



**ARIZONA STATE UNIVERSITY
PROPOSAL TO ESTABLISH A NEW GRADUATE DEGREE**

DEGREE PROGRAM

College/School(s) offering this degree: W. P. Carey School of Business

Unit(s) within college/school responsible for program: W.P. Carey School of Business Dean's Office

If this is for an official joint degree program, list all units and colleges/schools that will be involved in offering the degree program and providing the necessary resources: NA

Proposed Degree Name: Master of Science in Finance (MSF)

Master's Degree Type: MS-Master of Science

Proposed title of major: Finance

Is a program fee required? Yes No

Is the unit willing and able to implement the program if the fee is denied? Yes No

Requested effective term and year: Fall 2014
(The first semester and year for which students may begin applying to the program.)

PROPOSAL CONTACT INFORMATION

(Person to contact regarding this proposal)

Name: Dr. George O. Aragon

Phone: 965-5810

Title: Associate Professor

E-mail: george.aragon@asu.edu

DEAN APPROVAL

This proposal has been approved by all necessary unit and College/School levels of review, and the College/School(s) has the resources to offer this degree program. I recommend implementation of the proposed degree program. (Note: An electronic signature, an email from the dean or dean's designee, or a PDF of the signed signature page is acceptable.)

College Dean Name: Amy Hillman, ~~Executive~~ Dean

College Dean Signature Amy Hillman **Date:** 10/4/13

College Dean name:
(If more than one college involved)

College Dean Signature _____ **Date:** _____

**ARIZONA STATE UNIVERSITY
PROPOSAL TO ESTABLISH A NEW GRADUATE DEGREE**

DEGREE PROGRAM INFORMATION

Master's: MS-Master of Science

Proposed title of major: Finance

1. PURPOSE AND NATURE OF PROGRAM

A. Brief program description

The Finance Department proposes a Master's of Science in Finance (MSF) Program that is nine months in duration and has 12 courses of either 3.0 or 2.5 credit hours each. The proposed curriculum consists of twelve required (core) courses. The majority of the courses (9) will be taught by the Finance Department faculty, with expected contributions of one course from the Accounting and two courses from the Economics Department. The proposed degree leverages the W.P. Carey School's wide faculty expertise in finance and creates a short duration program that is competitive in the MSF marketplace.

Students targeted for the initial MSF program will be: 1) Recent undergraduates of degree programs where quantitative skills are emphasized, and 2) Career advancers with sufficient quantitative background and the ability to commit to full-time graduate study delivered during the day. Work experience will not be a requirement to enroll into the MSF program, as opposed to the MBA program. Demand for finance specialists is expected to remain strong and graduates will have placement opportunities both in the financial and the real sector, within and outside of Arizona.

The MSF curriculum will be scheduled on a quarter system of delivery consistent with the MBA program and other W. P. Carey Master's programs. The proposed curriculum is balanced across corporate finance and asset / portfolio management. The curriculum is also designed to ensure that students have a solid understanding of statistics and modeling tools essential in today's financial industry.

ASU programs in the Science, Technology, Engineering and Math (STEM) areas are targets for recruiting as are W. P. Carey undergraduate students, especially non-finance majors, who are soon to graduate in areas including accounting, economics, management, supply chain management, information systems, and marketing. We also expect, based on empirical and anecdotal evidence from other specialized masters programs across the U.S., that there is significant demand from international students.

Additional course electives, tracks of course specialization, multi-cohort on-site, part-time, and/or online versions of the MSF could follow based on the experiences gained during the first two years (inaugural period) of delivering the program. Expanding the program along these lines could increase the MSF program's revenue generation.

The Finance Department has conducted a review of comparable MSF programs to assess the MSF marketplace and determine key program parameters, which were used to develop this degree proposal. It is provided in Appendix 2.

B. Total credit hours required for the program: 32

C. Are any concentrations to be established under this degree program? Yes No

2. PROGRAM NEED

Degree Rationale: The W. P. Carey School of Business has been expanding its masters of science (MS) program offerings. The School now offers seven specialized MS programs, with the recent additions of MS in Business Analytics and MS in Management to an existing portfolio of MS programs in Accounting, Supply Chain Management, Real Estate, Taxation, and Information Management.

Expanding the MS degree offerings at the W. P. Carey School is partly an effort to respond to student demand for these more specialized programs. Moreover, the University President and Provost's Office also has a goal to increase the number of graduate degrees generated by ASU. To the latter point, the Provost has suggested that the W. P. Carey School consider starting five new MS programs at the Carey School for the 2014-15 academic year, one of which would be a Masters of Science in Finance ("MSF") offered at the Tempe campus.

In the wake of the financial crisis of 2008, better financial training ranks high on the agendas of banks and other financial institutions. In addition, an increasing number of young professionals and new entrants to the job market are interested in acquiring financial qualifications to gain an edge in the job market. Material traditionally taught by financial institutions to train new recruits are increasingly offered at business schools. As a result, the number of masters in finance degrees on offer by business schools has been growing, particularly targeting students with no previous work experience (Financial Times, 2013).¹

The 2012 Graduate Management Admission Council (GMAC) survey of more than 700 graduate business programs found that 73% of all specialized MS programs, and 57% of MSF programs, recorded an increase in the number of applications for the 2012-2013 academic year from the year before.² This evidence was more pronounced for US-based MSF programs where 65% of schools indicated increased application volume from 2011 to 2012.³ A similar pattern of growth in applications was also present in all prior years of available survey evidence – 2008, 2009, 2010, and 2011.⁴

GMAC's survey of prospective employers in 2012 indicated that more companies were interested in hiring students with specialized MS degrees than in 2008. Demand for graduates of specialized MS programs seemed to be stronger in Asia. More than half of surveyed companies in the Asia-Pacific were interested in hiring graduates from accounting, management and other specialized MS programs in 2012.⁵ Additional evidence sheds light on employment prospects specifically for masters of finance students. The proportion of potential employers planning to hire masters of finance students have increased over 2012-2013 (39% vs. 32%). In addition, 73% of companies plan to either increase or maintain the current level of compensation of MSF graduates.⁶

As noted above, the likely MSF applicant has little or no work experience, and differs significantly from an MBA applicant in that respect. A survey of graduating students shows that only 48% of MSF students have prior work experience (average of 2.4 years), as compared to 85% of full time 2-year MBA students (average of 4.5 years).⁷ This suggests that the MSF and the MBA programs serve relatively separate segments of the graduate business degree market. It is also possible to view the MSF and MBA as complementary. To that effect, Robert E. Mittelstaedt, Dean Emeritus of W. P. Carey School, has suggested that the master's in management programs could also become a way to "lock them [students] into the MBA," because they could return a few years later to complete an accelerated program towards

¹ Della Bradshaw. "Financial Training: The drive to spread expertise," the *Financial Times*, June 23, 2013, available at <http://www.ft.com/cms/s/2/144f634c-d5dd-11e2-a46c-00144feab7de.html#axzz2ZL3ictDz>.

² See [GMAC Application Trends Survey – 2012](http://www.gmac.com/~media/Files/gmac/Research/admissions-and-application-trends/2012-application-trends-survey-report.pdf), available at <http://www.gmac.com/~media/Files/gmac/Research/admissions-and-application-trends/2012-application-trends-survey-report.pdf>.

³ GMAC Application Trends Survey (2012), p. 21, Figure 16.

⁴ Most recent figures from GMAC show that fewer MSF programs report application growth for the 2013-2014 academic year compared to previous year. However, GMAC also notes that MSF programs are the most competitive and selective among specialized MS programs in terms of having the lowest average acceptance rate and the greatest number of applications per seat. See <http://www.gmac.com/~media/Files/gmac/Research/admissions-and-application-trends/2013-app-trends-survey-report.pdf>.

⁵ See [GMAC Corporate Recruiters Survey - 2012](http://www.gmac.com/~media/Files/gmac/Research/Employment%20Outlook/2012-crs-report-final-participants.pdf), available at <http://www.gmac.com/~media/Files/gmac/Research/Employment%20Outlook/2012-crs-report-final-participants.pdf>.

⁶ <http://www.gmac.com/~media/Files/gmac/Research/Employment%20Outlook/2012year-end-poll-public.pdf>.

⁷ <http://www.gmac.com/~media/Files/gmac/Research/curriculum-insight/gmegs-2013-stats-brief.pdf>.

an MBA.⁸ In other words, a good MS experience could bring students back later for advanced degrees, possibly an MBA, or other, which would help keep students on a path of continued learning.

Anecdotal evidence indicates strong international interest in specialized master’s programs. The Wall Street Journal reported that such programs in accounting, finance and other disciplines have become very popular in recent years among Chinese nationals seeking a competitive edge combined with U.S. experience. However, although demand for specialized MS programs improve revenues for business schools, an uneven applicant pool may have consequences on the classroom experience for all students and job-placement rates.⁹

3. IMPACT ON OTHER PROGRAMS

Limited. The existing MBA (which allows a specialization in Finance) is the closest related program to the proposed MSF. However, the MSF program is targeted towards candidates with little or no work experience and those who can commit to a full-time study, and is therefore expected to attract a different audience compared to the MBA program applicants.

Depending on the MSF demand from China, participation in the DBA program --offered by the W.P. Carey School on location in China-- might also be impacted. However, like the MBA, the DBA program primarily attracts students with work experience (in fact, the average DBA student has 19 years of management experience¹⁰), and therefore we expect limited overlap of the applicant pools for the DBA and the MSF.

Nevertheless, these potential impacts – particularly on the popularity of MBA finance specialization enrollments– need to be carefully studied during the inaugural period of the MSF program.

4. PROJECTED ENROLLMENT

We anticipate enrolling 40 to 45 students into the program the first two years and possibly adding a second cohort of 40 to 45 students by Year 4 based on demand from qualified applicants. This cohort size is consistent with median class sizes of 34 to 53 students reported at existing MSF programs.¹¹

5-Year Projected Annual Enrollment					
	1 st Year	2 nd Year (Yr 1 continuing + new entering)	3 rd Year (Yr 1 & 2 continuing + new entering)	4 th Year (Yrs 1, 2, 3 continuing + new entering)	5 th Year (Yrs 1, 2, 3, 4 continuing + new entering)
Number of Students Majoring (Headcount)	40-45	40-45	40-45	80-90	80-90

5. STUDENT LEARNING OUTCOMES AND ASSESSMENT

A. List the knowledge, competencies, and skills students should have when they graduate from the proposed degree program.

Program Foundations: The W. P. Carey School MSF will provide depth in finance knowledge and analytical skills applied to real-life management of financial institutions as well as corporations. The W. P. Carey School has the 30th ranked MBA program, which will provide the foundation for the MSF program’s content and instruction. Moreover, the W. P. Carey Finance Department is one of the top 25 finance

⁸ Melissa Korn. “Short-Term Master’s Programs: An M.B.A. Alternative?” the *Wall Street Journal*, April 4, 2013, available at <http://blogs.wsj.com/atwork/2013/04/04/short-term-masters-programs-an-m-b-a-alternative/>.

⁹ Melissa Korn. “Chinese Deluge U.S. Master’s Programs,” the *Wall Street Journal*, April 13, 2013, available at <http://online.wsj.com/article/SB10001424127887324883604578398831847621160.html>.

¹⁰ See <http://wpcarey.asu.edu/mba/china-program/english/dba-class-profile.cfm>.

¹¹ See Table 5 and Fig. 19 of GMAC’s Application Trends Survey for 2012 and 2013, respectively.

groups worldwide, home to many faculty¹² with research interests in theoretical and empirical topics in financial economics. Students in the MSF program will therefore have access to high quality teaching of not only the fundamental topics in finance, but also the newest research findings in financial economics. The finance department also has an active Ph.D. program, whose graduates have been placed in teaching and research positions in universities across the world.¹³ By attracting top students with interests in scholarly research, the MSF program could also help deliver highly qualified students into the finance Ph.D. program. Lastly, the finance department subscribes to a number of professional databases and has a Bloomberg machine on site, which would improve opportunities for applied learning.

Program Focus: The primary purpose of the MSF program will be to advance the careers of recent undergraduates of programs where their acquired quantitative skills and knowledge can be enhanced and applied in the financial industry (banking, insurance, and other financial institutions), or to the financial management of corporations. In addition, career advancers who can commit to full-time study for one academic year will leverage the degree to adapt their already quantitative bent to an applied business domain where job growth is sustainable.

Entering students will be expected to take the GMAT or the GRE. Typical undergraduate majors are expected to include business & management majors, economics, statistics, computer science and other types of science, engineering, technology and mathematics (STEM) degree areas.

The MSF curriculum is designed to ensure all students will acquire the requisite fundamental financial knowledge, the analytical tools necessary to analyze, manipulate and understand financial data, and the ability to utilize these tools and knowledge to real life finance applications. Especially, the in-depth coverage of advanced investment and corporate finance topics and international capital markets will provide MSF students with the sought-after qualifications in the job market.

The proposed MSF curriculum provides a broad training in the finance field for all students. A generalist approach preserves valuable flexibility as we learn more about market demand. After successful offerings (during the inaugural two year period), additional electives and tracks of specialization will be considered, in addition to additional cohorts and part-time and/or online offerings.

B. Describe the plan and methods to assess whether students have achieved the knowledge, competencies and skills identified in the Learning Outcomes.

As shown in the table below, evaluation of the Master of Science in Finance learning goals and objectives is a process that is ongoing throughout the curriculum. The process provides useful feedback to the business school faculty and the MSF Program Director. The “Finance Capstone” course will be broad-based case course that will help ensure students in the MSF program can apply finance concepts and other analytical knowledge in real-world problem solving settings.

¹² See <http://wpcarey.asu.edu/fin-rankings/rankings/results.cfm>, based on the number of articles published in the following top 4 finance journals: Journal of Finance, Journal of Financial and Quantitative Analysis, Journal of Financial Economics, and Review of Financial Studies.

¹³ See <http://wpcarey.asu.edu/finance/doctoral/placement-data.cfm>.

Learning Objectives	Outcome measure(s)	Assessment process	Frequency of assessment
Critical Thinking Skills	Student performance on exams, course projects, and presentations	Faculty committee will meet regularly to determine evaluate learning outcomes and will create a common method and rubric measuring learning for each outcome. They will meet regularly to review the assessment results and determine steps for improvement	Every course offering
Advanced Concepts in Corporate Finance, Investments, and Capital Markets. Students will acquire expertise in the following subject areas: <ol style="list-style-type: none"> 1. Managerial Statistics 2. Managerial Finance, Economics and Financial Accounting 3. Investments and Portfolio Theory 4. Corporate Finance 5. Derivatives and Risk Management 6. Fixed Income Securities 7. International Finance 8. Entrepreneurial Finance 9. Financial Institutions and Banks 	Student performance on exams, course projects, and presentations		Every course offering
Real-World Applications of Finance Concepts <ol style="list-style-type: none"> 1. Students will learn to apply finance principles related to the investment, risk management, and financing policies of the firm to develop decision-making ability in these areas. 2. Students will learn how to put finance problems into a broader business context. 	Student performance in the Finance Capstone course		End of program

It is also essential to assess/evaluate the MSF program itself, using a process that involves course-level evaluation during the program, and continues after students graduate, via regular alumni surveys. Periodic recruiter surveys will also assess the market's assessment of the W.P. Carey MSF graduates. Overall, the process is expected to provide useful feedback to the business faculty, MSF Program Director, W.P. Carey Associate Dean for MBA Programs, and W.P. Carey Student Services Coordinator.

Program Goals	Outcome measure(s)	Assessment process	Frequency of assessment
Quality of Curriculum	<ol style="list-style-type: none"> 1. Student satisfaction with instruction 2. Student satisfaction with job placement 3. Consistency/uniformity across courses with respect to rigor and quality of course content 	<ol style="list-style-type: none"> 1. End of semester evaluations 2. Alumni survey 3. Curriculum review 	<ol style="list-style-type: none"> 1. Every course offering 2. Periodic 3. Periodic
Advising and Career Management	<ol style="list-style-type: none"> 1. Student satisfaction with advising 2. Student satisfaction with post MSF placement 3. Firm satisfaction with graduates 	<ol style="list-style-type: none"> 1. Exit interview 2. Alumni survey 3. Recruiter survey 	<ol style="list-style-type: none"> 1. At graduation 2. Periodic 3. Periodic

6. ACCREDITATION OR LICENSING REQUIREMENTS (if applicable).

The W. P. Carey School programs are accredited by AACSB International (The Association to Advance Collegiate Schools of Business). As stated in the Accreditation Standards, “Any new business programs begun at the institution will have sufficient resources to satisfy accreditation standards and will result from strategic planning processes of the school and institution. AACSB should be informed whenever new business degree programs are begun. New business programs in the institution will be placed on the list of accredited programs of the institution until they have been reviewed.”

Our next accreditation visit will occur in AY 2013-14 at which time the new MS program will not yet be established. At that time, the review team will evaluate the program to determine how the degree enhances our vision and mission of the W. P. Carey School of Business and Arizona State University. We believe that the program is consistent with the mission and vision of the school, and foresee no negative outcomes to accreditation of such a program.

7. FACULTY, STAFF AND RESOURCE REQUIREMENTS

A. Faculty

i. Current Faculty

The MSF program will require the development of new courses to be offered in the W.P. Carey School of Business, and also the creation of additional sections to existing MBA Finance courses, and also to existing courses in Accounting and Economic departments. Current faculty members from these programs are natural candidates to deliver content in the MSF program. See the “Table of Likely MSF Faculty” below for the names, rank, and highest degree earned for faculty likely to teach in the MSF program. The three slots TBD will be filled by the Departments of Accounting and Economics, which have indicated their support as represented below on pages 14 and 15.

ii. New Faculty

The MSF program will require ongoing course development and significant staffing needs in Finance to deliver the MSF curriculum. The hiring of new tenured/tenure-track Finance faculty, both during the inaugural period (the first two years) and as the program evolves and becomes a mainstay of the W.P. Carey School’s MS portfolio, will be critical to the success of the MSF program.

Likely MSF Faculty		
Department	Name	Highest Degree
Finance	Aragon	PhD
Finance	Bharath	PhD
Finance	Bhattacharya	PhD
Finance	Bonadurer	PhD
Finance	Gallinger	PhD
Finance	Garrett	PhD
Finance	Hertzal	PhD
Finance	Lindsey	PhD
Accounting	TBD	
Economics	TBD	
Economics	TBD	

iii. Administration of the program

The Faculty Director of the M.S. in Finance program will oversee its curriculum and the Graduate Programs Office its operations. Admissions will be advised by Finance faculty who will be appointed by the Graduate Programs Office with input from faculty in finance and the faculty director. Course offerings and curriculum development and review will be handled by the Director and the Associate Dean for the W. P. Carey Graduate Programs. Career advising will be managed by the W.P. Carey School of Business, Graduate Career Center (GCC) in collaboration with the Business Career Center. Student services (i.e., matriculation, course registration, graduation coordination, approval of plans of study) will be managed by the W. P. Carey Graduate Programs student services team.

B . Resource requirements to launch and sustain the program.

The quality of the student experience for the MSF program will be closely linked to the quality of content (curriculum) and the faculty that delivers this curriculum. Additional program fees are necessary to ensure a relevant and competitive MSF curriculum is developed and delivered by superior faculty with dedicated classes / sections for the MSF students. It is anticipated that the single largest component of the MSF program fees will be used towards maintaining excellence in instruction.

Combined, thirty percent of the program fees are expected to be allocated towards recruitment and career placement, which are essential for a new program introduced into a growing and competitive segment of the graduate degree market.

Targeted national and international recruitment efforts for the MSF program will ensure the program will attract highly qualified students, which will contribute to the quality of the learning experience for all. Recruitment of top students will also support the marketability of MSF graduates. There has also been strong international demand for comparable MSF programs nationwide, and program fees might be needed to position the W. P. Carey MSF program internationally, and reach the best-qualified applicant pool. Top MSF students may also become candidates for further graduate study (possibly for a Ph.D. in Finance).

MSF students will also benefit from dedicated career placement services at the School, which is especially important for a new graduate program, whose graduates may also be looking for their first jobs. The School will also facilitate networking opportunities with assistance from the Finance Advisory Board in ensuring best placement outcomes for MSF graduates.

Program fees will also help support the ongoing development of new and existing W. P. Carey facilities, classrooms, labs, and study and meeting areas. First-class facilities keep students engaged on the campus, and encourage them to interact more with fellow graduate students (from other MS and MBA programs) and faculty.

A portion of the fees will also be used to provide high quality student services in areas such as admissions, registration, student assessment, the administration of course-level teaching evaluations, MSF exit surveys, and periodic employer surveys. Support for orientation activities at the MSF program level may also be important, especially if the student body is heavily international and/or undergraduate backgrounds indicate large variance.

8. COURSES:

A. Course Prefix(es): Provide the following information for the proposed graduate program.

- i. Will a new course prefix(es) be required for this degree program?
Yes No
- ii. If yes, complete the [Course Prefixes / Subjects Form](#) for each new prefix and submit it as part of this proposal submission.

B. New Courses Required for Proposed Degree Program

The following new courses are required for the degree and are in the process of being reviewed by curriculum change maker. Course numbers will be provided when the new courses are approved.

FIN 545: Advanced Corporate Finance

Studies major decision-making areas and selected topics in corporate finance. Attempts to develop decision-making ability in these areas using both lectures & cases.

Primary course component: Lecture Grading method: Student Option

Offered by: W. P. Carey School of Business -- Department of Finance

FIN 555: Entrepreneurial Finance

The objective of this course is to provide an overview of the economics and institutions involved in entrepreneurial finance. Our focus will be on the financing of new ventures. The class will consist primarily of case analysis, supplemented with in-class exercises and lecture material. Primary course component: Lecture Grading method: Student Option

Offered by: W. P. Carey School of Business -- Department of Finance

FIN 565: Risk Management in Banks and Financial Institutions

The objective of this course is to provide students with a risk management view of financial institutions (or financial intermediaries). Traditionally, banking courses have focused on an overview of the financial services industry, sector by sector, concentrating on balance sheet presentations and overlooking management decision making and risk management. In contrast, this course will emphasize a risk management approach.

Primary course component: Lecture Grading method: Student Option

Offered by: W. P. Carey School of Business -- Department of Finance

FIN 575: Finance Capstone

The objective of this course is to provide students with a culminating experience as a step in completing the degree.

The course applies finance principles related to the investment, risk management, and financing policies of the firm to develop decision-making ability in these areas. Analysis of finance problems through selected readings and case studies will be emphasized.

Primary course component: Lecture Grading method: Student Option

Offered by: W. P. Carey School of Business -- Department of Finance

APPENDIX 1

OPERATIONAL INFORMATION FOR GRADUATE PROGRAMS

(This information is used to populate the [Graduate Programs Search](#)/catalog website.)

1. Provide a brief (catalog type - no more than 150 words) program description.

The Master of Science in Finance (MSF) program is a lock-step, nine month program. A new cohort will be admitted each academic year in the Fall semester and will graduate in May of the following calendar year. Unlike the MBA program, work experience will not be a requirement for applicants. The program will be exclusively full-time and taught during the day.

2. Campus where program will be offered:

ASU Online only (all courses online)

All other campus options (please select all that apply):

Downtown Polytechnic
 Tempe West

Both on-campus **and** ASU Online (*) - (Check applicable campus from options listed.)

(*) Please note: Once students elect a campus option, students will not be able to move back and forth between the on-campus (in-person) or hybrid options and the ASU Online campus option.

3. Admission Requirements:

i. Degree

There are two main audiences for the initial offerings of the MSF Program: First, recent undergraduates from business or economics or related majors, or from programs where quantitative skills have been emphasized, and second, career advancers who have strong quantitative skills and seek to adapt those skills to be more competitive in the job market. Career advancers must be able to do full time, day plan of study; as it is currently designed, the MSF program may not cater to working professionals.

An important arena for recruiting students will be undergraduate programs with quantitative underpinnings at either ASU or other universities predominantly in the U.S. West & Southwest. It is anticipated that there will also be strong international demand for the MSF degree. Typical undergraduate majors are expected to include business & management majors, economics, statistics, computer science and other types of science, engineering, technology and mathematics (STEM) degree areas

Students must complete the online application form to apply to Graduate Education for admission to the program. They must also submit the following:

- Official transcripts of all coursework completed at institutions other than ASU.
- GMAT and/or GRE test scores.
- Two letters of recommendation.

ii. GPA and Minimum Qualifications

All applicants must submit either a GMAT or GRE test score. The GMAT is recommended. The average GMAT target is 650-675 (similar to peer programs). Applicants should expect to score above 600 on the GMAT to be competitive. GRE target scores would be comparable to the above GMAT targets, for example, using GMAT-equivalent scores provided by the Educational Testing Service.

Minimum undergraduate cumulative GPA of 3.0 is required (scale is 4.0=A) in the last 60 hours of a student's first bachelor's degree program. Minimum of 3.00 cumulative GPA (scale is 4.0 = A) in the applicable Master's degree.

iii. English Proficiency Requirement for International Applicants.

The English proficiency requirements are the same as the Graduate College requirement. (see Graduate College requirement

http://graduate.asu.edu/admissions/international/english_proficiency): Yes No

iv. Foreign Language Exam:

Foreign Language Examination(s) required? Yes No

v. Required Admission Examinations.

GRE OR GMAT Millers Analogies None Required

vi. Letters of Recommendation: Yes No

4. Application Review Terms (if applicable Session): Indicate all terms for which applications for

Admissions are accepted and the corresponding application deadline dates, if any:

Fall (regular) Deadline (month/year): 3/15

5. Curricular Requirements:

5A. Will concentrations be established under this degree program? Yes No

5B. Curricular Structure:

The MSF curriculum is lock-step, nine months in duration, and is composed of 12 courses. The schedule will follow the 7½ week quarterly schedule of the MBA program.

Required Core Courses for the Degree			Credit Hours
(Prefix & Number)	(Course Title)	New Course: Yes or No?	(Insert section sub-total)
ECN 501	Statistics for Managers	No	3.0
ECN 502	Managerial Economics	No	3.0
ACC 502	Financial Accounting	No	3.0
FIN 502	Managerial Finance	No	3.0
FIN 560	International Finance and Investments	No	2.5
FIN 525	Investment Strategies	No	2.5
FIN 530	Derivatives	No	2.5
FIN 550	Fixed Income	No	2.5
FIN 555	Entrepreneurial Finance	Yes	2.5
FIN 545	Advanced Corporate Finance	Yes	2.5
FIN 565	Risk Management in Banks and Financial Institutions	Yes	2.5

<u>Culminating Experience</u> <i>E.g. - Capstone course, applied project, thesis (masters only) – 6 credit hours) or dissertation (doctoral only) – 12 credit hours) as applicable</i>	<u>Credit Hours</u> (Insert Section sub-total)
FIN 575 - Finance Capstone	2.5
Total required credit hours	32

Proposed Draft Curriculum Schedule (indicates how the MSF curriculum will be delivered over the nine-month program duration)

Fall Semester (17 credits) 4 course of 3.0 credits, 2 courses of 2.5 credits		Spring Semester (15 credits) 6 courses of 2.5 credits	
Quarter 1 (9.0 credits)	Quarter 2 (8.0 credits)	Quarter 3 (7.5 credits)	Quarter 4 (7.5 credits)
ECN 501: Statistics for Managers	ECN 502: Managerial Economics	FIN 550: Fixed Income	FIN 565: Risk Management in Banks and Financial Institutions
ACC 502: Financial Accounting	FIN 525: Investment Strategies	FIN 560: International Finance and Investments	FIN 555: Entrepreneurial Finance
FIN 502: Managerial Finance	FIN 530: Derivatives	FIN 545: Advanced Corporate Finance	FIN 575: Finance Capstone

6. Comprehensive Exams:

Master's Comprehensive Exam (when applicable), please select the appropriate box.

No comprehensive exam required.

7. Allow 400-level courses: Yes No

8. Committee: Required Number of Thesis or Dissertation Committee Members: N.A.

9. Keywords (List all keywords that could be used to search for this program. Keywords should be specific to the proposed program.)

Finance, Investments, Portfolio Management, Financial Economics, Financial Management, Derivatives, Financial Analysis, Corporate Finance, Risk Management.

10. Area(s) of Interest

A. Select one (1) primary Area of Interest from the list below that applies to this program.

- | | |
|--|---|
| <input type="checkbox"/> Architecture & Construction | <input type="checkbox"/> Interdisciplinary Studies |
| <input type="checkbox"/> Arts | <input type="checkbox"/> Law & Justice |
| <input checked="" type="checkbox"/> Business | <input type="checkbox"/> Mathematics |
| <input type="checkbox"/> Communication & Media | <input type="checkbox"/> Psychology |
| <input type="checkbox"/> Education & Teaching | <input type="checkbox"/> STEM |
| <input type="checkbox"/> Engineering & Technology | <input type="checkbox"/> Science |
| <input type="checkbox"/> Entrepreneurship | <input type="checkbox"/> Social and Behavioral Sciences |
| <input type="checkbox"/> Health and Wellness | <input type="checkbox"/> Sustainability |
| <input type="checkbox"/> Humanities | |

B. Select one additional Area of Interest that applies to this program from the list below.

- | | |
|--|---|
| <input type="checkbox"/> Architecture & Construction | <input type="checkbox"/> Education & Teaching |
| <input type="checkbox"/> Arts | <input type="checkbox"/> Engineering & Technology |
| <input type="checkbox"/> Business | <input type="checkbox"/> Entrepreneurship |
| <input type="checkbox"/> Communication & Media | <input type="checkbox"/> Health and Wellness |

- Humanities
- Interdisciplinary Studies
- Law & Justice
- Mathematics
- Psychology

- STEM
- Science
- Social and Behavioral Sciences
- Sustainability

W. P. Carey School of Business Official Submission

-----Original Message-----

From: Kay Faris

Sent: Monday, October 07, 2013 2:22 PM

To: Curriculum Planning

Cc: Stacey Whitecotton; Kay Faris

Subject: FW: MS Degrees

Please see the attached Master of Science in Finance program that we are proposing for Fall 2014. Please let us know if you have any questions.

Kay A. Faris

Senior Associate Dean

W. P. Carey School of Business

Arizona State University

Tempe, AZ 85287-3406

480-965-7587 (voice)

480-965-3846 (fax)

School of Accountancy – Support

From: Phil Reckers
Sent: Wednesday, October 23, 2013 4:19 PM
To: Stacey Whitecotton
Subject: RE: MS-FIN Approval letter

OK, we support.

OK, we will do it.

From: Stacey Whitecotton
Sent: Wednesday, October 23, 2013 1:18 PM
To: Phil Reckers; Arthur Blakemore
Cc: George Aragon; Thomas Bates
Subject: MS-FIN Approval letter

Hi Phil and Art,

Will you please reply back acknowledging your support for the proposed Masters of Science in Finance degree and confirming your department's willingness to staff the following courses:

ECN 501	Statistics for Managers
ECN 502	Managerial Economics
ACC 502	Financial Accounting

We need the documentation for the proposal.

Thanks, Stacey

Stacey Whitecotton
Arizona State University | W. P. Carey School of Business
Sr. Associate Dean – Graduate Programs
Ph: 480.965.8315 | Stacey.M.Whitecotton@asu.edu
wpcarey.asu.edu | knowwpcarey.com

Department of Economics – Support

From: Arthur Blakemore
Sent: Wednesday, October 23, 2013 2:48 PM
To: Stacey Whitecotton; Phil Reckers
Cc: George Aragon; Thomas Bates
Subject: RE: MS-FIN Approval letter

Yes, we can teach those classes. Can you confirm the schedule?

From: Stacey Whitecotton
Sent: Wednesday, October 23, 2013 1:18 PM
To: Phil Reckers; Arthur Blakemore
Cc: George Aragon; Thomas Bates
Subject: MS-FIN Approval letter

Hi Phil and Art,

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ECN 501	Statistics for Managers
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Stacey Whitecotton

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APPENDIX 2: FINANCE DEPARTMENT MSF PROPOSAL AND REVIEW OF COMPARABLE MSF PROGRAMS

Introduction

The W.P. Carey School Finance Department is proposing a new Master of Science in Finance (MSF) degree program. To that end, we have put together the preceding formal proposal and are appending the following internal report in support of the proposal. (Some material here might be duplicated in the body of the proposal.) Our goal is for this proposal to earn favorable consideration by the CPAC, Senate, and ABOR during Fall 2013.

Proposed Master of Science in Finance (MSF) Program at the W. P. Carey School

We propose an MSF program with new course development during the inaugural two years and possibly thereafter. We expect a two year period to be sufficient to gauge demand and applicant profile based on which the MSF program can be tailored or enhanced in subsequent years. We envision the program's course offerings to grow through its third to fifth years, possibly to include tracks of specialization. We will also consider expanding the class size, possibly by adding a second cohort, and to investigate the viability of additional delivery formats (part-time and/or online).

Costs and Benefits of an MSF Program

In addition to the departmental time and resources needed in developing a new graduate program, other typical costs such as placement, admissions, and general administration would be handled centrally by the graduate programs office of the School.

The MSF program could potentially have a negative impact on the demand for the finance specialization of the MBA program, as well as the DBA degree offered by the W.P. Carey School in China. However, since both of these programs target students with work experience as opposed to the MSF, we expect the impact to be limited. Nevertheless, it is important that these impacts are studied during the inaugural years of the MSF program.

Aside from meeting the University- and School-level objectives for broadening the graduate degree / MS offerings, and bringing ASU to par with many of its MBA peers that offer an MSF, there are also departmental benefits of adding an MSF program. These include additional after-tax fee income and the ability for existing finance faculty to offer additional sections of masters level courses with little incremental preparatory work. Another important benefit would be the hiring of additional tenured/tenure-track finance faculty to meet the existing and future staffing needs of the MSF curriculum, which is critical to the success of the MSF program. The addition of new faculty will also help further the development of new electives for the MSF program. Finally, depending on our ability to recruit top students into the MSF program, we may feed better students into the Finance concentration under the Ph.D. in Business Administration program.

Program Description and Key Features

We propose an MSF program that is consistent with the comparable offerings in the market, yet simple and streamlined, to make efficient use of existing graduate-level course offerings by the W. P. Carey School, at least during its inaugural period (first two years). Beyond this inaugural period, we expect the program to grow in student body and course offerings.

The proposed MSF program would initially be a 9-month, lock-step program, with one intake per academic year (starting in Fall). Students will be required to attend the program full-time. During the

growth period, more students can potentially be admitted into the program by adding a second Spring cohort, as well as considering part-time or online attendance options for working professionals.

We propose a W. P. Carey MSF program that targets the “generalist” MSF market, as opposed to computational (or quantitative) finance programs dominated by some of the top schools like Berkeley, MIT, and Carnegie Mellon. The program would therefore be similar to (and possibly overlapping with) the existing *Financial Management and Markets* (FMM) specialization available to students in the full-time MBA Program. This approach, at least during the inaugural period, would provide flexibility for future development as we further gauge MSF demand and placement, and monitor the trends in MBA enrollment and specialization.

Once the MSF program proves viable beyond this foundational period, the focus can shift on differentiating the W. P. Carey MSF more from others. Differentiation can be achieved by offering specialization tracks, expanding finance elective offerings and enhancing student experience by adding applied learning opportunities (internship / practicum, international travel, projects, workshops, etc.). For example, an MSF program track can be developed that leverages W. P. Carey School’s existing teaching infrastructure in China. In addition to classroom evaluations, regular recruiter and alumni surveys would also ensure that the MSF program evolves in direct response to the needs of the students and market.

The target audience for the MSF would be students with little or no work experience and new graduates. We expect the strongest demand will come from students who have undergraduate degrees in business or economics, as well as other quantitatively-oriented disciplines, such as engineering. We also expect, based on empirical and anecdotal evidence from other specialized masters programs across the U.S., that there could be significant international demand.¹⁴ During the inaugural period, we expect enrollment to be around 40 to 45 students per cohort.

The MSF program should be priced competitively, with total non-resident tuition and fees to fall somewhere between \$46,000 to \$47,000 for the entire program. Minimum requirements (GPA and GMAT) for admission into the MSF program should be as rigorous as those for the MBA program.

Proposed Draft MSF Curriculum

We propose the following draft curriculum for the inaugural period of the MSF program. As stressed earlier, the goal of this curriculum is to make efficient use of existing W. P. Carey graduate courses and faculty resources. This would also ensure MSF students are delivered a well-rounded training in finance using tried and tested content. We expect additional new courses could be rolled out to coincide with the third cohort’s enrollment.

Initially, there will not be a thesis or practicum requirement in the MSF program, however all students will be required to enroll in the **Finance Capstone** course. MS faculty would advise and coordinate on the syllabus of the capstone course. Depending on development of applied learning opportunities and feedback from the market, a practicum requirement can be incorporated into the program beyond the inaugural period.

Review of Comparable MSF Programs¹⁵

Selection of Comparable Schools and MSF Programs

¹⁴ Depending on the proportion of international student demand, it may be necessary to develop specialized approaches to ensure learning outcomes are uniformly met and classroom experience is fulfilling for both U.S. and international students. For example, a communications bootcamp or a group program under ACEP see <https://global.asu.edu/aecp>, might be developed for MSF students.

¹⁵ Course curricula and program offerings are subject to change. This analysis is completed in July 2013.

We start with a list of 27 comparable business schools primarily based on university participation in the PAC-12 conference and having similar MBA ranking with respect to ASU.¹⁶ Two other schools with MSF programs were added to this list, namely University of Texas-Austin's MSF program, which has been included as an additional example of an MSF program offered by a large public university in the region. Also, the MSF program at the Southern Methodist University (Cox) was also included as their MSF proposal served as a source of inspiration. This brought the list to 29 schools.

Among these 29 schools, 12 currently do not have an MSF program (including seven of the PAC-12 member schools). The remaining 17 schools all have MSF programs. For our purposes, we excluded those four schools whose MSF programs had a quantitative or financial engineering focus (UC Berkeley-Haas, UCLA-Anderson, Boston University, and Georgia Tech's Scheller). We also excluded Georgetown University's new MSF program, since it will be delivered online only. Two schools have apparently repurposed their MSFs into internal degree programs available to undergraduates of their respective business schools (University of Florida-Hough and University of Wisconsin-Madison). Since these two MSF programs no longer accept outside applicants, they were also excluded from our short list.

Ultimately, this yielded a short list of 10 comparable MSF programs offered by the following business schools: University of Arizona (Eller), Ohio State University (Fisher), University of Maryland-College Park (Smith), University of Rochester (Simon), University of Texas-Dallas (Naveen Jindal, or Jindal), University of Utah (Eccles), University of Texas-Austin (McCombs), Vanderbilt University (Owen), Boston College (Carroll) and Southern Methodist University (Cox).

This comparable group represents seven public and three private institutions, and is made up of two PAC-12 schools (Eller and Eccles), six MBA peers (Fisher, Smith, Simon, Jindal, Owen, and Carroll), and the two independently selected schools (McCombs and Cox).

The table below lists the schools reviewed and summarizes the selection process.

Table 1: List of Comparable Schools

University (School)	PAC-12	MBA Peer*	Other**	Was on SMU list?	Public?	MSF Program?	Name of program	Include?
University of Arizona (Eller)	✓			✓	✓	✓	MS in Management with a Concentration in Finance	✓
University of Utah (Eccles)	✓			✓	✓	✓	MS in Finance	✓
Ohio State University (Fisher)		✓			✓	✓	Fisher Specialized Master in Business-Finance	✓
University of Maryland-College Park (Smith)		✓			✓	✓	MS in Business: Finance	✓
University of Rochester (Simon)		✓		✓	✓	✓	MS in Business Administration with a concentration in Finance	✓
University of Texas-Dallas (Naveen Jindal)		✓		✓	✓	✓	MS in Finance	✓
Vanderbilt University (Owen)		✓		✓		✓	MS Finance	✓
Boston College (Carroll)		✓		✓		✓	MS in Finance	✓
University of Texas at Austin (McCombs)			✓		✓	✓	MS in Finance	✓
Southern Methodist University (Cox)			✓			✓	MS in Finance	✓

¹⁶ Based on ASU's most recent US World News & Report ranking of #30, we selected schools that were ranked from #25 to #40. Source: <http://grad-schools.usnews.rankingsandreviews.com/best-graduate-schools/top-business-schools/mba-rankings>.

University (School)	PAC-12	MBA Peer*	Other**	Was on SMU list?	Public?	MSF Program?	Name of program	Include?
Georgetown University (McDonough)		✓				✓	MSF Online	O
UC Berkeley (Haas)	✓				✓	✓	Master of Financial Engineering Program	Q
UC Los Angeles (Anderson)	✓				✓	✓	Master of Financial Engineering Program	Q
Georgia Institute of Technology (Scheller)		✓		✓	✓	✓	Quantitative & Computational Finance	Q
Boston University		✓				✓	MS in Mathematical Finance (MSMF)	Q
University of Wisconsin–Madison ¹⁷		✓		✓	✓	✓	Quantitative Master's in Finance	U
University of Florida (Hough) ¹⁸		✓		✓	✓	✓	MS in Finance	U
University of Colorado	✓				✓			N
University of Oregon (Lundquist)	✓				✓			N
Oregon State University	✓				✓			N
University of Washington (Foster)	✓				✓			N
Washington State University	✓				✓			N
Stanford University	✓							N
University of Southern California (Marshall) ¹⁹	✓	✓						N
Texas A&M University–College Station (Mays)		✓			✓			N
UC–Davis		✓			✓			N
University of Notre Dame (Mendoza)		✓						N
Brigham Young University (Marriott)		✓						N
Rice University (Jones)		✓						N

Notes:

(*) Based on ASU's most recent U.S. World News & Report MBA ranking of #30, schools selected were ranked from #25 to #40 (note that multiple schools may be assigned the same ranking). Source: <http://grad-schools.usnews.rankingsandreviews.com/best-graduate-schools/top-business-schools/mba-rankings>.

(**) University of Texas at Austin has been included despite not being an MBA peer or a PAC-12 school due to its geographical proximity to ASU and being a public university. Southern Methodist University's MSF program has been included, because their MSF proposal served as an inspiration.

(N) Excluded because the School has no MSF program.

(O) Excluded because the School only has an online MSF program.

(Q) Excluded because of the quantitative nature of the MSF program.

¹⁷ Admissions to Wisconsin School of Business' Quantitative Master's in Finance program appears to have been suspended. Wisconsin's other specialized master's in finance program – MS in Finance: Applied Security Analysis – is only open to existing finance majors in the school's undergraduate program.

¹⁸ Effective February, 2013, the MSF program halted the usual summer intake of newly graduated students and students with work experience. According to the School website, "The current job market is not conducive to full time placement without the student having had a junior summer internship at one of their target firms, so the program's recruiting focus has shifted to current University of Florida undergraduates." See: <http://warrington.ufl.edu/graduate/academics/msf/>.

¹⁹ USC is reportedly launching a master's of finance program in Fall 2014.

(U) MSF program not open to external applicants, but tailored towards undergraduates from the university's own business school.

Comparable MSF Program Features and Degree Requirements

In terms of program features, six of the 10 comparable MSF programs intake students once per year, and four do so twice a year. Similarly, six programs either offer a part-time option, or allow for flexible completion of degree requirements. (For example, schools may indicate classes are scheduled to allow for evening attendance.) Four programs only allow full-time attendance (Fisher, McCombs, Owen and Cox).

Full-time MSF program length is skewed towards one calendar year or shorter. Half of the 10 comparable programs are designed to be completed in 9-months (2 semesters or 4 modules), and four others are 10 to 12 months long. The Jindal MSF program stands out as requiring 1.5 years of full-time attendance.

Credits for completion vary from 30 to 48, though the definition of credits / units across schools also differs, which makes direct comparisons difficult. Nevertheless, six out of 10 comparable MSF programs require 30 to 32 credits; three programs require 36 credits; and one (Simon) requires 48 credits for completion.

Six of the 10 comparable programs use the semester delivery format for their MSF programs; three use the "module" format. McCombs is unique in offering a mix of module- and semester-length courses in its MSF program.

The tuition and fees for seven of the 10 comparable MSF programs are in the \$40,000s, representing MSF programs by both public and private universities (Carroll, Cox, Eller, Eccles, Jindal, McCombs, Owen). Two programs have tuitions in the lower \$50,000s (Fisher and Smith), and only one (Simon) has tuition in the range of \$70,000.

In general, these programs report incoming students having average GMAT scores of 600 and above. (In many instances, schools allow GRE scores to be substituted for GMAT, with the exception of Fisher School which requires GMAT only.) Exam scores older than 5 years are generally not accepted. Many programs require at least one reference, and none require work experience for admission into the MSF program, though a few note some work experience to be useful (i.e., Fisher and Carroll). Regardless, the profile of MSF students tends to be younger than the MBAs (early to mid 20s) and with little (under 3 years) or no work experience (recent graduates). Not all programs provide the percentage of international students attending the MSF programs, though available information indicates the proportion ranges from at least 30% to as high as 90%.

Class sizes (when reported) tend to be under 50 students. Carroll, Eccles, and Simon are three of the larger programs with the recent (2012-13) class sizes reported as 59, 62 and 143 students, respectively. (Both Eccles and Simon School MSF programs intake twice a year, which may drive the larger class sizes.)

Curriculum at Comparable MSF Programs

Tracks

Offering of "tracks" to encourage further specialization is not uncommon among MSF programs. Four out of the 10 comparable programs offer at least three different tracks of specialization within the MSF program (McCombs, Eller, Fisher, Jindal). Rochester's Simon School offers not a subject matter track, but rather an internship vs. non-internship track, which affects the time to complete the MSF program (17 vs. 11 months, based on full-time attendance). While the Carroll School also offers a general vs. a quantitative track, in practice, this quantitative track is a distinct MSF program with different admission and degree requirements, and involves PhD level course work. Four remaining programs (Smith, Eccles, Owen, and Cox) do not offer tracks of specialization within their MSF programs.

Core Courses

Most of the MSF programs reviewed provide students a curriculum that is a mix of required (or core) and elective courses. Some programs have more elective courses than others, and those are also the programs that offer students with most flexibility. Only one out of the 10 comparable MSF programs reviewed here offers a fixed curriculum with no electives (Cox). A unique aspect of Carroll's MSF is that it offers two electives from *any* graduate course (finance or other) in the management school. The requirements for the required (or core) curriculum vary from program to program, and according to the competencies of each school. Moreover, some MSF programs (such as Carroll) expect incoming MSF students to be familiar with fundamental finance and accounting concepts and do not offer core courses in introductory financial topics. Nevertheless, there are some common "required" courses among the 10 comparable MSF programs:

- Eight programs have a required course on *statistics* (called either statistics, econometrics, data analysis or quantitative methods). The two schools that do not require a course in statistics are Cox and Eccles.
- Six programs have a required course in *economics* (called economics, managerial economics, financial economics, or business economics).²⁰ Four programs –Carroll, Eller, Eccles, and Smith– do not have such a core course.
- Eight programs require MSF students to take at least one core course either in *accounting* or on *financial statement analysis*. These are Cox, Eller,²¹ Eccles, Jindal, McCombs,²² Owen, Simon,²³ and Smith.
- Eight programs have a core course titled *investments* or *portfolio management*.²⁴ However, the two MSF programs that do not have a core investments course, Smith and Owen, instead each have a required course on derivatives. These programs likely cover fundamental portfolio management concepts in other courses (for example, Smith offers a core course named *Capital Markets*).
- Lastly, seven MSF programs require students to take a course covering fundamental topics in *corporate finance and valuation* (Carroll, Fisher, McCombs, Simon, Smith, Cox and Owen).²⁵

The table below maps out the primary core course offerings / subject areas at comparable MSF programs.

Table 2: Core Courses / Subject Areas in Comparable MSF Programs

MSF Core (Required) Subject Areas / Courses	Carroll	Cox	Eller	Eccles	Fisher	Jindal	McCombs	Owen	Smith	Simon
Statistics; Econometrics; Data Analysis; or Quantitative Methods (for Business)	✓		✓		✓	✓	✓	✓	✓	✓
Economics, Managerial/Financial Economics		✓			✓	✓	✓	✓		✓

²⁰ Rochester's Simon School varies the MSF curriculum if the students already have an MBA. In that case, some of the core requirements are waived, including those in statistics and economics.

²¹ Eller requires only those students in the Investments track to take accounting, which is offered as an elective to students in the other tracks.

²² Requires both.

²³ Requires both for students who do not already have an MBA. Those students who already have an MBA only have to take *Financial Statement Analysis*.

²⁴ Eller requires MSF students in all tracks except Corporate Finance track to take investments. This course is available as an elective for Corporate Finance track students.

²⁵ Eller requires only those students in the Corporate Finance track take a core course on corporate finance. Jindal has an *Advanced Financial Management* course as part of the core curriculum, which may satisfy this requirement, however, the course description is not available. None of the core courses in the Eccles MSF program cover corporate finance.

Accounting and/or Financial Statement Analysis		✓	✓	✓		✓	✓	✓	✓	✓
Investments or Portfolio Management	✓	✓	✓	✓	✓	✓	✓	*	*	✓
Corporate Finance, Valuation	✓	✓			✓	**	✓	✓	✓	✓

(*) Offer derivatives as core.

(**) Likely the “Advanced Financial Management” covers corporate finance.

Elective Courses

There is a wider variety among elective course offerings. MSF programs with “tracks” tend to have more electives. Electives also reflect subject matter (i.e., hedge funds, project finance), sector (real estate), or industry (energy) expertise. The table below summarizes various elective courses offered by the 10 comparable MSF programs.

Table 3: Elective Courses / Subject Areas in Comparable MSF Programs

MSF Elective Subject Areas / Courses	Carroll	Cox	Eller	Eccles	Fisher	Jindal	McCombs	Owen	Smith	Simon
Private Equity; Venture Capital; Raising Capital; Entrepreneurial Finance	✓		✓	✓	✓	✓	✓			✓
Advanced Corporate Finance; M&A; Corporate Restructuring & Distressed Firms	✓		✓	✓	✓	✓			✓	
Corporate Governance					✓				✓	✓
Options, Futures, Derivatives	✓	✓	✓		✓	✓	✓	✓	✓	✓
Fixed Income / Bond Markets	✓	*	✓	✓	✓	✓	✓	✓	✓	✓
Financial Engineering / Quantitative Trading / Mathematical Finance				✓	✓	✓	**		✓	
Alternative Investments / Hedge Funds	✓	✓								
Real Estate			✓	✓	✓	✓		✓		
Behavioral Finance					✓	✓				
International Finance / Global Investment	✓	✓	✓	✓	✓	✓		✓	✓	✓
Financial Markets & Institutions / Banks	✓	✓	✓	✓	✓	✓		✓	✓	✓
Risk Management				✓	✓	✓	✓		✓	
Insurance					✓					
Credit Risk			✓		✓					
Interest Rate Models			✓							
Financial Modeling / Modeling & Valuation / Economic & Financial Forecasting	✓	✓		✓	✓		✓	✓		✓
Financial Policy / Strategy	✓		✓			✓		✓		✓
Taxation / Regulation / Law			✓	✓	✓	✓		✓		
Project Finance									✓	
Energy		✓					✓			
Financial Information Systems / Business Intelligence & Analytics / Data Management						✓				✓

MSF Elective Subject Areas / Courses	Carroll	Cox	Eller	Eccles	Fisher	Jindal	McCombs	Owen	Smith	Simon
Game Theory & Business Strategy								✓		
Negotiation								✓		
Financial Fraud & Scams				✓						
Economic Crises	✓									

(*) Cox offers a course called "Advanced Portfolio Management" that covers fixed income instruments, but it is not a dedicated fixed income course. (**) For energy traders.

Moreover, three of the 10 comparable MSF programs (Jindal, Smith, and Fisher) indicate the availability of courses to aid students working towards the CFA designation.

Lastly, half of these programs currently have no degree requirement for a thesis, capstone project, practicum or comprehensive exam. On the other hand, MSF programs offered by Eller and Fisher schools involve project work to be completed as part of the MSF curriculum; McCombs requires MSF students to do a practicum; and Eccles administers a comprehensive exam. Carroll school requires MSF students to give 10 hours of service.