Board of Regents, State of Iowa

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

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

Institution: Iowa State University

Departments involved: Finance

CIP Discipline Specialty Title: Finance and Financial Management Services

CIP Discipline Specialty Number (six digits): 52.0899

Level: B M D FP

Title of Proposed Program: Master of Finance

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

Approximate date to establish degree: Month January Year 2013

Contact person(s): (name, telephone, and e-mail)

Travis Sapp; 294-2717; trasapp@iastate.edu Dermot Hayes; 294-3786; dhayes@iastate.edu

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

- Describe the proposed new degree program, including the following:
 - a. A brief description of the program and a statement of objectives including the student learning outcomes and how the learning outcomes will be assessed;

The proposed Master of Finance program is designed as a full-time residential program. The main learning objectives of the proposed program will be to impart knowledge and a specialized skill set in the field of Finance that will prepare students to conduct detailed analysis of financial problems and make better-informed managerial decisions. The curriculum will provide a more quantitative skill set than that of an undergraduate Finance degree and will prepare students for careers in advanced financial data analysis, credit analysis, risk management, and similar specialized areas. The curriculum will also be helpful to those wishing to pursue professional certifications such as the Chartered Financial Analyst (CFA) and Financial Risk Manager (FRM) designations. These designations are earned by passing a series of exams offered through the CFA Institute and GARP (Global Association of Risk Professionals), respectively.

The proposed curriculum requires 40 credits of graduate coursework, with an additional 6 credits of introductory accounting and finance being required if the student lacks previous coursework in accounting and finance. If the introductory coursework is needed, a total of 46 credits is needed to complete the program. Most students admitted to the program are likely to have prior coursework in basic accounting and finance and would therefore need only 40 graduate credits to complete the degree. The proposed program includes a foundation in quantitative methods and econometrics. Two courses that are currently offered at the Master's level in the Economics department, are well-suited to meet this requirement.

The proposed curriculum includes:

Course Modules	Courses	Hours	
Quantitative Methods and Econometrics	2	7	
Required Finance Core	5	15	
Finance Electives	3	9	
Additional Electives*	3	9	
TOTAL	13	40	
If Needed:			
Introductory Accounting and Finance	2	6	
TOTAL	15	46	

^{*} Electives must be approved by the program's Director of Graduate Education.

The quantitative methods course and the econometrics course will lay the quantitative foundation for the curriculum. A more specialized required course in financial econometrics, which examines problems and methods that are unique to Finance, will build upon this foundation. Further coursework in valuation, investments, advanced corporate finance, and derivatives will round out the core. Students must then select at least three electives from Finance offerings. Other courses for the remaining credits can be selected from Finance, other College of Business programs, or from disciplines outside of the College. Students will be encouraged and advised to identify a plan of study that will be best suited to their career interests. Student outcomes will be assessed by the same methods used to assess other masters programs in the College. Also, student outcomes will be assessed through graded coursework and feedback from employers who hire our students for Summer internships and for full-time employment.

b. The relationship of the proposed new program to the institutional mission and how the program fits into the institution's, college's, and department/program's strategic plan;

At the present time the College of Business (COB) offers high quality undergraduate and master level programs, and has a number of nationally recognized research scholars and a strong research reputation in selected fields. The COB has also recently launched a Ph.D. program in several disciplines. The addition of this master's level Finance program would

make a significant contribution to the College's strategic goals. The COB Strategic Plan for 2010-2015 provides the College's Vision which includes to "provide students with skills and experiences needed to succeed in a complex, technology-driven, global society." The Master of Finance program would further this goal by preparing students with an advanced set of tools and training in financial analysis to address the challenges of today's global financial system. The master's program would also provide more skilled research support for faculty through several research assistantships awarded to graduate students in the program. The opportunity to interact with and mentor graduate students is valuable in the recruitment and retention of faculty. Finally, the Finance department has the quality of faculty and facilities required to sustain an excellent master's degree program.

The proposed program will contribute to the educational mission and reputation of Iowa State University. The University 2005-2010 Strategic Plan established the goal of increasing the number and elevating the overall quality of graduate and professional students. The University 2010-2015 Strategic Plan builds on this goal to "provide exceptional undergraduate, graduate, professional, and outreach programs that prepare students and citizens for leadership and success." The proposed master's degree in Finance advances both of these strategic priorities.

c. The relationship of the proposed new program to other existing programs at the institution; describe how the proposed program will enhance other programs at the university.

The proposed degree program would have synergies with existing master's programs within the COB, such as the MBA and Master of Accounting (MAcc) programs. Students from these programs would benefit from the expanded set of course offerings in Finance at the graduate level. The Finance department currently offers six elective classes at the 500 level, which are taken primarily by MBA and MAcc students. The MAcc students in particular find Finance courses to be a natural complement to their core Accounting curriculum. A more robust slate of Finance electives would also serve as a recruiting tool for the MBA program to attract MBA students who desire a Finance specialization. This will also have a positive impact on the visibility of our MBA programs as the depth and quality of our Finance specialization within the MBA would be greatly enhanced. To the extent that these benefits increase the visibility of the MBA program, they will also enable the COB to attract high quality MBA students.

We expect the impact on the undergraduate program also to be favorable for three reasons. First, the introduction of a Master of Finance degree in the College of Business will not require reduction in the number of course offerings in the undergraduate program. Second, exceptional undergraduate students are able to take these graduate level courses to fulfill their undergraduate degree requirements and are likely to benefit from these more rigorous course offerings. Finally, ISU undergraduate students interested in furthering their Finance skill set would be able to continue their education here at ISU.

d. The relationship of the proposed new program to existing programs at other colleges and universities in lowa, including how the proposed program is different or has a different emphasis than the existing programs.

Neither the University of Iowa (SUI), nor the University of Northern Iowa (UNI) has a master's program in Finance. The SUI has a Ph.D. program in Finance and has occasionally awarded a master's degree in Finance to Ph.D. students who quit the program after completing their doctoral coursework. The SUI does not, however, have an actual master's degree program in Finance. Drake University in Des Moines has a 33-credit Master of Financial Management degree offered only on a part-time basis. Drake is not a research extensive university and, according to the Drake website, has four Ph.D. Finance faculty. We believe that ISU is well-positioned to deliver a higher quality product that can be completed in 15-24 months of full-time study. The ISU Finance department has 14 Ph.D. tenured or tenure-track Finance faculty, and all are active researchers and contributors to their field. ISU also benefits from highly ranked Economics and Statistics departments, which the proposed master's program would be able to draw upon.

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

ISU is an appropriate place for the proposed master's program because, as noted earlier, the program builds on and complements the unique strengths of the University, and there is no master's program in Finance at either the University of Iowa or the University of Northern Iowa. The proposed master's program is a good fit for ISU, and, as discussed below, the COB has the necessary faculty quality to provide an excellent program that will enhance the college's educational mission and provide for the educational needs of our next business leaders.

f. Does the proposing institution have personnel, facilities, and equipment adequate to establish and maintain a high quality program?

The Finance Department has an excellent research faculty that was educated at some of the top business schools in the country. The faculty members are engaged in cutting edge research, regularly publishing in quality journals, and have won professional recognition through numerous research awards. Thus, there is strong evidence that the COB has the necessary faculty quality. Finance is the most popular undergraduate major in the College of Business, with more than 490 undergraduates enrolled. All 14 tenured and tenure-eligible faculty members are teaching at the full load of 12 credits per year. In order to support the four or five new courses that would be required after the first year of the program, one additional faculty member would likely need to be hired. The new courses would be distributed among existing faculty, unless the new faculty expresses interest in teaching one or more of these courses.

The COB is housed in the Gerdin Business Building, the newest academic building on campus. Gerdin Business Building has state-of-the-art research and instructional technology, and adequate space to accommodate the proposed program. The building will be an asset when it comes to recruiting prospective students.

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

Approximately 40 other universities of similar or higher stature compared to ISU offer a master's degree in Finance (please see Appendix A). Many of these programs are at capacity and turn away qualified applicants. Most of these schools charge the same tuition for their Finance master's program as they charge for their MBA program. ISU business graduate tuition is among the lowest of our peers (Resident: \$4,538/sem., Non-Resident: \$10,396/sem.) and among the lowest of the published tuition rates of the universities listed in the Appendix. The low cost and high quality of the proposed program at ISU should make it very attractive to both in-state and out-of-state students. Our proposed budget also includes several assistantships to help attract high quality students with offers of part-time employment.

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

U.S. News and World Report just ranked Iowa State third in the nation in job placement rates among full-time 2010 MBA Graduate Students. Specifically, 96% of job-seeking ISU MBA graduates accept job offers within three months of graduating. This placement rate is a strong signal of affirmation from employers that the ISU College of Business is producing welltrained, quality graduates. We believe the strong job market that exists for graduates of our MBA programs is likely to carry over to graduates of the more Finance-focused master's program. Our strong record of job placement should also help in the recruiting of prospective students for our program. Our strategy of offering a strong quantitative skill set that is wellsuited to areas such as credit analysis, money management, and risk management should also distinguish graduates with the Master of Finance degree from the broad-based MBA degree. In order to gauge demand for this type of degree program, we also contacted many of our area employers, including Pioneer, John Deere, Principal, Aviva, Aegon, Wells Fargo, and the Federal Home Loan Bank. We outlined the proposed program and asked for their feedback on the perceived demand for such a skill set. The responses ranged from positive to enthusiastic, and contained several suggestions which have served to enhance the proposal. We have provided several abbreviated quotes from these employer responses in Appendix B. Overall, we believe these responses are the best indicator of potential job market demand for the proposed degree.

¹ A similar number of comparable schools offer a master's degree in Financial Engineering, which is a substantially different type of program than that in view in this proposal. Financial Engineering programs specialize in producing Wall Street "Quants" who focus on creating and pricing derivative securities. Institutions offering such programs are not included in the list in the Appendix.

5

-

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

As noted in 1.d. above, neither the University of Iowa (SUI), nor the University of Northern Iowa (UNI) has a master's program in Finance. Drake University in Des Moines has a Master of Financial Management degree offered only on a part-time basis. Drake is not a research extensive university and, according to the Drake website, has four Ph.D. Finance faculty. We believe that ISU is well-positioned to deliver a higher quality product that can be completed in 15-24 months of full-time study. The program being offered by Drake is sufficiently different, that we do not feel it is a close substitute for the program we are proposing. We do not believe a collaboration would be a workable solution.

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

Details of the proposed program were shared with Dr. Erik Lie, Finance Department Chair at the University of Iowa. Dr. Lie provided a letter (see Appendix E) in which he offered his support of the proposal. Details of the proposed program were also shared with Dr. Arthur Cox, Finance Department Chair at the University of Northern Iowa. Dr. Cox provided a letter (see Appendix E) in which he offered his support of the proposal.

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

We have not explored the possibility of an inter-institutional program. To our knowledge these are very uncommon at the graduate level.

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

a. Undergraduate

Undergraduate	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
Majors							
Non-majors							

b. Graduate

Graduate	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
Majors ^a	15	30	30	30	30	30	30
Non-majors	10	10	10	10	10	10	10

^a We assume a student completes the program in 2 years. We plan to admit approximately 15 students per year, reaching a "steady state" of 30 total enrollment in year 2.

c. What are the anticipated sources of these students?

We will actively recruit prospective majors nationally and internationally from high quality business academic programs. Additionally, we will also actively recruit majors and minors (i.e., non-majors) from current ISU students in both business and allied disciplines (e.g., agricultural economics, computer engineering, computer science, economics, industrial engineering, statistics, etc.).

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.

We currently offer some graduate Finance electives at our Des Moines Executive MBA campus. Some of our full-time MBA and MAcc students register for and attend these classes. Depending on logistics and perceived overall demand, some of the new classes created to support the Master of Finance may be occasionally offered at this venue as well.

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

The Finance Department unanimously voted to approve this proposal on February 15, 2012. The Business College Curriculum Committee unanimously approved this proposal on March 7, 2012. The Business College Faculty voted unanimously to approve this proposal on May 4,2012. Documentation of each vote is provided in Appendix D.

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

Yes. The COB will seek accreditation by the globally recognized agency for business school accreditation, AACSB International (The Association to Advance Collegiate Schools of Business). This is expected to take place during the next Maintenance of Business Accreditation Review in 2014-2015.

Will articulation agreements be developed for the proposed program? With whom?
 No.

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

COB and the University currently have the necessary facilities and equipment. The response to 1.f. above summarizes the existing personnel and infrastructure. One new faculty line would be necessary to support the proposed program.

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

The program is projected to be self-sustaining, more than paying for itself through student tuition. Besides miscellaneous office supplies and recruitment materials, the primary cost of the program is the addition of a new faculty line. Finance faculty tend to command the highest average salaries across all business disciplines across the country. The approximate total annual cost of a Finance faculty, with benefits, is \$208,000. This cost would not be incurred until after the first year of the program, since the new classes would not be needed until the entering cohort of students begins its second year. An additional, but flexible, cost is that of offering any assistantships to prospective students. We plan to offer three quarter-time assistantships per year, with an annual cost each of \$7,925, including wages and benefits.

SOURCES	TOTAL AMOUNT
Student tuition (30 students, half resident)*	\$441,213 per year

^{*}Assumes 12 resident students (\$108,912), 3 students with an assistantship (\$20,421), and 15 non-resident students (\$311,880), for a total of \$441,213.

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

We estimate \$5,000 per year for recruitment costs and miscellaneous office supplies. We plan to offer two new assistantships costing \$6,115 each in the first year and to add a third in the second year for a steady-state of three per year. The following assumes a new faculty is hired in Year 2 at a total cost of \$208,000.

	TOTAL COSTS ^a	TOTAL NEW COSTS ^b
Year 1 (2012-2013)	\$17,230	\$17,230
Year 2 (2013-2014)	\$255,345	\$238,115
Year 3 (2014-2015)	\$255,345	\$0
Year 4 (2015-2016)	\$255,345	\$0
Year 5 (2016-2017)	\$255,345	\$0
Year 6 (2017-2018)	\$255,345	\$0
Year 7 (2018-2019)	\$255,345	\$0

^a Expected total annual costs associated with the proposed master's program.

^b Expected incremental cost increase over previous year.

Supplemental materials (to be used at lowa State University in the review of the proposal):

- 13. Program requirements, including:
 - a. prerequisites for prospective students;
 - b. language requirements;
 - c. courses and seminars presently available for credit toward the program;
 - d. proposed new courses or modifications of existing courses;
 - e. thesis and non-thesis options in master's programs;
 - f. implications for related areas within the university;
 - g. admissions standards for graduate programs

a. Prerequisites for prospective students

Admission to the Master of Finance program is competitive and based on academic merit. The applicant to the program must have earned an acceptable bachelor's degree from an accredited institution whose requirements for the particular degree are equivalent to those of Iowa State University. An undergraduate degree in business, although helpful, is not required for admission. For students without prior coursework in finance and accounting, three credits of each will be required in the first semester of enrollment. Applicants must also have a suitable background in applied mathematics and statistics.

b. Language requirements

None

c/d. Presently available and proposed new courses and seminars

The following table provides information on the courses proposed for the Master in Finance program, identifying whether each is existing or new. Descriptions of the five proposed new courses appear in Appendix C.

Course	New/Existing	Comments
Fin 501: Fundamentals of Finance	Existing	Can be waived
Acct 501: Financial Accounting	Existing	Can be waived
Econ 500: Quantitative Methods in Economic Analysis	Existing	Required
Econ 571: Econometrics	Existing	Required
Fin 510: Advanced Corporate Finance	Existing	Required
Fin 520: Investments	Existing	Required
Fin 534: Financial Derivatives	Existing	Required
Fin 515: Case Studies in Financial Decisions	Existing	Elective
Fin 535: Venture Capital, Private Equity, and M&A	Existing	Elective
Fin 572: Real Estate Finance	Existing	Elective
Fin 530: Financial Analysis and Valuation	New	Required
Fin 550: Financial Econometrics	New	Required
Fin 525: Equity Analysis and Portfolio Management	New	Elective
Fin 528: Fixed Income Securities	New	Elective
Fin 564: Advanced Derivatives and Risk Management	New	Elective

Overall, the master's program will require five new 3-credit courses. MBA and MAcc students will also be admitted into these courses, providing them with greater selection in designing their course of study. The additional courses will be accommodated by distributing the teaching among interested faculty and filling the resultant gaps with the addition of one new faculty line.

e. Thesis and non-thesis options in master's program

The proposed program is for a coursework-only master's degree. There is no thesis or creative component required.

f. Implications for related areas within the university

The impact on existing graduate business and non-business courses will be minimal as most of the required courses will be offered by the Finance department. The MBA and Macc programs will enjoy spill-over benefits by having a greater selection of Finance electives from which to choose.

Admissions standards

The applicant must meet the minimum requirements in the following areas:

GMAT: The GMAT score is a critical part of the application process. A minimum GMAT score of 550 is required for evaluation of an application. However, as can be expected, the higher the GMAT score, the higher the chances of a student's acceptance. Although review of applications can be started without a GMAT score, a final decision will not be made until an official score is received. GMAT scores up to five years old can be accepted by the program. A GRE score may be substituted for the GMAT. In this case, a minimum average GRE score (verbal and quantitative) of 580 is required for evaluation of an application.

TOEFL: Students whose first language is not English should provide the results of a Test of English as a Foreign Language (TOEFL). A low TOEFL score (say below 250) will severely reduce chances of acceptance. Inquiries concerning this examination may be made to Test of English as a Foreign Language, Box 6151, Princeton, New Jersey 08540, U.S.A., or to most American embassies and consulates in cities outside the United States. TOEFL is administered internationally by Educational Testing Service; applicants can request ETS to report examination results directly to the Office of Admissions, College of Business, Iowa State University, Ames, IA 50011.

Academic Transcripts: Applicants need to send with their application official transcripts from all institutions in which they have completed any undergraduate and graduate course work. Applicants are expected to have at least a 3.0 GPA in both their undergraduate and graduate coursework. The transcripts must be in an envelope sealed by the degree granting institution.

Three Letters of Recommendation: Applicants need to send three letters of reference from individuals who can comment on their academic achievements and potential. These letters

should indicate the title, affiliation, and qualifications of the person providing the reference. The signature of the person writing the recommendation should be written across the envelope seal, unless the recommendation is provided electronically. These letters of recommendation, as all other materials, should be sent directly to the master's program coordinator.

Statement of Purpose: The applicant needs to prepare and send a formal statement of purpose for seeking the master's degree and specific reasons for applying to Iowa State University. The statement should also address the applicant's interest and qualifications, including career interest. The statement should not exceed two typed, double-spaced pages.

Curriculum Vitae: A detailed curriculum vitae is needed to complete the application.

Personal Interview: A campus or telephone interview is encouraged, but not required.

- 14. Attach to the program proposal memos from the department chair(s), the college dean(s), and other appropriate persons, agreeing to the allocation of new resources and/or the reallocation of resources as described in the Regents questions
- 15. Attach to the program proposal, letters of support, recommendations, and statements when appropriate:
 - a. from programs at the other Regents universities
 - b. from programs and departments at ISU which are associated with the proposed program or have an interest in the proposed program

Appendix A Finance Master's Programs at Other Universities

The table lists universities of either similar or higher stature that offer a master's degree in Finance. This information was gathered from the websites of the institutions listed. Programs in pure Financial Engineering have been excluded as they substantially differ from the type of program in view here.

					Per		
			Core	Semester	Credit		Cohort
School	Degree	Credits	Credits	Cost	Cost	Semesters	Size
Alabama	Finance	30	21	10950		2.5	
Arizona	Finance	36		16304	1132	2.5	30
Auburn	Finance	30		12149		2	
Baruch College	Finance	30			605	2.5	
Boston College	Finance	30	24		1270	2.5	
Case Western	Finance	39	21	16000	1771	3	80
Cincinnati	Finance	42	12	12218		3	
Colorado State	Fin Risk Mgmt	32		13153		2	
Connecticut	Fin Risk Mgmt	36	36	14219		3.5	
Delaware	Finance	30		12123		3	
Denver	Finance	62	44		1041	4	
Florida	Finance	32		17100		2.5	30
Florida International	Finance	36	27	16550		2.5	
Florida State	Finance	32		12344		2.5	
George Washington U	Finance	48	48		1250	4	
Georgia State	Finance	30	15	14868	1239	2.5	
Illinois	Finance	30	12	16590		2.5	
Indiana	Finance	30	24		1065	3	
Johns Hopkins	Finance	36	12		1010	4	
Lehigh	Analyt Fin	30	30		925	2	
LSU	Finance	36				3	10
Michigan State	Finance	30	18	38000/2.5		2.5	
MIT	Finance	30	22	29614			
North Carolina	Math Fin	30	24	10696			
Ohio State	Finance	32		24500		2	
Pepperdine	Finance	52		19367		3	
Purdue	Finance	40		36000/2.5		2.5	30
Rochester	Finance	43			1574		
Rutgers	Quant Fin	48	39	18034			
Southern Methodist	Finance	30		42900/2		2	
SUNY – Buffalo	Finance	30	18	13780			
Syracuse	Finance	30			1162		
Temple	Finance	42			1182		
Texas A&M	Finance	30					
Texas Tech	Finance	36		18500			
Texas – Austin	Finance	36	36	48000/2.5		2.5	
Texas – Dallas	Finance	36	12	12898		2.5	
Texas – Houston	Finance	36	24	36500/2.5		2.5	
Tulane	Finance	34		•			
Utah	Finance	32		18500		2	
Vanderbilt	Finance	32	14	21417	1339	2	
Villanova	Finance	33		30100/2.5		2.5	
Wash U – St. Louis	Finance	33		•	1335	2	

Note: All costs are for non-resident tuition. Some state schools charge lower tuition to residents.

Appendix B Comments from Employers on Demand for a Finance Master's Degree

"I think an MBA is too generic and watered down for someone who wants to tailor their curriculum needs more directly to Finance/Investments specifically...In a short answer yes, I think there is a lot of value in what you discuss below. For someone that wants to be a line manager or just tick the box on higher education an MBA is fine. But in my opinion if you want to work in the investment industry, what you discuss is definitely more valuable and more applicable. I have thought about this a lot when contemplating my own higher education. I've never been able to pull the trigger on an MBA because the thought of taking another marketing class, management class and many other general curriculum courses for MBA students I feel that is not time well spent when my career is so specialized... Economics always has and always will be essential...Mathematics/Statistics are invaluable to this industry. In my entire career since 1999 the best and brightest and most successful people I have come across have all had a strong comprehension of both economics and mathematics. This includes quantitative methods, econometrics, regression and statistics etc. As a finance major at UNI with an emphasis in Accounting I have had to work hard throughout my career to bolster these areas...All of the courses you have listed below are definitely invaluable. I would recommend them all."

> — Josh Lohmeier Portfolio Manager at Aviva Investors

"In short, we believe there would be significant demand for this type of program. Before responding to your email I wanted to speak with Rohini Ramaswamy (ISU Grad). She is part of the Derivative Solutions Group for Aviva Investors and is an active recruiter at Iowa State. From a macro viewpoint, we both believe there would be significant demand from many different organizations but there are a few things that may be worth considering, such as an internship requirement during the second half of the program. That type of opportunity is obviously a great feeder program to the various company's which would be looking to hire this type of student. There are various ways this could be done where the student could either be a full-time or part-time intern. I think both scenarios, depending on the company and the students situation, could be appealing. I do think this type of training would be more suited for a number of positions and would provide more specific training as compared to the general MBA. Having completed my MBA at the University of Iowa, I can tell you these type of classes were not that prevalent...I am glad that you are taking the initiative with this program."

— Brent Mathisen Director of Commercial Mortgage at Aviva Investors

"There currently is a need for more technical related education for various positions within the financial field, including AEGON; Investment Risk, Corporate Risk, Derivatives, etc. You'll even find this starting to creep into internal audit where many of the models and so forth have to be verified. (I just learned of this over the past weekend as my oldest son who is heading up the audit of Enterprise Risk Management for Wells Fargo will now add Credit Risk and Market Risk audit to his responsibilities.)"

— Dave Halfpap Head of Investment Strategy AEGON USA Investment Management "I think the MS in finance degree will be an important addition to ISU. When I was at John Deere Financial, there were basically two places we looked for candidates. The first was the MS in stat program and the second was the MS in economics. And even with these two programs, we had a hard time finding enough people to hire. With less people coming out of the econ program and going to industry, this will leave a big void in qualified candidates for companies like Deere, Pioneer, Principal, Aviva, Wells Fargo and others who hire quants in Iowa. Given the proposed class list, I think the MS in finance will do a good job of filling that void. It may even be a better fit than stat/econ for areas like credit risk management and treasury at Deere, but also many jobs in the finance and insurance industries. The skill-set taught in programs like this is becoming increasingly important for companies to stay competitive and to "compete on analytics". Even since I have started at Deere five years ago, we have become a lot more quantitative, and even the most experienced sales and marketing executives have embraced the benefits analytics can bring to decision making above and beyond their traditional processes. The problem solving, statistics and economics skills taught in programs like this give employees a big advantage in the workplace."

— Barrett Barr Economist at John Deere

"I would certainly lend my support to your proposal. During my 10 year career at Deere my education from ISU, particularly the courses that are the same or similar to those your are proposing, have been extremely beneficial. I've worked now in Credit Risk Management in the US and Europe as well as in Treasury in Moline as an Asset Liability Manager. Anyone applying to Deere with this coursework on their resume would receive strong consideration. I would add that in a world of increasing regulatory emphasis on risk management, the skills obtained through this coursework are evermore necessary. I've seen this firsthand with Basel implementation in Europe as well as the OCC regulation in the US. Through my interaction with peers at other institutions, many of whom work with government sponsored entities (GSEs), it is clear that many others share this view."

— Paul Brown Interest Rate Risk Manager at John Deere

"I think this is an important skill set and see its applicability in many areas of Pioneer (Market Research and Economics, Supply Planning, Finance). We've hired some talented people in Finance with these types of skills (Rich Rumsey, Drew Porter) who have gone on to have greater impact in the organization. Although we don't really hire many entry level positions in Finance (and when we do they are typically accounting grads) these backgrounds and skill sets are very desirable in my opinion. With the importance of Ag to lowa and the strength of Ag I would expect industry need for analytical and modeling skills to be strong."

— Tim Johnson Finance Director for the Americas Region at Pioneer

"I have a lot of people who want to get into Jr. Analyst/PMA roles but technically they just have no chance of competing with the candidates we get because even with an MBA they are not specialized enough. This type of [Master of Finance] degree, combined with a CFA would set them up well to compete for these very sought after positions."

— Josh Ingalls Recruiter at the Principal Financial Group "In trying to answer your questions, I do think that there is a need for a more technical skill set both at our Bank and in the financial community (whether that be here in Des Moines at companies such as Principal, Wells Fargo, Nationwide, and even MidAmerica Energy in their energy trading group or at global financial institutions). My group (Capital Markets which includes Portfolio Strategy and Treasury/Trading) and our Enterprise Risk group contains several highly quantitative individuals with either a similar MSF degree or, in some cases, PhD. We have approximately 4 to 5 individuals with PhD's in either mathematics, physics, or economics out of a group of approximately 35 individuals managing and monitoring our balance sheet portfolio (a majority of the rest have some type of Master's degree). Most of what you laid out for a curriculum would meet a lot of our needs for individuals to help manage and monitor our portfolio..."

— Edward McGreen Executive Vice President, Chief Capital Markets Officer Federal Home Loan Bank of Des Moines

"My general response to your question is: yes, I believe that there is a skills need for quants with a good grounding in and understanding of the principles of finance and economics. Here at the FHLB we've had a number of Math Ph.D.s as well as others with engineering degrees who had to learn the basics of finance on the job. We've also had MBAs who had to improve their quant skills to be able to advance in their jobs. As a result, when we interview candidates for, say, market risk analyst positions, CFA and FRM designations are definitely a plus. All in all, your proposal to add a Master's degree in finance makes a lot of sense."

— Dusan Stojanovic Executive Vice President, Chief Risk Officer Federal Home Loan Bank of Des Moines

"My experience at Wells Fargo has been mainly in Consumer Risk Management Analytics. I do feel that a more focused curriculum in quantitative analysis makes the student's skill more desirable than a general finance MBA degree if the student is interested in a career in quantitative fields in financial industry. They include credit scoring, risk/marketing analytics, forecasting. Some of the skills I think valuable are econometrics, forecasting (beyond simple moving averages) using logistic regression, survival analysis and transition matrix, design of experiments (if one does tests in marketing offering controlled for risk). Skills in SAS, SQL, large database manipulation and Monte Carlo simulation are highly valued. Additionally, it will be very helpful if the student can be exposed to real world problems as case studies. Another area that I feel useful is the portfolio credit risk modeling in the context of regulatory capital requirements (such as asset correlation, stress testing and concentration risk). These topics have become increasingly important after the great recession."

— Ling Qin Risk Manager at Wells Fargo

"I was just visiting today with another one of the managers in our group, who was commenting on how hard it is to find & recruit individuals for both internships & full-time positions in Risk Analytics...I would be very supportive of efforts, such as the one you'd described below, to continue to train students with strong economic/finance/statistics skills."

— Cullen Hawes Risk Manager at John Deere Financial

Appendix C Description of Proposed New Finance Courses

FIN 525. Equity Analysis and Portfolio Management.

(3-0) Cr. 3. Prereq: FIN 501, FIN 520

Advanced study of security analysis, security selection techniques and portfolio management. Emphasis on the applications of methods learned via the selection and evaluation of a portfolio of actual securities purchased in securities markets in the U.S. or abroad. Tracking and periodic reporting of the portfolio's performance relative to standard benchmarks is also required.

FIN 528. Fixed Income Analysis and Portfolio Management.

(3-0) Cr. 3. Prereq: FIN 501, FIN 520

Advanced analysis of fixed income markets and securities, including valuation and trading of treasury securities, corporate bonds, mortgage backed securities. Students are also required to manage a fixed income portfolio for an institutional investor. A top-down approach to portfolio management is assumed, with active bets taken on market direction, duration, yield curve, and credit spreads.

FIN 530. Financial Analysis and Valuation.

(3-0) Cr. 3. Prereq: FIN 501

Topics include the analysis and reorganization of financial statements, the drivers of value creation, industry analysis, patterns of growth, models for forecasting and analyzing firm cash flows, estimating and adjusting cost of capital, alternative methods of cash flow valuation, the calculation and use of valuation multiples, and valuing mergers and acquisitions. Also addressed are the valuation impact of taxes, pensions, and non-capitalized expenses such as leases and R&D expenses. Although the focus is on publicly traded firms, valuation of private firms is also addressed. Provides broad exposure to material appearing on the Chartered Financial Analyst (CFA) exams.

FIN 550. Financial Econometrics.

(3-0) Cr. 3. Prereg: FIN 501, ECON 571

Issues examined include analysis, modelling, and forecasting of time series data, volatility modelling and forecasting, maximum likelihood estimation, robust standard error computation, model specification testing, estimation under alternative distributional assumptions, default prediction and credit scoring models, and Monte Carlo simulation. Applications include tests of the CAPM and other asset pricing models, analysis of asset volatility, corporate event studies, and value at risk analysis.

FIN 564. Advanced Derivatives and Risk Management.

(3-0) Cr. 3. Prereq: FIN 501, FIN 534

Examines the tools of risk management and how they are applied within financial institutions such as banks, insurance companies, mutual funds, and hedge funds, as well as the corporate enterprise. The course focuses on measuring exposure to stock market risk, interest rate risk, currency risk, and credit risk and how these exposures may be managed. Topics include the Basel accords, volatility modelling, value at risk analysis, extreme value theory, credit default swaps, and portfolio simulation. Provides broad exposure to material appearing on the Financial Risk Manager (FRM) exams.

Appendix D Documentation of Approval Votes for the Master of Finance

- 1. Finance Department (February 12, 2012) Letter from Finance Department Chair Rick Dark
- 2. Business College Curriculum Committee (March 7, 2012) Letter from Curriculum Committee Chair Virginia Blackburn
- 3. Business College Faculty (May 4, 2012) Letter from Faculty Executive Committee Chair Russ Laczniak

Iowa State University

College of Business

William L. Varner Accounting & Finance Suite
Department of Finance
2330 Gerdin Business Building
515-294-8112
FAX 515-294-3525

Interoffice Memo

Date:

September 10, 2012

To:

Graduate Council

From:

Frederick Dark, Chair, Department of Finance Frederick

Re:

Approval of Master of Finance Proposal by Department of Finance

At the departmental meeting on February 15, 2012, the Finance Department unanimously approved a motion from a departmental task force to approve the Master of Finance Program proposal.



College of Business

Department of Management 2350 Gerdin Business Building Ames, Iowa 50011-1350 515 294-8110 FAX 515 294-7112

September 17, 2012

Dear Dr. Sapp,

The Master of Finance program was unanimously approved by the College of Business Curriculum Committee on March 7, 2012. Feedback from the departments was positive. The program was also approved by the entire College at the end of the year faculty meeting on May 4, 2012.

Sincerely,

Virginia Blackburn

Associate Professor

Curriculum Committee Chair 2011-2112

Chapira Hackber

College of Business

IOWA STATE UNIVERSITY

OF SCIENCE AND TECHNOLOGY Department of Marketing Suite 2350, Gerdin Business Building Ames, Iowa 50011 515-294-8110

Date: September 11, 2012

To: Travis Sapp, Associate Professor of Finance

From: Russell N. Laczniak Consol Professor of Marketing

Faculty Executive Committee Chair, Spring 2012

RE: College of Business Faculty Vote Support for the Master of Finance Program

On May 4, 2012, the College of Business faculty unanimously supported the "Master of Finance" program as it was proposed by the College's Curriculum Committee.

Appendix E Letters of Support from Other ISU Departments and Other Regents Schools

- 1. Iowa State University Economics Department Letter from Dr. John Schroeter, Department Chair
- 2. Iowa State University Statistics Department Letter from Dr. Ken Koehler, Department Chair
- 3. University of Iowa Finance Department Letter from Dr. Erik Lie, Department Chair
- 4. University of Northern Iowa Finance Department Letter from Dr. Arthur Cox, Department Chair

IOWA STATE UNIVERSITY

OF SCIENCE AND TECHNOLOGY

Department of Economics

Heady Hall Ames, Iowa 50011-1070 515 294-6741 FAX 515 294-0221

September 12, 2012

Professor Travis Sapp Dean's Fellow in Finance Department of Finance 3362 Gerdin Business Building Iowa State University

Dear Dr. Sapp:

Thank you for sharing your proposal for a new Master of Finance degree program. I have reviewed the proposal carefully and sought input from Sergio Lence, our Curriculum Committee Chair, as well as a few other faculty members who teach and do research in areas sharing some overlap with the proposed program. I am happy to convey to you my endorsement of the proposal.

As I expressed in an earlier communication, we welcome the inclusion of two of our courses, Econ 500 and Econ 571, as required courses in the program. These courses currently enroll about 10-12 students per offering, but they were much larger in years past. My understanding is that you anticipate Master of Finance class sizes on the order of 15 students to start. That increase in the enrollment of our courses could easily be accommodated. With other economics courses – Econ 501, 502, and 532 – listed as recommended electives for the Master of Finance program, there may be smaller impacts on the enrollments of these courses as well. But that could also be accommodated quite easily and is something we would welcome.

The new course you propose, Fin 550 Financial Econometrics, does bear some similarity to existing economics courses including Econ 571, which is a prerequisite for Fin 550, and Econ 674, a Ph.D.-level course on macroeconometrics. But there is also much that differentiates these courses, leaving no reason for concern about inappropriate duplication, in my opinion.

Finally, we see some potential that an occasional Master of Finance student might develop a deeper interest in economics through our courses taken to fulfill your requirements, and might consider applying to our Economics Ph.D. program after completing your degree. Needless to say, we also welcome the possibility that your new program might provide a springboard to our program for a few students.

Regards,

John R. Schroeter

Professor and Interim Chair

John R. Schroet

IOWA STATE UNIVERSITY

OF SCIENCE AND TECHNOLOGY

Department of Statistics and the Statistical Laboratory Snedecor Hall Ames, Iowa 50011-1210 Phone: (515) 294-3440 Fax: (515) 294-4040

October 18, 2012

Re: Proposal for new Master of Finance Program

Dear Dr. Sapp,

The Department of Statistics supports your proposal for a new Master of Finance Program. We believe that you have proposed a program with a strong quantitative foundation that will provide participants with the skills needed to creatively model market behavior, construct effective forecasting models, and quantify risk. All students in the program will be required to take ECON 500 which has prerequisites of a year of calculus and Stat 401, a course on hypothesis testing, analysis of variance, and multiple regression analysis. These would be sufficient prerequisites for some of the elective statistics course you have recommended, Stat 341, 447, 451, 479 and 480. Stat 432 requires a little more background in probability which can be gained by enrolling in either Stat 341 or Stat 447. Other courses that might be of interest to students in this program are Stat 421 on survey sampling, Stat 444 on Bayesian analysis, and Stat 503 on data mining. Students in the master of Finance program would be welcome in any of these courses.

The proposed course on Financial Econometrics, FIN 550, builds on statistical methodologies of time series analysis, maximum likelihood estimation, and Monte Carlo simulation which are covered in courses taught by the Statistics Department, but we do not teach a course with a similar emphasis on applications to pricing models, asset volatility, or financial risk analysis. FIN 501 and Fin 550 may be of interest to a few graduate students in Statistics. Several Statistics faculty are interested in the development of statistical methodologies for financial modeling and risk assessment, and they could be valuable collaborators for some of your faculty.

There is a substantial demand for the type of student you will train with this Master of Finance Program. I anticipate that the program will be very successful. Please contact the Department of Statistics if students in your program need advice on statistics courses or if you believe that Statistics faculty could be helpful in other ways.

Sincerely,

Kenneth J. Koehler Chair and Director

Letter from SUI Finance Department Chair

From: Lie, Erik [mailto:erik-lie@uiowa.edu] Sent: Tuesday, September 18, 2012 2:28 PM

To: Sapp, Travis R [FIN]

Subject: RE: Master of Finance Program at ISU

Hi Travis,

I have read your documents. The Finance Department at the University of Iowa has no major objections to your proposal.

Erik

Erik Lie

Henry B. Tippie Research Professor of Finance and Departmental Executive Officer 108 Pappajohn Business Building, S260 University of Iowa Iowa City, IA 52242-1000

Phone: 319-335-0846

http://www.biz.uiowa.edu/faculty/elie/

From: Sapp, Travis R [FIN] [mailto:trasapp@iastate.edu]

Sent: Monday, September 10, 2012 1:00 PM

To: Lie. Erik

Cc: Dark, Frederick H [FIN]; Hu, Qing [BUS]; Tiwari, Ashish

Subject: Master of Finance Program at ISU

Dear Dr. Lie,

I have been tasked with assembling and shepherding our College's proposal for a new Master of Finance program at Iowa State University. I am writing this letter to describe our proposed program, and to solicit your opinion. I have attached a separate document outlining the details of the program, as well as the formal Regents document. To my knowledge, neither your department at Iowa nor the University of Northern Iowa has such a program. Based on our interactions with employers, we believe there is an unmet demand for such a program and that we are in a strong position to deliver a quality product to students. I would be happy to hear of any thoughts, concerns, or suggestions you may have. If there are none, I would be appreciative if you would be willing to provide a brief memo stating that you have no objections. Your support would be most helpful as we prepare to move our proposal forward to the Regents later in the Fall.

I have copied ISU Finance Department Chair Rick Dark and ISU College of Business Assistant Dean for Graduate Programs Qing Hu. I have also copied my friend and mentor Ashish Tiwari, Iowa Finance PhD director, to make him aware of this proposal. Thank you for your consideration.

Best regards, Travis

Travis Sapp

Letter from UNI Finance Department Interim Chair

From: Arthur Cox [mailto:arthur.cox@uni.edu] **Sent:** Monday, September 17, 2012 2:46 PM

To: Sapp, Travis R [FIN]

Subject: Re: Master of Finance Program at ISU

Good afternoon Travis,

Thanks for reaching out to us regarding your proposed Master of Finance degree at ISU. I do not anticipate such a degree being offered by UNI any time in the foreseeable future. If you feel there would be adequate demand for such a program to remain viable I support your efforts. Let me know if I can be of any help.

Best regards,

Art

Arthur T. Cox Interim Head, Department of Finance Director, Center for Real Estate Education 317 Curris Business Building University of Northern Iowa Cedar Falls, IA 50614-0124 voice: 319-273-6986

Voice. 317-273-0700

For deaf or hard-of-hearing use Relay 711

fax: 319-273-2922 arthur.cox@uni.edu

On Mon, Sep 10, 2012 at 1:07 PM, Sapp, Travis R [FIN] < trasapp@iastate.edu > wrote: Dear Dr. Cox.

I have been tasked with assembling and shepherding our College's proposal for a new Master of Finance program at Iowa State University. I am writing this letter to describe our proposed program, and to solicit your opinion. I have attached a separate document outlining the details of the program, as well as the formal Regents document. To my knowledge, neither your department at UNI nor the University of Iowa has such a program. Based on our interactions with employers, we believe there is an unmet demand for such a program and that we are in a strong position to deliver a quality product to students. I would be happy to hear of any thoughts, concerns, or suggestions you may have. If there are none, I would be appreciative if you would be willing to provide a brief memo stating that you have no objections. Your support would be most helpful as we prepare to move our proposal forward to the Regents later in the Fall.

I have copied ISU Finance Department Chair Rick Dark and ISU College of Business Assistant Dean for Graduate Programs Qing Hu. Thank you for your consideration.

Best regards, Travis

Travis Sapp