

Master of Science in Innovation and Entrepreneurship Program
Submitted by the Boler College of Business

Entrepreneurship has become an increasingly popular academic offering at John Carroll, as evidenced by increased enrollment in the Entrepreneurship Minor, and on college campuses around the world. The newly arrived John J. Kahl, Sr. Chair in Entrepreneurship (Dr. Doan Winkel), the Entrepreneurship faculty and the Dean of the Boler School engaged in discussions to identify opportunities to expand curricular offerings in entrepreneurship and innovation at the graduate level. Multiple meetings with faculty and administrators in the Boler School and significant research of offerings at other schools produced course outlines and an implementation plan.

John Carroll faculty and administrators involved in the planning process have included Doan Winkel, Jacqueline Schmidt, Al Miciak, Walter Simmons. Additionally, the following subject-matter expert faculty from outside John Carroll have been involved in the planning process: Dr. Jeffrey Stamp, Dr. Alex Bruton, Dr. Jeff Cornwall, Dr. Heidi Neck, Dr. Rebecca White.

Justification for Program and Prevalence of Program at Other Institutions

Entrepreneurship has experienced extensive growth in the region and Ohio. This growth extends nationally as well. There are roughly 500 colleges and universities offering a major, minor, or certificate in entrepreneurship - up from nearly 100 in 1985 - and roughly 5,000 courses offered in entrepreneurship nationwide - up from nearly 250 in 1985. Across the US, over 400,000 students take entrepreneurship courses each year, and more than 9,000 faculty teach entrepreneurship.

At JCU the entrepreneurship minor has had continued growth since its inception in 2010. Currently, the undergraduate minor in entrepreneurship has 201 intended or declared minors in entrepreneurship. In the 2016-2017 academic year, 579 students took courses in entrepreneurship. During the 2017-2018 academic year, 625 students took entrepreneurship courses. These students' majors are 54% Boler College of Business and 46% College of Arts and Sciences. Currently, if JCU students are interested in pursuing entrepreneurship beyond the undergraduate degree, there is no option at JCU.

This interest in entrepreneurship is also seen in the region by the development of entrepreneurship at other universities and colleges. Currently in the Northeast Ohio region, the following institutions offer entrepreneurship undergraduate minors or majors: Ashland, Baldwin Wallace, Bowling Green University, Cleveland State, Case Western, College of Wooster, Duquesne University, John Carroll, Hiram College, Lake Erie College, Lakeland community college, Kent State University, Miami of Ohio, Notre

Dame College, Oberlin University, Ohio State University, University of Akron, University of Dayton, University of Findlay, University of Mount Union, University of Pittsburgh, University of Toledo, Ursuline College, Walsh University, and Youngstown state. Lorain County Community College offers a one year certificate in entrepreneurship.

If graduates from these programs want to expand their entrepreneurial skills, the options are limited. Ashland University, Baldwin Wallace, Carnegie Mellon University, University of Rio Grande, University of Toledo, Walsh University offer entrepreneurship as a concentration in their MBA programs. Cleveland State University, and the University of Pittsburgh offer graduate certificates in entrepreneurship.

M.S. in Entrepreneurship Landscape

There are no M.S degrees in the area of entrepreneurship offered through the Boler College of Business. Case Western University offers an M.S. through the science departments in the following fields: Biotechnology, Chemistry, and Physics. Nationally, the following schools offer M.S. degrees in entrepreneurship through their Business School: Syracuse University, Oklahoma State University, University of Michigan, University of Virginia, University of Southern California, University of Florida, Drexel University, Indiana University, and Northeastern University

Rationale for M.S. instead of MBA

The proposed program will provide an option for students from all academic backgrounds and disciplines from the Northeast Ohio region and nationally who want to pursue a more extensive degree in entrepreneurship without acquiring the full work experience required for admission to an MBA program. This will also offer a path to a graduate degree in innovation and entrepreneurship for students who meet prerequisites different from those necessary for an MBA degree. Furthermore the M.S. degree provides a broader market than an MBA degree in that it appeals to students completing both a B.S. in business, B.S. in science, or a B.A.

Rationale for M.S. instead of M.A.

An M.S. degree is more appropriate for studying entrepreneurship and innovation than an M.A. degree, for the following reasons:

- Our program will require a project that begins in the initial Bootcamp and carries throughout all the courses, requiring significant primary and secondary research (customer, market, industry, empirical, etc.) and technical skills. Although the program does not require a thesis it does involve extensive research.
- Also, it is the tradition and common practice that most AACSB Masters Programs are MS and Not MA

Purpose of Program

This is a new graduate program designed to enable students to develop an entrepreneurial mindset and learn how to deploy that mindset within current organizations, or in starting their own business. With the MS structure, students will begin their degree with a bootcamp where they will identify and begin working on an entrepreneurial/innovative project. This could be a startup idea, or an intrapreneurial project within their current organization or the industry in which they desire to work. They will continue to work on this project through the rest of the curriculum. With a strong focus on experiential learning and in-depth historical and real-time case studies around current issues, this program will explore all areas of innovation and entrepreneurship, including:

- Creative Thinking
- Design Thinking
- Ethics & Social Responsibility
- Idea Generation
- Customer Interviewing
- Problem Validation
- Business Modeling
- Prototyping
- Financial Projections
- Leadership

Ways Program Strengthens Academic Mission

This program will address all four John Carroll University Learning Goals. Students will be guided through in-depth study and learn to apply their learning to make a sustainable impact (*Intellect*), will further their habits of reflection and awareness of self and others as they engage with their own ideas and with potential customers (*Character*), will employ leadership and collaborative skills (*Leadership*), and will actively advocate for inclusion and social justice (*Service*).

Entrepreneurship and innovation are the backbone of any economy, including Northeast Ohio's. This program will provide students with the knowledge and confidence necessary to effectively lead others in entrepreneurial and innovative thinking and action in the business environment. This will give John Carroll University a recruitment tool in that incoming undergraduate students could partner with the award-winning Entrepreneurship minor and receive a graduate degree by staying a 5th year. Additionally, it could expand potential student recruitment nationally because it could be offered entirely online.

Relationship Between Proposed Program and Existing Programs

There are no current graduate programs that cover the material that will be covered in these courses. The current MBA programs offer some classes that this program would be

able to leverage as a set of core courses, but overall this program would complement the classes offered by Boler College of Business MBA programs. Electives for this program can be drawn from graduate programs in the College of Arts and Sciences and in the Department of Education.

Program Curriculum

Rationale and Justification for Courses

The identification of courses for this program began with extensive research of existing graduate entrepreneurship and innovation programs, and extensive discussion between Boler faculty, the individuals leading those programs, and regional entrepreneurs and innovators. With the overall learning goal of the program for students to learn how to apply entrepreneurial principles to start a new business or scale an existing business, the following topics, as applied in an entrepreneurial setting, emerged as critical for the program:

- **Creative Problem Solving:** Identify problems, redefine problems, develop new responses and solutions to problems, take action to implement solutions
- **Failure:** personal and professional reflection, resilience
- **Financial Management:** Financial forecasting, primary and secondary market research, revenue and expense models, cash flow management analysis, bootstrapping techniques, external sources of debt and equity financing
- **Strategy:** integrative thinking, resource allocation, problem solving
- **Business Modeling:** creation, delivery and capture of value, business purpose and process, key partners, activities and resources, value proposition
- **Leadership:** building culture, diversity, conflict management, inspiring team internal and external stakeholders
- **Communications:** pitching ideas, persuasive writing and verbal skills interviewing customers
- **Ethics:** Conflicts of interest, ethical experimentation

Program Requirements

This program consists of fourteen courses. Five of these courses already exist at the graduate level: Innovative Thinking (MB561), Global Social Entrepreneurship (MK582), Leadership Lab (MB560), Innovation Planning and Forecasting (MB564), and Ethics (MHR591). In addition, two electives can be from any graduate program at John Carroll.

The following seven additional courses (11 credits) would need to be added to the curriculum:

<i>Courses</i>	<i>Credits</i>
3-Day Intensive Bootcamp	1

Creativity and Design Thinking	2
Failure as a Learning Tool	2
Case Study 1	2
Innovative Business Models	1
Case Study 2	1
Startup Experience	2

Prerequisites and Sequencing of Courses

Students accepted into this program will have completed a Bachelor’s degree. To be admitted, students must also submit an application form and a letter of recommendation, and complete an interview process.

The following are prerequisites for this Full-time Master’s Program:

- An undergraduate degree
- An undergraduate statistics course
- ER305 (or equivalent ACC221) and ER 306 or (FIN312 & MK301 or equivalent)
 - Non-John Carroll students can take ACC521, FN521, and MKT521

Courses are sequenced to build upon each other. For example, Non-John Carroll students must take ACC521 before they take FN521. Credit hours for each course and sequencing of courses have been worked out by the faculty during meetings convened during AY2017-2018. This sequence of courses has been reviewed by entrepreneurship educators in existing M.S. in entrepreneurship programs and by entrepreneurs as a means of external validation.

Course Descriptions (** indicates courses that will be developed)

**** 3-Day Intensive Bootcamp (1 Credit) - to be taught by Dr. Doan Winkel**

The focus of this intensive experience is to expose students to the highs, lows, pressure and fun of the entrepreneurial process. Over the course of 3 full days, students will network, pitch ideas, build teams, find customers, experiment, build prototypes, and pitch their product and process at a final demo event. The emphasis will be on students experiencing the entire entrepreneurial process, while being mentored by actual entrepreneurs and investors from the JCU Entrepreneurs’ Association and partners in the Northeast Ohio community such as Jumpstart, Inc. During this experience, students will identify and begin working on an entrepreneurial/innovative project. This could be a startup idea, or an intrapreneurial project within their current organization. They will continue to work on this project through the rest of the curriculum.

**** Creativity and Design Thinking (2 Credits) - to be taught by Adjunct Faculty**

The focus of this course is on design thinking, a problem-solving approach that emphasizes customer empathy, prototyping, and iteration. The course is designed around

a model of empathizing, defining, ideating, prototyping and testing. A series of project management aids are incorporated to manage the process. Students will continue developing their Bootcamp project with the assistance of entrepreneurial and corporate mentors matched through the JCU Entrepreneurs' Association and partners in the Northeast Ohio community.

**** Failure as a Learning Tool (2 Credits) - to be taught by Dr. Doan Winkel**

The focus of this course is failure. Students will analyze the causes of failure, and will be presented a framework that will enable them to learn from failure. Through in-depth reflections of personal and professional failures, students will develop a portfolio of resilience mechanisms to better prepare them for an entrepreneurial success. Students will study and analyze failures in the industry of their Bootcamp Project. Students will work with entrepreneurial and corporate mentors matched through the JCU Entrepreneurs' Association and partners in the Northeast Ohio community to identify and navigate failures specific to the industry of their Bootcamp Project.

MB561 Innovative Thinking (2 Credits)

Explores a variety of customer-centric techniques for identifying opportunities, generating ideas to fit those opportunities, and translating those ideas into value propositions that, in turn, create value for the organization. Also includes a framework for understanding the application of business models to new ideas and methods for communicating those ideas. Students will apply all learning to their Bootcamp Project.

MK582 Global Social Entrepreneurship (2 Credits)

Focuses on entrepreneurial solutions to societal problems in global contexts. Students will learn social entrepreneurship as a strategy for engaging in profitable enterprise activity that results in providing solutions to both macro and micro problems in different cultures.

MHR591 Business Ethics & Social Responsibility (3 Credits)

Consideration of the social, political, legal, and ethical constraints on business policies and managerial decision making. Students will apply all learning to their Bootcamp Project.

MB564 Innovation Planning and Forecasting (3 Credits)

How to refine innovative ideas to fit customer needs using financial and planning tools. Students will learn how to plan the implementation of their innovation and forecast its impact. The ability to communicate qualitative and quantitative information through the process is also stressed

MB560 Leadership Lab (3 credits)

Provides a wide variety of skills necessary for success through experiential skill building activities, assessment and coaching. Requires students to demonstrate strong conceptual understanding of leadership, ethical decision-making, the ability to diagnose and plan interventions, and ultimately their capacity for leading others

**** Innovative Business Models (1 Credit) - to be taught by Dr. Doan Winkel**

Students will apply design methodologies and innovation tools while working closely with a client company with a real problem to solve. Students will study business model innovation, and will learn how to identify new business opportunities, design and test breakthrough concepts, and develop a viable business strategy and operating model.

**** Startup Experience (2 Credits) - to be taught by Dr. Doan Winkel**

Students will complete a co-op or internship with a Northeast Ohio startup company or with an innovative unit of a corporation. With assistance of Northeast Ohio partners and our Boler Professional Development staff, students will be guided to an experience to build relationships with people and organizations in their desired career path.

**** Case Studies 1 (2 credits) & 2 (1 credit) - to be supervised by John Carroll subject-matter faculty expert, and delivered by the Social Innovator in Residence who is subject of the Case Study**

Each case study will present students with a current in-depth problem, challenge or opportunity an entrepreneur in Northeast Ohio is currently facing. The issue presented will require the use of topics taught in previous courses. These case studies will be delivered by the Muldoon Center Social Innovators in Residence (SIR). The SIR program is currently being established through the Muldoon Center and the Boler College of Business, and will be in place by Fall 2019. The program will include six (6) entrepreneurs who are also social innovators. One responsibility these SIRs will be tasked with, and compensated for, will be to lead (with supervision from John Carroll faculty) these case studies using their current businesses. Each case study will result in a presentation to program faculty and a group of entrepreneurs and investors.

- Case Study 1 will focus on creativity, innovative thinking, ethics and social responsibility
- Case Study 2 will focus on business modeling and financial management

Many of these courses include extensive involvement of, and sometimes leadership by, mentors and partners from the entrepreneurial and Northeast Ohio business community. All courses will be developed and overseen by JCU entrepreneurship faculty, and all assessment in courses will be done by JCU faculty.

Sequencing of Courses (** indicates courses that will be developed)

Fall

Spring

Summer

** 3-Day Intensive Bootcamp (1 cr.)	Leadership Lab (MB560) - 3 cr.	** Case Study 2 (1 cr.)
** Creativity & Design Thinking (2 cr.)	Elective 1 (from any JCU graduate program) - 3 cr.	** Innovative Business Models (1 cr.)
** Failure as a Learning Tool (2 cr.)	Business Ethics & Social Responsibility (MHR591) - 3 cr.	** Startup Experience (2 cr.)
Innovative Thinking (MB561) - 2 cr.	Innovation Planning & Forecasting (MB564) - 3 cr.	
Global Social Entrepreneurship (MK582) - 2 cr.	Elective 2 (from any JCU graduate program) - 3 cr.	
** Case Study 1 (2 cr.)		
<i>TOTAL CREDITS: 11</i>	<i>TOTAL CREDITS: 15</i>	<i>TOTAL CREDITS: 4</i>

We are also considering implementing a model in the future that would have courses offered in a hybrid or fully online format with intensive meetings on Saturday. This model could attract more participants from outside the John Carroll community.

List of Courses to be Developed Including Timetable for Development

Seven of the courses are currently offered and so have already been developed. The other seven (11 credit hours) courses would need to be developed. These courses are already being developed, and will be finalized, during the Spring 2019 semester.

Mechanism for Approving New Courses

The course syllabi will be created by Dr. Doan Winkel, John J. Kahl, Sr. Chair in Entrepreneurship and Director of the Muldoon Center for Entrepreneurship, and Dr. Jacqueline Schmidt, Academic Program Director of Entrepreneurship and Professor of Communications, in collaboration with other members of the entrepreneurship team and with assistance from a global group of entrepreneurship educators, entrepreneurs, and innovators. Drs. Winkel and Schmidt will then present the syllabi to the Innovation & Entrepreneurship Faculty Committee (see below) for review, possible revision, and final approval.

Evidence of Sufficient Faculty

Faculty are already in place and teaching courses that comprise 19 hours of the program. For the other 11 hours, Dr. Doan Winkel, Professor Tom Bonda (Director of LaunchNET, and Executive Director of the Entrepreneurs Association), and Dr. Jackie Schmidt (Academic Program Director of Entrepreneurship) are available to teach courses required for this program, as are a stable of potential Adjunct faculty, and six (6) Social Innovators in Residence (SIR). The SIR program is currently being established through the Muldoon Center and the Boler College of Business, and will be in place by Fall 2019. The program will include six (6) entrepreneurs who are also social innovators. One responsibility these SIRs will be tasked with, and compensated for, will be to lead (with supervision from John Carroll faculty) the case studies using their current businesses.

Dr. Winkel currently teaches two courses per semester, but since one of those courses is being dropped from the catalog, he will pick up 3 credits each semester. He will teach the 3-Day Intensive Bootcamp (1 Credit) and Failure as a Learning Tool (2 Credits) in the Fall semester, and teach Innovative Business Models (1 Credit) and Startup Experience (2 Credits) in the Summer. The Intensive Bootcamp to kick off the semester is only three (3) days long, and the Startup Experience during the summer is similar structure to an internship.

In addition, we currently have four adjunct faculty members who are available to teach in the program on an adjunct basis, and through the Entrepreneurs Association, we have access to numerous other highly qualified and interested candidates for adjunct faculty. Adjunct faculty will teach the Creativity and Design Thinking (2 Credits) in the Fall semester. We also foresee establishing a tenure-track position in entrepreneurship as this program grows.

The two Case Study courses will be supervised by a John Carroll faculty member (depending on the specific topic, we will identify the best fit), but led by the Social Innovator in Residence who is the subject of the case study.

Given all these details, we do not foresee problematic staffing implications, but with a stable of qualified and experienced faculty, we are well-prepared to adjust as necessary.

Organization and Administration of Program

Faculty Committee

An Innovation & Entrepreneurship Faculty Committee will be established, to be chaired by the the John J. Kahl, Sr. Chair in Entrepreneurship, and comprised of all the faculty teaching in the M.S. in Innovation and Entrepreneurship program. This committee will develop, approve, and assess all curriculum for this program. Leadership from the

Graduate Programs Office in BCOB will also sit on this Faculty Committee. The Faculty Committee will report to the Graduate Programs Office in BCOB.

In addition to the Innovation & Entrepreneurship Faculty Committee, there will be an Advisory Board comprised of entrepreneurs and innovators that will advise the Faculty Committee on issues of strategy, planning and implementation.

Implementation Timetable

Since seven courses need to be developed, we will begin offering this program in Fall 2020.

Student Recruitment

We will begin this program as a cohort model, where all students will be full-time and proceed through all courses together. As the program grows, we hope to build options to include hybrid and/or part-time options, so we can accommodate a more diverse student population. With the initial full-time cohort model, we will likely attract recent graduates of undergraduate programs, but eventually seek to attract students who have more extensive work history.

We will concentrate our marketing efforts for our first cohort to current John Carroll University seniors, or very recent alums. Each year, our Entrepreneurship Minor graduates approximately 40 undergraduate students, and roughly 200 seniors from across campus are taking entrepreneurship courses. We have just received a renewable \$220,000 grant from the Burton D. Morgan Foundation to establish a LaunchNET program, through which we will more deeply engage students across campus in learning about and practicing entrepreneurship. With our existing reach across campus via our Minor, and the increased exposure and impact through our LaunchNET program, we anticipate being able to fill our first cohort of at least 12 students from this pool of internal students.

We will also market this program to students from other schools across Northeast Ohio, using our strong connections through the Entrepreneurship Education Consortium (EEC). The EEC is an award-winning group of 10 colleges and universities who have been collaborating and sharing knowledge and resources pertaining to entrepreneurship education since 2007. Because there is not a program like this in Northeast Ohio, the 10 schools in the EEC will market this opportunity to their undergraduate students graduating with majors, minors, or significant coursework in entrepreneurship, thereby significantly expanding the pool of potential applicants to this program.

Our long-term strategy for attracting more students to our program involves Dr. Doan Winkel, the Kahl Chair in Entrepreneurship and Director of the Muldoon Center. Dr. Winkel has developed a national reputation in entrepreneurship education; he currently

sits on the Board of Directors of USASBE, a national association of entrepreneurship educators, and will in coming years run for the role of President of that association. This channel will help our program gain exposure across a national network of undergraduate entrepreneurship programs, thereby enhancing the prominence of our program and school, and increasing the quality of students applying to and accepted into our program.

Marketing and Communication Plan

The Boler College of Business Graduate Office, in conjunction with the Innovation & Entrepreneurship Faculty Committee, will develop print materials and a communication plan for program roll out and ongoing future student recruitment.

Learning Outcomes and Assessment

Program Learning Outcomes

A graduate can expect to achieve the following learning outcomes:

- Solve complex problems, make decisions using creative and critical thinking, and identify and develop new business opportunities.
- Make holistic judgments when analyzing business situations; use a strategic understanding of entrepreneurship and innovation and take into account the relationships between this discipline and other areas of business.
- Make business decisions that make a difference in the world.
- Utilize empathy and interpersonal skills to be highly effective leaders.
- Demonstrate ethical reasoning skills, understand social, civic, and professional responsibilities and aspire to add value to society.
- Communicate using business specific terminology in written and verbal form and facilitate information flow in a variety of organizational, social, and intercultural contexts.

Program Learning Goals

The program learning goals are:

- Students will learn how to recognize how entrepreneurs and innovators develop and exploit an opportunity
- Students will learn how to identify and develop business concepts and business models, and assess their viability and feasibility
- Students will learn how to analyze and evaluate the financial requirements of exploiting a venture opportunity
- Students will learn how to assemble human and financial resources and apply them to build and further their entrepreneurial or innovation idea

Students will learn how to apply these outcomes to start a new business or innovate an existing business. More specifically, students will demonstrate functional knowledge of,

and be able to apply their knowledge of, the following entrepreneurship and innovation principles and practices:

- Opportunity recognition and idea development,
- Design thinking,
- Customer interviewing and other methods of market research,
- Prototyping and experimentation,
- Financial planning and analysis processes for starting and growing a small business,
- Group dynamics and conflict resolution in entrepreneurial teams,

In addition, students will exhibit the development of leadership capabilities through

- Written and oral communication techniques for entrepreneurs and innovators
- Creative problem solving and innovation for entrepreneurial settings
- Critical thinking and analysis for entrepreneurial settings
- Ethical awareness and reasoning with respect to entrepreneurship and innovation

Course Level Learning Outcomes (** indicates courses that will be developed)

**** 3-Day Intensive Bootcamp**

Students will be able to:

- Know how to use the Business Model Canvas to plan out all the key components of their startup
- Know how to identify early adopters
- Know how to conduct problem and solution customer interviews
- Know how to build a prototype to exhibit form and function of their idea
- Know how to estimate startup costs and revenue streams

**** Creativity and Design Thinking**

Students will be able to:

- Apply creative thinking and design thinking principles in a wide range of contexts, from the personal to the global
- Approach innovation challenges from a human-centered perspective
- Empathize with a broad group of stakeholders to understand their needs.
- Define and redefine innovation challenges by asking the right questions.
- Develop many creative ideas through structured brainstorming sessions.
- Develop rapid prototypes to bring their ideas into reality as quickly as possible, and obtain feedback.

**** Failure as a Learning Tool**

Students will be able to:

- Analyze the causes of failure - both their own and historical business failures
- Plan for and develop alternatives to potential failures
- Communicate failures to others while focusing on the learning moments
- Implement a variety of resilience mechanisms to reflect on failures

**** Innovative Business Models**

Students will be able to:

- Apply design methodologies and innovation tools to a real problem from a client company
- Identify innovation opportunities in their environment
- Use idea modeling tools to generate ideas that fit the identified opportunities
- Develop a business strategy around validated ideas
- Develop an operating model for a business strategy

**** Case Studies 1 & 2**

Students will be able to:

- Analyze key innovation, entrepreneurial, creative, and/or design issues in a particular company and propose appropriate solutions to the situation (specific to Case Study 1).
- Analyze a business model, strategy, and operating/financial plan in a particular company and propose appropriate business model and financial management recommendations to the situation (specific to Case Study 2).

Anticipated Methods of Assessment

Students will be assessed in a number of different ways. Assessment will include tests; written assignments; a variety of oral presentations; role-plays; simulations; case analysis;

The program will be evaluated based on student enrollment, BCOB course evaluations, reasons for student attrition, exit satisfaction surveys at graduation, and tracking of graduates over time to assess progression of their careers.

Anticipated Budget

This program is a cohort program completed over 12 consecutive months, beginning each Fall. We are estimating our first cohort will comprise 12 students, with subsequent cohorts of approximately 20 students.

The budget is developed with a conservative assumption that we will have 12 students in the first cohort and 20 in the second cohort. Each cohort will end in the spring and the next cohort will begin in the summer. See Appendix A for a breakdown of estimated program revenue and expenses for the first 4 years of the program.

We assume a graduate tuition rate equal to the current tuition rate for graduate business programs (\$900 per credit hour). Faculty will have the option of teaching as part of load or to teach off-load in this program. If faculty are teaching off-load, then they will be paid at the rate of their summer compensation with an assumed fringe rate of 15% which is consistent with fringe rates for summer compensation. The budget in Appendix A assumes all faculty members are teaching off-load as this is the more conservative

financial assumption. Course development grants will be provided to faculty at a rate of \$3,000 per 3-credit course and \$1,500 per 1- or 2-credit course.

Appendix A: Budget

	Cohort 1	Cohort 2
Tuition Revenue		
Number Credit Hours	30	30
Tuition per Credit Hour	\$930	\$930
Discounted Tuition per Credit Hour	\$652.50	\$652.50
Revenue Per Student	\$19,566	\$19,566
# Students	12	20
Total Tuition Revenue	\$234,852	\$391,380
Expenses		
Faculty Compensation <i>*calculated as \$1,000/credit for 5 credits total per cohort</i>	\$5,000	\$5,000
Fringe (15%)	\$750	\$750
Operating Expenses (Detail Below)	\$20,000	\$20,000
Course Development Grants	\$19,500	
Fringe (15%)	\$2,925	

Total Expenses	\$48,175	\$25,750
<i>Net Income from Program</i>	<i>\$186,677</i>	<i>\$365,630</i>
Operating Expenses		
Travel (Conferences, Meetings)	\$5,000	\$5,000
Supplies	\$15,000	\$15,000
<i>Total Operating Expenses</i>	<i>\$20,000</i>	<i>\$20,000</i>

Appendix B: Letters of Support

Dean Al Miciak
Dennis Hareza
Stephanie Levenson
Doan Winkel
Jackie Schmidt
Todd Bruce

Appendix C: Potential Applicants for the MS Innovation & Entrepreneurship Program

- JCU Bachelor's Degree (from Boler)
 - These students would meet all prerequisites and would complete the MS program in the sequence outlined in this proposal.
- JCU Bachelor's Degree (from CAS)
 - These students would meet the first two prerequisites.
 - If they minored in Entrepreneurship or in Business they meet all prerequisites.
 - If they did not complete the ER305/ER306 or equivalent course sequence, they would take ACC521 and MKT521 in the summer prior to the MS program, and FIN521 in the first Fall of the MS program. They would then complete the MS program in the sequence outlined in this proposal.
- Individuals with a Bachelor's Degree not from JCU
 - These students would meet the first prerequisite.

- Depending on their transcript, they may meet the next two prerequisites. If they do not have evidence of completing ER305/ER306 equivalent courses, they would take ACC521 and MKT521 in the summer prior to the MS program, and FIN521 in the first Fall of the MS program. They would then complete the MS program in the sequence outlined in this proposal.



Office of Institutional Effectiveness

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February 26, 2019

Dr. Daniel Kilbride,
Chair, Faculty Council

Dr. Christopher Sheil,
Chair, Committee on Academic Policies
John Carroll University

Dear Dr. Kilbride and Dr. Sheil:

I am writing to indicate my support for the proposed Master of Science in Innovation and Entrepreneurship. I encourage the members of the Committee on Academic Policies to recommend that the proposed new program be approved by the faculty and made part of the curriculum.

I have been asked to provide information regarding the relationship of new program to the overall curriculum, the viability of its assessment plan, and the availability of resources to support assessment of the program.

The proposed program is congruent with our existing academic structure, being comparable in size and structure to other Boler Master's programs. The learning goals and course of study show a strong alignment with many of our institutional learning goals. The proposal itself indicates how the programs' goals align with the University Learning Goals. The key concepts of the graduate learning goals (integrative disciplinary knowledge, critical analysis, creative and innovative thinking, leadership and collaboration, communication, and ethics) run through the goals of the program and its proposed courses.

This proposal provides a solid framework for a viable assessment plan. It describes program-level goals that are specific, generally measurable, aligned with the graduate studies learning goals, and focused on student learning. The proposal also proposed direct and indirect measures of student learning that are closely matched to the goals. Data obtained from these measures should enable

the faculty committee and program director to make curricular changes at appropriate intervals to best ensure student learning.

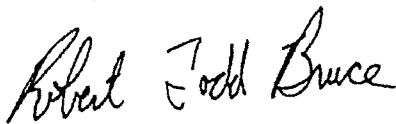
Assessment of student learning is a routine part of faculty work and every academic program at John Carroll University is already involved in assessment. This program will be no different. As with all departments and interdisciplinary programs, the program director or a faculty member in the program designated by him will need to agree to serve as assessment coordinator, coordinating program assessment with my office. *There is nothing in this proposal to suggest that assessment of this program will require additional resources beyond those already provided by the institution in general or my office, in particular.*

If the program is approved, I look forward to the opportunity to work with Dr. Winkel to further develop a formal assessment plan, curriculum map, and assessment instruments and procedures if the proposal is accepted.

This program will require approval from both the state of Ohio and from our regional accreditor, the Higher Learning Commission. The state requires institutional approval prior to its decision, and HLC requires both institutional and state approval. If the program is approved, I will work with Dr. Winkel and the Dean's office to ensure that both subsequent approval processes are completed in a timely fashion.

I fully support the approval of this new program. Please contact me at x1600 or rbruce@jcu.edu if there is anything else that I can provide to inform your deliberations.

Sincerely,

A handwritten signature in black ink that reads "Robert Todd Bruce". The signature is written in a cursive, flowing style.

Robert Todd Bruce
Assistant Provost for Institutional Effectiveness and Assessment



To: Dr. Dan Kilbride, Chair of Faculty Council
From: Michelle M. Reynard, Registrar
Date: March 12, 2019
Re: Review of Master of Science in Innovation & Entrepreneurship

Dear Dr. Kilbride,

After reviewing the proposal for the Master of Science in Innovation & Entrepreneurship, I have concluded that there are no special needs for scheduling, billing, formalizing a degree audit or other exceptions that would prevent the major from being implemented. I am also satisfied that if approved, the major's specifications and new courses will be communicated to the Office of the Registrar in a timely manner for implementation in Banner.

Sincerely,

A handwritten signature in cursive script that reads "Michelle M. Reynard".

Michelle M. Reynard
Registrar
mreynard@jcu.edu



To the Faculty Council:

Re: Letter of Support for Master of Science in Innovation and Entrepreneurship

After reviewing the financial analysis of the proposed MS Program in Innovation and Entrepreneurship, I am supportive of moving forward with this new initiative. The assumptions behind the financial analysis are reasonable and, if achieved, will result in the program being accretive to John Carroll's overall financial results. The one outstanding risk to the financial analysis that we need to monitor is the assumption that the five existing courses can absorb the incremental 30 students without adding additional sections. The potential longer term need of additional sections will decrease the overall surplus generation of the new program but it will continue to be an incremental financial benefit to the university

Regards,

Dennis Hareza

Executive Vice President and Chief Financial Officer



Office of Undergraduate Admission

1 JOHN CARROLL BLVD.
UNIVERSITY HEIGHTS, OHIO 44118-4581
PHONE 216.397.4294
WWW.JCU.EDU

March 9, 2019

Dr. Dan Kilbride
Chair, Faculty Council

Dear Dr. Kilbride:

I am writing to indicate our support for the proposed Master of Science in Innovation & Entrepreneurship by the Boler College of Business. We have been asked to provide information regarding the relationship of this new program to our recruitment efforts and ways in which we can attract new students to John Carroll University because of this program.

This program at the undergraduate recruitment level, will demonstrate JCU's commitment to the Boler College in the development of these new programs. Many high schools have developed strong programs in the area of entrepreneurship to provide early exposure and having the graduate option in this area further demonstrates JCU's commitment both at the undergraduate and graduate levels.

We encourage the members of Faculty Council to review and endorse this option.

If the program is approved, we look forward to the opportunity to consult with the staff from Boler to further develop a formal recruitment and marketing plan as well as discuss other opportunities for inquiry generation. Please contact us if we can provide any additional information throughout your deliberations.

Sincerely,

A handwritten signature in cursive script that reads "Stephanie Levenson".

Stephanie Levenson
Vice President for Enrollment Management

February 13, 2019

I am writing to give my vigorous support for the proposed Master of Science in Innovation and Entrepreneurship (MSIE) program. I have been leading the planning of this program for the past year. Our team has thoroughly researched graduate programs in entrepreneurship and innovation across the region, the nation, and the globe. We have carefully constructed a unique curriculum to meet the adaptive needs of entrepreneurial thinkers and innovators.

The program is a one year lock-step program with a new cohort starting every year. Because we are including five (5) current John Carroll University graduate courses, this program will not place an undue burden on faculty coverage for existing courses or for new courses in this program. Course development is scheduled to be completed during the summer.

This program is expected to pay for itself and should not be a burden on the financial resources of the MMS Department, School of Leadership and Social Innovation, and the Boler College of Business.

I enthusiastically support this program as an addition to our graduate business program. In addition to the revenue potential for this program, we have the ability to develop this unique program into a national program with great visibility.

If I can provide additional information regarding my support for this program, please do not hesitate to ask.

Sincerely,

Doan Winkel, Ph.D.
The John J. Kahl, Sr. Chair in Entrepreneurship
Director, The Edward M. Muldoon Center for Entrepreneurship
Assistant Professor of Entrepreneurship
Boler College of Business
John Carroll University



JOHN M. AND MARY JO BOLER
SCHOOL OF BUSINESS
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I wholeheartedly support a Master of Science in Entrepreneurship and Innovation. I have been working with the committee to develop this program for the last year and feel there is not only strong university support for a fifth year program, but also a strong regional appeal.

I have been working with entrepreneurship minor for the last seven years. During this time student enrollment in minor has steadily increased from 282 students taking courses in 2012 -2013 to 579 students taking courses in 2017-2018. Additionally, the mix of students taking courses in the entrepreneurship program (which includes the courses in the minor and core courses ER 110, 115, 120, and MSS 364) continues to be approximately 50% College of Business and 50% College of Arts and Sciences. Because the focus of the entrepreneurship program is on developing an entrepreneurial mindset, not necessarily starting a business, and embraces both social and business concerns, the program fits nicely into other majors. As a result, when students are looking for a fifth year program, many would like to continue with entrepreneurship but have no option. This program allows them to finish their major and adapt their skill sets in an entrepreneurial manner.

In addition to strong student support, we have developed strong faculty support through several Burton D. Morgan grants to expand entrepreneurship across campus in faculty learning communities. A total of 25 faculty from both Arts and Science and from Business have participated in these communities, adding entrepreneurship activities to their courses. We have increased our reach across campus by offering four linked courses each year with science and incorporating service learning requirements into the courses.

This proposal presents a unique interdisciplinary program for the region in that most graduate entrepreneurship programs are part of an MBA program which can limit the number of courses taught and student involvement based on background. This program provides options for students from other colleges to build or develop their innovative experience.

Sincerely,

A handwritten signature in cursive script that reads "Jacqueline J. Schmidt".

Jacqueline J. Schmidt
Academic Program Director of Entrepreneurship
Director of the Entrepreneurship Minor
Professor of Communication, Tim Russert Department of Communication and Theatre Arts



JOHN M. AND MARY JO BOLER
COLLEGE OF BUSINESS
1 John Carroll Boulevard
University Heights, Ohio 44110-4581
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February 22, 2019

Dr. Daniel Kilbride, Chair
John Carroll University Faculty Council
One John Carroll Blvd.
Cleveland, OH 44118

Dear Dr. Kilbride,

The Boler College Business is submitting for approval a new graduate program – Master of Science in Innovation & Entrepreneurship. This will be the first program offered under our newly created School of Leadership and Social Innovation.

This program represents an important new direction for growth from John Carroll University and the Boler College. The program development included extensive consultation with the CAS Leadership in the sciences, including the Associate Dean, and Chairs of Chemistry, Physics, and Biology departments. We believe that our students majoring in the sciences will find this an attractive option, and will have provide an additional pathway for graduate business education for the regional community.

The program draws extensively on our current graduate business curriculum, which will improve options for our current students. Eleven credit hours of new curriculum is proposed that will be taught by our current full-time faculty and supplemented through the specialized knowledge of our executive faculty.

Graduate enrollment at the Boler College has been growing over the past three years with a total enrollment increase of 60% achieved during that period. The Master of Science in Innovation & Entrepreneurship will allow additional incremental growth to graduate enrollments. Associate Dean, Walter Simmons will supervise the operations of the Program with Dr. Doan Winkel serving as Academic Program Leader. We request the support of the Faculty Council and Committee on Academic Programs.

Sincerely Yours.

A handwritten signature in black ink, appearing to read "Alan Miciak".

Alan Miciak, PhD
John M. Boler Dean