



2015-2016

# COURSE CATALOG

MBA AND MS PROGRAMS



SIMON  
BUSINESS  
SCHOOL



## THE ADMINISTRATION

### ANDREW AINSLIE Dean and Professor of Marketing

As dean of Simon Business School, Andrew Ainslie will lead efforts to differentiate and strengthen the School's curriculum, attract and retain faculty of the highest caliber, improve the student experience, and develop strong relationships with alumni and the business community.

Before joining Simon, he served as senior associate dean for the full-time MBA program at the UCLA Anderson School of Management from 2010 to 2014. While at UCLA, Ainslie's responsibilities included admissions, student services, and career placement. In the four years Ainslie was at Anderson, the school increased its admissions more than 60 percent, increased placements more than 20 percent, and revised its curriculum to better meet the demands of the market and the needs of the students.

In addition to his duties as Anderson's senior associate dean, Ainslie was associate professor of marketing at UCLA Anderson, and previously was assistant professor of marketing from 2000 to 2005. Prior to his time at Anderson, Ainslie was assistant professor of marketing at Cornell University's Johnson Graduate School of Management From 1997 through 2000.

Dean Ainslie's major research interests are in economic and statistical models of consumer behavior and in direct marketing. In particular, he is focused on developing variance components models for a variety of environments. Topics he has investigated include: new products and movie diffusion, model performance, and consumer behavior uncovered through choice modeling. Most recently, he is studying the effect of store characteristics on consumer purchasing behavior.

BSc, Electrical Engineering, University of Cape Town

MBA, Marketing, University of Cape Town

PhD, Marketing and Statistics, University of Chicago, Booth

### RON GOETTLER Senior Associate Dean for Faculty and Research; James N. Doyle Sr. Professor of Entrepreneurship; Professor of Economics, Marketing, and Entrepreneurship

Professor Goettler's research spans quantitative marketing, industrial organization, and finance, with an emphasis on structural econometric methods to understand consumer and

firm behavior. He is particularly interested in high-tech industries, focusing on the relationship between competition and innovation and on the marketing of new products.

Goettler's research has been published in various academic journals including the *Journal of Political Economy*, the *RAND Journal of Economics*, and the *Journal of Marketing Research*. His paper, "Equilibrium in a Dynamic Limit Order Market," which appeared in the *Journal of Finance*, was nominated for the journal's Smith-Breeden Prize and won the NYSE award for the best paper on equity trading at the 2004 Western Finance Association Meeting.

Before joining the Simon School in 2012, Goettler was an assistant professor of marketing at the University of Chicago.

BA, Economics, Miami University

PhD, Economics, Yale University

### RONALD W. HANSEN Senior Associate Dean for Program Development; William H. Meckling Professor of Business Administration

Dean Hansen oversees the Executive and Part-time programs, the School's Marketing and Communications area, and leads Simon's involvement in the undergraduate business program and the Technical Entrepreneurship and Management (TEAM) MS program. He is responsible for Simon's international program development and serves as area coordinator for the concentrations of Business Environment and Public Policy and International Management.

He became director of the Systems Analysis Program in 1972, and from 1977 to 1986 he was the associate director of the Center for Research in Government Policy and Business, now the Bradley Policy Research Center. He briefly left the Simon School to become the first recipient of the Merrell Dow Professorship of Pharmaceutical Administration in the College of Pharmacy at The Ohio State University (1986–88).

Prior to his current Simon School appointment, he served as senior associate dean for faculty and research for 21 years.

Hansen is widely recognized for his scholarly research in drug-development policy and in the regulation of the pharmaceutical industry. He helped to establish and collaborates on research with the Tufts Center for the Study of Drug Development. Hansen was on the editorial board of the *Journal of Research in*

*Pharmaceutical Economics*. He was a member of the National Advisory Council on Health Care Technology Assessment (1985–88) and the Committee on the Children's Vaccine Initiative, Institute of Medicine, National Academy of Sciences (1992–93).

BA, Mathematics, Northwestern University

MA, Economics, University of Chicago

PhD, Economics, University of Chicago

### DAVID TILSON Associate Dean of the Full-Time MBA Program; Clinical Associate Professor of Computers and Information Systems

Professor Tilson's research explores technical standards and mobile computing as well as digital platforms and infrastructure. In another research stream he strives to improve operational efficiency in Health Care settings. His teaching interests include strategic and business systems consulting, information systems, and business statistics. He has led and mentored dozens of student teams consulting with local businesses of all sizes. He teaches in the Simon Executive MBA program and has taught customized executive courses on teamwork and project management. His industry experience includes three years in strategy consulting, mostly with McKinsey & Company, along with a decade in R&D and project management in the telecom, high-tech and media industries. He has consulted for clients in financial services, insurance, telecom, software and energy. His track record of accomplishments includes a Royal Television Society (British equivalent to an Emmy) for broadcast technology. Having lived and worked on three continents gives him an understanding of business and collaboration in an international context.

BEng, Electrical and Electronic Engineering, Queen's University of Belfast (UK)

MSc, Telecommunications Engineering, University of London (UK)

MBA, Information Systems and Entrepreneurship, University of Texas at Austin

PhD, Information Systems, Case Western Reserve University

## THE FACULTY

### GUY ARIE Assistant Professor of Business Administration

Professor Arie's research interests include the study of employee incentives, strategic competition between firms, and the design of employee roles in firms.

His current research focuses on the internal design of firms and employee incentives when the employee's task becomes harder with effort. He is investigating how these ideas can help software producers improve the productivity and profitability of software testing. Another application of this research is the design and compensation of sales forces.

Arie's research on strategic competition between firms focuses on firms that operate in many markets. His research explains how larger firms' airlines can appear to be colluding while actually competing. The research also shows why international firms may seem more productive than local firms, while the converse may be true.

Other research by Arie studies the effect of switching costs on markets and shows that, contrary to the accepted wisdom, markets in which consumers suffer a small cost when switching between brands may be less profitable to firms than markets without such costs.

Prior to pursuing his PhD, Arie worked as an R&D engineer and manager in large defense and communication firms.

BSc, Computer Science and Philosophy, Tel Aviv University, Israel

MSc, Management Science, Tel Aviv University, Israel

PhD, Managerial Economics and Strategy, Kellogg School of Management, Northwestern University, Evanston, IL

### JAMES A. BRICKLEY Gleason Professor of Business Administration; Area Coordinator, Economics & Management Group

Professor Brickley has research and teaching interests in the economics of organizations, corporate governance and compensation policy, corporate finance, franchising and banking. His papers have been published in the *Journal of Business*, the *Journal of Law and Economics*, *The Journal of Finance*, the *Journal of Accounting and Economics*, the *Journal of Financial Economics*, the *Journal of Economic Perspectives*, the *Journal of Economic Behavior and Organization*, the *Journal of Risk and Insurance*, the *Journal of Financial and Quantitative Analysis*, *Financial Management* and the *Journal of Corporate Finance*. The

fifth edition of *Managerial Economics and Organizational Architecture* (authored by Brickley, Clifford W. Smith Jr. and Jerold L. Zimmerman) was published by McGrawHill/ Irwin in 2009. The sixth edition is scheduled for 2015. Brickley, Smith, Zimmerman and Janice Willett authored a trade version of this text entitled *Designing Organizations to Create Value*, published by McGraw-Hill in 2003. Brickley has served as an associate editor of finance and accounting journals. Several studies report that Brickley is among the most cited researchers in the areas of Corporate Governance and Finance. In 2002, three of his published papers received the *Journal of Financial Economics* All Star Paper Award (based on number of citations through 2001).

From 1989 to 1991, he was chairman of the finance department and research director at the University of Utah's Gorn Institute of Finance. Prior to his position at the University of Utah, Brickley was an associate professor of economics at the Simon School. He has served as chairman of the Simon Faculty Curriculum Committee and as Area Coordinator for Strategy and Organizations.

Brickley is a past winner of the Simon School's Distinguished Teaching Award. He has also been listed multiple times on the School's Teaching Honor Roll.

In addition to his academic achievements, Brickley has been a consultant to major corporations and law firms on organizational, franchising, valuations and antitrust issues. He has also held various positions in government in the state of Oregon, including executive director of the Jackson-Josephine County CETA Program, public transportation planner for the Rogue Valley Council of Governments and economic analyst for an economic development district.

BS, Economics, University of Oregon

MS, Economics, University of Oregon

PhD, Finance, University of Oregon

### DELORES CONWAY Professor of Real Estate Economics and Statistics

Professor Conway focuses on the Simon School's planning activities and represents the school in external engagement which includes enhancing corporate relations both domestically and internationally. Her research interests include statistics, real estate, health care management, finance, law and labor markets and her papers have appeared in many academic journals.

Prior to joining the Simon School, Conway was a tenured faculty member at the University of

Southern California (USC) Marshall School of Business and the director of the Casden Real Estate Forecast at the USC Lusk Center for Real Estate. While teaching statistics in the MBA Core, she received USC's highest teaching honor, the University Associates Award for Teaching Excellence, which is awarded each year to only two of the university's faculty. Before her USC appointment, she served on the faculty of the Booth School of Business at the University of Chicago. She is an elected fellow of the American Statistical Association and a former chair of the Business and Economics Statistics Section. She has also served on the editorial boards of major academic journals including the *Journal of the American Statistical Association*.

In addition to her research in statistics and financial modeling, she is widely respected for her research reports on the commercial and residential real estate markets in Southern California. She is frequently interviewed by the national news media for her viewpoints on the real estate markets and within the last couple of years was quoted by *The Wall Street Journal*, the *New York Times*, *Bloomberg*, *BusinessWeek*, *Forbes*, the *Chicago Tribune*, the *Los Angeles Times*, the *Washington Post*, *Investors Business Daily* and the *San Francisco Chronicle*, and has appeared on CNN, the CBS Evening News, the Today Show, MarketWatch and CNBC. *Real Estate Southern CA Magazine* listed her as one of the "50 Women of Influence in Real Estate" in California.

BS, Mathematics, Statistics, and Computer Science, University of Wisconsin - Madison

MS, Statistics, Stanford University

PhD, Statistics, Stanford University

### RICHARD G. COUCH Executive Professor, and Associate Director and Career Advisor for the Full-Time MS Finance Program

Mr. Couch has over 30 years of corporate, executive and turnaround management experience, covering over 500 assignments in a broad variety of businesses, in a total of 14 countries.

Since 1984, Mr. Couch has been the Founder, Chairman of the Board, CEO, and Managing Principal of the Diablo Management Group (DMG), a nationwide management consulting company based in the San Francisco (East Bay) area that provides services primarily to companies, investment firms, banks, and creditors which are involved in mergers, acquisitions, turnarounds, workouts, reorganizations, and sales (of equity and assets). Through DMG, he has served in various interim executive and/or

advisory capacities in companies experiencing managerial, financial, or operational difficulties.

In addition, Mr. Couch has handled numerous assignments as a Chapter 11 bankruptcy trustee and as a Trustee (Assignee) in Assignments-for-the-Benefit-of-Creditors (ABC's).

Prior to founding DMG, Mr. Couch founded and managed RGC Associates, which operated troubled companies, usually in an Interim President/CEO capacity. Mr. Couch was also a Senior Vice-President and Principal with INCO Venture Capital Management – where he assisted in the selection, growth and transition of early-stage companies.

Following a 9-year career at Xerox in managerial and vice president roles in both the copier manufacturing and printing systems groups, his early executive experience included general management roles in two mid-sized companies, which he ultimately sold to international buyers..

In addition to his crisis management experience, Mr. Couch has been a board member of several startup companies. He is also the past Executive Director of the Tri-Valley Technology Enterprise Center (TTEC) – an early-stage Incubator and Technology Transfer organization working with Lawrence Livermore Labs and Northern California Private Equity groups. He periodically accepts counselor/advisor/mentor roles with CEOs who are managing rapid change in their own companies.

Mr. Couch received the Simon School Distinguished Alumni Award at the University of Rochester, and has served on the Simon Executive Advisory Board and was the first Chairman of the Simon Alumni Advisory Board.

He is a frequent panelist/presenter at industry conferences and has taught numerous executive lecture series programs in graduate business schools.

Mr. Couch is a Navy Veteran, and lives with his wife, Deborah, and two children, Aliyah and Zachary, in Fairport, New York.

BS, Social Sciences, University of Buffalo  
MS, Education, University of Rochester  
MBA, University of Rochester

### **RAJIV M. DEWAN** **Xerox Professor of Business, Professor of Computers & Information Systems**

Professor Dewan has teaching and research interests in electronic commerce, organizational issues in management of information systems, the information technology industry, and financial information systems. He has won three Best Paper Awards for research, done in collaboration with his colleagues at the Simon

School, in the use of information systems standards in organizations, redesign of business processes and management of Web sites. His current research interests include marketing on the Internet, the Internet industry, strategic use of technology, the use of standards in managing information systems, and accounting and financial information systems. His papers have appeared in the *Journal of Computing, Management Science, Decision Support Systems* and *IEEE Transactions on Computers*, among other journals.

Prior to joining the Simon School, Dewan was a faculty member at Northwestern University's Kellogg Graduate School of Management. He is a member of INFORMS, the Association for Information Systems, and Beta Gamma Sigma.

BTech, Indian Institute of Technology, New Delhi

MS, Computers and Information Systems and Operations Research, University of Rochester

PhD, Business Administration, University of Rochester

### **GREGORY DOBSON** **Xerox Associate Professor of Operations Management**

Professor Dobson's current work concentrates on the application of process improvement principles to health care and other industries. The methodology employed is known as "Six Sigma," which refers to a set of tools for doing fact-based decision making in process improvement. He teaches an elective course on Six Sigma and Lean as well as the core Operations course. He remains interested in the interface of operations and marketing. Examples include work on the management of product variety, product line design, and the interface of production and distribution. His past work was in job shop scheduling and batch manufacturing. His articles have appeared in *Management Science, Marketing Science, Operations Research, Manufacturing and Service Operations Management, and Transportation Science*. He is associate editor for *Interfaces* and a member of the editorial board of the *International Journal of Services and Operations Management* and *Operations Management Education Review*. He is a member of INFORMS, ASQ, and Beta Gamma Sigma.

BS, Operations Research and Industrial Engineering, Cornell University  
PhD, Operations Research, Stanford University

### **PAUL ELLICKSON** **Professor of Economics & Marketing**

Professor Ellickson's research interests lie at the intersection between quantitative marketing and industrial organization, with a focus on

using structural modeling to understand the forces that drive strategic interaction and optimal decision making. He is particularly interested in modeling the importance of dynamic and spatial competition in retail trade.

Ellickson's research has been published in various academic journals including the *RAND Journal of Economics, Marketing Science, Marketing Letters* and the *International Journal of Industrial Organization*.

Before joining the Simon School in 2009, Ellickson was an assistant professor of economics at Duke University.

AB, Economics and Mathematics, University of California at Berkeley

PhD, Economics, Massachusetts Institute of Technology

### **MARSHALL FREIMER** **Professor of Management Science & Computers and Information Systems (retired)**

Professor Freimer has teaching and research interests in applied probability and optimization. He currently utilizes some of this work in the analysis of problems in information systems and marketing. His work appears in management, engineering, economics, statistics and mathematics journals. He is co-author, with Leonard S. Simon, of the book *Analytical Marketing*. He has held a Ford Foundation Faculty Fellowship and has won the Simon School Superior Teaching Award.

AB (summa cum laude), Mathematics, Harvard University

PhD, Mathematics, Harvard University

### **HARRY GROENEVELT** **Associate Professor of Operations Management**

Professor Groenevelt has interests in health care operations, logistics and supply chain management (including reverse logistics); service system management and design; and quality management. He has been a consultant on operations management issues for numerous manufacturing and service companies (including hospitals and other health care providers), as well as the city of Amsterdam, the Netherlands. He has had articles published in *Management Science, Operations Research, the Journal of Applied Probability, the European Journal of Operations Research* and other journals. He wrote the chapter on "The Just-in-Time System" for Volume 4 of the *Handbooks in Operations Research and Management Science* on logistics of production and inventory.

BS, Econometrics, Vrije Universiteit, Amsterdam, The Netherlands

MS, Econometrics, Vrije Universiteit

PhD, Operations Research, Columbia University

### **AVERY HAVIV** **Assistant Professor of Marketing**

Professor Haviv's research interest is primarily in the development and application of dynamic, structural models to identify, diagnose and solve marketing challenges.

Haviv has explored optimal consumer packaged goods pricing policies in the face of changing seasonal demand and developed a dynamic consumer inventory model to explain counter-cyclic pricing phenomena, wherein the price of some packaged goods are observed to drop during their peak selling season. In another joint work on brand building, he modeled the impact of firms' advertising investments on their brand equity, and demonstrated that changes in brand value depend not only on a firm's advertising, but also on the advertising strategy of the firms' competitors. In another methodological research initiative, Haviv has worked on the development of dynamic models that relax the assumption, rejected by research in consumer behavior and economics, that consumers think of the future in a purely rational way.

Haviv has taught at the Rotman School of Management and the Statistics Department at the University of Toronto, where he received a Teaching Assistant Award for Excellence. He has also worked as a consultant in the market research industry where he developed new methodologies and advanced statistical models on projects in the telecommunications, fast food, banking and public sectors.

BMath, Statistics, University of Waterloo  
MSc, Statistics, University of Toronto

PhD, Quantitative Marketing, University of Toronto (Rotman School of Management)

### **VINCENT W. HOPE** **Clinical Assistant Professor of Marketing**

Mr. Hope has a 30-year career leveraging customer knowledge in the creation of business opportunities. His leadership roles have spanned business development, market research and "Smart Marketing" applications in data-rich environments.

His client list includes Apple, Bank One, Disney, GM, IBM, Kellogg's, Matsushita, Mitsubishi, P&G, Sony, Sprint, 3M, and others. He served as director of customer knowledge in the database marketing arm of Acxiom Corp, and director of strategic research and planning at the American Society for Quality. He began his career in media production, before a 15-year

stint growing and leading a primary market research firm.

Mr. Hope is founder of Honor Flight Rochester, a community-driven organization created in 2008 to fly aging veterans to visit and reflect together at memorials built in their honor in Washington DC.

His academic interests include behavioral economics, the perceptual foundations of value, and client sponsorship of project practicums.

BS, Psychology, Denison University

MBA, Finance, Rochester Institute of Technology

### **DAN HORSKY** **Benjamin L. Forman Professor of Marketing and Area Coordinator, Marketing**

Professor Horsky has primary research interests in the analysis of consumer and firm behavior as they relate to marketing activities. He has applied stochastic models to describe consumers' brand-switching behavior. He has conducted studies of sales response to advertising and salesforce efforts, examined optimal advertising and salesforce policies and studied the estimation of multiattribute models and the optimal positioning of new brands. Horsky's research on the effects of price, income and information on the diffusion of new durable products has been funded by the National Science Foundation.

Horsky's publications have appeared in *Management Science, Marketing Science, the Journal of Marketing Research* and the *Journal of Business*. In 1991, Horsky and his co-author, Moshe Givon, received the John D. C. Little Award for "Untangling the Effects of Purchase Reinforcement and Advertising Carryover," which was selected as the best marketing-related paper published in 1990 in either *Marketing Science* or *Management Science*. Horsky received the John D. C. Little Award again in 1993 jointly with his co-author, Paul Nelson, for "New Brand Positioning and Pricing in an Oligopolistic Market." Horsky is a member of the editorial board of *Marketing Science*.

Horsky has taught in MBA and Executive MBA programs in the US, the Netherlands, Switzerland, Australia and Israel. Based on his achievements in research and teaching, Horsky has been named a University Mentor and received the Executive Development (MBA) Program Class of 1987 Superior Teaching Award. He has consulted on marketing-related topics, in particular on consumer multiattribute brand choice and on life cycles of new consumer durables, with firms worldwide.

BS, Industrial Engineering, Technion, Israel Institute of Technology

MS, Operations Research, Technion, Israel Institute of Technology

PhD, Industrial Administration, Purdue University

### **YUFENG HUANG** **Assistant Professor of Marketing**

Huang has research interests in demand estimation, learning, quantitative marketing, and structural econometrics. His teaching interests are in marketing research and marketing management.

BSc, Economics, Sun Yat-sen University  
MS Research, Economics, Tilburg University  
PhD, Marketing, Tilburg University

### **GLENN D. HUELS** **Clinical Associate Professor of Accounting**

Professor Huels has served as vice president–tax at Bausch + Lomb and as the head of the corporate tax department at Goulds Pumps Inc.

In both roles, he had overall responsibility for the leadership, management, administration, and direction of all aspects of the corporate tax function. This included responsibility for global tax planning strategies and working closely and collaboratively with operations and the corporate accounting, M&A, legal and treasury functions to determine and implement optimum legal, debt, and equity structures, and to maximize after-tax cash flows to the parent corporations through dividend planning and other repatriation strategies.

He has also served as Bausch + Lomb's director of external tax reporting, responsible for the company's income tax accounting and financial reporting requirements, and as a director in Bausch + Lomb's corporate treasury department, continuing to work closely with operations and other corporate functions regarding global cash flow strategies, debt compliance, accounting for derivatives and other external reporting requirements, and the minimization of foreign exchange exposures and risks.

Huels is a Certified Public Accountant licensed in New York State, and was a manager at the public accounting firm of Deloitte prior to his corporate experience. Before joining Simon Business School as a full-time associate professor, his teaching experience included instructing various courses for Deloitte junior staff at firm-wide national training sessions, lecturing in SUNY at Buffalo's Graduate Tax Certificate Program, and teaching accounting and tax courses at Finger Lakes Community College and the former St. John Fisher College Masters in Taxation program.

BS, Business Administration, State University of New York at Buffalo

MBA, Rochester Institute of Technology

### **OLGA ITENBERG** **Assistant Professor of Finance**

Olga Itenberg earned her doctorate in Economics from the University of Pennsylvania in 2014. In her dissertation titled “Essays in Firm Financing and Innovation Activity,” Olga quantifies the effect of floatation cost and dividend tax drops on manufacturing firms’ observed increased use of external equity and the reallocation of R&D and patenting efforts from large to small firms since the 1970’s. During her graduate studies, Olga received an Edwin Mansfield Prize for excellence in teaching and spent a summer at the Federal Reserve Bank of New York as a CSWEP Fellow.

BS, Business Administration, Economic Theory, New York University (Stern)

PhD, Macroeconomics, University of Pennsylvania (Wharton)

### **THOMAS H. JACKSON** **Distinguished University Professor and President Emeritus**

Thomas H. Jackson, president of the University of Rochester from 1994 to 2005, holds faculty positions in the William E. Simon Graduate School of Business Administration and in the University’s Department of Political Science.

Before he became Rochester’s ninth president, Jackson was vice president and provost of the University of Virginia, which he first joined in 1988 as dean of Virginia’s School of Law. He had been professor of law at Harvard from 1986 to 1988 and served on the Stanford University faculty from 1977 to 1986.

A 1972 graduate of Williams College, Jackson earned his law degree from Yale in 1975. He first clerked for U.S. District Court Judge Marvin E. Frankel in New York in 1975–76, and then for Supreme Court Justice (and, later, Chief Justice) William H. Rehnquist in 1976–77.

Jackson is the author of bankruptcy and commercial law texts used in law schools across the country, and served as Special Master for the U.S. Supreme Court in a dispute involving every state in the country over the disposition of unclaimed dividends held by brokerage houses.

BA, American Studies, Williams College  
JD, Yale University

### **GREGG A. JARRELL** **Professor of Finance and Economics**

Professor Jarrell has been a professor of finance and economics at the Simon School since 1988, where he also was assistant professor from 1977 to 1981. Jarrell served as director of the Simon School’s Managerial Economics Research Center from 1988 to 1990, and as director of the Bradley Policy Research Center from 1990 to 1994. Also, he was the A.T.&T. Foundation Resident Management Fellow at the Simon School from January to June 1987. In addition, Jarrell was a Research Fellow under Professor George J. Stigler at the University of Chicago’s Center for Study of the Economy and the State from 1981 to 1983, as well as a senior economist with Lexecon Inc., a Chicago economics consulting firm specializing in Antitrust and Securities litigation from 1983 to 1984.

Jarrell served as the chief economist of the US Securities and Exchange Commission (SEC) from April 1984 to January 1987. Before that, he was a member of the SEC Advisory Committee on Tender Offer Policy from February through July 1983. He has consulted with the Federal Trade Commission and has served as an adjunct professor at Georgetown University School of Law.

Jarrell has published dozens of articles on economic and finance topics in scholarly academic journals, as well as the popular media, and is an expert on mergers and acquisitions, hostile takeovers, the economics and regulation of financial markets, financial valuation and microeconomic theory and application. Jarrell frequently serves as an expert witness on financial-economic issues in business litigation, including financial valuation of publicly traded securities, securities fraud, contract damages and criminal inside-trading cases.

BS, Business Administration, University of Delaware

MBA, Economics and Finance, University of Chicago

PhD, Business Economics, University of Chicago

### **SUDARSHAN JAYARAMAN** **Associate Professor of Accounting**

Professor Jayaraman has research interests in corporate governance and the effects of accounting information in financial markets. His work on corporate governance has examined how large shareholders discipline managers via the threat of exit, and the role that stock market liquidity plays in the design of executive compensation contracts. He is currently interested in the functioning of financial institutions and the propagation of shocks between the banking and industrial sectors.

Professor Jayaraman’s publications have

appeared in *Journal of Accounting & Economics*, *Journal of Accounting Research*, *Journal of Finance*, *Review of Accounting Studies* and *The Accounting Review*. His work is presented not only at academic conferences within the U.S. and around the world, but also at regulatory bodies such as the European Central Bank and the Federal Reserve Bank of New York.

In addition to teaching a PhD seminar, Professor Jayaraman teaches Managerial Accounting in the Masters of Finance and the Executive MBA programs. Prior to joining Simon in 2014, he was at the Olin Business School of Washington University in St. Louis.

B.Com., University of Bombay

MBA, Bentley College

PhD, University of North Carolina, Chapel Hill (Kenan-Flagler)

### **GARRETT JOHNSON** **Assistant Professor of Marketing**

Professor Johnson’s research on Internet Marketing examines the market for online display advertising. His research uses experimental and structural methods to measure ad effectiveness and understand the welfare implications of consumer tracking.

Johnson works with Internet companies—including Facebook, Google and Yahoo!—to answer these questions with Internet-scale data.

BA, Economics, University of British Columbia, Vancouver

PhD, Economics, Northwestern University

### **ROY JONES** **Clinical Assistant Professor of Computers and Information Systems**

Professor Jones’s current research studies markets for information goods and the impact of development costs and the complexity of the development process on market structure. He is broadly interested in the information industries, in particular the economics of information systems, electronic commerce, and the evolution of the information technology industry.

Before pursuing his PhD, Jones was a lecturer for the Stanford University computer science department. In addition, he founded a relational database consulting firm. In this capacity, he worked with *Fortune* 500 firms and start-ups.

BA, History, Stanford University

MS, Computer Science, Stanford University

PhD, Operations, Information and Technology, Stanford University

### **RON KANIEL** **Jay S. and Jeanne P. Benet Professor of Finance; Chairman of the PhD Program**

Professor Kaniel has research interests in the areas of asset pricing, financial intermediation and investments. His research is focused on understanding mutual funds investment decisions and how they impact security prices, the impact of endogenous community effects on investors’ investment decisions and equilibrium prices, and the predictive role of changes in trading volume and investors’ order flow on security returns.

Kaniel has published articles in *The Journal of Finance*, *Journal of Financial Economics*, *Review of Financial Studies*, *Journal of Business*, *Operations Research*, and *Mathematical Finance*. His work has been cited multiple times in *The Wall Street Journal*, the *New York Times* and the *Washington Post*.

Prior to joining the Simon School in 2011, Kaniel was a faculty member at Duke University and the University of Texas at Austin, and was a visiting scholar at Stanford University.

BSc, Mathematics and Computer Science, Hebrew University of Jerusalem

MSc, Computer Science, Hebrew University of Jerusalem

PhD, Finance, Wharton School, University of Pennsylvania

### **DENNIS KESSLER** **Edward J. and Agnes V. Ackley Clinical Professor of Entrepreneurship**

Professor Kessler was co-owner of Kessler Restaurants LLC, a Rochester, NY-based owner and operator of franchised restaurants and real estate development. Kessler has 30 years’ experience in restaurant ownership, real estate and human resource development. He employed approximately 3,000 workers in central and western New York State in the operation of his restaurants. He has owned and operated a number of franchise concepts including Burger King and Friendly’s. At Friendly’s he was the largest franchise restaurant owner in the country. He has also led a number of successful start-up companies and is a member of the Council of Advisors for Gerson Lehrman Group Inc., an international association of academic and industry thought leaders consulting for leading investment professionals worldwide. Kessler is a former member of the board of trustees of the University of Rochester Medical Center and past chair and commissioner of the City of Rochester Civil Service Commission. He is currently a member of the board of Excellus Blue Cross/Shield of Western New York, President of the Rochester Police Foundation, former founding board member of the Young Women’s College Prep Charter School of

Rochester and a founding board member of the Rochester Education Foundation. He is also a founding member and Vice President of the Monroe County Sheriff’s Foundation and a past member of the Farash Foundation Grant Review Board. Kessler is also an advisory board member to Junior Achievement and an inductee in the Rochester Business Hall of Fame Class of ’06.BS, City University of New York

MA, Sociology, John Jay College of Criminal Justice  
MSL, Yale University Law School  
LLM, Northwestern University School of Law  
Certificate of Business Administration, Instituto de Empresa, Madrid, Spain

### **JAEWOO KIM** **Assistant Professor of Accounting**

Professor Kim’s research interests include financial reporting, auditing, tax avoidance, and corporate investment. He is particularly interested in understanding the interaction between accounting information and corporate decisions (e.g., investment, financing, and liquidity management). His current working papers examine the role of accounting for business combinations in explaining the asset growth anomaly, the effect of accounting conservatism on corporate investment, and the effects of CEO career concerns on risk-taking. His teaching interests are in financial and managerial reporting.

Prior to pursuing his PhD, Professor Kim worked as a financial and managerial accountant in a large life insurance firm in Seoul, South Korea.

BA, Economics, Korea University

MBA, Korea Advanced Institute of Science & Technology (KAIST)

PhD, University of Iowa

### **PHILLIP J. LEDERER** **Associate Professor of Operations Management**

Professor Lederer has research interests in operations management and its integration with economic theory. His current research focuses on three areas: the financial justification of manufacturing technology, performance evaluation in operations and competition in network-based industries. His work has appeared in *Econometrica*, the *International Journal of Flexible Manufacturing Systems*, the *Journal of Manufacturing and Operations Management*, the *Journal of Operations Management*, *Operations Research*, *Operations Research Letters*, *Regional Science and Urban Economics* and *Transportation Science*. Lederer is associate editor of the *International Journal of Production Economics* and an occasional referee for *Econometrica*, the *Journal of*

*Accounting and Economics*, *Management Science*, *Operations Research* and the *Review of Economic Studies*. He is a former assistant professor of business administration at the Darden Graduate School of Business Administration at the University of Virginia.

BS, Physics, State University of New York at Stony Brook

MS, Applied Mathematics, Northwestern University

PhD, Applied Mathematics, Northwestern University

### **JOHN B. LONG JR.** **Frontier Communications/Rochester Telephone Professor Emeritus of Business Administration**

Professor Long has research interests primarily in the area of financial economics. In his published articles, he has addressed many of the financial decision problems faced by individuals and firms. These include total savings and portfolio-selection decisions (with particular emphasis on income tax implications and the performance of sophisticated portfolio-selection techniques), investment-project evaluation and dividend-policy choice. In other articles, he addresses the behavior of relative asset prices, the measurement of “abnormal” asset returns, the implications of taxes and inflation for common stock prices and the term structure of interest rates. With Charles I. Plosser, Long has done theoretical and empirical research on fundamental interpretations of fluctuations in economic activity (business cycles). Long is a past editor and advisory editor of the *Journal of Financial Economics* and a member of Beta Gamma Sigma.

BA, Mathematics, Rice University

PhD, Industrial Administration, Carnegie Mellon University

### **MITCHELL J. LOVETT** **Associate Professor of Marketing**

Professor Lovett’s research develops quantitative models of consumers and firms to understand marketing phenomenon. His research studies targeted advertising, advertising content and schedule choices, online and offline word-of-mouth, social media listening, and consumer learning. One stream of Lovett’s research examines the antecedents and consequences of social engagement and word-of-mouth. Recent projects in this stream evaluate the relative importance of paid, earned, and owned media in building new entertainment brands, how brand characteristics influence word-of-mouth online and offline, and how these two channels differ in their content and use. A second stream of Lovett’s research

focuses on applying and developing empirical methods for political marketing. Current projects in this stream study the dynamics behind why candidates go negative in their political advertising, how candidates can improve their targeting of political ads, and the role of social media in influencing voter sentiment.

Lovett's research has been published in top marketing journals including *Marketing Science* and *the Journal of Marketing Research*; received research grants and awards, including the Institute for the Study of Business Markets' Research Grant Silver Medalist Award; and garnered national media attention in relevant trade publications such as the *New York Times*, *Ad Age*, *MSI Insights*, and *Marketing News*.

At the Simon School, Lovett teaches marketing research and advanced marketing topics and has taught advertising and consumer behavior. He was the Sheth Doctoral Consortium Fellow for Duke University where he earned his PhD.

BA, Mathematics, Economics, German, Ohio Wesleyan University

MBA, Boise State University

PhD, Business Administration, Duke University

### **RAVINDRA N. MANTENA** **Clinical Associate Professor of Computer and Information Systems**

Professor Mantena studies economics of digital and information-rich products. His research explores how the increasing information technology content in products alters competition, strategy and market structure. Recent research has focused on issues of pricing, product design and entry in converging digital markets, and also on price and demand evolution in network industries. In addition, he also has research interests in measuring decision performance, revenue management and information economics. Prior to pursuing his PhD in information systems, Mantena worked as a sales manager for a consumer goods multinational firm and founded an aquaculture company in India.

BE (honors), Electrical Engineering, Birla Institute of Technology and Science (India)

MBA, Business Management, Indian Institute of Management (India)

M.Phil, PhD, Information Systems, New York University

### **LAWRENCE J. MATTESON** **Executive Professor of Business Administration**

Professor Matteson brings to the Simon School over 25 years of experience in technology and manufacturing management and in strategy development in large corporations. He teaches

corporate strategy, competitive strategy, marketing strategy and negotiation theory and practice in both the regular MBA and Executive MBA programs. Matteson was previously senior vice president and manager of electronic imaging at Eastman Kodak Company, which he joined in 1965. He holds an MS degree in electrical engineering from Rensselaer Polytechnic Institute and received the Hugh H. Whitney Award for highest academic honors from the School's Executive MBA Program in 1979. He serves on several boards and is active as a management consultant.

BS, Electrical Engineering, Union College

MS, Electrical Engineering, Rensselaer Polytechnic Institute

MBA, Executive Development Program, University of Rochester

### **ANDRÁS MIKLÓS** **Clinical Assistant Professor**

Professor Miklós has research interests in business ethics, medical ethics and health policy. Prior to joining the Simon School, he was a postdoctoral fellow at Harvard University, and held fellowships at the European University Institute, the University of Oxford and the University of Oslo. His research has been published or is to appear in *Utilitas*, *Public Health Ethics* and *Public Reason*.

MA, Political Science, Central European University

PhD, Political Science, Central European University

### **JEANINE MIKLÓS-THAL** **Assistant Professor of Economics & Marketing**

Professor Miklos-Thal's research focuses on analytical modeling of strategic interactions between firms and consumers. Her main areas of expertise are (i) vertical restraints, including exclusive dealing and resale price maintenance, and (ii) how marketing decisions affect consumers' quality perceptions.

Miklos-Thal's research has been published or is to appear in the *RAND Journal of Economics*, the *Journal of the European Economic Association*, *The Economic Journal*, *Management Science*, the *Journal of Marketing Research*, *Quantitative Marketing and Economics*, *Games and Economic Behavior*, *Economic Theory*, and the *International Journal of Industrial Organization*.

Her main teaching interest lie in pricing and game theory.

Prior to joining the Simon School, Miklos-Thal taught at the University of Mannheim, Germany.

She was also a postdoctoral fellow at the European University Institute in Florence, and a visiting scholar at the MIT Sloan School of Management.

Propaedeuse, International Economic Studies, Maastricht University

Propaedeuse, Econometrics, Maastricht University

MA, Economics, Maastricht University

DEA, Economic Theory and Econometrics, University of Toulouse 1

PhD, Economics, University of Toulouse 1

### **DUNCAN T. MOORE** **Vice Provost for Entrepreneurship, Rudolf and Hilda Kingslake Professor of Optical Engineering, Professor of Biomedical Engineering, Professor of Business Administration, and Area Coordinator, Entrepreneurship**

Professor Moore was appointed vice provost for entrepreneurship at the University in 2007. In this role, he oversees the Center for Entrepreneurship and managed the Kauffman Campus Initiative (\$10.6M over five years). Moore is also the Rudolf and Hilda Kingslake Professor of Optical Engineering and professor of business administration at the University of Rochester.

From 2002 until 2004, he served as the president and chief executive officer of the Infotonics Technology Center. From 1995 to 1997, Moore was dean of engineering and applied sciences at the University. From 1997 until 2000 he served as associate director for technology, White House Office of Science and Technology Policy, Executive Office of the President.

Moore teaches an entrepreneurship course to a combined class of engineering graduate students and MBA's.

BA, Physics, University of Maine at Orono

MS, Optics, University of Rochester

PhD, Optics, University of Rochester

### **PAUL NELSON** **Faculty Director of MS Marketing, Area Coordinator for Marketing, and Clinical Professor of Marketing**

Professor Nelson's teaching and research interests are concentrated on the multi-attribute model of consumer behavior, brand management, product positioning and pricing, outsourcing and the Internet. Nelson directs the Brand Management Program at Simon. He recently had marketing articles published in *Marketing Science*, *Management Science* and the *Journal of Retailing* as well as philosophy and information systems journals.

He has served as a reviewer for numerous journals, including *Marketing Science*, *Management Science* and the *Journal of Consumer Research*. Nelson and his co-author, Dan Horsky, won the John D. C. Little Award for the best paper published in 1992 in *Management Science or Marketing Science*, for their paper, "New Brand Positioning and Pricing in an Oligopolistic Market." Nelson has also won the Frank M. Bass Award for the best published marketing paper based on a dissertation. Nelson previously taught at the Krannert Graduate School of Management at Purdue University. He has been inducted into Beta Gamma Sigma, Omicron Delta Epsilon, Pi Mu Epsilon and Phi Beta Kappa.

BA, Mathematics, Economics and Business, Macalester College

MS, Business Administration, University of Rochester

PhD, Business Administration, University of Rochester

### **ROBERT NOVY-MARX** **Lori and Alan S. Zekelman Professor of Finance**

Professor Novy-Marx's research focuses primarily on asset pricing, both theoretical and empirical, though he also works in industrial organization, public finance and real estate.

Novy-Marx earned the American Real Estate and Urban Economics Association Dissertation Award in 2005 and the Western Finance Association's Trefftz Award in 2004 for "An Equilibrium Model of Investment Under Uncertainty." His "Hot and Cold Markets" won the 2010 Mill's Prize for the best paper in real estate economics.

Novy-Marx is also a former professional triathlete, a member of the National Bureau of Economic Research and taught at the Booth School of Business before coming to the Simon School.

BS, Physics, Swarthmore College

PhD, Finance, University of California—Berkeley (Haas School of Business)

### **DAVID J. OLIVEIRI** **Executive Professor of Business Administration**

Professor Oliveiri has held several executive positions over a 30-year career in publishing and law.

He most recently served as group vice president of legal education for West Group (an operating arm of Thomson-Reuters) and president of Foundation Press.

He has held positions as senior vice president

and publisher, vice president of business development, vice president of product systems, and general manager/chief operating officer for various Thomson subsidiaries and operating groups.

Oliveiri began his career at Lawyers Cooperative Publishing in Rochester, NY, where he was a managing editor, and later, an editorial director. He has also served as general counsel at Theatre Confections Inc. and was assistant counsel at Central Trust Bank.

He is a member of the New York State and Monroe County Bar Associations, Beta Gamma Sigma, the Scribes Society of Legal Writers, and the Academy of Legal Studies in Business. He is licensed to practice law before the courts of New York State and the Federal Court of the Western District of New York.

Oliveiri is the author of the revised edition of *Nimmer's Commercial Asset-Based Financing* (Thomson/West), a leading legal treatise. His research interests are in the areas of law and economics as interrelated disciplines, and in particular how the legal environment affects comparative advantage.

BS, Accounting, University at Buffalo

JD, University at Buffalo

MBA, University of Rochester

### **DMITRY ORLOV** **Assistant Professor of Finance**

Dmitry has research interests in several areas of finance and economics including employee performance evaluations, markets for repurchase agreements, and coherent risk measurement. He also studies market microstructure models and general equilibrium asset pricing. Orlov's research has been published in the *Journal of Finance and Mathematical Finance*.

Mathematics, Moscow State University

Data Analysis, Moscow Institute of Physics and Technology

PhD, Financial Economics, Stanford Graduate School of Business

### **MICHAEL A. RAITH** **Associate Professor of Economics and Management**

Professor Raith joined the Simon School in 2002 and teaches MBA and MS courses in organizational and competitive strategy, for which he was named to the Teaching Honor Roll three times. His research interests parallel his teaching interests, and include organizational economics and industrial economics. Professor Raith has worked on pricing strategies in the presence of market uncertainty, the

effects of financial constraints on firms' behavior in product markets, incentive contracting and performance evaluation in organizations, and the interaction between incentives and communication in various organizational situations. Raith's work has been published in the *American Economic Review*, *RAND Journal of Economics*, *American Journal of Economics*, *Journal of Economic Theory*, *International Journal of Industrial Organization*, *Journal of Law, Economics and Organization* and *Journal of Financial and Quantitative Analysis*.

Prior to joining the Simon School faculty, Raith taught at the Graduate School of Business of the University of Chicago. During 2005–06, he visited the University of Southern California's Marshall School of Business, where he received a Golden Apple teaching award. In Fall 2011, he visited MIT's Sloan School of Management, where he taught organizational economics.

Vordiplom, Economics, University of Bielefeld

Vordiplom, Computer Science, Fernuniversität Hagen

Diplom, Economics, University of Bonn

PhD, Economics, London School of Economics

### **ROBERT READY** **Assistant Professor of Finance**

Professor Ready's research interests are in asset pricing, macrofinance, and international finance. His recent research focuses primarily on commodity prices. His current projects include studying how changes in production conditions lead to changes in the riskiness of commodity derivatives, and examining the relation between commodity price risk and currency risk.

BA, Economics, Carnegie-Mellon University

PhD, Finance, University of Pennsylvania

### **RICKY ROET-GREEN** **Assistant Professor of Operations Management**

Professor Roet-Green recently completed two postdoctoral fellowships at the University of Toronto in mechanical and industrial engineering at the Centre for Maintenance Optimization and Reliability Engineering (C-MORE), and in operations management at the Rotman School of Management. Her scholarly interests are in operations research, operations management, service systems, queuing theory, game theory, and mechanism design. Previously, she was an instructor at Tel Aviv University, where she won several awards for teaching excellence.

BA, Economics and Political Science, Tel Aviv University

MA, Political Science, Tel Aviv University  
MSc., Applied Mathematics, Tel Aviv University  
PhD, Operations Research, Tel Aviv University

### HUAXIA RUI Assistant Professor of Computers and Information Systems

Professor Rui's research interests include social media, economics of electronic commerce, health IT, and contract theory. His current research focuses on social media analytics, online word of mouth, and online advertising.

BE, ME, Control Science and Engineering, Tsinghua University  
PhD, Information Management, The University of Texas at Austin (McCombs School of Business)

### WERNER SCHENK Clinical Assistant Professor of Computers and Information Systems

Professor Schenk has professional and teaching interests in computers and information systems as applied to end-user computing, documentation and training, and applications development for office and manufacturing automation. Prior to joining the faculty, he worked as a principal information specialist and manager of programming services for Xerox Corporation. He now consults independently on information systems. He was a visiting professor of management information systems at St. John Fisher College and has held adjunct teaching positions at the Rochester Institute of Technology and the State University of New York at Brockport. He has been a member of the ANSI Committee for Programming Language Standardization and is a co-author of the American National Standards for Information Systems Programming Languages-Fortran.

Professor Schenk is also a member of the International Standards Organization (ISO) as part of a sub-committee defining programming standards for Computer-integrated manufacturing systems (CIMS) and Computer numerical control (CNC)

Professor Schenk is an arbitrator for the American Arbitration Association and a member of the Financial Industry Regulatory Authority (FINRA) Board of Arbitrators.

BA, Mathematics, University of California  
MBA, University of Rochester

### RONALD M. SCHMIDT Janice M. and Joseph T. Willett Professor of Business Administration for Teaching and Service

Since 1971, Professor Schmidt has served as a member of the faculty and as an administrator. He created the school's first international program in 1985 by developing an Executive Development (MBA) Program in partnership with Erasmus University in the Netherlands. In 1997, he initiated the school's Coach Program whereby second-year MBAs serve as coaches for first-year teams.

His teaching areas include managerial economics, organizations and corporate strategy. He received Superior Teaching Awards from the MBA Classes of 1974, 1976, 1983 and 1991. The Executive Development (MBA) Classes of 1984, 1985 and 1988 also chose him for their superior teaching award, as did the Rochester-Erasmus MBA Class of 1987 and the Rochester-Nyenrode Classes of 2000 and 2001.

His publications include papers on pricing, regulation, CEO compensation, organizational design, and economic inequality. His current research activities include an examination of CEO pay and the measurement of income inequality.

He has served as a consultant to several corporations.

BA, Economics, The Ohio State University  
MA, Economics, The Ohio State University

### BRYCE SCHOENBERGER Assistant Professor of Accounting

His research interests lie in financial accounting with specific interest in asset impairments, option markets, and earnings quality. He holds an active CPA license in Colorado following work experience at PricewaterhouseCoopers in the electronic audit support practice.

MA, Univeristy of Colorado, Leads School of Business

PhD, Accounting, University of Southern California (Marshall School of Business)

### G. WILLIAM SCHWERT Distinguished University Professor and Professor of Finance and Statistics

Professor Schwert has research and teaching interests in portfolio and capital-market theory, corporate finance and control, econometrics and time-series analysis, and in the effects of public regulation on business. From 1978 until 1982, his research was sponsored by the National Science Foundation. During 1982, he was the first CRSP Distinguished Research Scholar at the University of Chicago. He

received a Batterymarch Research Fellowship for the 1982–83 academic year. In 1990, he won the Graham and Dodd Plaque for the best paper ("Stock Market Volatility") published in the *Financial Analysts Journal*, and he won a Smith-Breeden Distinguished Paper Award for one of the best papers ("Why Does Stock Market Volatility Change Over Time?") published in *The Journal of Finance*.

Schwert has been an editor of the *Journal of Financial Economics* since 1979 and the managing editor since 1995. He was an associate editor of *The Journal of Finance* from 1983–2000, and he is an advisory editor of the *Journal of Monetary Economics*. His current research deals with the pricing of initial public offerings of stock, the effects of insider trading on the market for corporate control, the effects of anti-takeover devices on takeover activity, and on stock market volatility.

AB (honors), Economics, Trinity College  
MBA, Finance, Econometrics, University of Chicago  
PhD, Finance, Econometrics, University of Chicago

### ABRAHAM SEIDMANN Xerox Professor of Computers and Information Systems; and Area Coordinator, Computers and Information Systems, and Operations Management

Professor Seidmann is the author of over 100 research articles, which appear in many of the leading scientific journals, and has been the founding department editor on interdisciplinary management research and applications in *Management Science* for 10 years. He has been serving as an associate or area editor for *IIE Transactions*, the *International Journal of Flexible Manufacturing Systems*, *Production Planning and Controls*, the *Journal of Intelligent Manufacturing*, the *Journal of Management Information Systems*, and *Production and Operations Management*. His current research and consulting activities include medical informatics, electronic commerce, online auctions, information systems, health care management, business process design, project management and optimal resource allocation, strategic manufacturing systems, information economics, stochastic processes and performance modeling for capacity planning and pricing. In October 2012 Professor Seidmann was named a "Distinguished Fellow" by the Institute of Operations Research and the Management Sciences (INFORMS) and the Information Systems Society of INFORMS. The award was given to Seidmann, in recognition of his contributions to the information systems discipline.

Seidmann is the first faculty member at the University of Rochester to win that honor. In

October 2011, he also won the WITS 2012 Best Instructional Technology award for developing the highly interactive www.TradewindBusiness.com business simulation software. This software has been in use by dozens of leading universities around the globe.

Seidmann has been consulting with many of the leading industrial and service corporations and presented numerous research and executive seminars on four continents. He has won teaching awards from the MBA and Executive MBA classes at the Simon School, as well as from the Rochester-Nyenrode Class of 2003, and the MBA Classes of 1989 and 2009. His research was cited twice on the front page of *The Wall Street Journal*, and he was granted several prestigious prizes at international conferences for publishing outstanding research papers in the areas of information systems, information economics and electronic commerce. These include the Award for Best Research Paper at the 16th International Conference on Information Systems, presented in Amsterdam, the Netherlands. He also won the best paper award at the 1998 Hawaii International Conference on Systems Sciences, in Kohala, Hawaii.

In 1999, the Workshop on Information Systems and Economics gave him a special award for writing "The Best Paper on Information Systems and Economics." He is currently working with clinical teams from the University of Rochester Medical School, University of Texas Medical School and John Hopkins University on the development of innovative ways that leverage on Telemedicine for treating various Neurological disorders including Acute Migranes and Parkinson Disease using special protocols and care maps. He also works on the www.3rdFriday.com application that is designed to match medical students with the respective medical schools that they plan to visit for their residency.

BSc, Industrial and Management Engineering, Technion, Israel Institute of Technology  
MSc, Operations Research, Technion, Israel Institute of Technology  
PhD (cum laude), Industrial Engineering, Texas Tech University

### JOEL SELIGMAN President, University of Rochester

Joel Seligman, president of the University of Rochester since July 1, 2005, also holds faculty positions in the University's Department of Political Science and in the William E. Simon School of Business.

Before he became the University of Rochester's tenth president, Seligman was dean of Washington University's School of Law since 1999. He was dean and Samuel M. Fegly

Professor of Law at the University of Arizona College of Law from 1995 to 1999. He also served on the faculty at the University of Michigan Law School, George Washington University Law School, and Northeastern University Law School.

A graduate of Harvard University, Seligman is one of the nation's leading experts on securities law, and is the co-author, with the late Louis Loss and Troy Paredes, of the 11-volume *Securities Regulation*, the leading treatise in the field, and author of *The Transformation of Wall Street: A History of the Securities and Exchange Commission and Modern Corporation Finance*.

He also has served as reporter for the National Conference of Commissioners on Uniform State Laws, Revision of Uniform Securities Act (1998–2002); as chair of the Securities and Exchange Commission Advisory Committee on Market Information (2000–2001); and as a member of the American Institute of Certified Public Accountants Professional Ethics Executive Committee.

He is the author or co-author of 21 books and over 40 articles on legal issues related to securities and corporations.

AB, Political Science, University of California at Los Angeles  
JD, Harvard University

### GREG SHAFFER Wesray Professor of Business Administration; Professor of Economics & Management and Marketing

Professor Shaffer teaches the course on pricing policies to full-time and part-time MBA students. He has been named to the Teaching Honor Roll numerous times and was awarded the Superior Teaching Award from the MBA classes of 2001 and 2004. Shaffer's research employs game theoretic models to examine pricing-related issues in IO and anti-trust economics. His specialty is in the area of vertical restraints, including exclusive dealing, bundling, slotting allowances, market-share-based contracts and resale price maintenance. He has received research grants from the US National Science Foundation, the Social Science Research Council (USA), and the Social Research Council (UK).

Shaffer's work has appeared in the *American Economic Review*; *Economic Journal*; the *RAND Journal of Economics*; *Journal of Economics and Management Strategy*; *Journal of Law and Economics*; *Journal of Law, Economics and Organization*; *Journal of Industrial Economics*; *International Journal of Industrial Organization*; *Marketing Science*; and *Management Science*. He received *Emerald Management Review's*

Citation of Excellence Award as the author of one of the top 50 management articles of 2002.

Shaffer is a co-editor of the *Journal of Economics and Management Strategy* and an associate editor of the *Journal of Economics and Business*. He has served as a visiting scholar in the two US government antitrust agencies: the Antitrust Division of the US Department of Justice and the Bureau of Economics at the US Federal Trade Commission. Shaffer participated in the writing of the 2001 Federal Trade Commission's report on slotting allowances (payments for retail shelf space), and he has twice given invited testimony on their competitive effects, serving on a three-member panel investigating this practice at the *Hearings on Global and Innovation Based Competition* (1995) and again at the Federal Trade Commission's sponsored workshop on slotting allowances (2000).

Prior to joining the Simon School in 1997, Shaffer taught in the economics departments at Indiana University (Bloomington, Ind.) and the University of Michigan (Ann Arbor, Mich.). He has held an appointment at Princeton University's Woodrow Wilson School, and he has been a visiting scholar in the marketing department at Northwestern University's Kellogg School of Management.

In addition to his teaching and research duties at the Simon School, Shaffer has an appointment in the School of Management at the University of East Anglia (Norwich, UK). He is also the founder of the Center for Pricing.

BA (high honors), Economics and Mathematics, Swarthmore College  
MA, Economics, Princeton University  
PhD, Economics, Princeton University

### CAROL C. SHUHERK Clinical Assistant Professor of Business Communication

Professor Shuherk has extensive experience in the areas of leadership development and organizational change, in academia and private industry. Prior to joining the Simon Business School faculty, she was Senior Associate Provost for the University of Rochester where she created the first University-wide orientation and career development programs for new faculty, UR Year One, introduced leadership education for newly appointed academic department chairs and division chiefs, Conversations in Academic Leadership, and collaborated with faculty from each of the University's seven schools to design the Future Faculty Workshop, aimed at preparing doctoral students and post-doctoral fellows for their job searches and academic careers. She was a partner in

the work of the University's Office of Diversity & Faculty Development and a co-investigator/author of its 2010 Diversity Report, subsequently charged with implementing its recommendations for improving the experience of new, underrepresented faculty, and strengthening the capacity of department chairs' to lead in diverse academic communities.

Before coming to Rochester Shuherk established the University of Arizona's Program for Academic Leadership, creating seminars, conferences and consulting services for the UA's 125 academic department heads. Prior to that she was a faculty member at the University of Southern California's Marshall School of Business and academic director of its full-time MBA program.

As a long-term consultant to the *Los Angeles Times*, Carol led development of the Newspaper Management Institute, executive education for 200 mid-level Times managers, and collaborated with newsroom leaders to create Editing Excellence, leadership education for new editors. She has consulted with firms ranging from Fortune 50 media conglomerates to family-owned machine shops.

PhD, Rhetoric and Communication, University of Oregon

**CLIFFORD W. SMITH JR.**  
**Louise and Henry Epstein Professor of Business Administration and Professor of Finance and Economics**

Professor Smith has research interests in the fields of corporate financial policy, derivative securities, and financial intermediation. He has published 16 books and over 90 articles in leading finance and economics journals. Students in the Executive MBA Program have given him their Superior Teaching Award 21 times; students in the MBA Program have given him their Superior Teaching Award 16 times. In 2003, he received the FMA Fellows Award by the Financial Management Association International. He was named Distinguished Scholar by the Southern Finance Association in 2000, and Distinguished International Visiting Scholar by the British Accounting Association in 1991. In 1986, he was given the first Special Award for a Perfect Teaching Rating by the School; in 1983, he was chosen a University Mentor in recognition of his scholarship and teaching.

He is currently chairman of the board of Home Properties, a multifamily real estate investment trust (REIT) with operations primarily along the East Coast of the United States, and was formerly chair of the compensation committee, chair of the governance committee, and lead director.

Smith has served as president of the Risk Theory Society, president of the Financial Management Association National Honor Society, vice president for Global Services of the Financial Management Association International, vice president of the International Economics and Finance Society, a member of the board of advisors of the International Association of Financial Engineers, and a member of the board of directors of the Financial Management Association and the Southern Finance Association. He is an advisory editor of the *Journal of Financial Economics*; an associate editor of the *Journal of Risk and Insurance*, *Financial Practice and Education*, the *Review of International Economics*, the *Journal of Financial Services Research*, the *Journal of Derivatives*, and the *Journal of Financial Research*; a member of the editorial board of the *Review of International Economics*; and a member of the advisory board of the *Journal of Applied Corporate Finance*, *The Financier*, *Contemporary Finance Digest*, and *The Arbitrageur*. His paper, "Trading Cost for Listed Options: The Implications for Market Efficiency" (with Susan M. Phillips), was awarded the Pomerance Prize for Excellence in Options Research by the Chicago Board Options Exchange for 1980; his paper, "On the Convergence of Insurance and Finance Research," was awarded the Alpha Kappa Psi-Spangler Award by the American Risk and Insurance Association for 1996.

BA, Economics, Emory University  
PhD, Economics, University of North Carolina at Chapel Hill

**ERIN SMITH**  
**Assistant Professor of Finance**

In her dissertation, "Do Shareholders Want Less Governance?" Smith uses over-voting as a novel instrumental variable that increases the likelihood of passing anti-takeover provisions, finding that such provisions increase shareholder value.

She has been awarded the Best Finance PhD Dissertation in Honor of Stuart Greenbaum by Washington University in St. Louis and the Edwin Elton Prize for Best Job Market Paper by New York University, Stern School of Business. Smith visited the Securities and Exchange Commission during 2014.

BA, Engineering and Economics, Dartmouth College.

PhD, Finance, New York University (Stern)

**VERA TILSON**  
**Associate Professor of Operations Management**

Professor Tilson's research interests are in health care operations, supply chain management, and stochastic scheduling. Her teaching interests are in quantitative business modeling and in operations management. She has received a superior MBA teaching award, and multiple teaching honor roll recognitions. She has industrial experience as a software engineer and project manager in telecommunications, medical instrumentation, supply chain software and financial industries. Her research has been published in *Management Science*, *Operations Research*, *MSOM*, *Production and Operations Management Journal*, *Decision Support Systems*, *European Journal of Operations Research*, *International Journal of Production Economics*, and other scientific and industry publications.

SB, Electrical Engineering, Massachusetts Institute of Technology  
MS, Applied Mathematics, Colorado School of Mines

PhD, Operations Management, Case Western Reserve University

**HEIDI TRIBUNELLA**  
**Faculty Director of MS in Accountancy; Clinical Associate Professor of Accounting**

Professor Tribunella has served as an auditor for two national firms, Deloitte & Touche and PricewaterhouseCoopers LLP. At those firms, she served clients in the health care industry as well as mid-sized firms. Tribunella, also a New York State Certified Public Accountant, spent over five years in industry as a manager of financial reporting for two different health care companies. Prior to joining the Simon School faculty, she taught a variety of business and accounting courses at various colleges.

Tribunella has an interest in accounting and auditing research and has published articles in the *CPA Journal*, the *Journal of Business and Economics Research*, the *Journal of College Teaching and Learning*, the *Review of Business Information Systems*, and the *Accounting Information Systems Educator Journal*.

Tribunella has received Best Paper Awards at the International Business and Economics Research Conference and the Accounting Information Systems Educators' Conferences.

BS, Accounting, State University of New York at Geneseo

Certified Public Accountant, New York State License

MS, Accountancy, State University of New York Institute of Technology

**JEROLD B. WARNER**  
**Fred H. Gowen Professor of Business Administration; Professor of Finance and Area Coordinator, Finance**

Professor Warner has teaching and research interests in portfolio theory, capital markets, and corporate finance. He is currently an associate editor of the *Journal of Financial Economics*. He is a former member of the faculty of the University of Chicago Booth School of Business.

BS, Economics, University of Pennsylvania  
MA, Operations Research, Yale University  
MBA, Economics and Finance, University of Chicago

PhD, Economics and Finance, University of Chicago

**CHARLES E. WASLEY**  
**Joseph and Janice Willett Distinguished Scholar; Area Coordinator, Accounting**

Professor Wasley's teaching interest is the financial reporting area. His research interests encompass the role of accounting information in capital markets. He currently serves as an associate editor of the *Journal of Accounting and Economics*. His current research focuses on the rational pricing of earnings, cash flows, and accruals; measuring real activity management; the role of management earnings forecasts in the bond market; management cash flow forecasts; information externalities in capital markets; the determinants of insider trading windows; and the role of materiality as a determinant of firms' disclosure decisions.

Recent publications include "Soft-Talk Management Cash Flow Forecasts: Verifiability, Credibility, and Stock Price Effects," forthcoming in *Contemporary Accounting Research*, 2012 and "Information Externalities along the Supply Chain: The Economic Determinants of Suppliers' Stock Price Reaction to Their Major Customers' Earnings Announcements," *Contemporary Accounting Research*, 2011.

Wasley's research has been published in the *Journal of Accounting and Economics*, *The Accounting Review*, *the Journal of Accounting Research*, *the Journal of Finance*, *the Journal of Financial Economics*, *Contemporary Accounting Research*, *the Journal of Accounting, Auditing and Finance*, *the Journal of Portfolio Management*, and *the Review of Quantitative Finance and Accounting*.

Prior to his appointment at the Simon School, Wasley was a faculty member at Washington University in St. Louis and The University of Iowa.

BS, Accounting, State University of New York at Binghamton

MS, Accounting, State University of New York at Binghamton

PhD, Accounting, The University of Iowa

**GERARD J. WEDIG**  
**Academic Director of Health Care Programs; Associate Professor of Business Administration**

Professor Wedig's research interests involve the application of corporate finance, governance, organizational economics and incentives to the health care industry. He has studied the investment and financing decisions of hospitals and nonprofit entities, incentive payment systems for physicians and hospitals, and a variety of other issues in health economics, including the incentive effects of Medicare and Medicaid payment systems on costs, insurance coverage and charity care. His current research focuses on the organizational economics of the managed care industry. Wedig's publications have appeared in *The Journal of Finance*, *the Journal of Business*, *the Review of Economics and Statistics*, *the Journal of Health Economics*, *Health Affairs*, *Medical Care Research and Review* and other journals. In addition, he has been the recipient of numerous research grants from the Centers for Medicare and Medicaid Services (formerly HCFA) and the Robert Wood Johnson Foundation.

Wedig teaches courses in organizational economics as well as the corporate finance and governance of health care organizations. He has consulted to numerous medical organizations including hospitals, HMO's, physician groups, pharmaceutical firms and consulting firms on issues of health care finance. Prior to joining the Simon School, Wedig taught at Boston University's School of Management, the Wharton School at the University of Pennsylvania, and Indiana University's Kelley School of Business.

BS (summa cum laude), Economics, Washington University (St. Louis)

MA, Economics, Harvard University

PhD, Economics, Harvard University

**KURT WOJDAT**  
**Clinical Assistant Professor of Accounting**

Professor Wojdat gained public accounting experience working for two years as an auditor with Peat Marwick and Mitchell. A certified public accountant, he spent five years at Warner Lambert engaged in internal auditing, cost accounting, financial analysis and treasury activities. He then performed financial planning and analysis functions at Xerox Corporation for three years. After receiving his doctoral degree, he taught at Syracuse University for one year before joining the Simon School faculty.

BS, Accounting, State University of New York at Albany

MBA, Finance, University of Rochester

PhD, Accounting, University of Buffalo

**JOANNA SHUANG WU**  
**Susanna and Evans Y. Lam Professor of Accounting**

Professor Wu's research spans the areas of international financial reporting, the behavior of financial analysts, management compensation, voluntary disclosure, and mutual fund performance. Her work has been published in the *Journal of Accounting and Economics*, *Journal of Finance*, *Journal of Accounting Research*, and *The Accounting Review*, among others. She has been named to the Simon School Dean's Teaching Honor Roll numerous times.

Professor Wu is an editor of the *Journal of Accounting and Economics*.

BA, International Economics, Beijing University  
MA, Economics, Tulane University

PhD, Business Administration, Tulane University

**JEROLD L. ZIMMERMAN**  
**Ronald L. Bittner Professor of Business Administration and Professor of Accounting Professor Emeritus**

Professor Zimmerman's research and teaching interests involve financial and managerial accounting. In 2004, he and Professor Ross L. Watts (at MIT) received the American Accounting Association Seminal Contribution to the Accounting Literature Award, the most prestigious research award in the field of accounting. They received the American Institute of Certified Public Accountants Award in 1979 and 1980 for their joint papers. Zimmerman was the 1978 winner of the Competitive Manuscript Award, sponsored by the American Accounting Association, for his paper, "The Costs and Benefits of Cost Allocation." The Watts/Zimmerman research, which has come to be called "positive theories of accounting," seeks to understand the costs and benefits of various accounting procedures. He and Watts co-authored a book, *Positive Accounting Theory*, published by Prentice-Hall in 1986.

Zimmerman's current research includes: "Corporate Governance Myths: Comments on Armstrong, Guay, and Weber," with James A. Brickley (*Journal of Accounting and Economics*); "Unintended Consequences of Granting Small Firms Exemptions from Securities Regulation: Evidence from the Sarbanes-Oxley Act," with Feng Gao and Joanna Shuang Wu (*Journal of Accounting Research*); and "The Joint Effects of Materiality Thresholds and Voluntary Disclosure



Incentives on Firms' Disclosure Decisions," with Shane Heitzman and Charles Wasley (*Journal of Accounting and Economics*).

The sixth edition of *Managerial Economics and Organizational Architecture* by James A. Brickley, Clifford W. Smith Jr. and Jerold L. Zimmerman was published by McGraw-Hill/Irwin in 2015. Brickley, Smith, Zimmerman and Janice Willett authored a popular version of this text entitled *Designing Organizations to Create Value* published by McGraw-Hill in 2003. The seventh edition of Zimmerman's textbook, *Accounting for Decision Making and Control*, was published by McGraw-Hill in 2011.

Zimmerman is a founding editor of the *Journal of Accounting and Economics*. He was also a distinguished faculty member of the American Accounting Association's Doctoral Consortium, and a visiting professor at Chinese University of Hong Kong, Hong Kong University of Science and Technology, Hong Kong University, and Hong Kong Polytechnic University. He was on the board of directors of IEC Electronics and on the company's audit and compensation committees.

BS (cum laude), Finance, University of Colorado  
PhD, Business Administration, University of California at Berkeley

**MARK ZUPAN**  
**Director, Bradley Policy Center, Olin Professor of Economics and Public Policy**

Dr. Mark Zupan is the Olin Professor of Economics and Public Policy as well as the Director of the Bradley Policy Research Center at the University of Rochester's Simon Business School. Prior to that, he served two terms as dean of both the Simon School and the University of Arizona's Eller College of Management. He has also been an associate dean of masters programs and faculty member at USC's Marshall School of Business, a visiting faculty member at Dartmouth's Tuck School of Business, and a visiting scholar at the Cato Institute. He earned a B.A. in economics from Harvard (1981) and a Ph.D. in economics from MIT (1987).

While a graduate student at MIT, Zupan won Harvard University's Allyn Young Teaching Prize in Economics (1983 and 1984) as well as the campus-wide Joseph R. Levenson Memorial Teaching Prize (1985). At USC, Zupan won both the Marshall School's Golden Apple teaching award and the University's Burlington Resources Foundation Faculty Achievement Award for scholarship.

Zupan has authored two books and over forty scholarly articles. His opinion pieces have appeared in outlets such as the New York Times, Wall Street Journal, Los Angeles Times, Arizona Republic, BloombergBusinessweek.com, Kiplingers, Tucson Daily Star, Rochester

Democrat and Chronicle, Rochester Business Journal, and Huffington Post. He is presently working on a book titled "Co-Opting the State from Within: How Government Insiders Subvert the Public Interest" that is slated to be published by Cambridge University Press in 2016.

Dr. Zupan is a member of the board of directors/trustees for AACSB, the Harley School, HNP Capital, and iVEDiX. He has served on the board of trustees for the Harley School, an independent N-12 school in Rochester attended by his two sons, for eight years and chaired its board from 2013-2015. In prior years, he has served on the boards of the Graduate Management Admissions Council (GMAC), Constellation Brands, PAETEC Holdings, the Farash Corporation, Stocker Yale, Northern Trust (southwest region), and the United Way of Southern Arizona (he chaired their annual campaign in 2002). He has also served on the editorial boards for academic journals such as *Public Choice*, *Economic Inquiry*, and the *Journal of Business Economics*.

BA, Economics, Harvard University  
PhD, Economics, Massachusetts Institute of Technology

**ELLEN ZUROSKI**  
**Senior Lecturer**

Professor Zuroski has teaching and research interests in cross-cultural communication and second language acquisition. Her work for educational and corporate institutions includes design implementation of numerous communication skills courses and workshops, as well as coordinating translations and editing of marketing, training and instructional publications for internal use. Her clients have included Eastman Kodak Company, Gleason Corporation, Bausch & Lomb, Volvo and Saatchi & Saatchi Ltd.

Zuroski has served as a language arts educational consultant with public television and has written and produced a number of nationally syndicated educational television programs. She was awarded a Kellogg Foundation Fellowship in International Development for her work in fostering educational and enterprise initiatives among U.S., Latin American and Caribbean partners.

BA, English Literature and Asian Studies, Cornell University  
MS, Education, University of Rochester  
PhD (candidate), University of Rochester

**VISITING FACULTY**

**GREGORY H. BAUER**  
**Visiting Assistant Professor of Finance**

Professor Bauer is assistant director and research adviser in the Financial Markets Department at the Bank of Canada. At the bank, he is responsible for managing a group of nine PhD researchers who specialize in analyzing fixed income and foreign exchange markets. In addition, he coordinates the department's annual research workshops.

His main area of research is international finance. He has published papers in the *Review of Economic Studies*, the *Journal of Financial Economics*, the *Journal of Econometrics* and the *Journal of International Money and Finance*, as well as in several policy-oriented journals. He is currently working on incorporating macroeconomic factors into term structure models using high frequency data.

Bauer holds the Chartered Financial Analyst (CFA) designation. Prior to obtaining his doctorate, Bauer was a foreign exchange trader at the Bank of Canada and a macroeconomist at the Ontario Ministry of Finance. Bauer is a four-time winner of the Superior Teaching Award from the Simon MBA program and a multiple winner of awards from the Executive MBA program.

BA, Applied Economics, University of Waterloo  
MA, Economics, Queen's University  
MA, Finance, University of Pennsylvania  
PhD, Finance, University of Pennsylvania (Wharton)

**SHIMING FU**  
**Visiting Assistant Professor of Finance**

Professor Fu is visiting Simon from the Fuqua School of Business at Duke University, where he recently completed a PhD. His research interests are in financial economics, corporate finance, and dynamic contracting.

BA, Economics, Nankai University  
MS, Economics, Arizona State University  
PhD, Finance, Fuqua School of Business at Duke University

**THE ADJUNCT FACULTY**

**DANIEL J. BURNSIDE**  
**Lecturer in Finance**

Dan is director of quantitative research at Rochester money manager Clover Capital Management. He has held various roles in the investment, risk management and financial planning fields, and has worked extensively with both individual and institutional clientele. His teaching goal is to provide students with the knowledge to bridge the gap between the academic theories and the practitioner world of money management.

Burnside is a chartered financial analyst (CFA) and a certified financial planner (CFP).

BS, Engineering, Cornell University  
MS, Engineering, Cornell University  
MBA, University of Rochester  
PhD, Engineering and Mathematics, Cornell University

**BARRY A. FRIEDMAN**  
**Lecturer in Economics and Management**

Professor Friedman's professional interests include leadership, management effectiveness, human resource management, and organizational behavior. His corporate experiences include Xerox, ExxonMobil and Harris Interactive. He has published over 80 conference and journal articles in such journals as the *Journal of Applied Psychology*, *Personnel Psychology*, *Industrial Relations*, and the *Journal of Educational Administration*. He has taught in Singapore, Germany, China, Japan, and Turkey.

BS, Psychology and Political Science, University of Rochester  
PhD, Industrial and Organizational Psychology, The Ohio State University

**W. BARRY GILBERT**  
**Executive Lecturer in Business Administration and E-Commerce**

Mr. Gilbert recently served as CEO and chairman of the board of IEC Electronics Corporation and has served on a number of advisory boards.

He served as president of the Thermal Management Group of Bowthorpe Plc. from 1991 until 1999, where he had responsibility for eight manufacturing locations in the U.S., Mexico, Hong Kong, Malaysia, England, Italy and Germany.

Prior to Bowthorpe, Gilbert served as corporate vice president and division president for Milton Roy Company, a mid-sized NYSE company, and held several senior leadership roles for Bausch

& Lomb, Inc., concluding with becoming a division president for the company. Gilbert started his commercial career at Ernst & Young in New York City in its public accounting and management consulting groups.

In 1992, Gilbert was given the Simon School Distinguished Alumnus Award.

BS, Accounting (Honor Society), The Ohio State University  
MBA, Finance, Applied Economics, University of Rochester

**HARRY HOWE**  
**Lecturer in Accounting**

"I have a particular passion for the Financial Statement Analysis course. It's the course that tells the finance concentrators where the numbers come from, and where they should be skeptical or critical of the information provided in the 10-K's. It's the course that tells the accountants how the numbers they produce are going to be used – what matters to the consumer. And it's the course that brings elements of accounting, finance and strategy together into a new whole. I think it's one of the most important courses in the whole business curriculum." Howe has received several awards for teaching, active learning, scholarship and service. He continues active board service with the Rochester FEI and NYSSCPA chapters, is a past president of the Northeast AAA region and a 2011 inductee to its Hall of Fame. Prior to entering graduate school Howe worked in the construction and commercial real estate industries. Howe's avocational interests include bicycle touring, history and foreign travel. He is married to the photographer Lauren Howe, and their two sons are Benjamin (Captain in the USMC) and Noah (Congressional intern).

Harry Howe has twenty years of experience as an accounting instructor at both graduate and undergraduate levels. He has taught all the courses in the financial accounting sequence and, SUNY Geneseo (where he holds the rank of Professor) Howe developed the Financial Statement Analysis course and has taught that numerous times. His other teaching assignments have included AIS, Strategy, Finance and sections of the Western Humanities course.

Howe's research has addressed issues in business valuation (his PhD dissertation area), financial reporting for employee stock options and pedagogy. He co-authored two volumes in the BNA Policy and Practices series and a text on IT auditing published by Wiley. His papers and case studies have been widely presented in conferences and have published in *The Journal of Legal Economics*, *The Journal*

*of Business Valuation and Economic Loss Analysis*, *Issues in Accounting Education*, *The Journal of Accounting Education*, *The CPA Journal*, *Simulation and Gaming* and other journals.

BA, Brown University  
MBA, Union College  
PhD, Union College

**RICHARD C. INSALACO**  
**Lecturer in Finance**

Mr. Insalaco is the senior investment officer and assistant treasurer in the University of Rochester Investment Office, which manages and invests the University's endowment and affiliated funds as well as the University's operating capital. Mr. Insalaco's areas of responsibility include multi-strategy hedge funds, private equity, venture capital, distressed debt, fixed income, cash funds, and risk management; he also has responsibility for managing and investing the University's operating capital. He joined the University in 2007, after serving as a senior financial analyst and trader at the New York Federal Reserve Bank, where he worked on the Open Markets trading desk, from which the Fed implements monetary policy. In that capacity, he provided advice to senior Federal Reserve and treasury officials on macroeconomic issues and market developments, and oversaw the Open Market Desk's customer trading operations. Prior to this, Mr. Insalaco briefly worked as an investment banker in the financial institutions group at Smith Barney. He began his career as a corporate and securities attorney in San Francisco, where he practiced for seven years before returning to academia to attend business school.

Mr. Insalaco is a Chartered Financial Analyst (CFA) and a member of the Rochester CFA Society. He is also a member of the California, New York, and New Jersey bars, and is the co-author, with (former) US Senator Peter Fitzgerald, of Note, "Denying the Crime and Pleading Entrapment: Putting the Federal Law in Order" in the *University of Michigan Journal of Law Reform*. Mr. Insalaco serves on several non-profit boards in Rochester.

BA (Magna Cum Laude, Phi Beta Kappa), Political Science, University of Rochester

JD and MBA, University of Michigan

**RAMI KATZ**  
**Lecturer in Entrepreneurship**

Rami Katz is the Chief Operating Officer for Excell Partners, a VC fund that invests in high-tech startups in New York State focused on Upstate NY. Rami manages Excell's due-diligence and investment processes, managing a

team of venture analysts. Post investment, Rami takes an active role with the fund's portfolio companies as a member of the board of directors as well as by providing executive mentoring to the management team.

Prior to joining Excell, Rami played an active role in commercializing new technologies, as an entrepreneur, investor and a consultant working with regional incubators, entrepreneurs and researchers to develop business plans that secured over \$40M in funding.

MBA, University of Rochester  
JD, Tel-Aviv University

### **GREGG LEDERMAN** **Lecturer in Marketing**

Mr. Lederman is the founder of Brand Integrity Inc. and co-creator of the Achieving Brand Integrity™ process. With over 15 years of experience as a business and marketing strategy professional, Lederman is an entrepreneur who has owned and operated several businesses in the Rochester area prior to founding Brand Integrity Inc.

Brand Integrity focuses on facilitating senior management teams to achieve alignment and consensus in regards to an “ultimate business strategy,” the brand strategy, and creating actionable ways to live it internally through people and processes. Brand Integrity Inc. works with leadership to achieve employee “buy-in” to the brand strategy to ensure sound execution and to establish accountability for performance, which in turn leads to increases in employee productivity, loyalty among existing customers, and greater sales to new customers. Lederman has crafted and implemented organization-wide and product-specific brand strategies with many of today's leading companies including Wegmans Food Markets Inc., Hallmark Cards Inc., Erickson Communities, PAETEC Holding Corp., Corning Incorporated, Duke Energy, Frito-Lay and the American Red Cross.

Throughout the year, Lederman delivers keynote interactive presentations at various conferences across the country. Lederman is a board member with the Learning Disabilities Association, the Genesee Valley Trust Advisory Board, and the Simon School Alumni Council.

BS, Ithaca College School of Business  
MBA, University of Rochester

### **ROBERT M. PLACE** **Lecturer in Business Law**

Mr. Place has been a practicing attorney for 32 years and utilizes this experience in teaching for the University of Rochester. He taught social studies at the junior and senior high school

level for four years before attending law school at Syracuse University.

He was a partner in the law firm of Place & Arnold, a general practice which represented local municipalities, real estate, matrimonial, bankruptcy and estate clients. His varied legal experience gives students a practical understanding of business law.

AS, Liberal Arts, Monroe Community College  
BS, US and European History, SUNY College at Oneonta  
MS, Social Science Education, SUNY College at Oneonta  
JD, Syracuse University

### **MICHAEL RIEDLINGER** **Lecturer in Entrepreneurship**

Mr. Riedlinger is currently Program Manager for Technology Commercialization and Manager of the Rochester BioVenture Center for High Tech Rochester where he runs several programs throughout Upstate New York for entrepreneurial ventures in biotechnology, medical devices, sustainable energy, optics, and web/mobile applications.

He also serves as a board member for DG Tech Investors, Inc., the Business Incubator Association of New York State and the Industrial Advisory Board of the Cornell Center for Materials Research.

Prior to joining HTR, Riedlinger was a co-founder of Diffinity Genomics, Inc. which commercialized technology from the U of R Department of Chemistry for applications in the life science industry. Diffinity Genomics was sold to a multi-national organization and now functions as part of Chiral Technologies. Mr. Riedlinger also co-founded and served as president of NaturalNano, which went from start-up concept to a publicly-traded firm under his management. The company developed technologies based on naturally occurring materials with nanoscale attributes that were adapted for specialty cosmetics, polymers, and nanocomposite applications

His consulting firm, Technology Sales and Licensing Services, has provided support to entrepreneurs and organizations throughout the Finger Lakes Region since 2002. Projects included market assessments for new technologies in sustainable energy and manufacturing practices, applications for new materials in medical devices and new market opportunity development for mid-sized businesses that faced declining revenues in existing markets.

Additional experience includes roles as managing director of VitalWork, an organizational development firm, and sales and marketing roles for computer software development services and consumer products at Metamor

Software Solutions, Selectronics, and Microlytics.

BFA, Rochester Institute of Technology

MBA, Finance and Accounting, University of Rochester.

### **PAUL F. SHANAHAN** **Lecturer in Business Law**

Mr. Shanahan is a lawyer admitted to practice law before all federal and state courts in New York State and the District of Columbia. He maintains an active statewide practice with emphasis on commercial and civil litigation. Shanahan has published various articles in the *Albany Law Review* and the *International Practitioner's Notebook*. He has lectured extensively to legal and professional groups, speaking on a number of topics concerning the civil justice system. Shanahan has served as an arbitrator for various legal disputes. His research interests include the role of legal regulation in reducing systemic risk to the financial system. He has taught at Simon continuously since 1984. His excellence in teaching includes election by his students to the Simon Teaching Honor Roll.

Shanahan is a three-time recipient of the President's Distinguished Service Award by the New York State Trial Lawyers Association. He is a founding member of the New York Trial Lawyers Academy and a member of the American Board of Trial Advocates. He has served as both an officer and director of the New York State Trial Lawyers Association.

Shanahan's community service has included serving as a trustee of the Manlius Pebble Hill School and as a guest commentator for the *Rochester Democrat & Chronicle*, the *Rochester Business Journal*, and the *Rochester Daily Record*.

BS (cum laude), Management Law and Economics, Rensselaer Polytechnic Institute

JD, Albany Law School of Union University  
(Member, *Albany Law Review*)

### **BOB TOBIN** **Lecturer in Entrepreneurship**

Prior to his appointment at the University of Rochester, Mr. Tobin was president and CEO of Tobin & Associates Inc., an information technology services firm that was established in 1987. Over the next 20 years, the company grew from six employees to over 140, while extending the core competencies and capabilities to better meet the evolving technical requirements of its clients.

Tobin & Associates Inc. was a seven-time recipient of the Rochester Top 100 Award and also received the Quality First Award from Eastman

Kodak Company. Tobin & Associates Inc. was also awarded the Empire State Employer

Recognition Award, earning statewide praise for its proactive employment efforts on behalf of physically challenged individuals. In addition to his business and education pursuits, Tobin is very active in the Rochester community. He was an inaugural member of the Entrepreneurial Partnership of Nazareth College. He is past president of the Small

Business Council of the Greater Metro Rochester Chamber of Commerce, past board president of the Rochester Rehabilitation Center and past president of Prevention Partners, a drug use prevention and education agency.

He is currently Board President at Coordinated Care Services, Inc. and a board member of the collaboration project. He is also a member of the Advisory Board of Teen Empowerment. Tobin was named Small Business Person of the Year by the Small Business Council of the Greater Metro Rochester Chamber of Commerce and Citizen of the Year by the Penfield (NY) Lions Club.

BA, Sociology, Seton Hall University

### **THOMAS TRIBUNELLA** **Lecturer in Accounting**

Professor Tribunella's teaching and research interests are in the fields of accounting and information systems. He has published papers related to markup languages such as XML and XBRL, open source accounting systems, and technology's effect on productivity. He has also won four best paper awards at academic conferences. Examples of his publication appear in the following outlets, among others: *Journal of Information Systems*, *The CPA Journal*, *The Review of Business Information Systems*, *Journal of Global Information Management* and *Journal of Business and Economics Research*.

Tribunella worked in industry as an auditor and accountant before beginning a career in academia. He has been on the faculty at the Rochester Institute of Technology, SUNY Institute of Technology, SUNY Oswego and SUNY Geneseo. He is currently teaching Accounting Information Systems, Management Information Systems, Auditing and Information Systems, and Cost Accounting.

BBA, Accounting, Niagara University  
Certified Public Accountant, New York State License

MBA, Accounting, Rochester Institute of Technology

PhD, Information Science, State University of New York at Albany

### **MARK W. WILSON** **Lecturer in Entrepreneurship**

Mr. Wilson founded Initiatives Consulting LLC in 1997 to help clients turn technical ideas into new products and companies. Initiatives Consulting, LLC has created business plans, marketing support, and road show coaching that has been instrumental in starting six companies, raising several million dollars of seed money, and launching four new medical devices; including most recently a proprietary syringe-product and a device to reduce catheter-related blood stream infections.

Since 2004, Wilson's training company (www.networks.biz) has taken nearly 500 teams through an intense workshop to jump-start their technology-based product ideas. This program has launched well over 100 pre-seed stage companies out of university research and patents which have gone on to collectively raise over \$100 million in equity funding. (www.preseedworkshop.com).

With diverse roles prior to Initiatives in product design, process engineering, optical tooling, lean manufacturing and automation, Wilson has been involved in the creation and launch of five new medical device platforms currently generating more than \$1 billion in annual sales. As a part-time academic, Wilson is driven to simplify, quantify, and systematize the fuzzy-front-end of innovation.

BS, Mechanical Engineering, Rensselaer Polytechnic Institute

MS, Mechanical Engineering, Rensselaer Polytechnic Institute

## **THE STAFF**

We have an experienced and dedicated staff that support the faculty and students of the Simon School.

Faculty have individually assigned staff who can serve as liaisons to the students on coursework and research-related matters. The staff offices are located in close proximity to the faculty for optimal support and effectiveness for the students.

**MBA REQUIREMENTS AND CORE COURSE SEQUENCES**

**Full-Time MBA Program**

To earn the Master of Business Administration degree, a student must complete 68 credit-hours of study with a 3.0 grade-point average. Full-time MBA candidates must also successfully complete a Communicating Business Decisions course sequence.

The MBA curriculum consists of nine required core courses, plus a Communicating Business Decisions course sequence over the first year.

Waivers are permitted for some of the core courses. The list of core courses for which waivers are permitted and the details of the waiver policy are available on internal Websites at Simon. Waivers do not reduce the number of credits needed to get the MBA degree.

Additionally, 11 electives, and one additional for each waived core course, are required. Although not required, students may complete a concentration. Most opt for at least one and, in many cases, two. Concentrations permit students to develop expertise in the following areas:

- Business Systems Consulting
- Competitive and Organizational Strategy
  - ◊ Strategy and Organizations track
  - ◊ Pricing track
- Computers and Information Systems
- Corporate Accounting
- Entrepreneurship
- Finance
- Health Sciences Management
- International Management
- Marketing
  - ◊ Marketing Strategy track
  - ◊ Brand Management track
  - ◊ Pricing track
- Operations Management
- Public Accounting

Much of the academic work in the MBA program will rely on computer-based analysis and computer-assisted presentations. Upon entry to the program, faculty will expect students to have a working knowledge of spreadsheet and word-processing software. The programs most widely used are Microsoft Excel and Access.

**CORE COURSES**

- ACC 401. Corporate Financial Accounting
- CIS 401. Information Systems for Management
- FIN 402. Capital Budgeting and Corporate Objectives
- GBA 411. Business Modeling
- GBA 412. Data Analytics
- MKT 402. Marketing Management
- OMG 402. Operations Management
- STR 401. Managerial Economics
- STR 403. Organization and Strategy
- MGC 401. Interpersonal Persuasion
- MGC 402. Communicating Analytics
- MGC 403. Teamwork
- MGC 411. Advanced Persuasion

**Traditional Two-Year MBA Program**

PRE-FALL (6 wks)	FALL QUARTER	WINTER QUARTER	SPRING QUARTER
<b>GBA 412 Data Analytics</b> Billable Credits: 3 Total Credits: 3	<b>GBA 411 Business Modeling</b> Billable Credits: 3 Total Credits: 4	<b>OMG 402 Operations Management</b> Billable Credits: 3 Total Credits: 3	<b>STR 403 Organization and Strategy</b> Billable Credits: 3 Total Credits: 3
<b>STR 401 Managerial Economics</b> Billable Credits: 3 Total Credits: 4	<b>ACC 401 Corporate Financial Accounting</b> Billable Credits: 3 Total Credits: 4	<b>Elective</b> Billable Credits: 3 Total Credits: 3	<b>CIS 401 Information Systems for Management</b> Billable Credits: 3 Total Credits: 4
	<b>MKT 402 Marketing Management</b> Billable Credits: 3 Total Credits: 3	<b>Elective</b> Billable Credits: 3 Total Credits: 3	<b>Elective</b> Billable Credits: 3 Total Credits: 3
	<b>FIN 402 Capital Budgeting and Corporate Objectives</b> Billable Credits: 3 Total Credits: 3		
<b>CMC Programming</b>			
<b>MGC 401 Interpersonal Persuasion</b> Billable Credits: 1 Total Credits: 1	<b>MGC 402 Communicating Analytics</b> Billable Credits: 0 Total Credits: 1	<b>MGC 403 Teamwork</b> Billable Credits: 0 Total Credits: 1	<b>MGC 411 Advanced Persuasion</b> Billable Credits: 0 Total Credits: 1
Pre-Fall + Fall Quarter Billable Credit Hours: 19 Pre-Fall + Fall Quarter Total Credit Hours: 23		Winter Billable Credit Hours: 9 Winter Total Credit Hours: 10	Spring Billable Credit Hours: 9 Spring Total Credit Hours: 11
Year 1 Billable Credit Hours: 37 Year 1 Total Credit Hours: 44		MBA Program Billable Credits Hours: 61 MBA Program Total Credit Hours: 68	

**PMBA REQUIREMENTS AND CORE COURSE SEQUENCES**

**PROFESSIONAL MBA (PMBA) PROGRAM**

Students take nine core courses and eleven elective courses to complete their desired concentration(s).

**CORE CURRICULUM**

- Capital Budgeting and Corporate Objectives (FIN 402)
- Corporate Financial Accounting (ACC 401)\*
- Business Modeling (GBA 411)\*
- Data Analytics (GBA 412)
- Managerial Economics (STR 401)\*

- Operations Management (OMG 402)
- Marketing Management (MKT 402) – Fall 2015 & Spring 2016
- Information Systems for Management (CIS 401)\* – Winter 2016 & Summer 2016
- Organization and Strategy (STR 403) – Spring 2016 & Summer 2016

**PROGRAM SCHEDULE**

The first six core courses listed above are taken as a cohort. The remaining three core courses must be completed during the first six quarters of the program.

PMBA - FALL START		PMBA - SPRING START	
Fall - Year 1	STR 401* Managerial Economics ACC 401* Corporate Financial Accounting	Spring - Year 1	STR 401* Managerial Economics ACC 401* Corporate Financial Accounting
Winter - Year 1	GBA 412 Data Analytics FIN 402 Capital Budgeting & Corporate Objectives	Summer - Year 1	GBA 412 Data Analytics FIN 402 Capital Budgeting & Corporate Objectives
Spring - Year 1	GBA 411* Business Modeling Elective or Core	Fall - Year 1	GBA 411* Business Modeling Elective or Core
Summer - Year 1	OMG 402 Operations Management Elective or Core	Winter - Year 1	OMG 402 Operations Management Elective or Core
Fall - Year 2	Elective or Core Elective	Spring - Year 2	Elective or Core Elective
Winter - Year 2	Elective or Core Elective	Summer - Year 2	Elective or Core Elective
Spring - Year 2	Elective Elective	Fall - Year 2	Elective Elective
Summer - Year 2	Elective Elective	Winter - Year 2	Elective Elective
Fall - Year 3	Elective Elective	Spring - Year 3	Elective Elective
Winter - Year 3	Elective Elective	Summer - Year 3	Elective Elective

\* Three credit-hour lecture plus one credit-hour lab

\* Three credit-hour lecture plus one credit-hour lab

The study grids contained in this book are current for the 2015-2016 academic year. While it is not expected that any billable credits will change for the 2015-2016 academic year, the arrangement of courses is subject to change.

**CONCENTRATIONS - MBA****BUSINESS SYSTEMS CONSULTING**

(5 courses)

The Simon School concentration in Business Systems Consulting offers a cutting-edge, highly focused program designed to equip students with the skills and experience necessary to excel in the business systems consulting enterprise. While students will be exposed to a variety of career possibilities during the course of their studies, most students are likely to assume a position in the business systems practice of one of the major consulting firms.

Required core courses, **plus**:

CIS 461. Strategy and Business Systems Consulting Practicum (OMG 461)

**plus either**

CIS 415. Business Process Analysis and Design

**or**

OMG 415. Process Improvement

**Three** other electives must be selected from the following list:

ACC 438. Auditing II—Auditing and Information Systems

CIS 416.† Advanced Information Technology

CIS 418. Business Modeling and Analysis Using Spreadsheets

CIS 440. Electronic Commerce Strategy

CIS 446.† Financial Information Systems (FIN 446)

MKT 437. Digital Marketing Strategy

MKT 436. Marketing Analytics

OMG 411. Supply Chain Management

OMG 412. Service Management

OMG 413. Operations Strategy

OMG 416. Project Management

OMG 437. Managing Health Care Operations (HSM 437)

STR 421. Competitive Strategy

**COMPETITIVE AND ORGANIZATIONAL STRATEGY (STR)**

Simon Business School offers two tracks within the Competitive and Organizational Strategy concentration—The Strategy and Organizations track and the Pricing track. Students can choose either of these two tracks to satisfy the requirements of the Competitive and Organizational Strategy concentration.

**STRATEGY AND ORGANIZATIONS TRACK**

(5 courses)

The Strategy and Organizations track builds on the economic fundamentals introduced in STR 401 and STR 403. Its cross-functional and integrative curriculum provide a sound basis for the evaluation and implementation of a broad range of business strategies and policies.

Topics included are: policies internal to the firm such as compensation, performance evaluation, job design and aspects of hiring; strategic interaction among industry competitors, including pricing and advertising; and the influence of external factors such as the regulatory and macroeconomic environments.

Skills offered by the STR curriculum will develop the student's ability to identify the root causes of business problems and sources of new opportunities. The student will respond to these problems and opportunities with innovative solutions and strategies based upon the School's economics-based approach to management. The concentration holds particular interest to those seeking careers in consulting, general management or industry analysis, as well as those seeking an integrative complement to concentrations in other functional areas. Particular emphasis goes to developing the student's capacity to deal with unstructured business situations.

Required core courses and STR 421, Competitive Strategy.

Must complete a minimum of **four** additional courses in the STR area:

STR 422. Game Theory for Managers

STR 423. Pricing Policies (MKT 414)

STR 424. Human Resource Strategy

STR 427. Organizational Behavior

STR 429. Advanced Competitive Strategy

STR 430. Health Science Management and Strategy

STR 438. B2B Pricing (MKT 438)

STR 439. Advanced Pricing (MKT 439)

STR 440. Corporate Governance

STR 442. Special Topics in Strategy (*not offered every year*)

STR 461. Strategy and Business Consulting Practicum

**PRICING TRACK**

(6 courses)

The Pricing Track is offered for those students who desire a state-of-the-art training in pricing and for those interested in pursuing a career in pricing. The track resides within both the Competitive and Organizational Strategy and the Marketing concentrations and leverages our School's strengths in economics and marketing analytics.

The Pricing Track is offered by the Competitive and Organizational Strategy and Marketing faculty at the Simon School to enable students to integrate their knowledge of analytic marketing, cost accounting, finance, managerial economics, operations and strategy through the application of pricing optimization tools and technologies to deliver profitable pricing strategies for their organizations.

A student wishing to take the Pricing Track should complete the following **five** required courses:

STR 423. Pricing Policies (MKT 414)

(Should be taken before courses listed below)

STR 438. B2B Pricing (MKT 438)

**or**

STR 439. Advanced Pricing (MKT 439)

STR 421. Competitive Strategy

MKT 412. Marketing Research

MKT 436. Marketing Analytics

In addition to these required courses, the school requires **one** additional course from the list below:

ACC 410. Strategic Cost Analysis

ENT 435. Negotiation Theory and Practice: Bargaining for Value

STR 422. Game Theory for Managers

STR 438. B2B Pricing (MKT 438)

**or**

STR 439. Advanced Pricing (MKT 439)

(Counting only the one not taken to satisfy the above list)

A student completing these courses satisfies the requirements for both the Competitive and Organizational Strategy and the Marketing concentrations.

**COMPUTERS AND INFORMATION SYSTEMS (CIS)**

(4 courses)

The Computers and Information Systems area enjoys international recognition for its innovative research and teaching programs. The CIS concentration, taken by itself or combined with another functional concentration such as accounting, electronic commerce, finance or operations management, prepares students to manage the broad array of information-systems issues that arise in every organization or to act as successful management consultants.

The program focuses on the leading approaches used in the design and development of effective business processes that leverage information technology. It also emphasizes the major business issues that arise in choosing information technologies, designing information processes for improving the effectiveness of specific applications and using enterprise information technology for gaining competitive benefits. The concentration develops the necessary skills for managing in the current environment of rapid technological evolution, increased competition and global markets. The placement of Simon CIS students in retail or investment banks, *Fortune* 500 manufacturers and international consulting companies has been very strong. Typical CIS careers include electronic commerce leadership, the management of corporate information systems, business process re-engineering and general management consulting.

In the required courses, students learn how to analyze the fundamental subjects of business information and decision processes in organizations, and the resulting economic and technological trade-offs. In the advanced electives, students can study various aspects of electronic commerce, business process design, advanced information technologies, financial-information systems and business data communications systems.

A technical background prior to entering the MBA program is not a prerequisite to success in the CIS concentration.

Required core courses, plus:

CIS 413. The Economics of Information Management

At least **one** of:

CIS 415. Business Process Analysis and Design

CIS 416.† Advanced Information Technology

**Two** additional courses selected from the following list:

ACC 438. Auditing II—Auditing and Information Systems

CIS 417. Introduction to Business Analytics

CIS 418. Business Modeling and Analysis Using Spreadsheets

CIS 440. Electronic Commerce Strategy

CIS 446.† Financial Information Systems (FIN 446)

CIS 512.† Advanced Topics in Database Design

MKT 437. Digital Marketing Strategy

MKT 436. Marketing Analytics

**CORPORATE ACCOUNTING (ACC)**

(5 courses)

Corporations actively recruit MBA accounting majors for positions in the offices of controller, treasurer and internal auditing, as well as in accounting departments. Many corporate finance positions also require strong corporate accounting backgrounds.

Required core courses, plus:

ACC 411. Financial Statement Analysis

ACC 423. Financial Reporting I

ACC 424. Financial Reporting II

Plus **two** courses selected from this list:

ACC 410. Strategic Cost Analysis

ACC 417. Auditing

ACC 418. Taxes and Business Strategy

ACC 419. Positive Accounting Research

ACC 431.† International Financial Statement Analysis

FIN 411. Investments

FIN 413. Corporate Finance

FIN 423.† Corporate Financial Policy and Control

**ENTREPRENEURSHIP (ENT)**

(5 courses)

Entrepreneurship education is becoming increasingly important given the current global economic climate. The Entrepreneurship concentration allows students to draw from a variety of carefully selected courses to become a business generalist, well versed in organizing and managing resources. The Simon School has a legacy of educating entrepreneurs. Graduates with this concentration have started their own ventures or have pursued "intra-preneurial" careers with major corporations. Students often combine that concentration with finance or marketing to further enhance their

educational base. This is especially true for those pursuing investment banking and mergers and acquisitions where the entrepreneurship knowledge can be very useful.

Required core courses, plus:

ENT 444. Entrepreneurial Finance (FIN 444)

Plus **one** of:

ENT 423. New Venture Development and Managing for Long Term Success

**or**

ENT 425. Technical Entrepreneurship

Plus **three** courses selected from this list:

ACC 411. Financial Statement Analysis

ENT 422. Generating and Screening Entrepreneurial Ideas

ENT 442A. Special Topics in Entrepreneurship: Social Impact of Entrepreneurship

ENT 424.† Projects in Entrepreneurship

ENT 426.† Technology Transfer and Commercialization

ENT 427.† Practicum in Technology Transfer and Commercialization

ENT 431.† Legal and Tax Considerations of New Ventures (BPP 431)

ENT 432. Basic Business Law (BPP 432)

ENT 435. Negotiation Theory and Practice: Bargaining for Value

FIN 433. Cases in Finance

FIN 441A. Special Topics in Finance—Real Estate

GBA 482.† Business Policy

MKT 412. Marketing Research

MKT 414. Pricing Policies (STR 423)

MKT 432. New Product Strategy

OMG 461. Strategy and Business Systems Consulting Practicum (CIS 461)

STR 421. Competitive Strategy

**FINANCE (FIN)**

(5 courses)

The Simon School is best known for its research and scholarship in the area of finance. This concentration provides students with state-of-the-art techniques for financial analysis. Students learn to formulate and solve important corporate finance problems and to obtain information from the many databases on financial markets.

Required core courses, plus:

FIN 411. Investments	At least <b>two</b> of:
FIN 413. Corporate Finance	HSM 420. Business Economics of the Health Care Industry
Plus <b>three</b> courses selected from this list:	HSM 430. Health Sciences Management and Strategy (STR 430)
ACC 411. Financial Statement Analysis	HSM 431. Applications of Corporate Finance and Governance to Health Care
ACC 423. Financial Reporting I	HSM 437. Managing Health Care Operations (OMG 437)
ACC 424. Financial Reporting II	HSM 440. Evolving Medical Markets
ACC 431.† International Financial Statement Analysis	The remaining courses can be taken from the list below:
BPP 426. Macroeconomics	ACC 411. Financial Statement Analysis
FIN 423.† Corporate Financial Policy and Control	CIS 415. Business Process Analysis and Design
FIN 424. Options and Futures Markets	HSM 425. Managerial Accounting for Health Care Organizations (ACC 445)
FIN 430. Financial Institutions	OMG 412. Service Management
FIN 433. Cases in Finance	STR 421. Competitive Strategy
FIN 434. Investment Management and Trading Strategies	STR 424. Human Resource Strategy
FIN 441A. Special Topics in Finance: Real Estate	<i>Courses taught at the University of Rochester School of Medicine and Dentistry, Department of Community and Preventive Medicine may be eligible for credit towards your MBA Health Sciences Management elective. Please contact your area coordinator for details.</i>
FIN 441B. Special Topics in Finance: Private Equity	
FIN 442. International Economics and Finance (BPP 442)	
FIN 444. Entrepreneurial Finance (ENT 444)	
FIN 446.† Financial Information Systems (CIS 446)	
FIN 448. Fixed-Income Securities	
FIN 511. Advanced Financial Economics	
FIN 532. Advanced Topics in Capital Markets	
FIN 534.† Advanced Topics in Corporate Finance	
HSM 431. Applications of Corporate Finance and Governance to Health Care	
STR 440. Corporate Governance	

### HEALTH SCIENCES MANAGEMENT (HSM)

(5 courses)

The Health Sciences Management concentration draws on the Simon School's proven strengths and directs them to a dynamic industry. The Simon School's concentration focuses primarily on two management issues: ongoing operations and strategic planning. This is in contrast to the traditional Master of Public Health programs which generally focus on public policy issues. The program especially suits future health sciences consultants and front-line managers in health maintenance organizations, hospitals, insurance companies and pharmaceutical firms.

Required core courses, plus **five** additional courses as follows:

### INTERNATIONAL MANAGEMENT

The International Management concentration gives students opportunities to apply various disciplines to international markets. Differences in legal environments, currencies and workplace practices among countries provide both challenges and problems for businesses operating in the global marketplace.

One of two options will satisfy the concentration. The **International Management** option includes one required course and three electives. The **International Management Exchange** option includes one required course, one elective and one term (minimum of six credits) in an approved International Exchange Program.

### INTERNATIONAL MANAGEMENT (ITL)

(4 courses)

Required core courses, plus:

FIN 442. International Economics and Finance (BPP 442)

Plus **three** courses selected from this list:

ACC 431.† International Financial Statement Analysis

BPP 426. Macroeconomics
ENT 435. Negotiation Theory and Practice: Bargaining for Value
ENT 486.† Management of Technology
GBA 494. Foreign Language Transfer Credit (three credits)
MKT 449. Global Marketing Strategy
OMG 413. Operations Strategy
STR 421. Competitive Strategy
STR 424. Human Resource Strategy

### INTERNATIONAL MANAGEMENT EXCHANGE (ITLE)

Two courses at the Simon School, plus International Exchange Program.

FIN 442. International Economics and Finance (BPP 442)

Plus **one** course selected from this list:

ACC 431.† International Financial Statement Analysis

BPP 426. Macroeconomics

ENT 435. Negotiation Theory and Practice: Bargaining for Value

ENT 486.† Management of Technology

GBA 494. Foreign Language Transfer Credit (three credits)

MKT 449. Global Marketing Strategy

OMG 413. Operations Strategy

STR 421. Competitive Strategy

STR 424. Human Resource Strategy

Plus **one** term in one of the approved International Exchange Programs (GBA 492—six credits; GBA 493—nine credits).

### MARKETING (MKT)

Marketing knowledge and skills have become a necessity in today's increasingly competitive global business environment. Regardless of the kind of business—consumer goods or industrial goods, financial services or the non-profit sector—success depends on satisfying the customer better than one's competitors. The Marketing concentration at the Simon School prepares MBA students for these challenges. Alumni with Marketing concentrations now hold key positions in marketing management, research and consulting. Specialized programs are offered to students interested in brand management. In addition, many students have combined marketing with another discipline to round out their education. Popular combinations include

marketing/finance, marketing/operations management, and marketing/electronic commerce.

The Marketing curriculum emphasizes the integration of applications with theory. Applications are introduced via cases, experiential exercises, guest speakers and projects. Elective courses provide opportunities to pursue specific interests in marketing.

The Marketing concentration requirements consist of the required core courses and electives chosen to satisfy the additional requirements of one of the following three tracks—the Marketing Strategy track, the Brand Management track, or the Pricing track—specified below.

### MARKETING STRATEGY TRACK

(5 courses)

The Marketing Strategy track emphasizes the use of marketing principles for developing and implementing a firm's product-market strategies in the marketplace.

Students in the Marketing Strategy track must take **MKT 412 (Marketing Research)**, along with **four elective courses** from the following list. **At least two of those electives must be from Group A.**

#### Group A

MKT 414. Pricing Policies (STR 423)

MKT 432. New Product Strategy

MKT 433. Advertising Strategy

MKT 435. Channels Strategy

#### Group B

HSM 440. Evolving Medical Markets

MKT 431. Consumer Behavior

MKT 436. Marketing Analytics

MKT 437. Digital Marketing Strategy

MKT 438. B2B Pricing (STR 438)

MKT 441. Brand Management

MKT 442. Special Topics in Marketing

MKT 448.† Brand Strategy

MKT 449. Global Marketing Strategy

MKT 451. Advanced Marketing Analytics

### BRAND MANAGEMENT TRACK

(5 courses)

For those students wishing to become brand/product managers in either the consumer or industrial products markets or in financial services, a unique Brand Management Track is offered.

Participation in the program requires taking **MKT 412 (Marketing Research)**, **MKT 441 (Brand Management)** and choosing **three** courses out of:

MKT 414. Pricing Policies (STR 423)

MKT 432. New Product Strategy

MKT 433. Advertising Strategy

MKT 435. Channels Strategy

MKT 448.† Brand Strategy

### PRICING TRACK

(6 courses)

The Pricing track is offered for those students who desire a state-of-the-art training in pricing and for those interested in pursuing a career in pricing. The track resides within both the Competitive and Organizational Strategy and the Marketing concentrations and leverages our School's strengths in economics and marketing analytics.

The Pricing Track is offered by the Competitive and Organizational Strategy and Marketing faculty at the Simon School to enable students to integrate their knowledge of analytic marketing, cost accounting, finance, managerial economics, operations and strategy through the application of pricing optimization tools and technologies to deliver profitable pricing strategies for their organizations.

A student wishing to take the Pricing Track should complete the following **five** required courses:

STR 423. Pricing Policies (MKT 414)

(Should be taken before courses listed below)

STR 438. B2B Pricing (MKT 438)

or

STR 439. Advanced Pricing (MKT 439)

STR 421. Competitive Strategy

MKT 412. Marketing Research

MKT 436. Marketing Analytics

In addition to these required courses, the school requires **one** additional course from the list below:

ACC 410. Strategic Cost Analysis

ENT 435. Negotiation Theory and Practice: Bargaining for Value

STR 422. Game Theory for Managers

STR 438. B2B Pricing (MKT 438)

or

STR 439. Advanced Pricing (MKT 439)

(Counting only the one not taken to satisfy the

above list)

A student completing these courses satisfies the requirements for both the Competitive and Organizational Strategy and the Marketing concentrations.

### OPERATIONS MANAGEMENT

(4 courses)

Operations Management is concerned with the management of a firm's physical, financial and human resources with the objective of producing, distributing and selling goods and services. Operations Management has become increasingly important due to renewed interest in productivity and the utilization of operations for competitive advantage.

Required core courses, plus **four** out of the following:

OMG 411. Supply Chain Management

OMG 412. Service Management

OMG 413. International Manufacturing and Service Strategy

OMG 415. Process Improvement

OMG 416. Project Management

CIS 415. Business Process Analysis and Design

*\*Experience has shown that students pursuing a career in Operations Management benefit from taking additional courses such as STR 424 (Human Resource Strategy) or STR 427 (Organizational Behavior).*

### PUBLIC ACCOUNTING (CPA)

(13 courses\*)

The Public Accounting concentration offers courses needed toward the requirements for the Uniform Certified Public Accounting (CPA) examination in New York and other states. Assuming that students have met certain undergraduate prerequisite requirements, this program has been designated by the New York State Education Department as fulfilling the 150 credit hour requirements for professional education programs in public accountancy. Students whose undergraduate programs do not satisfy all the assumed prerequisites will be advised of the additional courses that they must complete following a review of the undergraduate transcript. Students interested in completing this concentration should contact Heidi Tribunella, clinical associate professor of accounting, for a transcript review and academic advisement. The New York State Department of Education will have final approval upon application for licensure.

Required core courses, plus:

STR 423. Pricing Policies (MKT 414)
(Should be taken before courses listed below)
STR 438. B2B Pricing (MKT 438)
or
STR 439. Advanced Pricing (MKT 439)
STR 421. Competitive Strategy
MKT 412. Marketing Research
MKT 436. Marketing Analytics
In addition to these required courses, the school requires <b>one</b> additional course from the list below:
ACC 410. Strategic Cost Analysis
ENT 435. Negotiation Theory and Practice: Bargaining for Value
STR 422. Game Theory for Managers
STR 438. B2B Pricing (MKT 438)
or
STR 439. Advanced Pricing (MKT 439)
(Counting only the one not taken to satisfy the

ACC 410.	Strategic Cost Analysis
ACC 411.	Financial Statement Analysis
ACC 417.	Auditing
ACC 418.	Taxes and Business Strategy
ACC 419.	Positive Accounting Research
ACC 423.	Financial Reporting I
ACC 424.	Financial Reporting II
ACC 436.	Research Into Professional Accounting Standards
ACC 437.	Basic Federal Income Tax Accounting
ACC 438.	Auditing II—Auditing and Information Systems
BPP 432.	Basic Business Law (ENT 432)
FIN 411.	Investments
FIN 413.	Corporate Finance
MGC 401.	Interpersonal Persuasion
MGC 402.	Communicating Analytics
MGC 403.	Teamwork
MGC 411.	Advanced Persuasion

By fulfilling the Public Accounting concentration requirements, students will also fulfill the Finance concentration requirements and the Corporate Accounting concentration requirements.

*\*This concentration requires 13 electives, 11 of which are included in the requirement for the full-time MBA. The final two courses necessary to complete this concentration are offered free of charge.*

*\*\*MGC 401. Interpersonal Persuasion, MGC 402. Communicating Analytics, MGC 403. Teamwork and MGC 411. Advanced Persuasion are required for full-time and part-time students pursuing the Public Accounting concentration.*

### FULL-TIME MASTER OF SCIENCE PROGRAMS

#### FULL-TIME MASTER OF SCIENCE IN ACCOUNTANCY

Students take nine required courses, two electives plus the Communicating Business Decisions course sequence. A 3.0 grade point average is required for graduation.

Assuming that students have met certain undergraduate prerequisite requirements this program has been designated by the New York State Education Department as fulfilling the 150 credit hour requirements for professional education programs in public accountancy.

Students whose undergraduate programs do not satisfy all the assumed prerequisites will be advised of the additional courses that they must complete following a review of their undergraduate transcript. The New York State Education Department will have final approval upon application for licensure. Students should contact Heidi Tribunella, clinical associate professor of accounting, for academic advisement.

#### Full-Time MS in Accountancy

PRE-FALL (6 wks)	FALL QUARTER	WINTER QUARTER	SPRING QUARTER
<b>BPP 432/ENT 432</b> <b>Basic Business Law</b> Billable Credits: 3    Total Credits: 3	<b>ACC 423 (MS)</b> <b>Financial Reporting I</b> Billable Credits: 3    Total Credits: 3	<b>ACC 437</b> <b>Basic Federal Income Tax Accounting</b> Billable Credits: 3    Total Credits: 3	<b>ACC 424 (MS)</b> <b>Financial Reporting II</b> Billable Credits: 3    Total Credits: 3
	<b>ACC 436</b> <b>Research Into Professional Accounting Standards</b> Billable Credits: 3    Total Credits: 3	<b>ACC 419</b> <b>Positive Accounting Research</b> Billable Credits: 3    Total Credits: 3	<b>ACC 411</b> <b>Financial Statement Analysis</b> Billable Credits: 3    Total Credits: 3
	<b>ACC 417</b> <b>Auditing</b> Billable Credits: 3    Total Credits: 3	<b>ACC 438</b> <b>Auditing II --- Auditing and Information Systems</b> Billable Credits: 3    Total Credits: 3	
	<b>Elective*</b> Billable Credits: 3    Total Credits: 3	<b>Elective*</b> Billable Credits: 3    Total Credits: 3	<b>Elective*</b> Billable Credits: 3    Total Credits: 3
<b>CMC Programming</b>			
<b>MGC 401</b> <b>Interpersonal Persuasion</b> Billable Credits: 1    Total Credits: 1	<b>MGC 402</b> <b>Communicating Analytics</b> Billable Credits: 0    Total Credits: 1	<b>MGC 403</b> <b>Teamwork</b> Billable Credits: 0    Total Credits: 1	<b>MGC 411</b> <b>Advanced Persuasion</b> Billable Credits: 0    Total Credits: 1
Pre-Fall + Fall Quarter Billable Credit Hours: 13-16 Pre-Fall + Fall Quarter Total Credit Hours: 14-17		Winter Billable Credit Hours: 9-12 Winter Total Credit Hours: 10-13	Spring Billable Credit Hours: 6-9 Spring Total Credit Hours: 7-10
<b>Degree Billable Credit Hours: 34</b>			
<b>Degree Total Credit Hours: 37</b>			

\* MS Accountancy students are required to take two elective courses during their program of study, one elective is taken in each of two quarters. The accounting/business elective is dependent on the student's undergraduate studies. Students will be advised during orientation as to what their particular elective requirements are. For any academic questions regarding MS Accountancy, please contact Professor Heidi Tribunella.

(E) - Evening Class

(MS) - Master's Level

**FULL-TIME MASTER OF SCIENCE IN FINANCE**

**Program Requirements (without a prior MBA)**

The MS requires the completion of 47-50 credit-hours. There are eight required core classes plus the Communicating Business Decisions course sequence and six additional courses which must be chosen from available electives. Students complete the program in 11 months, beginning in August each year. A 3.0 grade point average is required for graduation.

**Required courses:**

- ACC 401. Corporate Financial Accounting
- ACC 411. Financial Statement Analysis
- FIN 402. Capital Budgeting and Corporate Objectives
- FIN 411. Investments
- FIN 413. Corporate Finance

- FIN 448. Fixed-Income Securities
- GBA 461.\* Core Economics for MS Students
- GBA 462.\* Core Statistics for MS Students
- MGC 401. Interpersonal Persuasion
- MGC 402. Communicating Analytics
- MGC 403. Teamwork
- MGC 411. Advanced Persuasion

**Choose two from the following:**

- STR 403. Organization and Strategy
- FIN 433. Cases in Finance
- FIN 424. Options and Futures

**Choose four from the following:**

- ACC 410. Strategic Cost Analysis
- ACC 424. Financial Reporting II
- FIN 442E. International Economics and Finance

- or**
- BPP 426. Macroeconomics
- CIS 418. Advanced Business Modeling
- FIN 430. Financial Institutions
- FIN 434. Investment and Trading Strategies
- FIN 444. Entrepreneurial Finance (ENT 444) **or**
- FIN 441B. Special Topics in Finance: Private Equity
- FIN 441A. Special Topics in Finance: Real Estate
- FIN 441F. Project Course

\* Students with Prior MBA can exempt out of GBA461 and GBA462 and substitute other Finance electives for FIN402 and ACC401, thereby lowering the credit hours by 7 (6 billable)\*\*

MSF internship-track students take one fewer course by the end of Spring, and FIN 441 in Fall. Any questions please contact your academic advisor.

**Full-Time MS in Finance**

PRE-FALL (6 wks)	FALL QUARTER	WINTER QUARTER	SPRING QUARTER
<b>GBA 461 (MS)</b> Core Economics for MS Students Billable Credits: 3 Total Credits: 3	<b>FIN 411 (MS)</b> Investments Billable Credits: 3 Total Credits: 3	<b>ACC 411 (MS)</b> Financial Statement Analysis Billable Credits: 3 Total Credits: 3	<b>Take 4 out of:</b> <b>ACC 410 (MS)</b> Strategic Cost Analysis <b>ACC 424 (MS)</b> Financial Reporting II <b>FIN 442 (E) or BPP 426</b> International Economic and Finance or Macroeconomics <b>FIN 444 (MS) or FIN 441B (MS)</b> Entrepreneurial Finance or Private Equity
<b>GBA 462 (MS)</b> Core Statistics for MS Students Billable Credits: 3 Total Credits: 3	<b>ACC 401 (MS)</b> Corporate Financial Accounting Billable Credits: 3 Total Credits: 4	<b>FIN 448 (MS)</b> Fixed Income Securities Billable Credits: 3 Total Credits: 3	<b>CIS 418 (MS)</b> Advanced Business Modeling <b>FIN 430 (MS)</b> Financial Institutions <b>FIN434 (E)</b> Investment and Trading Strategies <b>FIN 441A (MS)</b> Real Estate <b>FIN 441F (MS)</b> Project Course Billable Credits: 12 Total Credits: 12
<b>FIN 402 (MS)</b> Capital Budgeting and Corporate Objectives Billable Credits: 3 Total Credits: 3	<b>FIN 413 (MS)</b> Corporate Finance Billable Credits: 3 Total Credits: 3	<b>Take 2 out of:</b> <b>STR 403 (MS)</b> Organization and Strategy <b>FIN 433 (MS)</b> Cases in Finance <b>FIN 424</b> Options and Futures Billable Credits: 6 Total Credits: 6	<b>CIS 418 (MS)</b> Advanced Business Modeling <b>FIN 430 (MS)</b> Financial Institutions <b>FIN434 (E)</b> Investment and Trading Strategies <b>FIN 441A (MS)</b> Real Estate <b>FIN 441F (MS)</b> Project Course Billable Credits: 12 Total Credits: 12
<b>CMC Programming</b>			
<b>MGC 401</b> Interpersonal Persuasion Billable Credits: 1 Total Credits: 1	<b>MGC 402</b> Communicating Analytics Billable Credits: 0 Total Credits: 1	<b>MGC 403</b> Teamwork Billable Credits: 0 Total Credits: 1	<b>MGC 411</b> Advanced Persuasion Billable Credits: 0 Total Credits: 1
Pre-Fall + Fall Quarter Billable Credit Hours: 19-22 Pre-Fall + Fall Quarter Total Credit Hours: 21-24		Winter Billable Credit Hours: 12 Winter Total Credit Hours: 13	Spring Billable Credit Hours: 12 Spring Total Credit Hours: 13
<b>Degree Billable Credit Hours: 43 - 46</b>			<b>Degree Total Credit Hours: 47 - 50</b>

(E) - Evening Class (MS) - Master's Level

**FULL-TIME MASTER OF SCIENCE IN BUSINESS ANALYTICS**

The MS in Business Analytics combines business frameworks with the latest data analytics techniques to provide students with skills and concepts to deal with big data in organizations. Students will learn concepts for dealing with large volumes, real time and unstructured data from organizational, web and social sources. Economics, statistics, and elements from computer science form the backbone of the program. The program includes a project in which the students will apply the newly learned techniques in real world settings.

The concentration requires 12 courses, totaling 41-42 credits. The competency in programming can be waived based on prior experience and education.

**Required courses:**

- FIN 402.\* Capital Budgeting and Corporate Objectives
- GBA 411. Business Modeling
- GBA 461. Core Economics for MS Student
- GBA 462R. Core Statistics for MS Students Using R
- CIS 401. Information Systems
- CIS 416. Advanced Information Technology
- or**
- MKT 451. Advanced Marketing Analytics

- CIS 417. Into to Business Analytics
- CIS 442C. Advanced Technologies for Social Media Analytics
- CIS 442D. Advanced Data Mining and Machine Learning
- CIS 461. Practicum in Consulting
- MKT 402. Marketing Management
- MKT 436R. Marketing Analytics Using R
- R, SQL, and SAS Bootcamps
- MGC 401. Interpersonal Persuasion
- MGC 402. Communicating Analytics
- MGC 403. Teamwork
- MGC 411. Advanced Persuasion

**Full-Time MS in Business Analytics**

PRE-FALL (6 wks)	FALL QUARTER	WINTER QUARTER	SPRING QUARTER
<b>GBA 461 (MS)</b> Core Economics for MS Students Billable Credits: 3 Total Credits: 3	<b>CIS 417 (MS)</b> Intro to Business Analytics Billable Credits: 3 Total Credits: 3	<b>MKT 436R (MS)</b> Marketing Analytics Using R Billable Credits: 3 Total Credits: 3	<b>CIS 461 (E)</b> Practicum in Consulting Billable Credits: 3 Total Credits: 3
<b>GBA 462R (MS)</b> Core Statistics for MS Students Using R Billable Credits: 3 Total Credits: 3	<b>CIS 442C</b> Advanced Technologies for Social Media Analytics Billable Credits: 3 Total Credits: 3	<b>CIS 442D</b> Advanced Data Mining and Machine Learning Billable Credits: 3 Total Credits: 4	<b>CIS 416</b> Advanced Information Technology <b>or</b> <b>MKT 451 (E)</b> Advanced Marketing Analytics Billable Credits: 3 Total Credits: 3
<b>FIN 402* (MS)</b> Capital Budgeting and Corporate Objectives Billable Credits: 3 Total Credits: 3	<b>MKT 402 (MS)</b> Marketing Management Billable Credits: 3 Total Credits: 3	<b>CIS 401 (E)</b> Information Systems Billable Credits: 3 Total Credits: 4	<b>GBA 411 (E)</b> Business Modeling Billable Credits: 3 Total Credits: 4
<b>R BOOTCAMP</b> (3 weeks at the start of the term) Billable Credits: 0 Total Credits: 0	<b>SQL BOOTCAMP</b> (3 weeks at the start of the term) Billable Credits: 0 Total Credits: 0	<b>SAS BOOTCAMP</b> (3 weeks at the start of the term) Billable Credits: 0 Total Credits: 0	
<b>CMC Programming</b>			
<b>MGC 401</b> Interpersonal Persuasion Billable Credits: 1 Total Credits: 1	<b>MGC 402</b> Communicating Analytics Billable Credits: 0 Total Credits: 1	<b>MGC 403</b> Teamwork Billable Credits: 0 Total Credits: 1	<b>MGC 411</b> Advanced Persuasion Billable Credits: 0 Total Credits: 1
Pre-Fall + Fall Quarter Billable Credit Hours: 19 Pre-Fall + Fall Quarter Total Credit Hours: 20		Winter Billable Credit Hours: 9 Winter Total Credit Hours: 12	Spring Billable Credit Hours: 9 Spring Total Credit Hours: 10
<b>Degree Billable Credit Hours: 37</b>			<b>Degree Total Credit Hours: 42</b>

(E) - Evening Class (MS) - Master's Level

\* Students electing to do a summer internship in Summer 2016 will take FIN402 in Fall 2016.

**FULL-TIME MASTER OF SCIENCE IN MARKETING ANALYTICS**

The Simon School one-year master's program in marketing analytics was designed to equip students with the skills and experience necessary to excel in marketing jobs in a compact, highly focused program. Students are likely to take a job related to one of the program's three main emphases: marketing research, consumer insights, advertising, and account management.

Students take 11 required courses plus the Communicating Business Decisions course sequence. A 3.0 grade point average is required for graduation. Students take the following courses to complete their degree.

- GBA 461. Core Economics for MS Students
- GBA 462R. Core Statistics for MS Students Using R
- MKT 402. Marketing Management
- MKT 412R. Marketing Research Using R
- MKT 414. Pricing (STR 423)
- MKT 436R. Marketing Analytics Using R
- MKT 431. Consumer Behavior **or**
- MKT 438. B2B Pricing (STR 438)
- MKT 437. Marketing on the Internet
- MKT 451. Advanced Marketing Analytics

- MKT 465. Marketing Projects
- CIS 417. Introduction to Business Analytics
- MGC 401. Interpersonal Persuasion
- MGC 402. Communicating Analytics
- MGC 403. Teamwork
- MGC 411. Advanced Persuasion
- R Bootcamp

**Full-Time MS in Marketing Analytics**

PRE-FALL (6 wks)	FALL QUARTER	WINTER QUARTER	SPRING QUARTER
<b>GBA 461 (MS)</b> Core Economics for MS Students Billable Credits: 3 Total Credits: 3	<b>MKT 402 (MS)</b> Marketing Management Billable Credits: 3 Total Credits: 3	<b>MKT 412R (MS)</b> Marketing Research Using R Billable Credits: 3 Total Credits: 3	<b>MKT 465 (MS)</b> Marketing Projects Billable Credits: 3 Total Credits: 3
<b>GBA 462R (MS)</b> Core Statistics for MS Students Using R Billable Credits: 3 Total Credits: 3	<b>CIS 417 (MSD)</b> Intro to Business Analytics Billable Credits: 3 Total Credits: 3	<b>MKT 436R (MS)</b> Marketing Analytics Using R Billable Credits: 3 Total Credits: 3	<b>MKT 451 (E)</b> Advanced Marketing Analytics Billable Credits: 3 Total Credits: 3
<b>R BOOTCAMP</b> (3 weeks at the start of the term) Billable Credits: 0 Total Credits: 0	<b>MKT 414 (E)</b> Pricing Billable Credits: 3 Total Credits: 3	<b>MKT 437 (MS)</b> Digital Marketing Strategy Billable Credits: 3 Total Credits: 3	<b>MKT 431 (MS)</b> Consumer Behavior  <b>OR</b> <b>MKT 438</b> B2B Pricing Billable Credits: 3 Total Credits: 3
<b>CMC Programming</b>			
<b>MGC 401</b> Interpersonal Persuasion Billable Credits: 1 Total Credits: 1	<b>MGC 402</b> Communicating Analytics Billable Credits: 0 Total Credits: 1	<b>MGC 403</b> Teamwork Billable Credits: 0 Total Credits: 1	<b>MGC 411</b> Advanced Persuasion Billable Credits: 0 Total Credits: 1
Pre-Fall + Fall Quarter Billable Credit Hours: 16 Pre-Fall + Fall Quarter Total Credit Hours: 17		Winter Billable Credit Hours: 9 Winter Total Credit Hours: 10	Spring Billable Credit Hours: 9 Spring Total Credit Hours: 10
<b>Degree Billable Credit Hours: 34</b>			
<b>Degree Total Credit Hours: 37</b>			

**(E)** - Evening Class      **(MS)** - Master's Level

**PART-TIME MS PROGRAMS AND CORE COURSE SEQUENCES**

**PART-TIME MASTER OF SCIENCE IN BUSINESS ADMINISTRATION WITH A CONCENTRATION IN MEDICAL MANAGEMENT**

**Management Tools**

The Simon School offers a part-time MS program in Medical Management to provide physicians, hospital administrators, and medical professionals with management tools and an understanding of the key business issues that confront health care providers. The part-time structure of the program allows health care professionals to maintain their career and personal commitments while in the program. The program focuses on developing health care managers and leaders who will be confident in making key financial, operational, and strategic decisions for their organizations.

**Logistics and Time Requirements**

The medical management master's is specifically designed to accommodate the busy schedules of physicians and medical professionals. The program consists of 30 credits and is offered on a part-time basis only.

During a typical school quarter, the medical management student enrolls in a core class that meets one night per week. During the same quarter, the student also takes a class on three separate weekends to cover the health care component of the module.

**Curriculum**

The curriculum is designed around four core areas of management that are especially relevant to health care:

- Development of marketing and business plans
- Quantifying strategy through financial analysis
- Implementing strategy by efficiently managing operations; and
- Building efficient organizations for the long run, through intelligent work design, performance assessment and employee incentives.

The curriculum is presented in a unique format that delivers the necessary depth of core business material while simultaneously applying that material to the health care industry. This is accomplished through the pairing of Simon School core courses with health care management courses that develop applications of the core material. Each pair of courses (module) is delivered and taken simultaneously.

**Part-Time MS BA: Medical Management Part-Time Program**

FALL QUARTER	WINTER QUARTER	SPRING QUARTER	SUMMER QUARTER	FALL QUARTER
<b>HSM 450</b> Medical Management Economics, Accounting, and Financial Primer	<b>HSM 425</b> Managerial Accounting for Health Care Organizations	<b>HSM 437/OMG 437</b> Managing Health Care Operations	<b>STR 403</b> Organization and Strategy	<b>HSM 455</b> Practicum in Medical Management 1
<b>HSM 451</b> Health Care Marketing and Business Plan	<b>HSM 452</b> Health Care Accounting and Finance	<b>HSM 453</b> Health Care Operations	<b>HSM 454</b> Designing and Optimizing Health Care Operations	<b>HSM 456</b> Practicum in Medical Management 2



**PART-TIME MS IN MARKETING ANALYTICS (11 CLASSES)**

	FALL QUARTER	WINTER QUARTER	SPRING QUARTER	SUMMER QUARTER
<b>CORE REQUIREMENTS</b>				
STR 401 Managerial Economics	✓		✓	
GBA 412 Data Analytics		✓		✓
MKT 402 Marketing Management	✓		✓	
<b>ADDITIONAL REQUIREMENTS</b>				
CIS 417 Intro to Business Analytics	✓			
MKT 412 Marketing Research		✓		✓
MKT 414 Pricing	✓		✓	
MKT 436 Marketing Analytics		✓		
MKT 437 Marketing on the Internet		✓		
MKT 431 Consumer Behavior	✓			
-OR-				
MKT 439 Advanced Pricing		✓		
MKT 451 Advanced Marketing Analytics			✓	
MKT 465 Marketing Projects		✓		

\* R Bootcamp available as needed.

**PART-TIME MS IN BUSINESS ANALYTICS (12 CLASSES)**

	FALL QUARTER	WINTER QUARTER	SPRING QUARTER	SUMMER QUARTER
<b>CORE REQUIREMENTS</b>				
STR 401 Managerial Economics	✓		✓	
GBA 411 Business Modeling			✓	
GBA 412 Data Analytics		✓		✓
MKT 402 Marketing Management	✓		✓	
FIN 402 Capital Budgeting and Corporate Objectives		✓		✓
CIS 401 Information Systems		✓		✓
<b>ADDITIONAL REQUIREMENTS</b>				
CIS 417 Intro to Business Analytics	✓			
CIS 442C Advanced Technologies for Social Media Analytics	✓			
CIS 442D Advanced Data Mining and Machine Learning		✓		
CIS 461 Practicum in Consulting	✓		✓	
MKT 436 Marketing Analytics		✓		
CIS 416 Advanced Information Technology			✓	
-OR-				
MKT 451 Advanced Marketing Analytics			✓	

\* R Bootcamp, SQL Bootcamp, and SAS Bootcamp available as needed.

**PART-TIME MS IN MANAGEMENT IN ROCHESTER (12 CLASSES)**

<b>REQUIRED COURSES (9 Classes)</b>	
ACC 401	Corporate Financial Accounting
CIS 401	Information Systems
FIN 402	Capital Budgeting and Corporate Objectives
STR 421	Competitive Strategy
GBA 412	Data Analytics
MKT 402	Marketing Management
OMG 402	Operations Management
STR 401	Managerial Economics
STR 403	Organization and Strategy

**CHOOSE ONE OF THE FOLLOWING, PLUS TWO OF ANY EVENING ELECTIVES:**

FIN 411	Investments
FIN 413	Corporate Finance
MKT 414	Pricing Policies

**PART-TIME MS IN FINANCE IN ROCHESTER (12 CLASSES)**

<b>REQUIRED COURSES (8 Classes)</b>	
STR 401	Managerial Economics
GBA 412	Data Analytics
FIN 402	Capital Budgeting and Corporate Objectives
ACC 401	Corporate Financial Accounting
ACC 411	Financial Statement Analysis
FIN 411	Investments
FIN 413	Corporate Finance
FIN 448	Fixed Income Securities

**CHOOSE FOUR OF THE FOLLOWING:**

ACC 410	Strategic Cost Analysis
ACC 424	Financial Reporting II
CIS 418	Advanced Business Modeling
FIN 424	Options and Futures
FIN 430	Financial Institutions
FIN 433	Cases in Finance
FIN 434	Investment and Trading Strategies
FIN 441A	Real Estate
FIN 442	International Economics -or-
BPP 426	Macroeconomics
FIN 444	Entrepreneurial Finance -or-
FIN 441B	Private Equity
STR 403	Organization and Strategy

\*STR401, GBA412, FIN402, and ACC401 must be completed prior to completing the rest of the required coursework.

\*\*Students with Prior MBA can exempt out of STR401 and GBA412 and substitute other Finance electives for FIN402 and ACC401, thereby lowering the credit hours by 7(6 billable) and enabling them to complete their degree requirements in a shorter time period.

**PART-TIME MS IN HEALTH CARE MANAGEMENT (12 CLASSES)**

<b>REQUIRED COURSES</b>			
ACC 401	Corporate Financial Accounting	HSM 420	Business Economics of the Health Care Industry
FIN 402	Capital Budgeting and Corporate Objectives	HSM 425	Managerial Accounting for Health Care Organizations
STR 401	Managerial Economics	HSM 431	Applications of Corporate Finance and Governance to Health Care Organizations
GBA 412	Data Analytics	HSM 437	Managing Health Care Operations
STR 403	Economics of Organizations	HSM 464	Creating and Using Information in Health Care
STR 421	Economics of Competitive Strategy	ENT 441	Medical Entrepreneurship

**JOINT- AND SPECIALIZED-DEGREE PROGRAMS**

The Simon School offers programs that allow students to receive a first-rate business education tailored to their specific needs. In addition to the Full- and Part-Time MBA Programs, a few other opportunities are available to students who wish to pursue coursework within a more specialized context of business management.

The following is a list of the Joint- and Specialized-Degree Programs offered at the Simon School. Each specific entry includes a brief program description and contact details for further information.

**MD/MBA PROGRAM**

Along with the Simon School, the School of Medicine and Dentistry offers a combined MD/MBA degree program in Health Sciences Management. This program is designed to prepare physician managers who can respond intelligently, effectively and creatively to the changing health care services industry. Only candidates with exceptional promise and academic records will be considered.

To participate in this program, students must apply to and be accepted by both the School of Medicine and Dentistry and the Simon School. Students are also required to take both the MCAT and GMAT exams. The program takes five years to complete—taken separately, the MD is four years and the MBA is two years. Students start the program at the Simon School for the first-year core courses and the majority of electives, and then move to the MD program on a full-time basis, completing the remaining Simon electives in their third and fourth years of medical school.

For application information, contact:

Pat Samuelson  
Director of Admissions  
University of Rochester  
School of Medicine and Dentistry  
601 Elmwood Avenue  
Box 601A  
Rochester, N.Y. 14642-8603  
(585) 275-4542  
E-mail: pat\_samuels@urmc.rochester.edu

or

Stefanie Attridge  
Director of Admissions  
Simon School of Business  
305 Schlegel Hall  
Rochester, N.Y. 14627-0107  
(585) 275-3533

E-mail: stefanie.attridge@simon.rochester.edu

**THE 3-2 PROGRAM**

In this program, students earn both a bachelor's degree in an undergraduate major from the University of Rochester and a master of business administration degree in five years.

In three years of undergraduate study at the University, students complete their majors and distribution requirements. Between January and March of their junior year, qualified students apply to the Simon School. The first year of the MBA program is substituted for the senior year. No merit-based scholarships are available to 3-2 students. However, during the final year as an undergraduate, students maintain any undergraduate financial assistance that is offered by the College. Visit [www.simon.rochester.edu/applynow](http://www.simon.rochester.edu/applynow) for application details.

**TECHNICAL ENTREPRENEURSHIP AND MANAGEMENT (TEAM) MS PROGRAM**

The one-year TEAM master's degree program is offered jointly by the Simon School and the Hajim School of Engineering and Applied Sciences and is administered by the University of Rochester Center for Entrepreneurship. This program is designed for students with an engineering, science, or mathematics undergraduate degree, who wish to pursue a master's level technical education in combination with business and leadership courses. TEAM could also be considered a 4-1 program for University of Rochester undergraduate engineering students.

Students accepted into the TEAM program may choose any technical cluster, such as optics, energy and the environment, computer science, biomedical engineering, chemical engineering, electrical and computer engineering, mechanical engineering or materials science. Students will simultaneously be taking courses at the Simon School and the Hajim School.

Requirements include:

- Three core management courses in the Simon School (one of which is a business plan development course)
- Three technical courses
- One additional course: either a technical class or a business elective
- A capstone practicum

To be considered for this program, students must take either the GRE or GMAT exam.

The master of science degree will be conferred by the Hajim School and the Simon School.

For application information, contact:

Andrea Galati  
Executive Director  
University of Rochester  
Center for Entrepreneurship  
1-211 Carol Simon Hall  
Box 270360  
Rochester, N.Y. 14627-0360  
(585) 276-3500  
E-mail: andrea.galati@rochester.edu  
Website: [www.rochester.edu/team](http://www.rochester.edu/team)

**COURSES**

All courses under the quarter system carry three hours of credit, unless otherwise indicated. A few exceptions are MGC courses; MKT 501 (Workshop in Marketing); MSM 501 (Quantitative Methods Colloquium); the one-credit-hour labs required for ACC 401 (Corporate Financial Accounting), GBA 411 (Business Modeling), CIS 401 (Information Systems for Management), and STR 401 (Managerial Economics). Also, courses offered jointly with the University of Rochester's Department of Economics or Statistics and the School of Medicine and Dentistry vary in credit hours.

Faculty whose biographies appear in the Administration and Faculty sections teach courses in the MBA program on a regular basis. The faculty described in this guide teach over 90 percent of all 400-level and 500-level Simon School courses.

In addition, one or two faculty members are visitors from other institutions. Carefully selected Simon School doctoral students teach a small number of graduate courses, typically summer offerings. Such students assume all of the responsibilities of regular faculty instructors. Executives from corporations, as well as local business owners, also serve as an additional faculty resource at the School for selected master's-level courses.

A course schedule showing offerings, times and instructors for each quarter is available from the Registrar's Office prior to the start of each quarter.

**ACCOUNTING**

Charles E. Wasley, *Area Coordinator*

**MASTER'S-LEVEL COURSES****ACC 401. CORPORATE FINANCIAL ACCOUNTING**

Credit—four hours

Corporate financial accounting is concerned with the form and content of the information firms disclose to external parties (e.g., shareholders). In the United States, financial reporting is based on generally accepted accounting principles (GAAP) set by the Financial Accounting Standards Board (FASB). GAAP define the accounting methods and disclosure practices that firms select from when providing financial statements to external parties. This course covers these principles and other important financial reporting practices. The primary focus of the course is developing the skills required to interpret and analyze financial information, rather than the skills required to prepare financial statements. Upon completion of the course, students will appreciate how financial accounting information is used in con-

tracts between parties (e.g., lenders and the firm) and to evaluate a firm's past performance and potential future performance.

**ACC 410. STRATEGIC COST ANALYSIS**

By examining the tension between decision making and control in organizations, the course examines a variety of questions such as: Why do managers allocate fixed costs, transfer goods between sub-units at full cost, and use other accounting policies that deviate from marginal cost? What are activity-based costing, normal costing and economic value added (EVA), and why are managers adopting these techniques? Topics include: analyzing traditional costing systems, divisional performance measurement, transfer pricing, cost allocations, opportunity cost, budgeting and standard costing. The course provides students with a framework to understand and productively use accounting systems. Emphasis is placed on the problems of motivation and control in organizations and the role of accounting information in this context.

Prerequisites: ACC 401 and STR 401 or GBA 461; STR 403 (may be taken concurrently)

**ACC 411. FINANCIAL STATEMENT ANALYSIS**

An objective of this course is to develop students' ability to use financial statement information (broadly defined) in various decision-making settings. The uses of financial statement information include: 1) evaluation of managerial performance; 2) analysts use financial statement information to perform prospective analysis, which serves as an input into the valuation of a firm's equity. Analysts make buy, sell, and hold recommendations based on analysis of financial information; 3) creditors and lenders use financial statement information as input into lending decisions. Lenders use financial information to determine the type, amount and terms of a loan, and also the nature of any covenants, and 4) corporations and investment bankers use financial statements to value companies that might be takeover targets. The primary objective is to develop and sharpen students' analytical ability to analyze financial statements and draw inferences about a firm's performance and future prospects. Cases and analysis of actual reporting practices are used to achieve the course objectives.

Prerequisites: ACC 401 and FIN 402

**ACC 417. AUDITING**

Auditing principles and procedures are examined. This course includes analysis of auditing and its relationship to financial reporting, with emphasis on the independent

accountant's attest function and consideration of ethical and legal responsibilities and regulatory influences. Statistical sampling, the role of the internal auditor, and compilation and review reports are discussed.

Prerequisite: ACC 401

**ACC 418. TAXES AND BUSINESS STRATEGY**

The objectives of this course are to help students develop the tools required to identify, understand and evaluate tax-planning opportunities and to develop a framework for understanding how taxes affect business decisions. Effective tax planning requires the planner to consider the tax implications of a proposed transaction for all of the parties to the transaction. Effective tax planning requires the planner, in making investment and financing decisions, to consider not only explicit taxes (tax dollars paid directly to taxing authorities), but also implicit taxes (taxes paid indirectly in the form of lower before-tax rates of return on tax-favored investments). Effective tax planning requires the planner to recognize that taxes represent only one among many business costs. In the planning process, all costs must be considered, including the costly restructuring of the business necessary to implement some tax plans. The framework is operationalized by applying it to a variety of settings such as investments, compensation policy, organizational form, regulated industries, financial instruments, tax-sheltered investments, multinational ventures, mergers and acquisitions and tax arbitrage.

Prerequisites: ACC 401 and FIN 402

**ACC 419. POSITIVE ACCOUNTING RESEARCH**

This course is designed for MBA students concentrating in accounting and students in the Master of Science in Accountancy program. The primary objective of the course is to introduce students to the role of financial accounting information in capital markets. This objective is accomplished by exposing students to academic accounting research on the relation between accounting numbers and stock prices, the debt contracting and executive compensation contracting roles of accounting numbers, incentives for managers to manage reported earnings, incentives for managers to voluntarily disclose financial information, properties of analysts' forecasts of accounting numbers, and issues related to international financial reporting. Another objective of the course is to help students appreciate some of the current debates surrounding the accounting profession and the role of empirical research in addressing such problems.

**ACC 423. FINANCIAL REPORTING I**

This course acquaints students with the conceptual and practical problems in measuring revenues and expenses, assets and liabilities. The principal objective is to make students proficient in assessing the financial position of a company, its cash flow, liquidity, capital structure, hidden liabilities and reserves through an understanding of generally accepted accounting principles (GAAP). The course provides a practical overview of the structure of accounting and its relation to finance and economics that should continue to be valuable as the accounting environment changes.

Prerequisites: ACC 401 and FIN 402

**ACC 424. FINANCIAL REPORTING II**

This course addresses the accounting for mergers and acquisitions, foreign operations and derivative financial instruments. Emphasis is placed on developing an appreciation of the forces shaping accounting, including the effects of organizational arrangements, information and taxes. The interdependency of the accounting methods, organizational structure and tax decisions are investigated.

Prerequisites: ACC 401 and FIN 402

**ACC 431. INTERNATIONAL FINANCIAL STATEMENT ANALYSIS**

The objective of this course is to prepare students for the analysis of financial statements in an international context. Cross-border transacting is an increasingly important component of business. Consequently, corporate financial statements are used in increasingly international settings by shareholders, lenders, creditors, managers, employees, suppliers, customers and governments. Because the course aims to develop skills in international financial analysis, it adopts a case format. The course addresses the economic and political determinants of:

- 1) similarities in accounting practices among countries;
- 2) differences in accounting practices among countries;
- 3) similarities and differences in the properties of reported accounting numbers among countries; and
- 4) the strong trend toward reducing differences in accounting practices among countries.

Prerequisites: ACC 401 and FIN 402

**ACC 433. ADVANCED BUSINESS LAW AND ETHICS**

(Same as BPP 433)

A continuation of BPP 432, which is a prerequisite)

Topics include: bankruptcy, real property, personal property, sales, secured transactions, negotiable instruments, insurance, trusts and

estates and consumer protection This course also includes discussions of ethics and professional responsibilities.

**ACC 436. RESEARCH INTO PROFESSIONAL ACCOUNTING STANDARDS**

This course will cover the conceptual framework for standard setting established by the Financial Accounting Standards Board (FASB). It will also review how to research financial accounting and reporting issues using the FASB Accounting Standards Codification. The research of financial accounting and reporting issues will be applied to professional accounting decisions in financial reporting, disclosure and other accounting decision making. In addition, a comparison of US Generally Accepted Accounting Principles (US GAAP) and International Financial Reporting Standards (IFRS) will be included. The course concludes with a review of the impact of governmental and not-for-profit accounting standards on financial reporting.

Prerequisites: ACC 401, ACC 423 and FIN 402

**ACC 437. BASIC FEDERAL INCOME TAX ACCOUNTING**

This course will introduce the federal tax system in the United States and will focus on specifics of federal tax code. It will provide an overview of individual, partnership, corporate, gift and estate taxes. Detailed topics will include, but are not limited to, gross income, deductions for adjusted gross income, deductions from adjusted gross income, taxable income, alternative minimum tax, certain tax credits, recognition of gains and losses, transactions between partners, Subchapter S Corporations, gift tax and estate tax. Skills will be developed to research the tax code and I.R.S. rulings to solve tax issues.

Prerequisite: ACC 401

**ACC 438. AUDITING II—AUDITING AND INFORMATION SYSTEMS**

This course will focus largely on Sarbanes-Oxley compliance and internal control systems. Internal control systems will be covered in depth, with focus on internal controls in an information technology (IT) environment. The IT environment will be discussed from the perspectives of designing effective internal controls and auditing in an IT environment. The function of the internal audit department will be covered, as well as how external auditors can work with internal auditors.

Prerequisites: ACC 401

**ACC 445. MANAGERIAL ACCOUNTING FOR HEALTH CARE ORGANIZATIONS**

(Same as HSM 425)

Costs for health services continue to rise faster than overall economic growth drawing ever greater attention from employers, governments and consumers. The front line of the cost battle is within the health services entities where decision making depends on accurate reporting of internal costs. This course will allow the student to understand how costs are reported and how to use this information to make decisions within the health services entity. The following topics will be examined within a health services setting: cost allocation, cost-volume-profit analysis, budgeting and variance analysis, and transfer pricing.

**PHD COURSES****ACC 501. SEMINAR IN ACCOUNTING**

(Offered each quarter, 1 credit. First-year PhD students are graded on a P/F basis. Second-year and later students receive a letter grade.)

A forum for the presentation, discussion and critique of current accounting research papers where accounting faculty, PhD students and outside speakers present working papers on current research topics. Students are expected to actively participate in the discussion and critique of the papers presented. In weeks when accounting workshops/seminars are scheduled, accounting PhD students will meet as a group with a member of the accounting faculty before the seminar to discuss the paper. Since such meetings are designed to facilitate students' active participation in the seminars, students are required to circulate a brief set of comments to the other class participants in advance of the meeting. Grading will be based on the quality of students' contributions to the pre-seminar meetings as well as their contributions and participation in the actual workshops.

**ACC 510. ACCOUNTING RESEARCH I**

(Offered Fall Quarter, 3 credits.)

The natural starting point for the study of capital markets research in accounting begins with the relationship between accounting earnings and security returns. This course covers the evolution of research on the earnings/return relation from the seminal papers up through current research. Topics covered include the fundamental features of the contemporaneous earnings/return relation, the nature of association-type and event study-type investigations of the contemporaneous earnings/return relation, theoretical and empirical evidence on the lead/lag relation between security returns and accounting earnings, the asymmetric timeli-

ness of accounting earnings, theoretical and empirical research on the role of conservatism in accounting earnings, pro-forma earnings and international research on the characteristics and properties of the earnings/return relation. The course also covers capital market research on analysts' earnings forecasts including the properties of such forecasts (e.g., optimism, pessimism, rationality) and the relation between analyst earnings forecasts and stock prices.

**ACC 511. ACCOUNTING RESEARCH II**

(Offered Winter Quarter, 3 credits.)

This course turns the focus from aggregate accounting earnings (which is studied in ACC 510), to the components of earnings; accruals and cash flow. Given the central role of accruals in the measurement of accounting earnings, the initial focus of the course is on the fundamental properties of accruals and the importance of accruals to accounting earnings central role as a summary measure of firm performance. The course also covers the relation between cash flow and accruals and the market pricing of accruals and the components of accruals. The study of accruals naturally leads to research on earnings management that focuses on how and why earnings are managed. Research on how earnings are managed focuses on managers' opportunistic manipulation of accounting accruals and/or via altering real activities while research on the managerial incentives to manage reported earnings focuses on (among other topics) the literature on meeting or beating earnings expectations and earnings thresholds. The course also covers the topic of voluntary disclosure. In particular, the incentives managers have to voluntarily disclose earnings and/or cash flow forecasts and the properties and stock price effects of such forecasts. Other voluntary disclosure literature studied includes the effect of voluntary disclosure on the cost of capital and the effect of the legal environment on firms' voluntary disclosure practices.

Prerequisite: ACC 510

**ACC 512. ADVANCED TOPICS IN ACCOUNTING RESEARCH**

(Offered Spring Quarter and alternates with ACC 513, 3 credits.)

This course covers advanced topics in accounting research including the role of accounting numbers in debt contracts and lending agree-

ments, the role of accounting numbers in executive compensation contracts and corporate governance, the economic consequences of accounting regulation, the use of accounting-based measures of the cost of capital and empirical tax research in accounting.

Prerequisites: ACC 510 and ACC 511

**ACC 513: CONTEMPORARY TOPICS IN ACCOUNTING RESEARCH**

(Offered Spring Quarter and alternates with ACC 512, 3 credits.)

This course covers topics including value relevance, accounting-based valuation models, earnings quality, the impact of earnings and accrual quality on firm valuation, the impact of real activity management on firm performance, market efficiency with respect to accounting numbers, the economic consequences of fraudulent financial reporting and the effects of accounting restatements.

Prerequisites: ACC 510 and ACC 511

**■ APPLIED ECONOMICS****PHD COURSES****AEC 501. APPLIED ECONOMICS SEMINAR I**

The seminar is a forum for recent and current research. PhD students, faculty and outside speakers present papers on their current research and/or discuss recent work by others in the field.

**AEC 502. APPLIED ECONOMICS SEMINAR II**

A continuation of AEC 501.

**AEC 503. ORGANIZATIONAL AND COMPETITIVE STRATEGY SEMINAR**

(Same as STR 501)

A continuation of AEC 501 and AEC 502.

**AEC 504. FUNDAMENTALS OF ECONOMICS**

This is a course meant for entering doctoral students with insufficient background in economics. Topics covered include markets and prices, consumer behavior, individual and market demand, choice under uncertainty, production, competitive markets, monopoly and monopsony, competitive strategy, markets with asymmetric information, externalities and public goods. Offered in the summer, primarily for entering doctoral students.

**AEC 505. REAL ANALYSIS**

The course introduces mathematical tools especially useful in economics, econometrics and finance. Topics include a basic topology of the real line, sequences and series, limits, continuity, differential and integral calculus. Offered in the summer, primarily for entering doctoral students.

**AEC 506. PROBABILITY THEORY**

This course teaches Random Variable, Distribution, Independence; Transformations and Expectations; Common Families of Distributions; Multiple Random Variables, and Markov Chains. Offered in the summer, primarily for entering doctoral students.

**AEC 510. PHD WORKSHOP IN APPLIED ECONOMICS**

The workshop provides a forum for the presentation of ongoing and completed research projects by PhD students in the economics core. Third- and fourth-year PhD students are expected to participate actively.

Prerequisite: permission of the instructor

**AEC 511. ADVANCED PRICE THEORY**

Provides a survey of the substance and methods of contemporary price theory for students preparing to do research. Generally, the course covers the economic behavior of individuals and firms in a competitive market setting. Individual behaviors examined include responses to price and income changes, intertemporal planning (e.g., saving), household production, labor supply, investment in human capital, search, and reactions to uncertainty about future assets and goods prices. For firms, the implications of value-maximization for input demands and output supplies are explored thoroughly. Managerial choices related to multiple products, intertemporal production planning and uncertainty are explicitly modeled. Some extensions to monopoly behavior are considered. Finally, some implications of consumer and competitive firm behavior for industry (single market) and general equilibrium are examined. These include (for industry equilibrium) the technological determinants of industry responses (entry-exit, quantity changes, price changes) to economic shocks such as shifts in demand for the industry's product. For general equilibrium, the first and second welfare theorems will be covered. This course will follow the semester schedule.

**AEC 512. GAME THEORY**

This course teaches the tools of game theory, and applies them to topics in industrial organization, organizational economics and other areas. Game theory is the study of strategic interaction among a small number of decision-makers. It is nowadays applied in almost any area of economics, as well as in related disciplines such as finance, accounting, marketing and operations research. The course is organized by concepts and methods, but most time will be spent on applying them to a large variety of topics. While this is a theory course, the instructor will also occasionally refer to relevant empirical work.

**AEC 513. INDUSTRIAL ORGANIZATION THEORY**

This course provides an introduction to the theory and practice of industrial organization. Broad areas of application include static oligopoly models, two-stage games and games with infinite horizons. Concepts from game theory such as Nash equilibria, subgame perfect equilibria, and perfect Bayesian equilibria will be used as needed. Special topics may include: contracts, patents, licensing, bundling, tying, buyer-seller networks, switching costs, price discrimination, mergers and entry barriers.

**AEC 516. ANALYSIS OF ECONOMIC POLICY**

(Offered at the discretion of the instructor)

**AEC 520. CAUSAL INFERENCE**

(Same as ACC 520 and MKT 520)

The course will cover how to design compelling research, the focus of which is causal inference. The course covers the design of true experiments and concepts of validity (internal validity, external validity, replicability). The approach should follow the Rubin potential outcomes framework. The course then covers causal inference and related econometric methods in observational studies for cross-sectional, panel data, and time-series, and non-linear models including OLS, instrumental variables, Heckman selection models, regression discontinuity designs, matched sample designs, granger causality, event studies, diff-in-diff, fixed effects, clustering standard errors, dynamic panel methods (e.g., Blundell and Bond 1998), and some issues in logit/probit/multinomial logit. Although the course will discuss many econometric techniques, students are expected to have already learned the mechanics of these methods, so that the course can focus on causal inference and its limitations in these methodologies.

**AEC 521. ADVANCED TOPICS IN THE ORGANIZATION OF INDUSTRY**

The course concentrates on unsettled areas in industrial organization, exposing students to potential thesis and research projects. Specific topics vary from year to year. Typical current topics are theory of conglomerate mergers, analysis of advertising and scale as barriers to entry, quality competition and market responses to costly information.

**AEC 523. MICRO-ECONOMETRIC MODELING: STATIC APPROACHES**

This course introduces students to canonical modeling approaches for analyzing decision making by both firms and consumers, focusing on static environments. Central topics include demand estimation, models of strategic interaction, networks and platforms and auctions. Applications include firm pricing decisions, new product introductions, strategic entry and vertical relationships. The course generally includes coding assignments and student presentations, in addition to the weekly lectures on methods and applications.

**AEC 524. MICRO-ECONOMETRIC MODELING: DYNAMIC APPROACHES**

This course examines consumer and firm

behaviors that involve inter-temporal trade-offs and as a result involve dynamic optimization on the part of both consumers and firms. It begins with an overview of dynamic programming methods, in both single and multi-agent settings, emphasizing methods that link estimation with computation. Single agent topics include models of capital replacement, dynamic demand, inventory models and salesforce management. Multi-agent topics include strategic innovation, learning by doing, demand smoothing, and product repositioning. A strong emphasis is placed on recent methods and frontier topics. The course generally includes coding assignments and several student presentations, in addition to weekly lectures.

**AEC 525. MATHEMATICAL ECONOMICS I**

(Same as ECO 481)

(Offered at the discretion of the instructor)

Credit—four hours

This course covers the use of optimization theory in economic analysis. The topics covered include finite-dimensional optimization (unconstrained optimization, Lagrange's Theorem, the Kuhn-Tucker Theorem), the role of convexity in optimization, parametric continuity of solutions to optimization problems, and finite- and infinite-horizon dynamic programming.

Prerequisite: AEC 505

**■ APPLIED STATISTICS****MASTER'S-LEVEL COURSES****APS 425. ADVANCED MANAGERIAL DATA ANALYSIS**

The objective of this course is to provide a systematic way to organize and make use of quantitative information in business decision-making. The course builds on what students have learned in introductory statistics, extending that knowledge to include the situations frequently encountered in decision-making.

Prerequisites: GBA 412 or GBA 462

**PHD COURSES****APS 511. INTRODUCTION TO MATHEMATICAL STATISTICS**

A more theoretical treatment of the subject matter of APS 411, offered in the summer, primarily for entering doctoral students.

**APS 514. INTRODUCTION TO ECONOMETRICS**

(Same as College course ECO 484)

Credit—two hours

The course is for students intending to do research in quantitative areas. Topics include: estimation and hypothesis testing in the standard linear model, weighted least squares, transformations, constraints, analysis of variance and covariance and problems of model specification.

Prerequisites: AEC 505 or equivalent and APS 511 or equivalent

**APS 515. ELEMENTS OF ECONOMETRICS**

(Same as College course ECO 485)

Credit—four hours

The course starts with the single-equation linear model, focusing on OLS estimation and instrumental variables estimation. Then it moves to a linear system of equations model and covers system OLS estimation, generalized least squares estimation, and generalized method of moments. It ends topics of the linear model with linear unobserved effects panel data models. Then the course moves to non-linear estimation, covering the M-Estimators and discrete response models. If time permits, a few more advanced topics will also be covered.

The course assumes familiarity with matrix algebra, probability theory, basic statistics, and econometrics at the level of ECO 483 and ECO 484. The course requires programming in Matlab for some problem sets.

Prerequisite: APS 514

**APS 519. TOPICS IN MICROECONOMETRICS**

The course content varies from year to year. Panel data, cross-section time series, qualitative dependent variables and duration analysis are possible topics discussed.

Prerequisite: ECO 517 or permission of the instructor

**APS 523. ADVANCED ECONOMETRICS**

(Same as College course ECO 517)

Credit—five hours

The course covers advanced topics in econometrics, including maximum likelihood methods and methods of moment estimation. Also discussed are asymptotic theory, and semi-parametric and nonparametric estimation.

Prerequisite: APS 515

**APS 524. TOPICS IN MACROECONOMETRICS**

(Same as College course ECO 518)

Credit—five hours

The course focuses on the econometric techniques and problems associated with particular fields in eco-

nomics, such as the econometrics of labor economics and the econometric issues in macroeconomics or finance.

Prerequisite: APS 523 or permission of the instructor

**APS 528. SAMPLING TECHNIQUES**

(Same as Medical School course BST 421; APS 528 is offered in alternate years)

Credit—four hours

The course is for students with a primary interest in applied statistics or research in quantitative areas. Topics include: design and analysis of simple random, stratified, cluster and systematic sampling; multistage and multiphase sampling; and nonresponse and measurement errors.

Prerequisites: GBA 411, GBA 412 and differential calculus

**APS 529. APPLIED MULTIVARIATE ANALYSIS**

(Same as Medical School course BST 441; APS 529 is offered in alternate years)

Credit—two hours

This course examines the theory and applications of multivariate methods often used in economics, marketing and finance. Topics include: multivariate normal distributions, sampling distributions, tests of hypotheses, multivariate analysis of variance, canonical correlation, principal components and factor analysis.

Prerequisite: APS 514

**APS 531. APPLIED ECONOMETRICS**

The course aims to provide PhD students with a broad set of applied econometric skills. The contents of the course have been designed as to provide the broadest group of students fairly in-depth exposure to key topics in Panel Data methods that would be useful in their research endeavor. These methods have applications in accounting, corporate finance, marketing, and more recently in operations management and information systems.

The course will be broken up into four modules. The first module is a refresher to topics already covered in the introductory sequence of econometrics courses. The focus, however, would be for students to grasp the idea behind the methods in a more applied setting. The second module introduces students to Panel Data and the issues involved with the estimation of models based on such data. The third module forms the core of the course and focuses on simulation-based econometric methods. In this module, the models discuss both reduced form and structural models applied to cross sectional as well as Panel Data. The course concludes with a quick introduction to Bayesian ideas and methods.

## ■ BUSINESS COMMUNICATIONS

### **MGC 401. INTERPERSONAL PERSUASION** *(Influence in professional relationships)*

MGC 401 establishes the conceptual foundation and the learning method for the MGC sequence. It anchors the course in two conceptual frameworks: the rhetorical principles of logic and persuasion, and the interactional approach to communication in groups and professional relationships. It introduces the teaching model for the course: speaking and writing assessments, case analyses and discussion, successive rounds of business presentations and writing assignments, and repeated practice in active listening, and giving and receiving performance feedback.

### **MGC 402. COMMUNICATING ANALYTICS** *(Storytelling with data)*

MGC 402 applies the principles of persuasion and logic of argument established in MGC 401 in successive rounds of presentation practice, coupled with peer and self-review. Presentations stem from analyses of business problems using the Simon problem-solving framework and make recommendations aimed at influencing decision makers in varying functions and at different levels. Students facilitate discussions of readings, give one team presentation, develop behavioral interview skills, and, as in all quarters of MGC, give and receive feedback in both informal and formal ways.

### **MGC 403. TEAMWORK**

*(Personal Effectiveness in Collaborative Partnerships)*

MGC 403 applies the interactional concepts of group dynamics introduced in MGC 401 to team formation and performance, through focus on business cases and field projects. Foundational concepts in group dynamics, meeting management, intercultural communication, and conflict resolution are examined through the lens of team activity. Team projects culminate in presentations and written reports, with integrated processes for self and team evaluation.

### **MGC 411 ADVANCED PERSUASION**

*(Attracting offers; negotiating deals; coaching for improved performance)*

MGC 411 applies the concepts of persuasive communication to a widened range of workplace settings, including team projects in business case analysis and persuasion for decision makers; one-to-one and multi-party negotiations; and managerial interactions employing feedback for skill development and

improved performance. The course culminates with identification of goals for improving individual communication competency as related to career progress

## ■ BUSINESS ENVIRONMENT AND PUBLIC POLICY

### MASTER’S-LEVEL COURSES

#### **BPP 426. MACROECONOMICS**

Macroeconomics is the study of how economies grow and fluctuate over time and how they interact with one another. In this course, we discuss economic measurement, economic growth and the business cycle. We also discuss the implication of modern theories of growth and fluctuation for the conduct of monetary policy and fiscal policy. There is a strong emphasis on the international linkage among economies and the implications of macroeconomics for the business environment.

Prerequisite: STR 401

#### **BPP 431. LEGAL AND TAX CONSIDERATIONS OF NEW VENTURES**

(Same as ENT 431)

(Offered at the discretion of the instructor)

This course surveys, from the entrepreneur’s perspective, legal and tax considerations that impact strategic choices in organizing, funding, staffing, governing, and operating new ventures. The course’s principal focus is on how to create and retain competitive advantage through the skillful ordering of legal affairs. Emphasis will be transactional and include analysis of such issues as the creation and protection of intellectual property, technology licensing, global expansion, and internet commerce. The course will include, as a context for applied learning, a term project involving the creation and evolution of a selected new venture opportunity.

#### **BPP 432. BASIC BUSINESS LAW**

(Same as ENT 432)

This course surveys the law of contracts, agency, and business associations – with the objective of developing familiarity with selected laws, regulations, legal principles, and legal processes that govern (a) efficient exchange, generally; and (b) how and in what ways managers and entrepreneurs organize and interact to facilitate exchange. Although emphasis will be on United States law, there will be selected reference throughout the course to issues related to international transactions and to pertinent differences in legal systems of countries outside the United States. The course has a distinct transactional focus, with heavy

reliance upon contemporary cases, commercial practices, and issues. Particular attention will be given to the impact of the legal framework upon sound managerial decision-making, business risk management, commercial rights and responsibilities, and ultimately business valuation.

#### **BPP 433. ADVANCED BUSINESS LAW AND ETHICS**

(Same as ACC 433)

A continuation of BPP 432, which is a prerequisite)

Topics include: bankruptcy, real property, personal property, sales, secured transactions, negotiable instruments, insurance, trusts and estates and consumer protection This course also includes discussions of ethics and professional responsibilities.

#### **BPP 442. INTERNATIONAL ECONOMICS AND FINANCE**

(Same as FIN 442)

Topics include: theories of international trade; exchange-rate regimes; the determination of exchange rates in a world of flexible exchange rates; the Euromarkets; the pricing of assets in open economies; international financial management and the theory of multinational corporations; foreign exchange exposure; analysis of currency forward, future, option and swap contracts; capital budgeting for foreign projects; and financing international trade.

Prerequisite: FIN 402

Recommended: FIN 411

## ■ COMPETITIVE AND ORGANIZATIONAL STRATEGY

Michael Raith, *Area Coordinator*

### MASTER’S-LEVEL COURSES

#### **STR 401. MANAGERIAL ECONOMICS**

Credit—four hours

The primary objective of the course is to train students to think in economic terms, to identify the relevant economic issue in a given situation, to separate the relevant from the irrelevant, and to analyze the implications of alternative actions. Another objective is to provide an increased understanding of markets. The course presents the basic analytical tools of microeconomics, particularly as those skills are relevant to managers. Important economic concepts used in subsequent courses, such as opportunity costs and a Nash Equilibrium, are covered. Applications of marginal analysis are stressed.

#### **STR 403. ORGANIZATION AND STRATEGY**

The course teaches how to approach and solve a large range of organizational problems from an analytical-economic perspective that is grounded in agency theory. It discusses in detail the assignment of decision rights (including centralization vs. decentralization of decisions), performance measurement, and incentives and rewards. These are the three elements of “organizational architecture,” the central framework of the course. Applications range from job-level incentive problems to broader questions about organizational structure and the boundaries of the firm (e.g., vertical integration). Throughout, the course emphasizes the complementarity of organizational policies and the importance of alignment between a firm’s internal organization and its strategy.

Prerequisite: STR 401 or GBA 461

#### **STR 421. COMPETITIVE STRATEGY**

Competitive strategy deals with the most significant decisions that companies make in the marketplace, including entry into a market, product positioning, pricing, investments, technology choice and acquisitions. This course provides tools and concepts for analyzing these decisions and for designing business strategies that help firms make above-normal profits in the long run. Throughout the course, there is an emphasis on how firms interact with existing or potential competitors and other parties in the market. The tools and concepts used to understand this interaction are partly those of the traditional field of Strategic Management, but more importantly those of modern micro-

economics, especially the field of Industrial Organization.

The first half of the course looks at the “big picture” and covers industry analysis, value creation and competitive advantage, and integration and diversification decisions. The second half of the course focuses on strategic interaction among firms, and covers specific topics such as the dynamics of price competition in oligopolies, commitment strategies of firms, entry and exit, networks and standards, and technological competition.

The course is largely case-based. About one third of all classes are lectures; the other two thirds are case discussions.

Prerequisite: STR 401

#### **STR 422. GAME THEORY FOR MANAGERS**

This course develops game-theoretic tools that can be used to provide both quantitative and qualitative prescriptions for profit-maximizing behavior in a variety of strategic settings. The basic concepts are introduced through applications to strategic settings that one encounters in typical business situations. However, the game-theoretic concepts themselves are quite general, as the goal of the course is provide students with both an understanding of these concepts and a tool kit with which to evaluate a broad range of strategic problems.

The set of strategic problems specifically discussed includes the pricing of new and existing goods in the presence of substitutes and complements, determining advertising and R&D expenditures, analyzing market entry, exit, and entry deterrence opportunities, and evaluating bargaining and auction environments. Extensive use is made of examples from both private- and public sector analyses of strategic interactions among firms.

Prerequisite: STR 401 or GBA 461

#### **STR 423. PRICING POLICIES**

(Same as MKT 414)

This course prepares future managers to analyze the environment in which their firm operates in order to arrive at an appropriate pricing policy for their products or services. Topics include (i) relevant costs (i.e., which costs are relevant for pricing decisions), (ii) elasticity of demand, and (iii) market segmentation (e.g., through the offering of a product line, or by means of bundling, tying, menus of two-part tariffs, quantity discounts, and other direct and indirect means of price discrimination). The course will also cover essential pricing analytic tools such as break-even analysis and economic value analysis, and it will provide a solid introduction into the pitfalls of pricing in a

competitive environment and how to anticipate competitor responses. Lastly, the course will cover the legal aspects of pricing as appropriate.

Prerequisites: STR 401 or GBA 461 and MKT 402

#### **STR 424. HUMAN RESOURCE STRATEGY**

This course analyzes human resource management from an economics perspective. It focuses primarily on the implementation of compensation and incentive structures in organizations. Topics include: selection and hiring of employees, measurement and appraisal of employee performance, promotion-based incentive systems, managing work-force diversity, employee relations, and the coordination of human resource policies and business strategy.

Prerequisite: STR 401 or GBA 461

Recommended: STR 403

#### **STR 427. ORGANIZATIONAL BEHAVIOR**

This course presents behavioral concepts that influence individual, group, and organizational effectiveness. Particular emphasis is given to motivation, culture, globalization, leadership, group dynamics, communication, organizational structure and change. Students develop ways of thinking about organizational problems to increase individual and organizational effectiveness. Multiple stakeholder perspectives and systemic approach to organizational problems are emphasized.

#### **STR 429. ADVANCED COMPETITIVE STRATEGY**

This course builds on STR421 to train students in conducting and communicating strategic analysis. The course provides an end-to-end methodology for evaluating and developing business strategy. Students learn and practice framing an unstructured strategic challenge, constructing workable questions, collecting and evaluating the required evidence and formulating strategic recommendations. The course is split about evenly between work on a quarter-long project, lectures and case studies.

Prerequisite: STR 421

#### **STR 430. HEALTH SCIENCES MANAGEMENT AND STRATEGY**

(Same as HSM 430)

This course applies the principles of organizational economics and strategy to the institutional setting of health sciences. The course focuses on the interdependence between the delivery, financing, and technology sectors of the health care marketplace. It discusses how management and strategy choices within each sector are responses to the unique institutional

factors in the health care marketplace and how the strategies of each sector affect the behavior of the others. Students will leave the course with an ability to think productively about management and strategy challenges within each of the three health science sectors.

Prerequisite: STR 401 or GBA 461

Recommended: STR 403, STR 421

### STR 438. B2B PRICING

(Same as MKT 438)

Students will learn the major differences in pricing strategies between selling to consumers (STR423) and to other firms, which then deal with consumers. The course starts by analyzing the pricing problem of a manufacturer selling to a retailer. We examine the issue of double marginalization, and learn how two-part tariffs get us out of this problem. We also examine different forms of contractual relations—from vertical acquisitions to regular short-term contracts—and potential issues with every form, touching on transfer pricing and outsourcing. In the second part of the course, we analyze a crucial concept of cost pass-through (how much a retailer should decrease the retail price in response to a decrease in the wholesale price) and the effect of manufacturer's advertising on the retailer and on the channel overall. This course is a natural continuation of STR423 Pricing Policies for those who are interested in working in an industry where a significant portion of sales is done through independently-owned retailers, whether students are planning on working on the retailer side or on the manufacturer side of this industry.

Prerequisite: STR 423

### STR 439. ADVANCED PRICING

(Same as MKT 439)

This course builds on MKT 414/STR 423 to equip students with the skills to make profitable pricing decisions in complex business environments. Topics include: pricing with constrained supply and uncertain demand; markdown management; advance selling; pricing on the internet; selling through auctions; pricing in markets with (direct and indirect) network effects; and psychological aspects of pricing.

Prerequisite: MKT 414 or STR 423

### STR 440. CORPORATE GOVERNANCE

This course builds on STR 403 (Organization and Strategy to provide a more in-depth analysis of organizational choice and governance mechanisms. Topics include: the choice of organizational form; corporate charter (voting rules, anti-takeover provisions, and so on); proxy process; board of directors; ownership

structure; banks and other financial institutions as organizational monitors; CEO selection, retention and succession; and governance in entrepreneurial firms. The class presents the important issues relating to these topics and examines the relevant empirical research. Emphasis is placed on how optimal practices can vary across industry, strategy and country and on how they might evolve through time. The course complements FIN 411 (Investments) and FIN 423 (Corporate Financial Policy and Control) in helping students understand how corporate policies affect security prices and value.

Prerequisites: STR 401 or GBA 461 and STR 403

### STR 442. SPECIAL TOPICS IN STRATEGY

(Not offered every year)

Special topics are generally those, which are not well covered in the other courses, such as advanced pricing techniques, or they may deal with strategy in selected industries (e.g., financial services, high-tech marketing, etc.). The specific content of the course varies, depending on faculty interests.

Prerequisite: permission of the instructor

### STR 461. STRATEGY AND BUSINESS SYSTEMS CONSULTING PRACTICUM

(Same as CIS 461 and OMG 461)

This course provides MBA students with an introduction to strategy and business systems consulting. It is aimed at students who wish to explore career opportunities within the major consulting firms, but is also relevant for students considering a career as an independent consultant, or within a corporation's internal consulting group. The course focuses on three areas:

- *The Consulting Industry:* Students will examine several types of consulting (e.g., strategic, operations, systems, human resource and marketing) and understand where the major consulting firms position themselves. The career paths for MBA's entering the industry, and the skills and values necessary for success as a consultant will be scrutinized.

- *The Business Systems Consulting Process:* The creation of proposals, the winning of consulting engagements, and the preparation of contracts will be discussed. The typical stages of a business systems consulting engagement (e.g., problem framing, analysis design, gathering data, interpreting results, architectural solution, and presentation of recommendations) and managing different sorts of consulting projects (e.g., operational improvement, supply-chain optimization, quality improvement, strategy formulation, and organization design) will be examined.

- *Consulting Skills:* The role of the consultant and the human dimension will be discussed (e.g., personal attributes of consultants, relationship building, and team building). Diagnostic tools and data gathering techniques (e.g., questionnaires and interviews) will be presented. Frameworks for problem solving, and communicating recommendations will also be introduced.

The course examines a wide range of modern global business challenges and opportunities from both the consultant's and the manager's perspectives and provides a learning platform to integrate and practice the skills and knowledge learned.

### PHD COURSES

#### STR 501. ORGANIZATIONAL AND COMPETITIVE STRATEGY SEMINAR

(Same as AEC 503)

A continuation of AEC 501 and AEC 502

#### STR 510. RESEARCH IN ORGANIZATIONAL AND COMPETITIVE STRATEGY

This course provides a forum for discussing theoretical and empirical research on organizational and competitive strategy, and it contains the core material for preparing for a minor exam in STR. The course covers topics similar to those in STR 403. However, students study more advanced papers and analyze the material with more depth and rigor. Depending on the backgrounds and interests of the students, likely topics include: why firms exist; why organizations take the form that they do; the motivations for change within organizations; incentive problems and contracting; the factors that determine the allocation of decision rights within an organization; how agency problems are mitigated by the market for corporate control; the managerial labor market; compensation plans; the ownership structure of residual claims and the court system; and why "hybrid" organizations such as franchises and joint ventures exist.

Prerequisite: STR 403 or permission of the instructor

## ■ COMPUTERS AND INFORMATION SYSTEMS

Abraham Seidmann, *Area Coordinator*

### MASTER'S-LEVEL COURSES

#### CIS 401. INFORMATION SYSTEMS FOR MANAGEMENT

Credit—four hours

This course focuses on the theoretical foundations underlying management information systems and their vital role in the modern business environment. Topics include: information economics; innovative models of e-business and the impact of the Web on organizational transformation; the nature and operation of large-scale-enterprise information systems; database and knowledge management systems; data communications; electronic commerce; business process re-engineering; and information-systems analysis, design and control. The strategic and economic impacts of competitive information systems are emphasized. Assignments and cases introduce students to modern quantitative business modeling concepts and analysis, and to sophisticated business applications of the Web and databases.

#### CIS 413. THE ECONOMICS OF INFORMATION MANAGEMENT

This course covers economic approaches to the management of information systems (IS). Topics include: the value of information in an organizational setting; cost trends in hardware and software; the nature and implications of information asymmetries and objective conflicts in the IS setting, such as introducing new technology in an organization, the use of pricing and other control mechanisms such as budgets and corporate standards to manage IS resources; analysis of peak-load problems; outsourcing and EDI issues; and the effects of queuing and its associated externality. Several business cases are used to illustrate the issues.

Prerequisites: CIS 401 and STR 401 or GBA 461

#### CIS 415. BUSINESS PROCESS ANALYSIS AND DESIGN

This course studies the analysis, design and automation of business processes. The course teaches system-modeling tools appropriate for the analysis and design of business processes and information systems. These tools are applied to electronic commerce ventures, the design of various service processes, logistics and R&D activities. Key features of the course are: modern process analysis techniques, the study of cutting edge research results on work organization and design, and an introduction to rapid prototyping of new information systems.

The course includes a comprehensive team-based field project involving a real business process. This project requires the application of the concepts and techniques taught in the course.

Prerequisite: CIS 401

#### CIS 416. ADVANCED INFORMATION TECHNOLOGY

Information has become increasingly important to the modern corporation for conducting operations, improving efficiency and maintaining competitiveness in rapidly changing markets. Effective use of information technology (IT) involves knowledge of the existing capacities, awareness of how information technology is changing and imaginative use of the technology to enhance business performance.

The course contains a broad coverage of trends in IT development (e.g., hardware, software, systems architecture, networks, security, etc.), and how these components can be used for new business applications. The emphasis is not on the technology, but rather on managerially evaluating its usefulness for solving business problems.

Topics to be covered include: client-server architecture, data warehousing, data mining, decision support, enterprise resource planning, knowledge-based systems/artificial intelligence, networks and security, object-oriented and Web-based programming languages, and technology for project managers. All students are required to complete a group project on the business implications of these technologies. They have to look at these technologies from the perspective of a business consultant who needs to understand how to match the right technology with his or her customers' business problems.

Prerequisite: CIS 401

#### CIS 417. INTRODUCTION TO BUSINESS ANALYTICS

This course covers the emerging field of business analytics (BA) or 'data mining' and expands and develops the students' analytical tool kit in analyzing massive data sets. Using cases studies and hands-on data sets, students will learn advanced data query techniques, data cleaning and organization, explore various machine learning techniques including supervised and unsupervised classification schemes, text classification, clustering techniques as well as predictive analytics. Students will gain hands-on experience with a variety of software tools, including SQL, SAS, R, Tableau, and Weka – an open source platform for data mining.

Prerequisite: GBA 412 or GBA 462

#### CIS 418. ADVANCED BUSINESS

## MODELING AND ANALYSIS USING SPREADSHEETS

The course expands and develops students' analytical tool kit through "hands on" training in the effective use of spreadsheet-based tools for advanced managerial analysis. Students perform quantitative analysis of advanced problems in options pricing, investments, corporate finance, marketing and operations. The course enhances and reinforces the analytical skills developed in earlier MBA classes such as formulating and solving large-scale business problems using quantitative models, risk simulation and sensitivity analysis. Spreadsheet tools introduced in this class include Visual Basic for Applications (V.B.A.) and stochastic optimization using Optquest. Students who successfully complete the course should possess cutting-edge skills in spreadsheet business modeling and analysis.

Prerequisite: GBA 411

#### CIS 437. DIGITAL MARKETING STRATEGY (Same as MKT 437)

This course examines the major issues involved in marketing on the Internet. Among the topics studied are: new product opportunities on the Internet; the changed role of advertising; the Internet as a two-way communication medium with consumers; targeting individual consumers; word-of-mouth among consumers on the Internet; the Internet as a distribution channel; and marketing research on the Internet.

Prerequisite: MKT 402

#### CIS 440. ELECTRONIC COMMERCE STRATEGY

This course covers electronic strategies for business to business and consumer e-commerce. This includes strategies for protecting market share by going online, ameliorating online competition using network effects and customer lock-in, positioning against other online presences, dealing disintermediation and re-intermediation, developing online communities for business or consumer e-commerce, and managing supply chain and customer relationships.

Prerequisite: CIS 401

#### CIS 442. SPECIAL TOPICS IN COMPUTER AND INFORMATION SYSTEMS

Special topics are generally those which are not well covered in other courses. The specific content varies, depending on faculty interest.

Prerequisite: Established by the instructor

**CIS 446. FINANCIAL INFORMATION SYSTEMS**

(Same as FIN 446)

This course examines the role that advances in telecommunications, the Internet, and information systems play in the financial markets and the financial services industry. An in-depth understanding of operations of industry is developed while studying technology's transformative role. The class explores subjects such as electronic trading systems competing with traditional exchanges and Internet brokerage firms challenging full-service brokerage firms and banks for customers. How trends in these areas will appear in other kinds of electronic commerce are discussed, the latest developments in financial markets and the financial services are examined, and case studies are used in many classes.

Prerequisites: CIS 401 and FIN 402

**CIS 461. STRATEGY AND BUSINESS SYSTEMS CONSULTING PRACTICUM**

(Same as OMG 461 and STR 461)

This course provides MBA students with an introduction to strategy and business systems consulting. It is aimed at students who wish to explore career opportunities within the major consulting firms, but is also relevant for students considering a career as an independent consultant, or within a corporation's internal consulting group. The course focuses on three areas:

- **The Consulting Industry:** Students will examine several types of consulting (e.g., strategic, operations, systems, human resource and marketing) and understand where the major consulting firms position themselves. The career paths for MBA's entering the industry, and the skills and values necessary for success as a consultant will be scrutinized.

- **The Business Systems Consulting Process:** The creation of proposals, the winning of consulting engagements, and the preparation of contracts will be discussed. The typical stages of a business systems consulting engagement (e.g., problem framing, analysis design, gathering data, interpreting results, architectural solution, and presentation of recommendations) and managing different sorts of consulting projects (e.g., operational improvement, supply-chain optimization, quality improvement, strategy formulation, and organization design) will be examined.

- **Consulting Skills:** The role of the consultant and the human dimension will be discussed (e.g., personal attributes of consultants, relationship building, and team building).

Diagnostic tools and data gathering techniques (e.g., questionnaires and interviews) will be presented. Frameworks for problem solving, and communicating recommendations will also be introduced.

The course examines a wide range of modern global business challenges and opportunities from both the consultant's and the manager's perspectives and provides a learning platform to integrate and practice the skills and knowledge learned.

**PHD COURSES****CIS 501, 502, 503, 521, 522, 523. PHD SEMINARS IN COMPUTERS AND INFORMATION SYSTEMS**

These six PhD seminars are offered in the fall, winter and spring quarters, with topics selected from the following: decision-support systems, economics of information and the valuation of information systems, issues in the management of information systems and the economics of computing, advanced topics in systems analysis and design, organizational aspects of information systems, logical and physical database design and topics discussed in the joint CIS/OMG PhD seminars.

Prerequisite: permission of the instructor

**CIS 512. ADVANCED TOPICS IN DATABASE DESIGN**

This course examines current research issues in database management systems. Topics include: database-design methodologies, semantic models, semantic integrity constraints, object-oriented approaches and applications of artificial intelligence to database management systems.

Prerequisite: CIS 415 or permission of the instructor

**■ ENTREPRENEURSHIP**Duncan T. Moore, *Area Coordinator***MASTER'S-LEVEL COURSES****ENT 422. GENERATING AND SCREENING ENTREPRENEURIAL IDEAS**

As the foundation course in Entrepreneurship, ENT422 covers:

- Idea Generation
- Opportunities Screening
- Entrepreneurial Characteristics

This course outlines a critical evaluation process used by successful entrepreneurs to prioritize new venture ideas. The focus of this course is on the technical and market evaluation of very early-stage ideas when information is greatly lacking and the time and money to research such answers is also limited.

Students, in group format, will generate and filter their own ideas and evaluate them based upon technical merit, business challenges, and early market indicators. Teams will present their idea-filtering rationale to a panel for review and feedback.

Behind this evaluation process, the class will review reference material on the subject and several accomplished entrepreneurs will share their personal experiences.

While the nomenclature will align most directly to high-technology for-profit start-up companies, parallels to low-tech-no-tech, intra-preneurship, non-profits, and social entrepreneurship will be discussed.

**ENT 423. NEW VENTURE DEVELOPMENT AND MANAGING FOR LONG TERM SUCCESS**

The focus of ENT 423 is learning how to prepare an effective business plan that will communicate the inherent value of the concept.

Among the critical issues that will be addressed are:

- Competitive conditions and industry trends
- Sustainable competitive advantages
- Management team
- Marketing plan
- Financial plan
- Exit possibilities
- Franchising
- Legal Entities

The approach used is appropriate for start-ups and for corporate venturing. It is also suitable for both profit and for not-for-profit organiza-

tions. Also included is a social entrepreneurship module.

At the same time plans are prepared, other entrepreneurial issues are studied, such as assembly resources, launching and building new ventures and harvesting results.

Lectures, cases and guest speakers are utilized. The speakers will address a range of new venture topics from the development of management teams, marketing, finance, venture capitalists and legal issues. The completion of a business plan for a proposed new venture is required.

Prerequisite: Completion of core courses and ENT 422 (after the Fall Quarter 2007)

**ENT 424. PROJECTS IN ENTREPRENEURSHIP**

Available to a limited number of students (10–15), this course combines a supervised internship with a start-up firm with lectures and in-class discussion on the management of new ventures. The internship places second-year MBA students, to be known as Simon Interns, with Rochester-area firms where they will work closely with senior managers for approximately 120 hours over a ten-week quarter.

In their internship, students will focus on the commercial viability of the firm's offerings. This will be accomplished through shadowing management, reviewing reports, participation in meetings and work assignments.

Complementing this hands-on entrepreneurial experience will be weekly classes held to discuss student experiences. In addition, there will be lectures on pertinent entrepreneurial subjects as well as guest speakers.

Prerequisites: Completion of core courses, and either ENT 422, 423 or 425. Permission of the instructor MUST be secured prior to registration.

**ENT 425. TECHNICAL ENTREPRENEURSHIP**

This course provides an opportunity to examine the management practices associated with technical innovation and new business development. The analysis of entrepreneurship is evaluated primarily from the perspective of a start-up venture that requires equity capital investment. Management issues discussed include organizational development, analysis of market opportunities, market engagement, financial planning and control, capitalization, sources of funds, the due-diligence process and valuing the venture.

An important reason for taking this course is to learn how to develop a business plan. Therefore, a significant component of a stu-

dent's final grade will be based on this. In too many instances, a new venture does not become a viable entity because either there is no plan, or if there is, it is poorly conceived. Furthermore, a good plan is an effective communications tool for the investment community. An additional benefit is learning to work in multidisciplinary teams.

Teams of three to four students will collaborate in the preparation of a business plan. The course will include time for students to share business ideas and identify possible team members. In general, each team will include two MBA students and two science/technology graduate students. Other team configurations are possible with instructor approval. Each team's business plan will receive a grade and that grade will apply to each individual on the team.

Each team will have a coach who is an experienced businessperson. The coach will be available to provide feedback to the team. This course is cross listed at OPT 481 and is taught by a faculty member in the Simon School and who is from Engineering.

**ENT 426. TECHNOLOGY TRANSFER AND COMMERCIALIZATION**

The creation of value in today's globally competitive environment is increasingly driven by technology. Corporations are reaching out for new technologies, and start-up companies with the highest potential are being formed around novel disruptive technologies. Radical innovation creates a "gale of creative destruction" which transform industries. The identification and evaluation of technologies with high potential is today a key to success. With the decline of corporate research functions, novel technologies are increasingly sourced from other firms and universities. This course will examine the overall technology commercialization process, with an emphasis on the processes by which intellectual property is protected, valued and transferred from one organization to another. The course addresses the strategic decisions involving novel technology: the identification of target markets, the economic valuation along the phases of the commercialization process and the assessment of alternative commercialization strategies including licensing, startup company formation and venture capital funding. The course will be taught by a combination of lectures and real-world case studies of current technologies, primarily from the University of Rochester in science, engineering and medicine.

**ENT 427. PRACTICUM IN TECHNOLOGY TRANSFER AND COMMERCIALIZATION**

Students in this course will work in the Office of Technology Transfer on projects which are a best fit to the student's background and the range of inventions from the University of Rochester in science, engineering and medicine. Projects can include either marketing to existing companies or work on catalyzing a startup company. Either type of project will require assessments of novel concepts based on discussion with the inventors and direct market research and interactions with potential customers. The skills required are primarily those of marketing and business assessment, but some facility with technical content will be helpful. The students will prepare a technology commercialization and/or new venture plan and assist the licensing executives in the University's Office of Technology Transfer in the negotiation process to implement the plan.

**ENT 431. LEGAL AND TAX CONSIDERATIONS OF NEW VENTURES**

(Same as BPP 431)

(Offered at the discretion of the instructor)

This course surveys, from the entrepreneur's perspective, legal and tax considerations that impact strategic choices in organizing, funding, staffing, governing, and operating new ventures. The course's principal focus is on how to create and retain competitive advantage through the skillful ordering of legal affairs. Emphasis will be transactional and include analysis of such issues as the creation and protection of intellectual property, technology licensing, global expansion, and internet commerce. The course will include, as a context for applied learning, a term project involving the creation and evolution of a selected new venture opportunity.

**ENT 432. BASIC BUSINESS LAW**

(Same as BPP 432)

This course surveys the law of contracts, agency, and business associations – with the objective of developing familiarity with selected laws, regulations, legal principles, and legal processes that govern (a) efficient exchange, generally; and (b) how and in what ways managers and entrepreneurs organize and interact to facilitate exchange. Although emphasis will be on United States law, there will be selected reference throughout the course to issues related to international transactions and to pertinent differences in legal systems of countries outside the United States. The course has a distinct transactional focus, with heavy reliance upon contemporary cases, commercial

practices, and issues. Particular attention will be given to the impact of the legal framework upon sound managerial decision-making, business risk management, commercial rights and responsibilities, and ultimately business valuation.

**ENT 435. NEGOTIATION THEORY AND PRACTICE: BARGAINING FOR VALUE**

This course surveys the theoretical and behavioral underpinnings of negotiation practices and develops skills that enhance the ability to capture value in cooperative and competitive bargaining scenarios. Students will participate in and evaluate several cooperative and competitive negotiation simulations. Grades will depend, in large part, on performance in these exercises.

**ENT 441. MEDICAL ENTREPRENEURSHIP**

This course aims at educating medical technology innovators how to increase their likelihood of success in identifying important clinical needs; inventing new medical practices, devices, and instruments; and transforming these advances into businesses that improve health. It covers several topics including clinical cost effectiveness methodologies, needs finding and formulation, market analysis for biotech, patient searching strategies, and models of disease state and existing technologies. The course is unique in that it attracts both medical students and business students who are working on supervised projects together.

**ENT 442A. SPECIAL TOPICS IN ENTREPRENEURSHIP: SOCIAL IMPACT & ENTREPRENEURSHIP**

This course provides both an academic exploration of social impact and entrepreneurship, as well as real-world clinical projects with clients and deliverables. Readings will explore the background, overview, evolution, challenges, structures and potentials of applying social entrepreneurial tools and attitudes to address critical societal issues, such as poverty, education, public health and environmental threats. The role of both for-profit and not-for-profit entities will be examined. Clinical projects will address business strategies, financing and approaches that have clearly defined, implementable solutions for real-world problems.

**ENT 444. ENTREPRENEURIAL FINANCE**

(Same as FIN 444)

This course provides an introduction to financial theories and tools an entrepreneur needs to start, build and harvest a successful venture. Lectures and case studies will cover financial planning, business valuation including the venture capital and the real option approach, financing, venture capital funds, compensation structures and exit strategies.

Prerequisites: FIN 402

**■ FINANCE**

Jerold B. Warner, *Area Coordinator*

**MASTER'S-LEVEL COURSES****FIN 402. CAPITAL BUDGETING AND CORPORATE OBJECTIVES**

This course provides an introduction to financial analysis and capital budgeting with an emphasis on the valuation of real investment projects. Topics discussed include an analysis of the firm's choice among alternative investment projects, the term structure of interest rates, modern portfolio theory and the valuation of risky assets, the estimation of free cash flows, capital structure choices, and the cost of capital.

**FIN 411. INVESTMENTS**

Investments includes discussion of the efficient-markets theory of the dynamic behavior of prices in speculative markets, along with empirical evidence for the validity of the theory; evaluation of the implications of the efficient-markets theory for the profitability of alternative investment strategies; exploration of the implications of portfolio theory for equilibrium asset prices and the measurement of risk; emphasis on the empirical evidence for various mean-variance and multifactor models of asset pricing and the use of these models for evaluating portfolio performance; and introduction to special topics in financial markets, such as arbitrage pricing theory, options and futures contracts.

Prerequisites: GBA 412 or GBA 462 and FIN 402

**FIN 413. CORPORATE FINANCE**

This course provides an intensive analysis of the effects of various corporate financial policy decisions on the value of the firm, including a discussion of the effects of taxes, bankruptcy costs and agency costs on these decisions. It then examines the interrelation of financing policy with executive compensation, leasing, hedging and payout policies. The course provides an understanding of the theoretical issues involved in the choice of these policies.

Prerequisite: FIN 402

**FIN 423. CORPORATE FINANCIAL POLICY AND CONTROL**

This course examines the theory and empirical evidence for models of corporate financial policy; analysis of new issues of securities, recapitalizations, stock repurchases, and the market for corporate control (tender offers, mergers, proxy fights and corporate voting rights); and emphasizes critical evaluation of the evidence for different models of corporate financial policy.

Prerequisites: FIN 402 and FIN 411, FIN 413

**FIN 424. OPTIONS AND FUTURES MARKETS**

This course provides intensive study of the fundamental ideas of option-pricing theory and their application to options, financial futures and other securities; analysis of hedging with forward and futures contracts; development of the Black-Scholes option-pricing formula, its uses and modifications, and generalizations of the model; and discussion of the structure and organization of options and futures markets and the exploration of empirical evidence on the validity of option-pricing models. Analyses of the pricing of options on futures, foreign currency, portfolios and indexes, commodity prices, bond prices and interest rates are included as time permits.

Prerequisites: FIN 402 and FIN 411

**FIN 430. FINANCIAL INSTITUTIONS**

This course focuses on analysis of the mutual fund, investment banking, commercial banking and insurance industries. Particular emphasis is placed on the effects of contracts and organizational structure on the incentives of the participants in these industries.

Prerequisites: FIN 402; FIN 411 and FIN 413 (may be taken concurrently)

**FIN 433. CASES IN FINANCE**

This course provides intensive exercise in valuation methods and the economic analysis of problems of corporate financial policy. A variety of other topics, including insider trading, portfolio performance and asset allocation, are also explored. Specific case topics include: corporate valuations; M&A transactions (tender offers, mergers, proxy fights); recapitalizations; stock repurchases; and novel securities. Case reports are done in teams and judged on clarity and usefulness to practitioners in understanding and resolving strategic problems.

Prerequisites: FIN 402 and FIN 413

**FIN 434. INVESTMENT MANAGEMENT AND TRADING STRATEGIES**

This course explores selected topics in the management of equity portfolios. Course content may vary from year to year. Topics include: active portfolio management with particular emphasis on risk analysis, multifactor risk/return models and performance evaluation and style analysis. The course also considers issues and evidence on different forms of market structure and trading systems, including the role of specialists/dealers, optimal trading behavior for institutions, price impact of trades, and related information technology. Extensive use is made of investment software.

Prerequisite: FIN 411

**FIN 441. SPECIAL TOPICS IN FINANCE**

(Not offered every year)

Special topics are generally those which are not well covered in other courses. The specific content varies, depending on faculty interest.

Prerequisite: Established by the instructor

**FIN 441A. SPECIAL TOPICS IN FINANCE: REAL ESTATE**

This course provides an introduction to and an overview of real estate as a capital asset and as a major component of our financial markets. The course will focus on the basic economics of real estate markets, market analysis, and real estate finance. Concepts used in the real estate industry will be covered throughout the course. The course will specifically consider market analysis, valuation, capital structure, and risk analyses for income-producing (commercial) properties. The securitization of both commercial and residential properties has been a critical factor in our current economy, and the structure of real estate securities and investment vehicles such as real estate investment trusts will be studied. The course will also introduce real estate development and current trends in the market.

**FIN 441B. SPECIAL TOPICS IN FINANCE: PRIVATE EQUITY**

The Private Equity and Venture Capital [PE/VC] industry is more in the popular press than ever before; funds are larger and more diverse than in any past generation, deals are bigger, scope is worldwide, and wealth-generation seems to be at levels heretofore unseen. Many argue that PE/VC drives major segments of national economies more than ever before, and that it is essential that the industry is better understood and weighed more heavily in the thinking and plans of policy-makers in government and commerce. This course will provide exposure



to what PE/VC is and how it works. We cover, among other things; the make-up of funds, the composition and operation of PE/VC firms, dealing sourcing, due diligence and investment process, and the roles of partnerships, GPs, LPs, 'activists' and Boards. At a higher level, we cover industry performance and competition, fund creation, some international aspects of the business, and differing approaches to financing in different alternative asset categories.

#### **FIN 442. INTERNATIONAL ECONOMICS AND FINANCE**

(Same as BPP 442)

Topics include: exchange-rate regimes; the determination of exchange rates in a world of flexible exchange rates; speculation in foreign exchange markets; the Eurocurrency and measurement of foreign exchange exposure; analysis of currency forward, future, option, bond, and swap contracts; hedging of foreign exchange exposure.

Prerequisite: FIN 402

Recommended: FIN 411

#### **FIN 444. ENTREPRENEURIAL FINANCE**

(Same as ENT 444)

This course provides an introduction to financial theories and tools an entrepreneur needs to start, build and harvest a successful venture. Cases and lectures will cover business evaluation and valuation, including the venture capital and the real option approach, financing, venture capital funds, compensation structures and exit strategies.

Prerequisites: FIN 402

#### **FIN 446. FINANCIAL INFORMATION SYSTEMS**

(Same as CIS 446)

This course examines the role that information systems and telecommunications play in various aspects of financial markets, financial service organizations, and corporate finance. Technology's transformation of financial markets is studied from the perspectives of electronic trading systems competing with exchanges; Internet brokerage firms attracting trading and IPO's and making markets; firms supplying company and market information, managing risk, and providing custodial and management services. The course covers financial services issues such as electronic banking, automated personal financial management, electronic payment systems, and digital cash. Case studies are used in many classes.

Prerequisites: CIS 401 and FIN 402

#### **FIN 448. FIXED-INCOME SECURITIES**

The objective of this course is to undertake a rigorous study of fixed-income securities and markets. A variety of fixed-income securities will be discussed including coupon bonds, callable and puttable bonds, sinking fund provisions, and floating rate notes. Interest rate derivatives such as forwards and futures on fixed-income securities, bond options, options on bond futures, caps, floors, and collars will also be discussed. In addition, we will study some tools that are useful in bond portfolio management including horizon analysis, duration, optimization techniques for constructing bond portfolios and modes for pricing fixed-income securities. While the perspective of this course is from the viewpoint of a bond investor, a person in corporate finance needs to understand similar material. Evaluating an investment in a fixed-income security is the mirror image of the problem faced by a corporation in deciding whether or not to issue a bond.

Prerequisites: FIN 402 and FIN 411

#### **PHD COURSES**

#### **FIN 501. WORKSHOP IN FINANCE**

Seminars discussing current research in finance by faculty, students, and guest speakers. PhD students are expected to participate actively.

#### **FIN 505. THEORY OF FINANCE**

The goal of this course is to present the theory of asset pricing and portfolio selection in multi-period settings under uncertainty. The asset pricing results are based on three increasingly restrictive assumptions: single-agent optimality, absence of arbitrage and equilibrium. These results are unified with two key concepts: pricing kernels and martingales. The course draws connections between these concepts and makes plain the similarities between discrete and continuous time models. Applications include term structure models, portfolio choices and the pricing of corporate securities. This course will follow the semester schedule.

#### **FIN 511. CONTINUOUS TIME THEORY IN FINANCE**

The course builds on the basic theory presented in FIN 505 Theory of Finance. FIN 511 will emphasize some relatively advanced mathematical methods that are used in the research literature of financial economics. The objective of the course is to provide the student with enough knowledge of these methods that he or she can begin to use them in nontrivial ways in his or her research. Particular emphasis is given to topics that are costly or difficult to learn on an individual basis.

The methods surveyed in the course are primarily techniques for constructing and analyzing continuous-time models of trading and of stochastic asset price behavior. Virtually all of the derivative security pricing models and many of the multifactor models of asset prices and the term structure of interest rates are of this type.

#### **FIN 512. EMPIRICAL ASSET PRICING**

This course covers classic contributions and recent developments in capital markets research, both applied theoretical and empirical, in relation to corporate policies, business cycle and economic growth. Specific topics include time-series predictability of stock market returns, empirical methods and evidence on the cross-section of returns, evidence on mutual fund performance and the closed-end fund puzzle, event studies and the empirical relations between stock returns and corporate policies, consumption-based asset pricing, applied equilibrium modeling of asset pricing anomalies and behavioral finance.

#### **FIN 513. AGENCY THEORY**

The course studies game theoretic foundations of the theory of the firm. The strong emphasis is placed on corporate finance. The topics include capital structure, asymmetric information and signaling, contract design, and optimal security design. In addition, we look into information aggregation in financial markets, bargaining with asymmetric information, and dynamic signaling – important and fascinating topics in the broader area of information economics.

#### **FIN 514. EMPIRICAL CORPORATE**

This course covers cross-sectional and panel data empirical methods used in corporate finance research. The course will expose students to a variety of methods commonly employed in empirical research. While the course will cover the efficiency and consistency of various estimators, the primary focus will be on how econometric tools can be used to identify unbiased causal effects. Lectures and econometric readings will provide students with econometric intuition behind each method covered in the course. Course readings will expose students to examples of the methods being used in published and working papers. Assignments will familiarize students with standard datasets used in corporate finance and will enable students to apply the methods covered in the course and to analyze and criticize other researchers' use of common empirical methods.

#### **FIN 523. ADVANCED AGENCY THEORY**

The course studies dynamic aspects of the theory of the firm. The strong emphasis is placed on the role of time and repeated decisions in firm management. The topics include real options, dynamic lemons markets, dynamic contracts, and investment under constraints. The course is research intensive, requiring completion of several referee reports and a term project.

#### **FIN 532. ADVANCED TOPICS IN CAPITAL MARKETS**

This course covers classic contributions and recent developments in capital markets research, both applied theoretical and empirical, in relation to corporate policies, business cycle and economic growth. Specific topics include time-series predictability of stock market returns, empirical methods and evidence on the cross-section of returns, evidence on mutual fund performance and the closed-end fund puzzle, event studies and the empirical relations between stock returns and corporate policies, consumption-based asset pricing, applied equilibrium modeling of asset pricing anomalies and behavioral finance.

#### **FIN 534. ADVANCED TOPICS IN CORPORATE FINANCE**

This course examines the determinants and consequences of corporate financial policy choices. Topics include: capital structure, bankruptcy and financial distress, payout policy, corporate control, leasing, hedging and insurance, raising capital, concentrated ownership, board structure, and executive compensation. Specific topics will vary from year to year. The course will investigate both the theoretical and empirical literature on these topics.

#### **FIN 535. TOPICS IN FINANCE**

This course will expose students to advanced topics in finance, including current work in different financial topics. An emphasis will be put on the link between empirical and theoretical work, and how to think about research questions critically.

### **■ GENERAL BUSINESS ADMINISTRATION**

#### **MASTER'S-LEVEL COURSES**

#### **GBA 411. BUSINESS MODELING**

This course has two major objectives: (1) to develop your ability to frame business decision

problems in a way that makes them amenable to quantitative analysis and (2) to train you in fundamental quantitative analysis techniques useful for business problems. The course is structured in three parts. In the first part you will learn how to use spreadsheets to model business decision problems. In the second part you will learn how to solve complex decision problems involving many variables and constraints. In the third part you will be introduced to Monte Carlo simulation so that you will have a framework for understanding and analyzing uncertainty in business. Examples from different functional areas will demonstrate how the techniques taught can be applied in a practical way to a variety of settings.

#### **GBA 412 DATA ANALYTICS**

A firm relies on decisions made by its managers. Decisions that are based on relevant data and correct analysis translate to profits more consistently than do those that are based on intuition and instinct. This course is about learning to make good decisions. After building some core statistical and decision theoretic tools, this course will introduce you to different types of data and will seek to provide you with a set of analytical methods that apply to each. In the process, you will learn to ask the right questions, seek out the relevant data, apply appropriate methods and effectively communicate your insights to your target audience.

#### **GBA 419 AND GBA 419A. LEADING TEAMS I AND II**

This sequence of courses spans fall and winter quarters and prepares Simon MBA Coaches and Workshop leaders to lead 1st project teams and problem solving groups in areas of setting expectations; establishing process; employing collaborative problem-solving frameworks; managing conflict; and giving and receiving performance feedback. The course rests on theoretical frameworks from the fields of education, psychology, and communication; its focus is the practical application of these concepts to facilitate the successful functioning of team-based problem solving and project management groups. The course provides weekly opportunity to review Workshop and Coach meeting related issues. Workshop leaders increase their mastery of business modeling and operations management concepts, and coaches improve their skills in developing presentations, managing projects and giving feedback for improved performance.

#### **GBA 441. BUSINESS ETHICS**

This course deals with business ethics and the social responsibility of business organizations. It is designed to inform decision-making about ethical challenges arising in business. It will

help students identify and manage difficult ethical dilemmas they are likely to encounter in their future careers. The course is organized into four parts. It begins by looking at the place of business ethics in a competitive economy and discussing fundamental questions about the ethical responsibility of business corporations. Next, it addresses ethical issues faced by individuals in business organizations, including the complex nature of managerial responsibilities, whistle-blowing, and insider trading. It also explores the responsibilities of business corporations vis-à-vis clients, customers, and employees, discussing issues such as professional conflicts of interest in financial services, information disclosure in advertising, fairness in sales practices and in hiring and treating employees. Finally, it analyzes some ethical questions specific to business decisions in the health sector.

#### **GBA 450. ACCOUNTING, ECONOMICS AND FINANCE FOR MS STUDENTS\***

(Same as HSM 450)

*\*Available only to MS students concentrating in Marketing and Health Sciences Management*

This course is designed to present the fundamentals of economic analysis, financial accounting, and financial analysis that will serve as a foundation for concepts developed throughout subsequent courses in the Medical Management program. The objectives of this course are to enable participants to understand and productively use the principles of managerial economics and accounting information to better structure business decisions. In addition, the course will address the principles of capital budgeting.

The economics section will cover foundational principles of microeconomics. The focus will be on those principles with the greatest application for managers in health care, including supply and demand, the economic model of behavior, decision-making under uncertainty, gains from trade, externalities, demand, production, and cost functions, and basics of pricing.

The accounting and finance module will present skills required to interpret and analyze common financial statements, and evaluate a company's past performance and potential future performance. Specific topics of discussion will include differences in financial statements of for-profit vs. not-for-profit entities, cash vs. accrual accounting, depreciation methodologies, and capital budgeting. Capital budgeting will include net present value (NPV), pay-back, accounting rate of return (ARR) and internal rate of return (IRR).

**GBA 461. CORE ECONOMICS FOR MS STUDENTS**

This course covers the fundamentals of economic theory, and discusses marketing-relevant applications. Specific concepts include understanding demand and demand elasticity, marginal revenue, key cost concepts (fixed costs, variable costs, marginal costs, sunk costs), profit maximization, understanding the competitive environment and strategic decision making, and net present value calculations.

**GBA 462. CORE STATISTICS FOR MS STUDENTS**

This course equips MS students with statistical skills necessary for data-driven decision making. The course covers central tendency and variability, probability, binomial and normal distributions, standard scores, hypothesis testing, z and t tests, ANOVA, correlation and regression, and non-parametric tests.

**GBA 482. BUSINESS POLICY**

(Offered at the discretion of the instructor)

This capstone course focuses on how corporations and other forms of enterprise establish aims and goals, determine strategies to achieve those aims and goals and, subsequently, how those strategies are executed. Emphasis is given to the concerns of top management leaders in anticipating and reacting to changes in the economic environment, changes in the nature of market competition and how action is stimulated to produce desired responses in the enterprises they govern. The course consists of lectures and discussions supplemented by the analysis of recent complex cases involving well-known international corporations in contemporary situations. Both individual and team reports are required, and students are expected to use computer-based market forecasting and financial-simulation techniques to analyze the “what if” problems faced by senior managers in these cases. Oral and written reports are graded on the clarity of presentation as well as the quality of analysis.

Prerequisite: completion of core courses

**GBA 486. MANAGEMENT OF TECHNOLOGY**

(Offered at the discretion of the instructor)

This capstone course focuses on the strategies of international corporations that seek a sustainable competitive advantage through technological innovation. Instruction consists of lectures, guest speakers from the business community and case presentations. Topics include: the definition of corporate strategy; the C.E.O.'s role as leader as well as manager; the analysis of the firm's competitive position; the development of the firm's core competencies; the management of research and development; fast-cycle product development; cross-functional

teams; achieving product quality through technology; a comparative analysis of patent law in the U.S. and other countries; structuring strategic alliances between large and small firms; international joint ventures; and the acquisition of small, high-tech firms by large corporations. Student teams play the role of principals in a management consulting firm (“Simon Associates”) that has been retained by the CEO of a technology-based corporation to develop strategic options and recommendations for the solution of a complex business problem with marketing, operations and financial implications. Oral presentations, management memos and written reports are graded on the clarity of presentation as well as the quality of analysis.

Prerequisite: completion of core courses

**GBA 490. AMERICAN BUSINESS PRACTICE**

Credit—one hour

This course is designed to give non-U.S. students an opportunity to apply business-management theories they have learned in their Simon School studies while they are assigned as interns (minimum of six weeks) with U.S. companies. Internships allow students to work in business settings/situations in which they receive on-the-job training from management personnel and gain valuable practical experience in performing professional-level tasks in their area(s) of concentration. GBA 490, which cannot be used to complete a concentration in the MBA program, is open only to non-U.S. students who are eligible to work in the United States. An eligible student, as defined by immigration regulations, is a degree candidate who has lawfully resided in the United States on visa status for at least one academic year (eight to nine months) prior to starting an internship position. Students who plan to enroll in GBA 490 must communicate with the University of Rochester's International Services Office (ISO) regarding the submission of proper documentation for employment. They should inform Simon School Career Management of their plans to seek a business internship, and they should schedule an appointment with Career Management to discuss career interests and employment-search strategies. When/if an internship is obtained, the student must meet with a GBA 490 faculty advisor to prepare a proposal describing the location and nature of the assignment and the planned functional area of study. The proposal, which will include specific learning objectives, must be approved by the faculty advisor prior to the student's acceptance of the internship. Upon completion of the internship assignment, the student must prepare a 10- to 12-page report detailing its outcome(s) and stating whether the proposed learning objectives were met.

Prerequisite: completion of all core courses

**GBA 490E. INTEGRATING BUSINESS THEORY AND PRACTICE**

Credit—one hour

This course is designed to give students an opportunity to apply business-management theories they have learned in their Simon School studies while they are assigned as unpaid interns.

These unpaid internships allow students to work in business settings and situations in which they receive on-the-job training from management personnel and gain valuable practical experience in performing professional-level tasks in their area(s) of concentration.

GBA 490E, Integrating Business Theory and Practice, which cannot be used to complete a concentration in the MBA program, is open to international students who are not yet eligible to work in the United States or to any domestic student who has completed at least two quarters of study.

Students should complete a GBA 490E form, meet with the Student Services director and then bring the approved paperwork to the Simon School registrar's office for processing. Upon completion of the internship assignment, the student must prepare a one- to two-page report detailing the outcome(s) and stating whether the proposed learning objectives were met.

**GBA 491. READING COURSE**

(Offered at the discretion of individual faculty)

Supervised reading and study on topics beyond those covered in existing formal courses.

**GBA 492/493. INTERNATIONAL EXCHANGE PROGRAMS**

(Open to full-time and part-time MBA students; GBA 492—six credits; GBA 493—nine credits)

The International Management–Exchange option of the International Management concentration gives students opportunities to participate in one of several exchange programs. See the chart on page 51 of this guide for details.

**GBA 494. FOREIGN LANGUAGE TRANSFER CREDIT**

Credit—three hours

**PHD COURSES****GBA 591. PHD READING COURSE****GBA 594. PHD INDEPENDENT STUDY****GBA 595. PHD RESEARCH****GBA 995. CONTINUATION OF DOCTORAL ENROLLMENT****GBA 999. WRITING DISSERTATION****■ HEALTH SCIENCES MANAGEMENT**

Gerard J. Wedig, *Area Coordinator*

**MASTER'S-LEVEL COURSES****HSM 420. BUSINESS ECONOMICS OF THE HEALTH CARE INDUSTRY**

This course aims to educate students about the unique business institutions and problems of the health care industry so that students can be prepared to apply their core business knowledge to solve managerial problems in the health care industry. The course will consist of an overview of the major institutions of the US health economy as well as an economic analysis of these institutions.

**HSM 425. MANAGERIAL ACCOUNTING FOR HEALTH CARE ORGANIZATIONS**

(Same as ACC 445)

Costs for health services continue to rise faster than overall economic growth drawing ever greater attention from employers, governments and consumers. The front line of the cost battle is within the health services entities where decision making depends on accurate reporting of internal costs. This course will allow the student to understand how costs are reported and how to use this information to make decisions within the health services entity. The following topics will be examined within a health services setting: cost allocation, cost-volume-profit analysis, budgeting and variance analysis, and transfer pricing.

**HSM 430. HEALTH SCIENCES MANAGEMENT AND STRATEGY**

(Same as STR 430)

This course applies the principles of organizational economics and strategy to the institutional setting of the health sciences. The course focuses on the interdependence between the delivery, financing, and technology sectors of the health care marketplace. It discusses how management and strategy choices within each sector are responses to the unique institutional factors in the health care marketplace and how the strategies of each sector affect the behavior of the others. Students will leave the course with an ability to think productively about management and strategy challenges within each of the three health science sectors.

Prerequisite: STR 401 or GBA 461

Recommended: STR 403, STR 421

**HSM 431. APPLICATIONS OF CORPORATE FINANCE AND GOVERNANCE TO HEALTH CARE**

This course applies the principles of corporate finance and governance to the institutional setting of health care. It draws on the principles of financial valuation, investments and corporate financing, as well as the economics of organizations and corporate governance, to analyze current management problems in the health care sector. The primary purpose of the course is to gain an understanding and comfort level with applying economic and financial theories within the unique institutional setting of health care.

Prerequisites: STR 403, ACC 410. In addition, it is strongly recommended that students complete FIN 413 and HSM 430 before taking this course.

**HSM 437. MANAGING HEALTH CARE OPERATIONS**

(Same as OMG 437)

The health care industry is undergoing rapid growth as well as rapid structural changes. New technology, changing reimbursement mechanisms, and increased competition create many interesting management problems, not in the least in the area of health care operations. In this course, we will study the operations of various types of health care provider organizations (such as hospitals, HMO's, group practices, nursing homes, etc.) and other participants in the industry (such as insurance companies, pharmaceutical companies, suppliers and consulting companies). Topics that will be studied include: patient and provider scheduling, capacity management, providing services and supplies to health care providers, new product development and integrated delivery systems.

Students who took OMG 402 or similar need to obtain instructor's permission prior to registration.

**HSM 440. EVOLVING MEDICAL MARKETS**

Firms supplying products and services to the health care industry face a variety of regulatory and marketing challenges that will be explored in this course. Topics include: the economics of developing and marketing new medical technologies, regulations affecting market structure, health and safety regulations and insurance markets. The course will cover evaluation tools frequently used in public policy debates and in marketing medical technologies including cost-benefit and cost-effectiveness analysis and quality of life indices.

**SPECIALIZED COURSES**

The courses below are only available to students in the Master of Science in Business Administration with a concentration in Medical Management program.

**HSM 450. ACCOUNTING, ECONOMICS AND FINANCE FOR MS STUDENTS\***

(Same as GBA 450)

*\*Available only to MS students concentrating in Marketing and Health Sciences Management*

This course is designed to present the fundamentals of economic analysis, financial accounting, and financial analysis that will serve as a foundation for concepts developed throughout subsequent courses in the Medical Management program. The objectives of this course are to enable participants to understand and productively use the principles of managerial economics and accounting information to better structure business decisions. In addition, the course will address the principles of capital budgeting.

The economics section will cover foundational principles of microeconomics. The focus will be on those principles with the greatest application for managers in health care, including supply and demand, the economic model of behavior, decision-making under uncertainty, gains from trade, externalities, demand, production, and cost functions, and basics of pricing.

The accounting and finance module will present skills required to interpret and analyze common financial statements, and evaluate a company's past performance and potential future performance. Specific topics of discussion will include differences in financial statements of for-profit vs. not-for-profit entities, cash vs. accrual accounting, depreciation methodologies, and capital budgeting. Capital budgeting will include net present value (NPV), pay-back, accounting rate of return (ARR) and internal rate of return (IRR).

**HSM 451: HEALTH CARE STRATEGY AND BUSINESS PLAN DEVELOPMENT**

Basic marketing and economic concepts are integrated with the unique institutional features of health care markets to develop a framework for strategic and business planning for a health care organization. A special focus is placed on the practical elements of plan development.

**HSM 452: HEALTH CARE ACCOUNTING AND FINANCE**

Basic concepts in finance and financial accounting are combined with material developed in ACC 410 to develop a framework for financial decision making, financial planning, assessment and control. The goal of the class is to provide students with a set of tools to first make financial decisions about programmatic development. In addition, students will be taught to assess and control programs toward specified financial goals.

**HSM 453: HEALTH CARE OPERATIONS**

This is an advanced course on operations management for health delivery organizations. We will study the application of operations management concepts to the management of health care provider organizations (such as hospitals, group practices, HMO's, nursing homes, etc.), and other participants in the health industry (such as insurance companies, pharmaceutical companies, consulting businesses, etc.). Applications will include both medical and administrative operations. The course will use a mixture of cases, lectures, in-class exercises, and guest lecturers.

Part of this course will be closely integrated with OMG 402, Operations Management extending and applying concepts from the introductory course to practical problems in health care administration. However, a significant part of the course will focus on quality and process improvement, a topic that is not covered in OMG 402.

**HSM 454: LEADING HEALTH CARE ORGANIZATIONS**

Concepts developed in STR 403 Organizations and Strategy are applied within the evolving health care setting to teach the student how to organize tasks and motivate staff to achieve coordination and efficiency (including leadership, culture, change management, and team effectiveness).

**HSM 455. PRACTICUM IN MEDICAL MANAGEMENT**

This course provides students with hands-on experience with a medical management project. It develops skills in formulating a problem, working with data, finding possible solutions and delivering recommendations, all within a fixed time frame. Students will learn to produce analysis, but also have to argue persuasively that the recommendations based on the analysis are valuable and should be implemented.

Projects require that students not only apply

analyses learned in the classroom, but also that they argue persuasively that the recommendations based on the analyses are valuable and should be implemented. Teams of three to four students will be responsible for the individual projects, and will meet with the instructor individually. The organizations submitting projects must be willing to spend time with students and to provide appropriate data.

**HSM 456: PRACTICUM IN MEDICAL MANAGEMENT 2**

A continuation of the project from HSM 455.

Prerequisite: HSM 455

**HSM 464. CREATING AND USING INFORMATION TO MANAGE HEALTHCARE**

The objective of this course is to provide Healthcare executives with an understanding of the role that Information Technologies can play in driving care quality and financial performance in their organizations. It is intended to improve their ability to invest strategically and thoughtfully in IT to achieve the desired organizational returns. The course discusses how information technologies are reshaping and redefining the healthcare sector through better care, efficiencies in the delivery of care, advanced tools for patient involvement and continuum of care, decision support tools for clinicians, and the generation of insight from digital exhaust. It will teach students how to critique and analyze various technology tools and systems currently available to health care professionals. The focus will largely be on strategic level issues, although some implementation issues will also be discussed.

**■ MANAGEMENT SCIENCE METHODS***MASTER'S-LEVEL COURSES***MSM 400. MATHEMATICS REVIEW**

Non-credit

Review of mathematical concepts prerequisite to the MBA program. Topics include: sets, vectors and matrices, functions and relations, linear equations, laws of exponents, limits and continuity, differentiation, maxima-minima, partial derivatives and simple integration.

**MSM 491. MATH FOR MANAGEMENT**

Credit—two hours

This is a master's level math class that is more intensive than MSM 400. Analysis and concepts in modern business analysis rely heavily on quantitative methods. The objective of this course is to bring incoming MBA or MS students "up to speed" with respect to the mathematical and statistical knowledge expected of them. The complexity of the course is on par with (college) freshman-year calculus, algebra and introduction to probability and statistics. Necessary theories and intuition behind them will be covered. The focus of the course is primarily on applications in business, economics and related areas.

Math for Management is offered in the summer quarter only. While it is not a required course for the credits required for the MBA or MS degree, it will be a graded class to give students an assessment of their mathematical skills. The GPA will appear on the official transcript, but will not be included in the cumulative GPA for the MBA or MS program.

*PHD COURSES***MSM 501. QUANTITATIVE METHODS COLLOQUIUM**

Non-credit

This is a forum for the presentation of on-going and recently completed work by students, faculty and guest lecturers.

**MSM 502. LINEAR ALGEBRA**

The goal of this course is to give an introduction to linear algebra. Topics include: Gaussian elimination, matrix operations, matrix inverses. Vector spaces and subspaces, linear independence, and the basis of a space. Row space and column space of a matrix, fundamental theorem of linear algebra, linear transformations. Orthogonal vectors and subspaces, orthogonal bases, and Gram-Schmidt method. Orthogonal projections, linear regression. Determinants: how to calculate them, properties, and applications. Calculating eigenvectors and eigenvalues, basic properties. Matrix diagonalization, application to difference equations and differential equations. Positive definite matrices, tests for positive definiteness,

singular value decomposition. Classification of states, transience and recurrence, classes of states. Absorption, expected reward. Stationary and limiting distributions. Offered in the summer, primarily for entering doctoral students.

**MSM 503. OPTIMIZATION**

This course covers Optimization in  $R^n$ , Weierstrass Theorem, Unconstrained optimization, Lagrange Theorem and equality constraints, Kuhn-Tucker Theorem and Inequality constraints, Convexity, Parametric Monotonicity and Supermodularity. Offered in the summer, primarily for entering doctoral students.

**MSM 504. THEORY OF PROBABILITY AND STOCHASTIC PROCESSES I**

The course provides an introduction to stochastic processes. Topics include the Poisson process, renewal theory, Markov chains, semi-Markov and Markov renewal processes, and regenerative processes.

Prerequisite: Some knowledge of functions of a real variable (MTH 265) and probability (BST 401)

**MSM 505. REAL ANALYSIS**

This course covers Optimization in  $R^n$ , Weierstrass Theorem, Unconstrained optimization, Lagrange Theorem and equality constraints, Kuhn-Tucker Theorem and Inequality constraints, Convexity, Parametric Monotonicity and Supermodularity. Offered in the summer, primarily for entering doctoral students.

**MSM 506. MANAGEMENT SCIENCE METHODS**

The purpose of this course is to introduce PhD students to a variety of operations research and management science methods in an applied setting to develop their modeling abilities. The emphasis of the course is on defining problems, building models, and analyzing the models to gain some insight, in other words, critical research skills. This course will draw upon both deterministic optimization methods and stochastic models but not their theory. These will include linear programming including integer and network formulations, basic queueing models (M/M/1, M/M/n, M/G/1), and Monte Carlo simulation.

**MSM 509. INFORMATIONAL SCIENCES AND LARGE-SCALE ALGORITHMS**

This course examines recent methodological and modeling advances for solving large business problems. It includes summaries of numerical analysis techniques, artificial intelligence and heuristic optimization techniques (neural networks, genetic algorithms, tabu search and simulated annealing), and modeling techniques (decomposition, aggregation, scaling and dimensional analysis). The advances in optimization techniques include primal and dual decomposition, distributed algorithms, various projection and relaxation approaches, inner and

outer linearization, aggregation and bounds.

Prerequisite: MSM 535 or permission of the instructor

**MSM 522. OPTIMIZATION**

This course introduces unconstrained and constrained optimization in finite dimensional spaces. Topics include convex sets and functions, Kuhn-Tucker theory, Lagrangian duality, parametric continuity, dynamic programming, and parametric monotonicity.

Prerequisite: Some knowledge of linear algebra and functions of a real variable

**MSM 533. DYNAMIC PROGRAMMING**

Dynamic Programming (DP) is a recursive approach to obtaining optimal solutions to sequential decision problems. DP can be used for either finite-horizon or infinite-horizon problems, and is applicable to both deterministic and stochastic problems. This course will treat both theoretical and computational aspects of DP.

Prerequisite: MSM 522

**MSM 535. NETWORK AND INTEGER PROGRAMMING**

This course covers the solution of network problems and integer programs. Shortest path, minimum spanning tree, maximum flow, minimum-cost flow and matching are some of the network problems covered. Algorithms for linear-integer and mixed-integer problems include branch and bound, implicit enumeration, primal and dual cutting planes, group theoretic methods, Lagrangian relaxation and surrogate relaxation. These algorithms are illustrated on classical integer problems such as the knapsack, set covering/partitioning and traveling salesman.

**MSM 542. QUEUING THEORY AND APPLICATIONS**

The course offers in-depth study of queues and networks of queues, including single- and multi-server-queues; Markovian models of phase-type systems; open-and-closed networks of queues; product-form solutions and local balance; bottleneck-analysis approximations and computational aspects. It also covers applications to scheduling, resource allocation and capacity-expansion decisions in service systems, computer systems and job shops.

Prerequisite: MSM 504 or Medical School course BST 402, or permission of the instructor

**MSM 549 MARKOV DECISION PROCESSES**

This course is as an introduction to sequential decision-making and it reviews the theoretical foundations of dynamic programming, stochastic control, and Markov decision processes. Much of the course is devoted to the theoretical, modeling, and computational aspects of Markov decision processes. Applications in the area of production and inventory, finance, and marketing are explored.

Prerequisites: MSM 504 and MSM 505 or equivalent.

**MARKETING**Dan Horsky, *Area Coordinator***MASTER'S-LEVEL COURSES****MKT 402. MARKETING MANAGEMENT**

This course is our introduction to marketing. The viewpoint is that of a manager making marketing decisions in a variety of competitive and institutional settings. Considered are: consumer behavior, marketing research, product design, advertising, salesforce management, pricing and distribution channels.

Prerequisites: STR 401 or GBA 461 and GBA 412 or GBA 462 (may be taken concurrently)

**MKT 412. MARKETING RESEARCH**

This course deals with the collection and use of data to support marketing decisions. The first part of the course teaches the student how to formulate the research problem, design the research and collect the data. Among the data-collection techniques discussed are: questionnaire design; telephone, mail and electronic surveys; and laboratory and field experiments. The second part of the course examines various techniques for analyzing data: cross-classification analysis, factor analysis, multidimensional scaling, conjoint analysis, etc. As part of the course requirements, teams of students design, administer, analyze and report on an actual marketing-research study.

Prerequisites: MKT 402 and GBA 412 or GBA 462

**MKT 414. PRICING POLICIES**

(Same as STR 423)

Pricing is one of the most important, least understood, and most controversial decisions a manager has to make. These decisions often have significant long-term implications for a firm's bottom line. The purpose of this course is to help future managers make good decisions by preparing them to analyze the environment in which their firm operates and to arrive at an appropriate pricing policy for their product or service. More specifically, the objectives of the course are: 1) to develop an understanding of the relationship between a firm's environment (e.g., cost, demand, competition, and legal aspects) and its optimal pricing strategy, and 2) to develop skills in applying this understanding.

There are several components to the course: elasticity of demand and relevant costs, price discrimination and market segmentation, and competitive pricing. Students will learn the fundamentals of economic-value analysis and break-even analysis, and will be made familiar

with strategies such as bundling, tie-in sales, quantity discounts, product-line pricing, and demand buildup. The course will cover ways of predicting competitor-pricing responses, and it will discuss a firm's legal environment as it pertains to pricing.

Prerequisites: STR 401 and MKT 402 (may be taken concurrently)

**MKT 431. CONSUMER BEHAVIOR**

The course studies buyer behavior in consumer and industrial markets. Topics include: culture, social class, consumer involvement, motivation, knowledge, attitudes and group decision making. Besides theory, the course also covers applications to product, advertising and pricing decisions.

Prerequisite: MKT 402

**MKT 432. NEW PRODUCT STRATEGY**

This course examines the issues involved in the planning and introduction of new brands and the management of existing brands. The approach taken is analytical and consistent with some of the more up-to-date methods used by companies. The course starts by examining the product class in which the firm is considering either repositioning an existing brand or introducing a new brand. We study how consumers choose a brand within the product class. This includes the theory and estimation of the multiattribute utility model. Leading on from this, we study how to reposition an existing brand and optimally design a new brand or a line of brands. Procedures for lab and market testing of a new brand are reviewed. We proceed by evaluating the current and future sale of the product class through the diffusion model. A discussion is held on the marketing mix policies for brands over the product life cycle. The course concludes with an evaluation of the portfolio of product classes in which the firm ought to compete. A group project involving the development of a marketing strategy for an existing brand with emphasis on its repositioning is required.

Prerequisites: MKT 402 and GBA 412 or GBA 462

**MKT 433. ADVERTISING STRATEGY**

This course explores the tools available to marketers for the promotion of products and services. The integrated marketing communications philosophy is stressed, and principles of consumer behavior are discussed as the starting point for the analysis of promotion decisions. Advertising is the main focus of the class, and issues such as the setting of

campaign objectives, segmentation and targeting, budgeting, media placement, message strategy, creative development, persuasion and measurement of advertising effectiveness are discussed. More specialized units consider Internet and global/cross-cultural advertising. Sales promotion techniques are also discussed, including consumer promotions (e.g., sampling, coupons, premiums, contests) and trade promotions (e.g., buying allowances, cooperative advertising). Other elements of promotion discussed include public relations, sponsorships and personal selling.

Prerequisite: MKT 402

**MKT 435. CHANNELS STRATEGY**

This course deals with the issues that arise in designing and managing distribution channels and salesforces. A central theme of the course is that these entities perform both a tactical/operational function as well as a strategic function and that both aspects need to be considered in their design and management. The course looks at a number of design options, ranging from direct distribution through a salesforce to a complex, multi-layered channel consisting of several layers of intermediaries such as wholesalers and retailers.

Managing a channel requires an understanding of the competitive and cooperative aspects of manufacturer-distributor relationships. The course evaluates the efficiency of contractual arrangements like exclusive territories, exclusive dealing requirements and resale-price maintenance from the manufacturer's and the distributor's point of view. Finally, an assortment of contemporary issues in channels—such as everyday low pricing versus promotional pricing, slotting allowances, the shift in bargaining power from manufacturers to retailers for consumer goods, growth of store-labeled brands, the role of the Internet and new forms of retailing—are discussed. In addition, a number of modeling and quantitative techniques are studied that help implement the strategies discussed in the course.

On the salesforce front, the course delves into a number of critical issues such as performance measurement, territory decision, quotas and compensation design.

Prerequisite: MKT 402

**MKT 436. MARKETING ANALYTICS**

Firms can now gather detailed real-world data on their customers, competitors and marketplace on an unprecedented scale. This volume of information will provide significant competitive advantages to those companies that are

able to analyze and leverage these data sets to derive actionable business-building insights. This course will focus on what datasets, both big and small, can and cannot tell us.

This analysis, however, requires a different toolset, and a different mindset than traditional survey data analysis. The goal of this course is to introduce students to data-based marketing analytics by demonstrating how to develop and integrate statistical models, segmentation, and marketing models for optimal data-driven decisions.

The tools and metrics of three kinds of data analysis will be covered: predictive, explanatory, and casual. Students will be introduced to basic programming through R, a widely used and state of the art statistical analysis software. Students will learn how to prepare their data for analysis, and to then turn these results into actionable insights.

**MKT 437. DIGITAL MARKETING STRATEGY** (Same as CIS 437)

This course examines the major issues involved in marketing on the Internet. Among the topics studied are: new product opportunities on the Internet; the changed role of advertising; the Internet as a two-way communication medium with consumers; targeting individual consumers; word-of-mouth among consumers on the Internet; the Internet as a distribution channel; and marketing research on the Internet.

Prerequisite: MKT 402

**MKT 438. B2B PRICING**

(Same as STR 438)

Students will learn the major differences in pricing strategies between selling to consumers (as in MKT414/STR423) and to other firms which then deal with consumers. The course starts by analyzing the pricing problem of a manufacturer selling to a retailer. We examine the issue of double marginalization, and learn how two-part tariffs get us out of this problem. We also examine different forms of contractual relations—from vertical acquisitions to regular short-term contracts—and potential issues with every form, touching on transfer pricing and outsourcing. In the second part of the course, we analyze a crucial concept of cost pass-through (how much a retailer should decrease the retail price in response to a decrease in the wholesale price) and the effect of manufacturer's advertising on the retailer and on the channel overall. This course is a natural continuation of Pricing for those who are interested in working in an industry where a significant portion of sales is done through independently-owned

retailers, whether students are planning on working on the retailer side or on the manufacturer side of this industry.

**MKT 439. ADVANCED PRICING**

(Same as STR 439)

This course builds on MKT 414/STR 423 to equip students with the necessary skills to make profitable pricing decisions in complex business environments. Topics include: pricing with constrained supply, pricing in the presence of uncertainty about demand, markdown management, advance selling, pricing on the internet, pricing in the presence of direct or indirect network effects, selling through auctions, and behavioral and ethnical aspects of pricing. The course also includes a comprehensive pricing simulation.

Prerequisite: STR 423

**MKT 441. BRAND MANAGEMENT**

This course is the capstone course of the Brand Management Track. Lectures focus on scanner data analysis, and guest speakers discuss timely brand management topics. The main focus is a team project performed for a major consumer packaged goods firm, requiring the analysis of various current data sources, most notably scanner data. The major deliverable is a presentation to the client by each team of their findings. Typically, this amounts to performing a brand review.

Prerequisite: MKT 412 (may be taken concurrently)

**MKT 442. SPECIAL TOPICS IN MARKETING**

(Not offered every year)

Special topics are generally those which are not well covered in other courses, or they may deal with marketing in selected industries (e.g., financial services, high-tech marketing, etc.). The specific content of the course varies, depending on faculty interests.

Prerequisite: permission of the instructor

**MKT 444: B2B MARKETING**

This course involves all of the basic marketing functions but it takes on a totally different complexion in that it involves organizations (profit and not profit) that acquire goods and services that are utilized in the production of others goods and services or are used in the overall operation of the organization.

Besides the major commercial organizations that make up a sizeable percentage of B2B companies, there are institutional organizations in the

mix as well – hospitals, colleges, universities and government. B2B marketing involves several distinct characteristics such as: larger, fewer purchases, centralized buying decisions, multiple buying influences, close supplier/customer relationships etc.

The overall market tends to be global in nature and technology is a major influence.

Prerequisites: Dependent upon instructor.

**MKT 448. BRAND STRATEGY**

In this project-based course, students consult with the senior leadership teams of local companies that are in need of a brand strategy. In doing so, students address the following questions:

- What is the firm's desired brand strategy?
- How does the firm currently see its brand?
- How does the marketplace perceive the firm? (Internal and external perceptions rarely match.)
- What can the firm do organizationally (hiring, structure, incentives, etc.) to move toward providing the desired brand?
- What can the firm do using marketing activities, including product and service experiences, to move consumer perceptions toward this desired positioning?

The course introduces students to an intuitive framework in which to develop answers to these questions and a series of research tools to collect the needed information. Students then actually use these tools to help a local company design brand strategy.

Students in this course realize several meaningful benefits:

- Greater preparedness to add immediate value in the corporate workforce, where they are sure to come across the topic of brand building. This class provides them with practical exposure to a proven methodology and an array of appropriate tools for aligning organizations going through a brand transformation or engaging in a brand-related project.
- Access to senior level leadership challenges. This course provides an opportunity for students to interact regularly with the upper management of the participating company, thereby enabling them to learn from real-life, demanding experiences.

Class sessions consist of lectures relating to brand strategy development methodologies and tools and discussions pertaining to the course project. Multiple team meetings with the client firm outside of the scheduled class times are required. Grading is based on peer, profes-

sor and client evaluations of team success.

Prerequisite: MKT 402

### **MKT 449. GLOBAL MARKETING STRATEGY**

This course will develop the concepts of marketing strategy in the context of the resource-based view of the firm and the market focus view of the firm. Marketing strategy formulation and implementation will be related to strategies at the corporate and business unit level as well as other functional areas of the organization. The analytical tools and concepts for strategic analysis will be developed from basic economic principles. Core MBA subject matter will be integrated in the course as a part of the analysis and construction of a marketing strategy. The course examines the importance of bilateral information flows between the firm and the marketplace in defining new product requirements, changing competitive conditions, product advertising, and strategic commitment.

The course consists of lectures and classroom discussion of contemporary cases in services and tangible products. The case discussions will illustrate how the entire organization is affected by strategic marketing decisions. The definition of new core capabilities and the use of existing unique resources in creating competitive advantage will be explored. Special emphasis will be given to the impact of globalization and technology on the formulation and implementation of marketing strategy.

Prerequisite: MKT 402

### **MKT 451. ADVANCED MARKETING ANALYTICS**

This course is designed to give students the knowledge, vocabulary, and confidence to implement customized data analysis, using flexible and adaptable approaches. The course will cover the use of state-of-the-art computational data analysis techniques that are now possible with the widespread adoption of modern computing, including maximum likelihood estimation, fitting models with custom metrics, optimization, bootstrapping, time series data, binary data, and discrete choice data.

Expanding on the topics covered in MKT 436, the course will explore questions such as: How do you customize your analysis approach to new problems? When should you or should you not use regression? How do you integrate the next big thing in data analysis?

The course will also discuss potential computational bottlenecks, and the techniques, software, and hardware to avoid them.

Students' basic R programming skills will be expanded. All instruction is "hands on" and students should expect to be proficient in R by

the end of the course.

This course has been designed for students who have completed an introductory statistics course and who have also either taken MKT 436 or have a basic working knowledge of R.

### **MKT 465. MARKETING PROJECTS**

This course serves as a practical capstone experience for the MS Marketing Analytics program. Partnering with corporate sponsors, student teams put their training to use in database projects which address practical marketing issues. Corporate guest speakers and practicing analysts guide students in their project work. Strong emphasis is placed on the "context" for applied analytics: the competitive market environment of the firm, customer attributes and sensitivities, marketing program recommendations and optimum business decision-making.

### **PHD COURSES**

#### **MKT 501. WORKSHOP IN MARKETING**

Non-credit

This workshop provides a forum for the presentation of ongoing and completed research by students, faculty and visiting scholars. PhD students are expected to participate actively.

Prerequisite: permission of the instructor

#### **MKT 511. ADVANCED TOPICS IN MARKETING I**

This course is the first leg of a three-part sequence that prepares PhD students for research in marketing. The presentation of topics between the three parts may vary from year to year. The aim is to survey the literature, assess progress and identify opportunities for future research.

Prerequisite: permission of the instructor

#### **MKT 512. ADVANCED TOPICS IN MARKETING II**

In this second part of a three-part sequence that prepares PhD students for research in marketing, topics are discussed in a format similar to MKT 511.

Prerequisite: permission of the instructor

#### **MKT 513. ADVANCED TOPICS IN MARKETING III**

In this third part of a three-part sequence that prepares PhD students for research in marketing, topics are discussed in a format similar to MKT 511 and MKT 512.

Prerequisite: permission of the instructor

## **■ OPERATIONS MANAGEMENT**

Abraham Seidmann, *Area Coordinator*

### **MASTER'S-LEVEL COURSES**

#### **OMG 402. OPERATIONS MANAGEMENT**

Operations Management introduces the concepts and skills needed to design, manage and improve service and manufacturing operations. The course develops a managerial perspective of the operations function and an appreciation of the role that operations plays in creating and maintaining a firm's competitive edge. The course introduces process analysis, performance measurement systems for operations and production control systems.

Quantitative models and case studies apply these skills to service process management, manufacturing, inventory control, supply chain management and project management. The course highlights the role of effective operations management in the strategic direction of the firm as well as the connections between operations and other functional areas.

Prerequisites: CIS 401, GBA 411, and GBA 412 or GBA 462

#### **OMG 411. SUPPLY CHAIN MANAGEMENT**

This course gives an overview of supply chain management in a wide variety of industries such as: groceries, style goods, consumer electronics and services. The impact of shifts from traditional channels to e-commerce will be emphasized. New initiatives introduced to address these new challenges, such as vendor managed inventory (VMI), variety postponement, cross docking, real options contracts and quick response, will be studied and applied both in class and assignments. Supporting software, such as Enterprise Resource Planning (ERP) and supply chain tools, will also be discussed. After completing this course, the student should be able to characterize the supply chain issues in an industry/firm, and evaluate current practice as well as identify improvement opportunities.

Prerequisite: OMG 402

#### **OMG 412. SERVICE MANAGEMENT**

Success of service management critically depends on managing the integration of business processes with customers as well as all related support systems (technology, human resources, information flow). This integration presents a challenge to service managers who need to address significant variation in customer expectations and requirements while controlling costs and remaining competitive. This

course provides a foundation for the analysis and improvement of businesses, paying particular attention to the service sector. The type of analysis learned in this course is required in virtually every industry as companies work to improve their bottom-line performance. The best way to improve performance is through a holistic approach, where the structure of processes, information and technological requirements, and the managerial implications, are considered concurrently. The methodologies developed in this course will provide a framework for analysis that will remain constant amid the many different types of services analyzed. Please note that this course is case intensive.

Prerequisite: OMG 402

#### **OMG 413. OPERATIONS STRATEGY**

For many firms, the operations function marshals the majority share of a firm's assets and resources while producing products and services. Decision making in operations can have a decisive effect on both the cost and the attractiveness of the firm's outputs. Thus the management of operations activities is a critical factor in a firm's competitive strategy. This is a course that explores operations related decisions in the context of overall business, operations, financial and marketing strategies. Strong emphasis is given to valuation of different operational strategies and NPV analysis. Many types of operations decisions are considered: location, capacity, sourcing, flexibility, and process choice. Risk management and financial evaluation of capital projects will be discussed. In addition to financial evaluation, students will analyze the fit of strategic choices in the competitive context a firm faces. Every class will involve a case study.

Prerequisite: OMG 402

#### **OMG 415. PROCESS IMPROVEMENT**

This course will teach a systematic method for understanding and improving ongoing business processes. The techniques you learn in this class provide a systematic method of asking questions, collecting data, and analyzing that data to learn how processes work (or are failing) and what can be changed to improve them. The statistical techniques you will learn are SPC (Statistical Process Control, used as a proactive tool for investigation rather than its traditional role as a reactive tool), MSA (Measurement Systems Analysis, for determining if your measurement system is capable), FMEA (Failure Modes and Effects Analysis), and DOE (Design of Experiments). In addition to these analysis tools, there will be a strong emphasis on the process of data acquisition. To support the process of acquiring the right data and learning the analysis tools, you will do a

small outside project for the class and a series of in-class simulations. You will learn to use two additional tools that support the questioning that leads to good data acquisition: process mapping (of the process you will be improving) and thought process mapping (of the process you use to solve the client's problem).

Prerequisite: OMG 402

#### **OMG 416. PROJECT MANAGEMENT**

The topics treated in this course span a wide spectrum of issues, concepts, systems and techniques for managing projects effectively in today's complex business environment. Students are led through a complete project life cycle, from requirements analysis and project definition to start-up, reviews, and phaseout. Important techniques for controlling project costs, schedules, and performance are studied. The course employs a combination of lectures, case analyses, business/project simulations, videos, Internet resources, and group discussions to develop the conceptual understanding and operational skills needed for effective managerial role performance.

Prerequisite: OMG 402

#### **OMG 437. MANAGING HEALTH CARE OPERATIONS**

(Same as HSM 437)

The health care industry is undergoing rapid growth as well as rapid structural changes. New technology, changing reimbursement mechanisms, and increased competition create many interesting management problems, not in the least in the area of health care operations. In this course, we will study the operations of various types of health care provider organizations (such as hospitals, HMO's, group practices, nursing homes, etc.) and other participants in the industry (such as insurance companies, pharmaceutical companies, suppliers and consulting companies). Topics that will be studied include: patient and provider scheduling, capacity management, providing services and supplies to health care providers, new product development and integrated delivery systems.

Students who took OMG 402 or similar need to obtain instructor's permission prior to registration.

#### **OMG 460. SPECIAL TOPICS IN OPERATIONS MANAGEMENT**

This course provides a critical study of selected topics in operations management focusing on best practice and the status of research efforts to date. Potential topics are: yield management, operations and information management issues in retail fashion and media, transporta-

tion management, or customers' relationship management.

Prerequisite: OMG 402

### OMG 461. STRATEGY AND BUSINESS SYSTEMS CONSULTING PRACTICUM

(Same as CIS 461 and STR 461)

This course provides MBA students with an introduction to strategy and business systems consulting. It is aimed at students who wish to explore career opportunities within the major consulting firms, but is also relevant for students considering a career as an independent consultant, or within a corporation's internal consulting group. The course focuses on three areas:

- **The Consulting Industry:** Students will examine several types of consulting (e.g., strategic, operations, systems, human resource and marketing) and understand where the major consulting firms position themselves. The career paths for MBA's entering the industry, and the skills and values necessary for success as a consultant will be scrutinized.

- **The Business Systems Consulting Process:** The creation of proposals, the winning of consulting engagements, and the preparation of contracts will be discussed. The typical stages of a business systems consulting engagement (e.g., problem framing, analysis design, gathering data, interpreting results, architectural solution, and presentation of recommendations) and managing different sorts of consulting projects (e.g., operational improvement, supply-chain optimization, quality improvement, strategy formulation, and organization design) will be examined.

- **Consulting Skills:** The role of the consultant and the human dimension will be discussed (e.g., personal attributes of consultants, relationship building, and team building). Diagnostic tools and data gathering techniques (e.g., questionnaires and interviews) will be presented. Frameworks for problem solving, and communicating recommendations will also be introduced.

The course examines a wide range of modern global business challenges and opportunities from both the consultant's and the manager's perspectives and provides a learning platform to integrate and practice the skills and knowledge learned.

### PHD COURSES

#### OMG 501, 502, 503, 521, 522, 523. PHD SEMINARS IN OPERATIONS MANAGEMENT

These six PhD seminars are offered in the fall, winter and spring quarters, with major topics such as the following: distribution/ inventory theory; flexible-manufacturing systems; (production) batching, scheduling and sequencing; reliability/maintenance management; design/ strategy; routing/vehicle scheduling; quality; production-control systems; and planning models. Topics for the joint CIS/OMG seminars include: computer-integrated manufacturing, network-based industries, performance evaluation of dynamic systems, business expert systems and artificial intelligence.

#### OMG 531. ANALYSIS OF PRODUCTION SYSTEMS

The course introduces the theory of production and inventory systems, and discusses mathematical models used in designing and managing real-world systems. Topics include: aggregate production planning, static and dynamic approaches to operations scheduling, inventory control with known and uncertain demand, flexible and high-volume manufacturing systems, hierarchical production planning systems and manufacturing resource planning.

### INTERNATIONAL EXCHANGE PROGRAMS

BUSINESS SCHOOL	UNIVERSITY	LOCATION	PROGRAM OBJECTIVE	SPECIAL EMPHASIS	LANGUAGE
<b>ARGENTINA</b> Centro de Estudios Macroeconomicos de Argentina	Universidad del CEMA	Buenos Aires, Argentina	International business with programs in firm management and banking	Entrepreneurship, strategic planning, financial analysis, finance, macroeconomics, international banking	Primarily Spanish, some English
<b>AUSTRALIA</b> Australian Graduate School of Management	University of Sydney and University of New South Wales	Sydney, Australia	International scope; strong focus on financial management and logical decision making	Policy analysis and public-sector management; interdisciplinary approach combines economics, quantitative methods, politics and management	English
<b>BELGIUM</b> Katholieke Universiteit Leuven		Leuven, Belgium	Stresses analytical techniques and rigor in management. In-depth understanding of concepts and techniques necessary in modern management	An analytical and often quantitative approach to the study of managerial problems; learning principles of problem solving which lead to effective decision making	English
<b>CHINA</b> Antai College of Economics and Management	Shanghai Jiao Tong University	Shanghai, China	Opportunity to experience Shanghai's business environment; downtown commercial district location; frequent interaction with Shanghai business and industry leaders	Two full-time MBA programs: International MBA and China Leaders for Global Operations; three part-time programs: Finance MBA, Technology MBA, and General MBA	English (offering weekly Chinese classes free of charge)
<b>FINLAND</b> Aalto University Executive Education		Helsinki, Finland	International business	Intensive modules of study concentrated over three weeks	English
<b>GERMANY</b> Otto Beisheim School of Management	WHU	Vallendar, Germany	Business administration, policy, strategic and situational management	AACSB, EQUIS, and FIBAA accredited	Graduate programs (MSc, MBA) are completely taught and examined in English
<b>HONG KONG</b> School of Business and Management	Hong Kong University of Science and Technology	Kowloon, Hong Kong	To cultivate students able to handle the challenges and opportunities presented by the continuing globalization and development in the Asia-Pacific region	Expertise in China business, electronic commerce, information technology management and financial services	English
<b>JAPAN</b> Graduate School of International Management	International University of Japan	Niigata, Japan	To prepare specialists with a broad international outlook and an understanding of management practices in international cultures	Invites foreign scholars as professors and lecturers	English
<b>MEXICO</b> Instituto Panamericano de Alta Direccion de Empresa (IPADE Business School)	Universidad Panamericana	Mexico City, Mexico	To give participants the opportunity to live abroad while developing global managerial skills	To shape leaders with global vision, social responsibility, and Christian values who have the capacity to transform organizations and society	English and optional Spanish
<b>NORWAY</b> BI Norwegian Business School		Sandvika, Norway	Functional business, economics, international strategy, Euro-management	Subspecialization in environmental management	English

**ADMISSIONS AND FINANCIAL AID**

The Simon School encourages applications from men and women with diverse educational, professional, cultural and geographic backgrounds. This rich mix of educational backgrounds and experiences greatly enhances classroom interaction and social life at the School.

**CRITERIA FOR SELECTION**

The selection process emphasizes evaluating the applicant as an individual and determining potential contributions to the School and to the world's business community. The Admissions Committee looks carefully for predictors of success in both the academic setting and the business world. In selecting students, the committee considers the following criteria: evidence of leadership and initiative, the nature and scope of prior work experience, teamwork and communication skills, undergraduate grade-point average, GMAT or GRE score, recommendations and the applicant's career focus. The applicant is encouraged to prepare a careful and thoughtful application.

**PREPARATION FOR GRADUATE STUDIES**

Applicants from all undergraduate majors are considered for admission to the MBA program. MS degrees in some areas may have specific course or major prerequisites. Check our Website at [www.simon.rochester.edu](http://www.simon.rochester.edu) for details. Undergraduate backgrounds of current MBA students are distributed across business, engineering/math/sciences, economics, and other social sciences and the humanities. The curriculum is designed to be managed successfully by students without prior business coursework. However, for applicants planning to take additional courses prior to entering the Simon School, economics, accounting and statistics are recommended. An elementary knowledge of calculus is required.

**TWO-YEAR MBA PROGRAM**

Our traditional Two-Year MBA students begin in August each year and complete the first year during the fall, winter, and spring quarters. Most Two-Year MBA students complete a summer internship between their first and second year of study and have curricular flexibility to pursue one or more concentrations during their time at Simon.

**FULL-TIME MS PROGRAMS**

Our full-time MS programs are one year of focused study in an area of business. Designed for early career professionals, students can choose from a number of concentrations, including: Accountancy, Finance, and Marketing.

**PROFESSIONAL MBA (PMBA) AND PART-TIME MS**

The Simon Professional MBA (PMBA) program is designed for students working full time. The PMBA program offers a partial lock-step, cohort-style experience, in which teams of students take six of the nine core courses together in a structured sequence. Students will also take 11 electives to complete any desired concentration(s). If students complete two classes per quarter, they typically complete their degrees in two-and-a-half years. Need- and merit-based scholarship opportunities are available for the PMBA program.

The criteria for admission are the same for full-time and Professional MBA and part-time MS students. Applicants to the Professional MBA and Part-time MS program may matriculate in the fall or spring quarter. Application instructions and deadlines can be found on the Simon website.

Students interested in the Professional MBA or Part-time MS program may take up to two non-matriculated courses before formally applying to the program. Course options are: STR 401 (Managerial Economics), ACC 401 (Corporate Financial Accounting), CIS 401 (Corporate Financial Accounting), MKT 402 (Marketing Management) and FIN 402 (Capital Budgeting and Corporate Objectives).

Grades received in non-matriculated courses automatically become part of the application for students who plan to matriculate into the part-time programs. Professional MBA and Part-time MS students who complete the two non-matriculated courses with a grade-point average of 3.3 or higher will not be required to take the GMAT or GRE. The non-matriculated courses may be started during any quarter. See the Simon website for course offerings.

The Office of Admissions offers day and evening appointments for part-time applicants desiring admissions counseling. Additionally, quarterly Open Houses are offered to provide prospective students with more information about the School.

All part-time students must complete an orientation/registration session prior to beginning classes at the Simon School. We offer one evening session prior to the start of each quarter for students interested in the non-matriculated option. Students matriculating into the Professional MBA or Part-Time MS program will attend a full-day orientation in the fall or spring quarter of matriculation. The orientation provides details on Simon and University of Rochester student services and the transition into business school, while allowing the student to complete course registration. Please refer to

[www.simon.rochester.edu/ptevents](http://www.simon.rochester.edu/ptevents) for dates of the Open Houses and orientation sessions.

**APPLICATION PROCEDURES**

Applications must be complete before being considered by the Admissions Committee.

A complete application consists of the following:

- the online application form, including essays;
- an uploaded, scanned official transcript from each college attended (undergraduate and graduate);
- at least one and no more than two online letters of recommendation;
- a non-refundable application fee;
- a current résumé;
- Uploaded scanned official scores reported from the Graduate Management Admission Test (GMAT) or Graduate Record Exam (GRE);
- Uploaded scanned Test of English as a Foreign Language (TOEFL) or IELTS for international applicants who are non-native English speakers (see details in the Online Application available through our Website)

MBA or MS applicants are expected to apply online through our Website at [www.simon.rochester.edu/applynow](http://www.simon.rochester.edu/applynow). Additional details on the admissions process and requirements are available by reviewing the application.

**INTERVIEWS**

The Admissions Committee may request an interview with prospective candidates. Applicants selected for an interview will be notified by the Office of Admissions after a preliminary review of his or her application. The interview is regarded as an important two-way communication channel for both the School and the applicant. U.S.-based candidates are expected to visit campus for their interviews. A video interview with a member of the Simon School Admissions Committee is available for candidates outside of North America.

**CAMPUS VISITS**

Prospective MBA and MS students are strongly encouraged to visit the Simon School. First- and second-year Simon Ambassadors conduct individual tours of Schlegel and Gleason Halls and the University of Rochester campus. They also escort visitors to classes, treat them to lunch and provide information about the Simon experience from a student perspective. Visits usually include an interview with a member of the Admissions staff. To make the most of your visit, it is recommended that visits be scheduled between Monday and Thursday,

when classes are in session. We will make an attempt to accommodate those who request to visit on Friday, provided that sufficient notice is given for this preference. Scheduling priority is given to those candidates who have already submitted an application to the Simon School and who have been invited to interview by the Admissions Committee. However, the Office of Admissions will consider all requests to visit, provided a current résumé and GMAT/GRE/TOEFL/IELTS scores are submitted at the time of the request.

**INTERNATIONAL STUDENTS**

The interactive MBA and MS programs in Rochester rely on the breadth of experience of its students. The international student population adds an especially valuable dimension to discussions on current business practices in a global marketplace. Applicants from outside the U.S. are expected to be comfortable with conversational English since active participation both in and out of the classroom is integral to success at the Simon School.

**TRANSFER CREDIT**

Students may petition to receive transfer credit for graduate courses taken at other universities within five years of the date of Simon School matriculation. A maximum of three courses (nine credit hours) may be transferred to the Simon School MBA program. A maximum of two courses (six credit hours) may be transferred to an MS program. Students taking approved courses for transfer credit to the Simon School must earn a grade of B or better in those courses. Requests for transfer of course credit are made by submitting a petition for transfer credit to the associate dean for MBA programs. Only petitions from students already matriculated into a program will be considered. Course descriptions and syllabi should accompany the request.

Because of the integrated nature of the cohort system, no transfer credit is granted for core courses for full-time students. Part-time students, however, may petition for the transfer of core courses. Grades for transferred courses are not calculated into a student's cumulative GPA. There is a \$600 course-transfer fee for each course taken outside the University of Rochester and transferred for credit to the Simon School. An official transcript is required for credit to be awarded.

**EXPENSES**

The tuition for the 2015–2016 academic year is \$1,745 per credit hour. The average tuition for a full-time MBA student is \$53,223 per year. MS students pay \$1,745 per credit hour. There is no charge for the credits associated with labs for matriculated students, and there is one

course credit charged for the Management Communication sequence. All students are charged tuition by the credit hour.

All full-time graduate students pay an annual health fee of approximately \$3,000. This covers use of the University Health Service and provides medical insurance coverage for the student. The health fee is reduced if the student has medical insurance coverage from another source. Medical insurance for students' families is also available.

Part-time students may opt to take advantage of the Employer-Sponsored Payment Plan (ESP Plan). Through this plan, employer-sponsored matriculated students may defer payment of tuition until the 10th day of the month immediately following the end of the quarter.

**STUDENT OWNERSHIP OF LAPTOP COMPUTERS (REQUIRED)**

It is required that students acquire a laptop computer to support their class and course work. It is the responsibility of each student to acquire one; the School will not supply equipment to students.

Students who purchase computers may include the cost when calculating their eligibility for loan programs.

When considering the purchase of a laptop computer, Dell is the preferred brand. Simon School IT staff members have in-depth experience with Dell models, features and troubleshooting. Most laptops manufactured today have the basic requirements (network cable connection, high speed processor, wireless B/G adapter, Microsoft operating system), but purchasers should consider investing in at least 2 GB of memory/RAM (more if budget allows). Investments in additional features are at the purchaser's budgetary discretion. Students are free to choose equipment that meets their individual needs and budgets, but must bear in mind that the further they deviate from the recommendation, the more likely they are to face difficulties. Mac/Apple computers must have Parallels software installed since most class-specific software only runs on the Windows platform.

**MERIT-BASED FINANCIAL AID**

The Simon School assists qualified full-time students in financing their management education and has been relatively generous in awarding merit-based scholarships to those who show promise of achieving excellence at the School and in their careers. In awarding merit-based aid, primary emphasis is given to academic excellence, professional development and demonstrated qualities of leadership.

These awards are renewed in the second year, provided first-year academic performance has

been satisfactory. Consideration for Simon School merit-based financial aid does not require a separate application.

Financial aid for international students is available, but competitive and candidates must consider the costs of financing academic study in the United States. International students are also encouraged to investigate funding sources in their home countries as early as possible.

**LOAN PROGRAMS**

The University of Rochester administers the full range of federal and private financial aid programs. International students may borrow, provided they have a co-signer who is a citizen or permanent resident of the United States.

To apply for student loans, students should submit a Free Application for Federal Student Aid (FAFSA). To receive a timely response, a completed FAFSA should be on file in the University of Rochester Financial Aid Office at least 12 weeks prior to the start of the quarter in which a student intends to enroll. The University of Rochester requires parental information of dependent students only.

For further information on student loans, please contact:

University Financial Aid Office

Box 270261  
University of Rochester  
Rochester, N.Y. 14627-0261  
(585) 275-3226  
(800) 881-8234 (toll free within the U.S.)

**INTERNATIONAL FINANCIAL AID OPPORTUNITIES**

The organizations listed below offer financial assistance to international students.

American Association of University Women (AAUW) International Fellowships

AAUW Educational Foundation

1111 Sixteenth Street, NW  
Washington, D.C. 20036  
(800) 326-2289  
(202) 785-7700  
[www.aauw.org](http://www.aauw.org)

Edmund S. Muskie/FSA Graduate Fellowship

American Councils ACTR/ACCELS

1776 Massachusetts Avenue, NW,  
Suite 700

Washington, D.C. 20036

Contact: Andrew Segars

(202) 833-7522

[www.americancouncils.org](http://www.americancouncils.org)

Institute of International Education  
809 United Nations Plaza  
New York, N.Y. 10017-3580  
(212) 883-8200  
www.iie.org

The Rotary Foundation  
Ambassadorial Scholarship  
Rotary International  
One Rotary Center  
1560 Sherman Avenue  
Evanston, IL 60201  
(847) 866-3000  
www.rotary.org  
Contact: inquiries@rotary-intl.com

## STUDENT SERVICES

### ATHLETIC FACILITIES

Simon students have access to University facilities such as the Robert B. Goergen Athletic Center, which is well equipped for a wide variety of individual and group athletic activities. In addition to multipurpose areas for volleyball, basketball and exercise, the facilities include indoor and outdoor tennis courts, a modern 25-meter pool with a separate diving area, and a Cybex fitness center.

### BARNES AND NOBLE BOOKSTORE

The Barnes and Noble Bookstore on the University of Rochester River Campus is located in College Town at the corner of Elmwood Ave. and Mt. Hope Ave.

All textbooks for Simon School courses are available. In addition to course materials, the store also carries an assortment of Simon School merchandise and apparel.

For information, call (585) 275-4012, or visit the Website at [www.urochester.bncollege.com](http://www.urochester.bncollege.com).

Visit the Simon School's online "Virtual Store" and find a number of branded Simon products to choose from. From the Simon School home page at [www.simon.rochester.edu](http://www.simon.rochester.edu), select "About Simon" for the current link to the Virtual Store site.

### DINING SERVICES

Many dining options are available on the University's River Campus. Meals may be purchased with cash or a prepaid dining plan.

Espresso, cappuccino, sushi, sandwiches, soup, salads and baked goods are available at Schlegel Hall's coffee counter.

The Douglass and Danforth Dining Centers each serve a wide variety of foods for breakfast, lunch and dinner. Kosher meals are also offered daily.

Food options available at the serving stations in The Commons, which has been recently renovated in Wilson Commons, include: Starbucks, Pizzi Pi, Blimpie, The Common Grill, A New Leaf, Kettle Classics, Zoca (Mexican) and Panda Express (Chinese).

Pura Vida, located on the ground floor of Robert B. Goergen Hall for Biomedical Engineering and Optics, specializes in serving only 100 percent organic, Fair Trade, shade-grown coffee. In addition to freshly brewed Pura Vida coffee, one can choose from a variety of baked goods and grab-and-go options.

The Corner Store, located in the Frederick Douglass Building, provides a selection of snacks, beverages, grocery items, fresh produce and kosher selections.

A coffee cart is provided in Hutchison Hall during the weekday lunch period.

Sophisticated fine dining in the Meliora is open to the community weekdays for lunch and Friday night dinner. Private dining rooms and catered cuisine are also available.

For more information, call dining services at (585) 275-0171, or visit our Website at [www.rochester.edu/studentlife/dining.html](http://www.rochester.edu/studentlife/dining.html).

### HEALTH SERVICES

The University Health Service (UHS) provides a comprehensive, prepaid health care program for all full-time graduate students. Students pay a mandatory health fee that entitles them to use the University Health Service throughout the academic year and the following summer, as long as they are enrolled on a full-time basis. The health plan offers students a wide variety of high quality, affordable and accessible health care services. UHS staff supports preventive medicine and encourages students to take an active role in their health care. All full-time students must have health insurance. An Excellus Blue Cross/Blue Shield insurance plan is available for individual students through UHS. Students with equivalent insurance can waive the Excellus Blue Cross/Blue Shield insurance. A family insurance plan is available for students who want coverage for themselves and their dependent children.

For more information, call (585) 275-2662, or visit [www.rochester.edu/uhs/](http://www.rochester.edu/uhs/).

### HOUSING

The University owns several housing facilities specially reserved for graduate students. These include:

- furnished or unfurnished one- and two-bedroom apartments in Goler House;
- unfurnished studios with kitchenettes, and one- and two-bedroom apartments at University Park;
- unfurnished two-bedroom garden apartments and two- and three-bedroom townhouses surrounded by woods at Whipple Park, perfect for families;
- unfurnished two-bedroom bungalows across from University Park;
- furnished suites at University Towne House, a short walk to campus;
- and a community-living facility that houses 40 single graduate students at the River Road Residence.

All University apartments have reserved off-street parking and are served by frequent runs of the University shuttle bus.

Eligibility for housing is contingent on current enrollment status, and all applicants must be registered as full-time graduate students of the Simon School. Because applications for housing always exceed available facilities, a lottery system, usually held in early May, is used to establish priority among qualified applicants. Graduate students from outside the Rochester area are advised to make specific housing arrangements in advance of coming.

For more information, call (585) 275-3166, or visit our Website at [www.rochester.edu/reslife/graduate/index.html](http://www.rochester.edu/reslife/graduate/index.html).

## ID CARDS

University of Rochester ID cards are required to obtain after-hours access to Schlegel and Gleason Halls. ID cards are also required to use the library and sports complex. For information, contact the River Campus Identification Card Office, located in the Susan B. Anthony Residence Hall, at (585) 275-3975, or visit our Website at [www.rochester.edu/living/services/onecard/ID1.htm](http://www.rochester.edu/living/services/onecard/ID1.htm).

## IMMUNIZATIONS

All entering matriculated full-time and part-time students must submit a University Health History Form that includes immunization information. Under New York State law, students who do not show proof of immunity to measles, mumps and rubella before classes begin will not be allowed to attend the Simon School.

## INTERFAITH CHAPEL

As the center for spiritual life on the River Campus, the Interfaith Chapel offers graduate students opportunities for worship, meditation, social service, and cultural and social events. Roman Catholic, Protestant, Muslim and Jewish clergy are available for personal counseling. In addition, there are resource staff members available to assist students from the Buddhist, Jain, Hindu, Sikh, Universalist Unitarian and Latter-Day Saints traditions.

## CORP COOPERATIVE RESIDENCY

The Cooperative Program will allow students to work a six-month paid internship supervised by a senior manager, which enhances the learning of students toward their career goals. This co-op, due to its duration, will allow students to gain significant experience and ability to utilize classroom lessons in a work setting. All students must complete a proposal indicating the sponsor of the program, the duties associated with the co-op and the benefits the student will receive toward his or her intended career path. The student must also submit a plan of study to the Senior Associate Dean for Faculty and Research who will review the student's academic standing and will ensure that the student can graduate on time. Students must meet with the Career Management Center for further information and to determine eligibility.

## 2015-2016 SIMON BUSINESS SCHOOL COURSE CATALOG

The information contained in the 2015–2016 Course Catalog is current as of November 4, 2015.

Provisions of this publication are not to be regarded as an irrevocable contract between the student and the William E. Simon School of Business. The Simon School reserves the right to make changes in its course offerings, degree requirements, regulations and procedures, and fees and expenses as educational and financial considerations require.

The Simon School encourages the application of all qualified persons interested in the study of management at the master's and doctoral levels.

The University of Rochester values diversity and is committed to equal opportunity for persons regardless of age, color, disability, ethnicity, gender identity or expression, genetic information, marital status, military/veteran status, national origin, race, religion/creed, sex, sexual orientation, or any other status protected by law. Further, the University complies

with all applicable non-discrimination laws in the administration of its policies, admissions, employment, and access to and treatment in University programs and activities.

Questions on compliance should be directed to the particular school or department and/or to the University's Intercessor, University of Rochester, P.O. Box 270039, Rochester, NY 14627-0039. Phone: (585) 275-9125.

## CAMPUS CRIME STATISTICS

The Advisory Committee on Campus Safety will provide upon request all campus crime statistics as reported to the United States Department of Education (USDOE). The statistics are available on the USDOE's Website (<http://ope.ed.gov/security/>) and on the University's site at (<http://www.security.rochester.edu/>).

You can also obtain a hard copy of the report, titled Think Safe, by contacting University Security Services at (585) 275-3340.

## CONTACT INFORMATION

### Admissions

(MBA and MS Programs)  
Phone: (585) 275-3533  
Fax: (585) 271-3907  
E-mail: [admissions@simon.rochester.edu](mailto:admissions@simon.rochester.edu)

### Advancement

Phone: (585) 275-7563  
Fax: (585) 756-8053  
E-mail: [alumni@simon.rochester.edu](mailto:alumni@simon.rochester.edu)

### Career Management Center

Phone: (585) 275-4881  
Fax: (585) 473-9604  
E-mail: [career@simon.rochester.edu](mailto:career@simon.rochester.edu)

### Executive MBA Program

Phone: (585) 275-3439  
Fax: (585) 244-3612  
E-mail: [emba@simon.rochester.edu](mailto:emba@simon.rochester.edu)

### Financial Aid Office

Phone: (585) 275-3226, (800) 881-8234  
Fax: (585) 756-7664  
E-mail: [help@finaid.rochester.edu](mailto:help@finaid.rochester.edu)

### Information Technologies

Phone: (585) 275-4409  
Fax: (585) 271-8752  
E-mail: [ssit@simon.rochester.edu](mailto:ssit@simon.rochester.edu)

### Marketing and Communications

Phone: (585) 275-3736  
Fax: (585) 275-9331  
E-mail: [marketing@simon.rochester.edu](mailto:marketing@simon.rochester.edu)

### Off-Campus Living

Information Center  
Phone: (585) 275-1081  
Fax: (585) 276-1886  
E-mail: [offcampus@reslife.rochester.edu](mailto:offcampus@reslife.rochester.edu)

### Part-Time Programs

Phone: (585) 275-3803  
Fax: (585) 244-3612  
E-mail: [ptprograms@simon.rochester.edu](mailto:ptprograms@simon.rochester.edu)

### PhD Program

Phone: (585) 275-2959  
Fax: (585) 276-1965  
E-mail: [phdoffice@simon.rochester.edu](mailto:phdoffice@simon.rochester.edu)

### Registrar's Office

Phone: (585) 275-3533  
Fax: (585) 271-3907  
E-mail: [registrar@simon.rochester.edu](mailto:registrar@simon.rochester.edu)

### Student Services

Phone: (585) 275-8163  
Fax: (585) 276-2368  
E-mail: [studentservices@simon.rochester.edu](mailto:studentservices@simon.rochester.edu)

### University Apartments Office

Phone: (585) 275-5824  
Fax: (585) 276-1886  
E-mail: [uapts@reslife.rochester.edu](mailto:uapts@reslife.rochester.edu)