<u>Master of Science in Investment Management (MSIM) Program</u> <u>Boston University School of Management</u>

Mission & Program Summary

MISSION

Boston University's Graduate Program in Investment Management is designed to provide investment professionals the expertise necessary to make effective investment decisions. Most students seek to learn the skills that will move their career into the middle of the investment process. The program is also appropriate for professionals outside the investment industry seeking to gain employment in the investment business. MSIM has been very successful in this mission, with over 200 alumni and students who are now working as securities analysts, portfolio managers and other investment professionals. Many alumni earn promotions while MSIM students.

PROGRAM SUMMARY

A team of faculty, practitioners and practitioner-faculty designed and consistently update the curriculum; the group defines the appropriate list of skills to be taught and how to teach them. The MSIM strategy is to teach students the basic theory behind key finance tools and have them learn to effectively apply those tools in real world practice. The MSIM objective is to graduate investment professionals who are truly thoughtful in tackling investment problems.

The goal in the classroom is to teach intellectual content in finance, accounting, economics and quantitative methods. The program also stresses the importance of MSIM casework--solving complex, real-world investment problems in securities analysis and portfolio management. Faculty teaches foundation classes at the MBA level yet customize the courses to stress investment applications. Practical courses including equity analysis and the two portfolio management courses are highly challenging classes, requiring students to draw from their MSIM education and on their creativity.

MSIM is not a CFA[®] exam preparatory class. Faculty teaches focused academic content, not review topics. Equity analysis and portfolio management courses are taught in apprentice-style, stressing the importance of looking into the future, not simply the past. The value of the CFA curriculum is recognized as an important body of educational content and is used as a tool for ensuring effective course coverage. The CFA Charter is an important goal for most MSIM students, and the MSIM program provides supplemental tools, outside of the classroom, to support them in meeting that goal.

FORMAT

The MSIM degree is offered in an **accelerated**, **executive-style format**. Students progress in a single cohort—every course is required and exclusive. They learn fundamental tools in finance, accounting, economics and quantitative methods in the first semester. This material fits closely with the CFA Level I curriculum. The second semester trains students in equity analysis, including training in the investment research process, corporate financial policy and equity valuation. Fixed income investing and derivatives are covered in the third semester and portfolio management issues are the focus for the final semester.

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<u>Curriculum Design</u>

BACKGROUND

Boston University's MSIM degree was conceived in the late 1990's as a program to teach equity analysts the intellectual content in **investment management theory and quantitative methods**, to support their interest in pursuing the CFA[®] charter. Beginning with the program's first year, the mission was refined and expanded to include **advanced practical techniques** extending beyond a traditional MBA curriculum for all investment professionals, whether or not they are committed to the CFA program. In 2006, a formal discipline of educational goals, curriculum design and learning metrics was completed to support AACSB accreditation.

DESIGN

The curriculum covers **four clear educational goals**. Learning objectives for MSIM are listed below.

- 1. Each student understands basic investment technology, as defined by Boston University and the Level I curriculum of the CFA[®] Institute.
- 2. Each student can conduct rigorous investment analysis and effectively communicate an investment thesis.
- 3. Each student understands advanced investment techniques in derivatives, fixed income and risk management.
- 4. Each student can effectively explore and solve a complicated investment management problem, and effectively communicate the solution.

DETAILS

Goal #1: Each student understands *basic investment technology*, as defined by Boston University and the Level I curriculum of the CFA[®] Institute.

The first semester of MSIM is matched to meet this goal--teaching the basic terms and techniques of investment management. This includes accounting, statistical techniques, economic theory and a survey of finance. These courses are similar to traditional core MBA classes, but are modified to stress issues important for investing. For example, the accounting class is focused on financial statement analysis and the quantitative analysis course uses exclusively financial data in its problem sets.

The first semester matches up closely with the CFA Level I curriculum. In fact, professors design problem sets and exam questions to match the style of the Level I exam. Faculty & advisory board members believe that all professionals in the investment industry should know these basic tools and terminology. This belief is supported by guidance from outside practitioners.

Level II material fits under goals 2 and 3 and Level III topics are contained in goal 4.

Goal #2: Each student can conduct *rigorous investment analysis* and effectively communicate an investment thesis.

Goals 2 and 4 are the most difficult to meet in an educational institution because these skills are not typically taught in a classroom setting. Equity analysis and portfolio management are traditionally learned working 80-hour weeks over a number of years as an apprentice in the investment business. The challenge for a business school is to structure a set of learning steps and design effective casework to accelerate the traditional process so a fundamental understanding can be learned over a few semesters. It is helpful to have participation from both practitioners and faculty, and faculty who've been professional investors.

MSIM training in equity analysis is broken into three parts: the equity research process including analysis of fundamental data to craft original research on an industry and individual stock, corporate finance policy including techniques to maximize the value of a firm and equity valuation techniques including multiples, DCF and EVA. These three areas are combined into a single semester to meet learning goal number 2. The success of the learning process is evaluated by reviewing student research reports. To ensure graduates also understand the basics of fixed income research, a module on credit analysis is included in the Risk Management course. Student stock recommendations are subsequently evaluated in the following April and impact their spring course grades.

Goal #3: Each student understands advanced investment techniques in derivatives, fixed income and risk management.

This goal builds on the first. It is met with offering advanced theory courses which are similar, but not identical, to traditional MBA advanced electives. Traditional coursework is customized to ensure application to investment management and problem sets and exams are designed to reflect CFA-style formats. It is important for MSIM graduates to develop an advanced understanding in interest rate dynamics and bond pricing, including imbedded options. As derivatives grow in importance in the financial industry, MSIM graduates must be very comfortable with the pricing and use of futures, options and custom derivatives.

Goal #4: Each student can *effectively explore and solve a complicated investment management problem*, and *effectively communicate the solution*.

The MSIM portfolio management courses incorporate advanced investment tools, casework and ongoing feedback and are designed to meet goal number 4. To raise the stakes for the students, a final presentation on the casework is made to guest practitioners. The success of investment decisions are determined in the future, so special care is to taken to provide students with forward looking tools, and stress the importance of looking beyond past return behavior. The MSIM cases are based on complex problems taken from real world experience, requiring creative solutions. The thoughtfulness of the analysis, the quality of the solutions and the clarity of the proposal are all reviewed to measure the level of learning.