISU is real and growing. A recent survey of 1,371 Iowa State students found that almost 800 students ranked a one-year master's degree as their preferred format for a graduate level entrepreneurship degree. Furthermore, the Pappajohn Center for Entrepreneurship has seen significant growth in the number of applications for its CYstarters student accelerator program (triple the first year of the program in 2015), including graduate and doctoral students. The students are working on viable business concepts and benefit greatly from an immersive accelerator program. Additionally, student demand for inclusion in the Startup Factory has been strong, as it provides an opportunity for technical graduate students, post docs and faculty members to validate technological discoveries stemming out of the research labs on campus. All of these reflect growing student demand for entrepreneurship-related programs, and a formal master's program in entrepreneurship provides another important avenue for graduate-level students to pursue a venture creation opportunity. Moreover, students in the master's program will provide needed skills sets in contributing to the development of other startups in the ISU entrepreneurial ecosystem.

Workforce need/demand. As reported in an October 2020 World Economic Forum article, "Why universities should support student entrepreneurs – here's why and how":

*Fast-growth entrepreneurial ventures are essential for prosperity and social progress. Entrepreneurs create value by seizing opportunities, assuming risks, solving problems and taking action. They take risks in creating and commercializing innovative technologies in ways that larger businesses are unable to. Sometimes these technologies open completely new markets, transforming industries. Tesla is a good example. Universities play a crucial role in underpinning innovation and entrepreneurial activities. They provide the conditions, facilities and talent that foster the emergence of breakthrough ideas.*

*Many have systems in place to support the development of new ideas so that they have practical use. They play an important part in maintaining the deal flow that gives opportunities for venture capital investment, which in turn mobilizes the growth of entrepreneurial ventures.*

*In the past, a university education typically prepared students for careers defined by others. More than ever in the unpredictable post-pandemic world, universities need to prepare them for careers they define themselves. Universities have to offer the curricula, facilities and incentives to create new generations of entrepreneurs, as well as the traditional pathways into the professions, established companies and into government. This is part of the sea of change that is needed to modernize universities and will play a crucial role as they help build the jobs and industries needed for economic recovery after COVID-19. When once it was a marginal activity, entrepreneurship has become a centrally important part of the university experience.*

The Kauffman Foundation's 2019 Entrepreneurship Indicators reports that the current national and statewide rate of participation in entrepreneurship is 31%, meaning 310 of every 1,000 adults becomes an entrepreneur. Further, startups create on average of 5.2 jobs for every 1,000 people, and the survival rate is 79.6% nationally (81.4 percent in Iowa), meaning eight out of every 10 startups survive (which is vastly different from two decades ago). Those who will end up starting, or even working in, a small or entrepreneurial company will benefit from advanced graduate education in entrepreneurship and innovation.

Funding and Cost. There are no total new costs for this program. The department has the necessary faculty in place to begin offering the program. Through ISU the budget model, tuition revenue associated with student credit hour production will support the cost of teaching classes for this program (including the instructor responsible for supervising the "experiential" components) and any marginal costs for equipment or marketing. This program will not require investments in fixed expenses such as facility renovations, information technology software or licenses.

In addition to funding from ISU's standard budget allocation model, financial resources for this new program may come from internal reallocations made within the college during the program's startup phase. The level of reallocation will depend, in part, on the numbers of new students attracted to the proposed program, and the number of existing students who choose the proposed program over another program, based on standard and differential tuition rates. The proposed program will not be dependent on grants, contracts, gifts, central university resources, or reallocations between academic colleges.

Projected student enrollment. The program admits graduate level students.

	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
Majors	15	20	25	30	30
Non-Majors	n/a	n/a	n/a	n/a	n/a

The ISU Ivy College of Business Master of Entrepreneurship is designed for:

- Existing entrepreneurs who are seeking assistance in order to take their startup to the next level
- Working professionals who aspire to be entrepreneurs
- Recent graduates who have a business idea and are serious about taking the next steps to start it up
- Recent graduates who may not have an idea, but aspire to help found a business and can be connected to existing startup teams or university IP in pursuit of that goal

The Ivy College of Business' Director of Professional Masters Programs Recruiting will also work with faculty and staff to develop and execute a strategic recruiting plan for the proposed program.

Accreditation. The proposed program will be covered by the existing AACSB accreditation of the Ivy College of Business. The proposed program will be evaluated every five years along with all other degree programs offered by the Ivy College of Business as part of its Continuous Improvement Review.

Evaluation plan. The program will be part of the standard ISU evaluation processes.

Letters of Support



November 30, 2020

Dean David Spalding  
2300 Gerdin Business Building  
Iowa State University  
Ames, IA 50011

Dear David,

I am pleased to provide a letter of support for your proposed Master of Entrepreneurship degree program in the Ivy College of Business at ISU. This proposed program appears to complement your existing suite of entrepreneurship offerings in a reasonable way. The experiential aspect of the proposed program is particularly exciting. We are in the process of proposing a new Graduate Certificate in Entrepreneurship at UNI and look forward to the new opportunities this will provide for our students.

Sincerely,

A handwritten signature in blue ink that reads "Leslie K. Wilson". The signature is written in a cursive style.

Leslie K. Wilson

---

**IOWA**

**Tippie College of Business**

Office of the Dean  
University of Iowa  
108 John Pappajohn Business Building, Suite C120  
Iowa City, Iowa 52242-1994  
319-335-0862  
Fax 319-335-0860  
tippie.uiowa.edu

January 13, 2021

Dean David Spalding  
Ivy College of Business  
Iowa State University  
2200 Gerdin Business Building  
2167 Union Drive  
Ames, IA 50011

Dear Dean Spalding,

I am writing to offer our support for the Ivy College's proposed Master of Entrepreneurship degree program. I believe that students would benefit from the significant experiential component in the new proposed program. We wish you all the best in this important endeavor.

Sincerely,



Amy Kristof-Brown, Ph.D.  
Henry B. Tippie Dean

---