# W. P. Carey School of Business

### wpcarey.asu.edu

## PURPOSE

The W. P. Carey School of Business is a professional school that pursues excellence in instruction and research. The pursuit of excellence in programs of instruction implies that the school admits only students who are especially well qualified for the study of business and who will, upon graduation, compete successfully for highly desirable positions, both nationally and internationally.

The mission of the W. P. Carey School of Business is to expand the knowledge of business and to educate men and women for managerial leadership through research activities and professional educational programs that address issues of importance to future managers in a world characterized by racial, cultural, and gender diversity in the work force; demands for continuous improvements in quality; growing technological sophistication; and globalized markets.

The W. P. Carey School of Business is a comprehensive research school of business that selects and retains faculty based on their ability to use their teaching and research skills to fulfill its mission.

The W. P. Carey School of Business—through its research support, its Seidman Institute programs and centers, and its doctoral programs—develops knowledge that is important to managers and the management of organizations. It endorses joint research projects that are not only supported by business but include managers as partners in the research objectives, processes, and outcomes.

The W. P. Carey School of Business anticipates that its mission will lead to research and professional degree programs that will result in its being recognized among the top schools of business in the U.S. Strategies to achieve its mission include an emphasis on the MBA degree: increasing its quality such that it is competitive with the best 25 programs found at other large public schools of business and developing a curriculum that incorporates the knowledge, skills, and abilities identified in the mission of the school.

Strategies relative to the doctoral program also include raising admission standards, increasing stipends, and assuring that students possess the teaching and research skills necessary for placement at peer schools of business. Consistent with the mission, an additional strategy is to improve the retention and graduation rates of minority students through programs at the MBA and doctoral levels. Finally, the school will, through its Seidman Institute, increase the level of funded research by adding support services to facilitate grant preparation and by clarifying the mission of research centers as liaisons between faculty and businesses. Robert E. Mittelstaedt Jr., MBA, Dean

### ORGANIZATION

The school's eight academic units and several centers serve more than 1,400 graduate students enrolled in eight graduate degree programs. Academic units contributing to graduate offerings include the School of Accountancy, the School of Health Management and Policy, and the Departments of Economics, Finance, Information Systems, Management, Marketing, and Supply Chain Management. The Seidman Institute serves as the school's focal point for applied research, and several centers are organized in conjunction with the Seidman Institute: the Arizona Real Estate Center, the Bank One Economic Outlook Center, CAPS Research, the Center for Business Research, the Center for Services Leadership, the Center for Advancement of Small Business, and the Center for Advancing Business through Information Technology. For more information, see "L. William Seidman Research Institute," page 38.

#### **GRADUATE PROGRAMS**

The MBA program is the premier professional degree in the W. P. Carey School of Business. The school offers the traditional full-time program, an executive MBA program, an evening program for working managers, a program for technology professionals, and an online program. The faculty also offer the PhD degree in Economics and in Business Administration, with concentrations in accountancy, computer information systems, finance, health services research, management, marketing, and supply chain management. Other master's offerings include the Master of Accountancy and Information Systems, Master of Health Sector Management, and MS degrees in Economics and in Information Management, an interdisciplinary program leading to an MS degree in Statistics, and the Master of Taxation.

See the "W. P. Carey School of Business Graduate Degrees and Majors" table, page 110.

### **ADMISSION REQUIREMENTS**

Applicants to all degree programs must meet the minimum Division of Graduate Studies academic requirements. Admission is highly competitive and selective. Acceptance is based on the applicant's previous college record, all relevant data provided with the application, and scores from the Graduate Management Admission Test or the Graduate Record Examination (GRE). (GRE scores are required for the Economics programs only.) Certain degree programs require applicants to submit a statement of purpose and letters of recommendation. In addition, the Test of English as a Foreign Language is required of international applicants whose native language is not English.

Major	Degree	Concentration <sup>1</sup>	Administered By
Accountancy and Information Systems	MAIS		School of Accountancy
Business Administration	MBA PhD	Accountancy, computer information systems, finance, health services research, <sup>2</sup> management, marketing, or supply chain management	W. P. Carey School of Business W. P. Carey School of Business
Economics	MS, PhD		Department of Economics
Health Sector Management	MHSM	-	School of Health Management and Policy
Information Management	MS	-	Department of Information Systems
Public Health <sup>2</sup>	MPH	Community health practice or health administration and policy	School of Health Management and Policy
Statistics <sup>3</sup>	MS		Committee on Statistics
Taxation	MTax	—	School of Accountancy

W. P. Carey	School of	Business	Graduate	Degrees	and Majors

<sup>1</sup> If a major offers concentrations, one must be selected unless noted as *optional*.

<sup>2</sup> Applications are not being accepted at this time.

<sup>3</sup> This program is administered by the Division of Graduate Studies.

## SPECIAL ACADEMIC PROGRAMS

**Concurrent and Dual Degree Programs.** The W. P. Carey School of Business offers dual degree programs with Thunderbird, the Garvin School of International Management; the Graduate School of Commerce in Toulouse, France; Carlos III University of Madrid; Monterrey Institute for Technical and Superior Studies in Mexico City; and the Graduate School of Business Administration in Peru. (These schools offer the Master of International Management.) Call 480/965-3332 for more information.

The school also offers the following concurrent degrees:

- 1. Master of Science (MS) in Economics/Juris Doctor (JD);
- 2. MBA/JD;
- 3. MBA/Master of Accountancy and Information Systems;
- 4. MBA/Master of Architecture;
- 5. MBA/MS in Information Management;
- 6. MBA/Master of Health Sector Management (MHSM);
- 7. MBA/MS in Economics;
- 8. MBA/Master of Taxation; and
- 9. MHSM/JD.

Separate applications are required for each degree, and each application is reviewed independently. Students should apply simultaneously to both of the concurrent degree programs. The MBA/JD is best completed by attending one year in the law school, then attending the MBA program after the first or second year, and finally returning to the law school to complete the third year. Students are not admitted to the law school after the third year.

## ACADEMIC STANDARDS AND POLICIES

All graduate students in the W. P. Carey School of Business are required to maintain a cumulative GPA of 3.00. See individual graduate degree programs for specific requirements on satisfactory academic progress, probation, and disqualification.

Information sessions are held weekly throughout the year in the MBA Program Office, BA 160. To inquire about information sessions, send e-mail to wpcareymba.infosession@asu.edu. MBA brochures may be obtained at the office; call 480/965-3332.

## SCHOOL FACILITIES

The W. P. Carey School of Business offers one of the most modern and sophisticated environments available for professional graduate study. The school facilities provide attractive and comfortable classrooms, computer systems, study areas, a television studio, modern auditoriums, and a graduate student resource suite. Both mainframe interactive and networked microcomputer facilities, in addition to wireless capabilities, are available to graduate students throughout the two business buildings. See "Computing Facilities and Services," page 33.

## ACCREDITATION

The W. P. Carey School of Business and its School of Accountancy are accredited by AACSB International—The Association to Advance Collegiate Schools of Business. AACSB International is the recognized accrediting agency in the field of business education. The School of Health Management and Policy is accredited by the Accrediting Commission on Education for Health Services Administration.

### ACCOUNTANCY AND INFORMATION SYSTEMS

## Accountancy and Information Systems

Master's Program

wpcarey.asu.edu/acc

480/965-3631

BA 223

#### James R. Boatsman, Director

**Professors:** J.R. Boatsman, Christian, Gupta, Johnson, Kaplan, Pany, Pei, Reckers, Schultz

Associate Professors: Golen, Hwang, Regier, Whitecotton

Assistant Professors: Comprix, Lee, O'Donnell, Petersen, Robinson, Rowe, Weiss

Senior Lecturers: Geiger, Goldman, Maccracken

Lecturers: J.L. Boatsman, Levendowski, Munshi, Wigal

The objective of the MAIS program is to provide specialized preparation for careers in professional accounting, corporate accounting and finance, management consulting, and information systems. This program is also designed to meet the 150-hour requirement for earning the CPA certification.

# MASTER OF ACCOUNTANCY AND INFORMATION SYSTEMS

Admission. Applicants must submit scores from the Graduate Management Admissions Test (GMAT) exam. All applicants are also required to submit the supplemental application materials required by the school. International applicants whose native language is not English must submit scores from the Test of English as a Foreign Language (TOEFL) and Test of Spoken English (TSE) exams. Preference in admission is given to those with degrees in accounting and business, although other exceptional candidates are considered. Complete application instructions may be obtained from the school's Web site at wpcarey.asu.edu/acc.

**Prerequisites.** Applicants must complete program prerequisites. Refer to the School of Accountancy Web site for a current listing of required course prerequisites for the program.

**Program of Study.** The Master of Accountancy and Information Systems program consists of a minimum of 30 semester hours and is continually updated. In this program students acquire core knowledge and a set of professional skills from course work drawn from financial and managerial accounting, auditing, taxation, and information systems. These core courses, recommended by the AICPA as "a fundamental part of any graduate-level accounting curriculum," build on a base level of such knowledge and skills that students are presumed to have acquired from an undergraduate degree. Additionally, students select a sequence of courses that allow a greater focus in either information systems or traditional accounting. Completion of the program should result in students possessing an expanded understanding of the strategic role of accounting in business organizations and society, professional responsibilities, and the ethical standards of the accounting profession.

Access the school's Web site for a current program of study.

**Course Load.** Students are limited to 12 hours per trimester.

#### Foreign Language Requirements. None.

#### Thesis Requirements. None.

**Final Examination.** A final comprehensive, written examination is required of all candidates.

### **RESEARCH ACTIVITY**

For current information about research activity, access the School of Accountancy Web site at wpcarey.asu.edu/acc.

### ACCOUNTANCY (ACC)

For more ACC courses, see "Course Prefix Index," or access www.asu.edu/aad/catalogs/courses. The campus designation—E (East), M (Tempe), or W (West)—may affect how courses may be used to fulfill requirements.

# M ACC 502 Financial Accounting. (2–4) once a year

Financial accounting concepts and procedures for external reporting. Prerequisite: MBA degree program student.

M ACC 503 Managerial Accounting. (2–4) once a year

Managerial accounting concepts and procedures for internal reporting. Prerequisite: MBA degree program student.

## M ACC 511 Taxes and Business Strategy. (1–4) once a year

Economic implications of selected management decisions involving application of federal income tax laws. Recognition of tax hazards and tax savings. Prerequisite: ACC 502 (or its equivalent).

M ACC 515 Professional Practice Seminar. (1-4)

selected semesters

History, structure, environment, regulation, and emerging issues of the accounting profession.

#### M ACC 521 Tax Research. (1-4)

once a year

Tax research source materials and techniques. Application to business and investment decisions. Prerequisite: ACC 430.

M ACC 533 Application Solutions in the Connected Economy. (1–4)

#### once a year

Analyze's software solutions and evaluation methods. Emphasizes current topics such as enterprise modeling, ERP software, and interorganizational solutions. Prerequisite: MS in Information Management degree program student or MAIS degree program student.

# M ACC 541 Strategic Innovations in Information and Cost Management. $(1\!-\!4)$

once a year

Strategic cost management emphasizing contemporary topics, including activity-based costing and strategic uses of information technology systems. Cooperative learning, lecture. Prerequisite: ACC 503 or MS in Information Management degree program student or MAIS degree program student.

# M ACC 567 Financial Models in Accounting Systems. (1–4) selected semesters

Development and application of financial models by accountants. Analysis of decision support systems as financial modeling environments. Prerequisite: ACC 330.

# M ACC 571 Taxation of Corporations and Shareholders. (1–4) once a year

Tax aspects of the formation, operation, reorganization, and liquidation of corporations and the impact on shareholders. Pre- or corequisite: ACC 521.

## M ACC 573 Taxation of Pass-Through Entities. (1–4) once a year

Tax aspects of the definition, formation, operation, liquidation, and termination of a partnership. Emphasizes tax planning. Pre- or corequisite: ACC 521.

# M ACC 575 Family Tax Planning and Wealth Transfer Taxation. (1– 4)

once a year

Tax treatment of wealth transfers at death and during lifetime, with emphasis on tax planning. Pre- or corequisite: ACC 521.

# M ACC 577 Taxation of Real Estate Transactions. (3) selected semesters

Income tax aspects of acquisition, operation, and disposal of real estate; syndications; installment sales; exchanges; dealer-investor issues; alternative financing; and planning. Prerequisite: ACC 521 or instructor approval.

# M ACC 582 Information Security of Interorganizational Systems. $(1\!-\!4)$

selected semesters

Function and responsibility of the information security officer.

Advanced topics in security methods and technology. Prerequisite: MS in Information Management degree program student or MAIS degree program student.

# M ACC 585 Performance Measurement of Emerging Business Models. (1–4)

#### once a year

Applies quantitative techniques to accounting problems. Prerequisite: ACC 503 or MS in Information Management degree program student or MAIS degree program student.

# M ACC 586 Shareholder Value Creation and Financial Statement Analysis. (1–4)

once a year

Develops skills necessary to exploit financial reporting information in a business environment and appreciation of reporting issues faced by management.

## M ACC 587 Business Process Integrity Controls. (1–4) once a year

Design and evaluation of computer-based accounting information system. Development of computer-based business models for planning and control. Prerequisite: MAIS degree program student.

#### M ACC 591 Seminar on Selected ACC Topics. (1-12)

selected semesters

- Topics may include the following:
- Computer Security
- once a year
- Data Warehouse and Data Mining once a year
- Electronic Commerce
- once a year

  Enterprise Modeling
- once a year
- Financial and Managerial Accounting selected semesters
- Strategic Cost Management and e-Business selected semesters

**Omnibus Courses.** For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 56.



Edward C. Prescott, the W. P. Carey School of Business Chair of Economics, was awarded the 2004 Nobel Prize in Economics.

Tim Trumble photo

## **Business Administration**

Master's and Doctoral Programs

#### School of Accountancy

wpcarey.asu.edu/acc

480/965-3631 BA 223

#### **Department of Finance**

wpcarey.asu.edu/fin

480/965-3131

BAC 519

### **Department of Information Systems**

wpcarey.asu.edu/is

480/965-3252 BA 223

#### **Department of Management**

wpcarey.asu.edu/mgt

480/965-3431

BA 323

### **Department of Marketing**

#### wpcarey.asu.edu/mkt

480/965-3621 BAC 460

### **Department of Supply Chain Management**

wpcarey.asu.edu/scm

480/965-6044 BA 446

#### James R. Boatsman, Director School of Accountancy

**Professors:** J.R. Boatsman, Christian, Gupta, Johnson, Kaplan, Pany, Pei, Reckers, Schultz

Associate Professors: Golen, Hwang, Regier, Whitecotton

Assistant Professors: Comprix, Lee, O'Donnell, Petersen, Robinson, Rowe, Weiss

Senior Lecturers: Geiger, Goldman, Maccracken

Lecturers: J.L. Boatsman, Wigal

#### Jeffrey Coles, Chair, Department of Finance

Professors: Booth, Coles, Hertzel, Kaufman, Sushka

Associate Professors: Cesta, Gallinger, Hoffmeister

Assistant Professors: Deli, Juergens, Martin, Nardari

#### Robert D. St. Louis, Chair Department of Information Systems

Professors: Goul, Roy, St. Louis, Steinbart, Vinze

Associate Professors: David, Iyer, Keim, Kulkarni, O'Leary

Assistant Professors: Chen, Corral, Demirkan, Ravindran, Roussinov, Santanam, Shao

Senior Lecturers: Birney, Hayes, Shrednick

Lecturer: McCarthy

#### **Department of Management**

Regents' Professor: Gomez-Mejia

Professors: Ashforth, Cannella, Cardy, Hershauer, Hom, Hoskisson, Keim, Kinicki, Mittelstaedt, Roberson, Tsui

Associate Professors: Boyd, Hillman, Keats, Keller, Moorhead, Olivas, Van Hook

Assistant Professor: Corley, Koka, Lee

Lecturers: Beer, Davila

#### Michael P. Mokwa, Chair, Department of Marketing

**Professors:** Bitner, Bolton, Brown, Hutt, Jackson, Kumar, Lastovicka, Mokwa, Nowlis, L. Ostrom, Reingen, Walker, Ward

Associate Professors: Blasko, A. Ostrom, Sinha, Stephens

### Joseph R. Carter, Chair, Department of Supply Chain Management

Professors: J. Carter, P. Carter, Choi, Dooley, Ellram, Guntermann, Jennings, Kirkwood, Pearson, V. Smith-Daniels

Associate Professors: Brooks, Callarman, Davis, Keefer, Lock, Maltz, Rangtusanatham, Siferd, D. Smith-Daniels, Verdini

The faculty in the W. P. Carey School of Business offer a PhD degree in Business Administration and a Master of Business Administration (MBA) degree offered in full-time, evening, executive, and online programs.

Other professional master's degrees offered through the school of business are described in this catalog under their respective degree program headings.

### MASTER OF BUSINESS ADMINISTRATION

The central theme of the program is to build and strengthen capabilities in knowledge and analysis of the functional areas of business, basic skills, and managerial abilities. Knowledge involves textbook and case materials. Basic skills include computing, writing and critical thinking, presentation and speaking, team and group work, interpersonal relations, and time management. There is a strong team emphasis throughout the ASU curriculum.

The MBA program is supported by each of the eight academic units within the school of business.

### W. P. CAREY SCHOOL OF BUSINESS

Admission. See "Admission to the Division of Graduate Studies," page 58. All students applying to graduate business administration programs (except those applying to the MS degree in Economics) are required to take the GMAT. The TOEFL is required of all international applicants whose native language is not English or who are not graduates of an institution located in the United States. The TSE is not required for admission to the MBA program. However, it may be required for a dual degree program. For more information on testing, call 609/921-9000, fax 609/734-5410, access the Web site at www.ets.org/toefl, send e-mail to etsinfo@ets.org, or write

### EDUCATIONAL TESTING SERVICE ROSEDALE RD PRINCETON NJ 08541-6103

Students applying to the MBA program are required to have at least two years of full-time work experience and should submit an essay for the degree program addressing commitment, goals, qualifications, and reasons for interest in the program. Applicants are to provide letters of recommendation commenting on the student's motivation, commitment, achievements, work experience, and opportunity for success in the program. In addition to the above data, students are to communicate their interest for either the full-time, evening, executive, or online program. Applications are to be completed online.

**Registration.** Registration in courses numbered 502 and above is limited to students who have been admitted to a graduate degree program, have the approval of the MBA program office, and have the prerequisites of calculus and computer literacy.

Structure of the MBA Program. MBA courses are open only to students admitted to the MBA program.

**Program Requirements.** While there are no business course prerequisites, applicants must have computer proficiency and expertise in using a spreadsheet package, a word processing package, a presentation software package, an e-mail package, and an Internet browser. Potential students must also demonstrate strong quantitative ability. This is accomplished through an above average performance (65th percentile or above) on the GMAT quantitative section or a college math course in calculus or advanced statistics.

At least 48 hours are required to complete the evening, executive, and online programs. The full-time program has additional requirements that vary by area of study. Students are admitted to the fall semester only and, generally, enter and graduate as a class in two years.

The core courses are designed to provide a foundation in business knowledge and skills and must be taken in the prescribed sequence.

Elective courses build upon the business core and focus on the further development of an area of study.

The school of business does not accept credits earned while students are in nondegree status; moreover, graduate business courses are not open to nondegree students.

#### Foreign Language Requirements. None.

Thesis Requirements. None.

**Comprehensive Examination.** All students must successfully complete the comprehensive requirement established by the school of business and Division of Graduate Studies for the MBA degree. The comprehensive examination is integrated with MGT 589 Strategic Management. Students passing this course with a grade of "A" (4.00) or "B" (3.00) satisfy the comprehensive examination requirement.

**Concurrent and Dual Degree Programs.** See "Concurrent and Dual Degree Programs," page 110.

### DOCTOR OF PHILOSOPHY

The PhD degree in Business Administration prepares candidates for scholarly careers at leading educational institutions and for positions in business and government organizations where advanced research and analytical capabilities are required. Major emphasis is placed upon the development of expertise in a chosen subject area, a disciplined and inquiring mind, competence in research methodology, and skill in effectively communicating advanced business concepts.

Students are encouraged to work closely with the faculty from the beginning of their programs. A ratio of resident doctoral students to faculty of less than one to one ensures that faculty may serve effectively as mentors for doctoral students.

Admission. A completed application for admission to the PhD in Business Administration degree program includes

- 1. application for admission to the Division of Graduate Studies,
- 2. official undergraduate and postgraduate transcripts,
- 3. Graduate Management Admission Test score,
- 4. applicant's letter of personal career objectives and rationale for pursuing the PhD program,
- 5. three letters of recommendation,
- 6. applicant's employment history,
- 7. Test of Spoken English score for applicants whose native language is not English, and
- Test of English as a Foreign Language score for applicants whose native language is not English and who have not completed a degree from a U.S. college or university.

Admission is granted for fall semesters only. The deadline for receipt of all required application materials is February 1.

Areas of Concentration. The PhD student may choose from among six areas of concentration: accountancy, computer information systems, finance, management, marketing, and supply chain management.

The accountancy specialization area includes financial accounting, managerial accounting, tax policy, auditing, and information systems. See "Concentration in Accountancy," page 115.

Research activities in information management encompass areas of theory and application in computer information systems. See "Concentration in Computer Information Systems," page 116. Research interests of the finance faculty offering the finance concentration focus on corporate finance, investments, financial markets, banking, and entrepreneurial finance.

The management concentration requires three core courses: organizational theory, organizational behavior, and research methodology. In addition to these core courses, students choose one of two specialty tracks: strategic management or human resource management. See "Concentration in Management," page 116.

Research conducted by the marketing faculty offering the marketing concentration is focused in several areas: advertising, buyer behavior, distribution channels, services marketing, and other dimensions of marketing, including sales management, industrial marketing, and public-policy implications of marketing.

The faculty in the Department of Supply Chain Management offer the supply chain management concentration and are actively involved in the input-conversion-output process.

**Program of Study.** See "Doctor of Philosophy," page 69, for general requirements. The PhD degree program requires mathematical competence through linear algebra and calculus and computer skills. The basic program curriculum includes graduate study in economics, behavioral sciences, and quantitative/statistical analysis. The advanced program is composed of course work in the respective area of concentration and supporting course work that best prepares students for conducting scholarly work in their areas of interest.

**Comprehensive Examinations.** A written comprehensive examination, designed to ascertain the candidate's knowledge and orientation in the respective field of study and fitness to proceed to the completion of a dissertation, is required at the end of course work. An additional written comprehensive examination on a candidate's supporting course work is a departmental option. An oral examination after completion of the written examination is also a departmental option.

**Dissertation Requirements.** The candidate must present an acceptable dissertation based on original investigation. The dissertation must represent a significant contribution to knowledge, be written in a scholarly manner, and demonstrate the ability of the candidate to do independent research of high quality.

**Final Examination.** A final oral examination in defense of the dissertation is required. The examination covers the subject matter of the dissertation and the field most nearly corresponding with that of the dissertation.

## School of Accountancy

### DOCTOR OF PHILOSOPHY

#### **Concentration in Accountancy**

The objective of the PhD degree in Business Administration with a concentration in accountancy is to prepare scholars to conduct high-quality research. Graduates teach in the fields of financial and managerial accounting, auditing, information systems, and taxation. This program allows students to develop the capability to review, analyze, conduct, and publish research through a series of research seminars and theory-building and statistical course work that supplement and complement students' abilities and desires. In addition, PhD students participate in ongoing research projects in conjunction with faculty members in the School of Accountancy.

Admission. A completed application for admission to the PhD in Business Administration degree program must be submitted by the deadline of February 1. Admission is granted for the fall semester only. For more information, access the school of business Web site at wpcarey.asu.edu/grad/phd\_ba\_concentrations.cfm.

**Program of Study.** See "Doctor of Philosophy," page 69, for general requirements. The PhD degree program requires mathematical competence and computer skills. The program of study includes graduate study in economics, behavioral sciences, and quantitative/statistical analysis. A minimum of 30 semester hours of doctoral course work and 24 semester hours of dissertation and/or research are required to be taken at the Tempe campus.

**Comprehensive Examinations.** A written comprehensive examination is required once all course work has been completed. An oral examination after completion of the written examination is also a departmental option. Specific questions can be directed to the Accountancy faculty advisor.

**Dissertation.** The candidate must present an acceptable dissertation based on original investigation. The dissertation must represent a significant contribution to knowledge, be written in a scholarly manner, and demonstrate the ability of the candidate to do independent research of high quality. The final oral examination in defense of the dissertation is mandatory and must be held on the Tempe campus.

## **Department of Finance**

#### **FINANCE (FIN)**

For more FIN courses, see "Course Prefix Index," or access www.asu.edu/aad/catalogs/courses. The campus designation—E (East), M (Tempe), or W (West)—may affect how courses may be used to fulfill requirements.

### M FIN 502 Managerial Finance. (2-4)

once a year

Financial decision making, including net present value, interest rates, risk and return, efficient capital markets, capital budgeting, and financial forecasting. Lecture, cases, discussion. Prerequisites: ACC 502; ECN 502; QBA 502.

#### M FIN 521 Investment Management. (1-4)

#### once a year

Valuation of equities and fixed income securities. Trading strategies and portfolio management. Performance evaluation. Trading mechanisms and market organization. Lecture, cases, discussion. Prerequisite: FIN 502.

## M FIN 527 Derivatives and Risk Management. (1–4)

Characteristics and pricing of forwards, futures, swaps, options. Applications of instruments for hedging strategies, corporate risk management, and capital budgeting. Lecture, cases, discussion. Prerequisite: FIN 502.

## M FIN 531 Financial Markets and Intermediaries. (1–4)

Short-term and long-term fixed-income securities and their marketplaces, tools for bond portfolio and interest rate risk management. Lecture, cases, discussion. Prerequisites: FIN 521, 527.

#### M FIN 551 Applied Fundamental Analysis. (1-4)

#### once a year

Analyzes financial documents to determine quality of earnings. Forensic financial analysis to diagnose financial health and sustainable growth. Lecture, cases, discussion. Prerequisite: FIN 502.

## M FIN 556 International Financial Management. (1–4) once a year

Behavior of exchange rates, interest rates, inflation rates. Analyzes corporate exposure to exchange rate risk and hedging strategies. Multicurrency capital budgeting. Lecture, cases, discussion. Prerequisites: FIN 521, 527.

### M FIN 561 Strategic Financial Management. (1-4)

#### once a year

Capstone case-oriented course in strategic applications of corporate finance. Acquisition, allocation, and management of funds within the business enterprise. Cases, discussion. Prerequisites: FIN 531, 551, 556.

## M FIN 581 Advanced Valuation Methods. (1-4)

once a year

Analyzes practical aspects of valuing the enterprise using economic value added, free cash flow, and other financial techniques. Lecture, cases, discussion. Prerequisite: FIN 502.

### M FIN 591 Seminar. (1-12)

selected semesters

Topics may include the following:

## Managerial Finance

M FIN 594 Entrepreneurial Finance. (1-4)

#### once a year

Applies financial economic principles to solve problems associated with incubating and new ventures. Planning, understanding financial needs, structuring contracts. Lecture, cases, discussion. Prerequisite: FIN 502.

## M FIN 781 Theory of Finance. (3)

once a year

Fundamental tools of financial economics; asset pricing, arbitrage, option pricing, capital structure, dividend policy, asymmetric information, and transaction-cost economics. Prerequisites: FIN 502, 521, 531.

# M FIN 791 Doctoral Seminar in Finance. (1–12) once a year

Topics may include the following:

- Financial Institutions and Markets. (3)
   Economic and monetary theory applied to financial markets and institutions; implications of financial structure for market performance and efficiency.
- Financial Management. (3)

Financial theory pertaining to capital structure, dividend policy, valuation, cost of capital, and capital budgeting.

Investments. (3)

Investments and market theory; efficient markets hypothesis; option and commodity markets.

Prerequisite: FIN 781.

Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 56.

## **Department of Information Systems**

## DOCTOR OF PHILOSOPHY

### **Concentration in Computer Information Systems**

The objective of the PhD in Business Administration with a concentration in computer information systems is to prepare scholars for careers at leading educational institutions. This program allows students to develop the capability to review, analyze, conduct, and publish research through a series of research seminars and additional supporting course work. In addition, PhD students participate in ongoing research projects in conjunction with faculty members in the Department of Systems Information.

Admission. A completed application for admission to the PhD in Business Administration degree program must be submitted by the deadline of February 1. Admission is granted for the fall semester only. For more information, access the school of business Web site at wpcarey.asu.edu/grad/phd\_ba\_concentrations.cfm.

**Program of Study.** See "Doctor of Philosophy," page 69, for general requirements. The PhD degree program requires mathematical competence and computer skills. The program of study includes graduate study in economics, behavioral sciences, and quantitative/statistical analysis. A minimum of 30 semester hours of doctoral course work and 24 semester hours of dissertation and/or research are required to be taken at the Tempe campus.

**Comprehensive Examinations.** A written comprehensive examination is required once all course work has been completed. An oral examination after completion of the written examination is also a departmental option. Specific questions can be directed to the CIS faculty advisor.

**Dissertation.** The candidate must present an acceptable dissertation based on original investigation. The dissertation must represent a significant contribution to knowledge, be written in a scholarly manner, and demonstrate the ability of the candidate to do independent research of high quality. The final oral examination in defense of the dissertation is mandatory and must be held on the Tempe campus.

## **Department of Management**

## DOCTOR OF PHILOSOPHY

## **Concentration in Management**

The faculty in the Department of Management offer students the opportunity to obtain a PhD degree in Business Administration with a concentration in management. The doctoral program places primary emphasis on the development of research competence and emphasizes teaching as a vehicle to academic professionalism. The mission of the program is to provide an environment that is conducive to the development of scholars who are prepared to assume the diverse responsibilities of positions at leading research universities. The goal is to prepare students for research careers in the academic community.

Doctoral students are encouraged to design an individually meaningful course of study within the larger context of the management field. Opportunities for doing this are available through course work, individual work with faculty members, and independent research and study. Students in the PhD program select a series of PhD course modules within the department and several supporting courses from other departments on campus. Students develop additional focus and expertise through collaboration on major papers with individual faculty members.

The faculty in the Department of Management cover the areas of human resource management, operations management, organizational behavior, organizational theory, and strategic management. The faculty's research and teaching emphasizes corporate governance, high-tech management, knowledge management, quality, process management, strategic alliances, globalization, diversity, small business and entrepreneurship, change management, organizational identity, and human resource management practices in their research, consulting, and teaching. The faculty has distinguished itself with research and publications in premier journals. In a recent update of a study originally published in the *Academy of Management Journal*, ASU's Department of Management climbed to third place internationally in research performance among journals, up from 21st place.

Further information, links to courses, current faculty, and updates on the Department of Management can be found on the Web at wpcarey.asu.edu/mgt.

Further information, application procedures, links to current faculty, and updates on the PhD program in Business with a concentration in management can be found at wpcarey.asu.edu/mgt/degree/phd\_program\_description.cfm.

#### **MANAGEMENT (MGT)**

For more MGT courses, see "Course Prefix Index," or access www.asu.edu/aad/catalogs/courses. The campus designation—E (East), M (Tempe), or W (West)—may affect how courses may be used to fulfill requirements.

**MGT Note 1.** In addition to individual course prerequisites, nonbusiness students must have at least a 2.50 ASU cumulative GPA, a 2.50 ASU business GPA, and 56 earned semester hours to register for any upper-division business course unless otherwise noted.

# M MGT 400 Cultural Factors in International Business. (3) fall and spring

Cultural role in international business relations; applied principles of cross-cultural communications, negotiations, and management; regional approaches to business relations. Cross-listed as IBS 400. Credit is allowed for only IBS 400 or MGT 400. See MGT Note 1. Prerequisites: IBS 300, 306 (or ECN 306); MGT 300 (or 320).

## M MGT 410 Responsible Leadership. (3)

fall, spring, summer Values, core beliefs, legal and ethical mandates and cultural norms as they apply to the conduct of organizations; application through a Service Learning project. Interactive, learner-centered. See MGT Note 1. Prerequisites: MGT 310, 320.

## M MGT 420 Performance Management. (3)

#### fall, spring, summer

Development of skills and knowledge to lead associates effectively: hiring, developing, evaluating, retaining, and rewarding employees. Preparation for leadership roles. Lecture, discussion, interactive, learner-centered. See MGT Note 1. Prerequisites: MGT 310, 320.

## M MGT 440 Small Business and Entrepreneurship. (3)

### fall and spring

Opportunities, risks, and problems associated with small business development and operation. See MGT Note 1.

### M MGT 445 Business Plan Development. (3)

#### fall and spring

Develops a complete strategic business plan emphasizing the planning process undertaken by successful small business owners and entrepreneurs. Lecture, discussion, experiential exercise. See MGT Note 1. Prerequisite: MGT 440.

## M MGT 450 Changing Business Processes. (3) fall and spring

Describes and analyzes business processes. Generates and evaluates alternatives. Creates improvement and implementation plans. Fee. See MGT Note 1. Prerequisite: completion of 100 hours, including all business administration core requirements. Pre- or corequisite: FIN 461 or MGT 460 or MKT 460 or SCM 479 or any other recommended business integrative course.

## M MGT 459 International Management. (3)

### fall and spring

Concepts and practices of multinational and foreign firms. Objectives, strategies, policies, and organizational structures for operating in various environments. Cross-listed as IBS 459. Credit is allowed for only IBS 459 or MGT 459. See MGT Note 1. Prerequisites: IBS 300, 306 (or ECN 306); MGT 300 (or 320 or 380).

### M MGT 460 Strategic Leadership. (3)

## fall, spring, summer

Systems theory of organizations, strategy formulation and administration in organizations, creating organizational cohesiveness, and leading change within organizations. Lecture, cases, exercises. See MGT Note 1. Prerequisites: MGT 410, 420; completion of 100 hours, including all business administration core requirements. Pre- or corequisite: MGT 450 (recommended as corequisite).

### M MGT 494 Special Topics. (1-4)

selected semesters Current topics in management, primarily designed for business majors. See the *Schedule of Classes* for current offerings of courses. Topics may include the following:

- Applied International Management. (3)
- Cultural Factors in International Business. (3)
- Prerequisite: IBS 300 (or 459) or MGT 300 (or 459).
- Dealership Management. (3)
- Strategic Management. (3)

# M MGT 502 Organization Theory and Behavior. (2–4) once a year

Important concepts and applications in management, including communication, decision making, group dynamics, leadership, motivation, organization change, and organization design. Prerequisites: computer literacy; graduate degree program student.

## M MGT 522 Human Resource Activity and the Management of Diversity. (3)

#### once a year

Applies general and human resource management principles to work effectively with a diverse spectrum of people. Discussion, exercises.

## M MGT 523 Performance Management. (2-4)

#### once a year

Addresses effective management of people in organizations. Considers evaluating and improving performance using concepts and application. Discussion, lecture, class exercises, cases. Prerequisite: MBA degree program student.

#### M MGT 559 International Management. (2-3)

#### once a year

Studies international and cross-cultural influences on management processes and development of global leadership capabilities for experienced management professionals. Discussion, company analyses, case analyses, lecture, guest speakers.

# M MGT 561 Advanced Integrated Project. (2–3) once a vear

Capstone project of the high-technology ASU MBA. Student teams develop business plans for new technology-based products. Online project. Prerequisite: MBA degree program student.

#### M MGT 570 Management Consulting. (3)

#### once a year

Develops understanding of how internal and external consultants add value. Prerequisites: ability to use common business software, including Microsoft Office; familiarity with spreadsheets.

#### M MGT 588 Strategic Leadership. (2-4)

#### fall

Explores the general manager as organizational leader. Focuses on competitive advantage and how each functional area contributes to it. Lecture, discussion, case studies. Prerequisite: W. P. Carey MBA program student.

#### M MGT 589 Strategic Management. (2-4)

#### sprina

Formulation of strategy and policy in the organization, emphasizing the integration of decisions in the functional areas. Prerequisite: MBA degree program student.

#### M MGT 591 Seminar. (1-12)

selected semesters

Topics may include the following:

- Business Plan Competition
- · Entrepreneurship
- Human Resource Management and Service Delivery
- Human Resources and High-Technology Management
   Organizational Change and Business Process Consulting
- · Organizational Management.

### M MGT 593 Applied Projects. (3)

#### once a vear

Cross-functional teams initiate (possibly implement) organizational change within a local firm. Lecture, discussion, experiential learning. Pre- or corequisite: all core courses in the MBA program.

#### M MGT 598 Special Topics. (3)

selected semesters

Graduate special topics chosen from human resources, strategic management, and international management, including special topics in international management in Asia or Europe. Prerequisite: instructor approval.

#### M MGT 791 Seminar: Doctoral Seminar in Management. (1-12) selected semesters

Short module seminars. Topics may include the following:

- Causal Modeling. (1)
- Change and Coping. (1) Cognition: Micro and Macro Perspectives. (1)
- Dysfunction in Workplace. (1)
- · Economic Theories of the Firm. (1)
- Levels of Analysis. (1)
  Motivation and Attitudes. (1)
- Organizational Identity and Identification. (1)
- Organizational Learning and Organizational Identity. (1)
- Organizational Performance and Reward Systems. (1)
- Organizational Strategy and Culture. (1) Organizational Strategy and Culture. (1)
- Organizational Withdrawal. (1)
- Performance Appraisal. (1)
  Power and Organizational Change. (1)
- Selection. (1)
- Strategy Overview. (1)
- Teams, Groups, and Leadership. (1)
- The Craft of Research. (1)

Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 56.

## Department of Marketing

#### **MARKETING (MKT)**

For more MKT courses, see "Course Prefix Index," or access www.asu.edu/aad/catalogs/courses. The campus designation-E (East), M (Tempe), or W (West)-may affect how courses may be used to fulfill requirements.

MKT Note 1. In addition to individual course prerequisites, nonbusiness students must have at least a 2.50 ASU cumulative GPA, a 2.50 ASU business GPA, and 56 earned semester hours to register for any upper-division business course unless otherwise noted.

#### M MKT 411 Sales Management. (3)

#### once a year

Applies management concepts to the administration of the sales operation. See MKT Note 1. Prerequisite: MKT 302.

#### M MKT 412 Promotion Management. (3) once a year

Integrates the promotional activities of the firm, including advertising, personal selling, public relations, and sales promotion. See MKT Note 1. Prerequisite: MKT 302.

### M MKT 424 Retail Management. (3)

#### selected semesters

Role of retailing in marketing. Problems and functions of retail managers within various retail institutions. See MKT Note 1. Prerequisite: MKT 300.

#### M MKT 430 Marketing for Service Industries. (3) once a vear

Concepts and strategies for addressing distinctive marketing problems and opportunities in service industries. Current issues and trends in the service sector. See MKT Note 1. Prerequisites: MKT 300, professional program business student.

#### M MKT 434 Business-to-Business Marketing. (3) once a vear

Strategies for marketing products and services to commercial, institutional, and governmental markets. Changing industry and market structures. See MKT Note 1. Prerequisite: MKT 302 or instructor approval

### M MKT 435 International Marketing. (3)

## once a year

Analyzes marketing strategies developed by international firms to enter foreign markets and to adapt to changing international environments. See MKT Note 1. Prerequisites: MKT 302 (or instructor approval); professional program business student.

## M MKT 451 Marketing Research. (3)

#### fall, spring, summer

Integrated treatment of methods of market research and analysis of market factors affecting decisions in the organization. See MKT Note 1. Prerequisites with a grade of "C" (2.00) or higher: MKT 302; QBA 221

#### M MKT 460 Strategic Marketing. (3)

fall, spring, summer

Policy formulation and decision making by the marketing executive. Integrates marketing programs and considers contemporary marketing issues. Prerequisite: professional program business student. See MKT Note 1. Prerequisites with a grade of "C" (2.00) or higher: MKT 302, 304, 451.

#### M MKT 494 Special Topics. (1-4)

#### fall, spring, summer Chosen from topics in the marketing and international marketing

arenas to include seminars in international marketing in Europe and Asia. See MKT Note 1. Topics may include the following:

#### Applied International Marketing

Dealership Management

#### M MKT 499 Individualized Instruction. (1-3)

#### fall, spring, summer

Topics of special interest chosen by students and agreed to by the departments to do independent studies with a professor acting as a guide. See MKT Note 1.

#### M MKT 502 Marketing Management. (2-4)

#### fall, spring, summer

Managing the marketing function; market and environmental analysis; marketing planning, strategy, and control concepts. Development and management of marketing programs. Prerequisite: ECN 502.

## M MKT 524 Services Marketing. (3)

#### once a vear

Strategies for marketing services emphasizing the distinctive challenges and approaches that make marketing of services different from marketing manufactured goods. Prerequisite: MKT 502 (or its equivalent)

#### M MKT 563 Marketing Strategy. (3)

#### selected semesters

Planning and control concepts and methods for developing and evaluating strategic policy from a marketing perspective. Prerequisite: MKT 502

## M MKT 584 Internship. (3)

## fall, spring, summer

#### M MKT 591 Seminar. (1-12) once a vear

#### Offered in conjunction with the MBA program (see MBA program section). Topics may include the following:

Branding

- · Business-to-Business Marketing
- Customer Satisfaction and Loyalty Measures
- E-commerce Marketing Strategy
- Interactive Sports Business Strategies
- New Product and Service Development
- Service Operations
- Sports Business Revenue Generation
- Sports Business Negotiation/Alliance Management
- Strategies for Consumer Markets

Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses." page 56.

## Department of Supply Chain Management

### **BUSINESS (BUS)**

For more BUS courses, see "Course Prefix Index," or access www.asu.edu/aad/catalogs/courses. The campus designation—E (East), M (Tempe), or W (West)—may affect how courses may be used to fulfill requirements.

M BUS 591 Seminar. (3)

selected semesters

Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 56.

#### LEGAL AND ETHICAL STUDIES (LES)

For more LES courses, see "Course Prefix Index," or access www.asu.edu/aad/catalogs/courses. The campus designation—E (East), M (Tempe), or W (West)—may affect how courses may be used to fulfill requirements.

**LES Note 1.** In addition to individual course prerequisites, nonbusiness students must have at least a 2.50 ASU cumulative GPA, a 2.50 ASU business GPA, and 56 earned semester hours to register for any upper-division business course unless otherwise noted.

#### M LES 411 Real Estate Law. (3)

once a year

Legal and ethical aspects of land ownerships, interests, transfer, finance development, and regulations of the real estate industry. See LES Note 1.

#### M LES 532 Negotiation Agreements. (3)

fall and spring

Develops negotiation competencies to build partnerships and create lasting agreements with internal/external customers, suppliers, work teams, and external constituencies. Lecture and substantial student interaction through team exercises.

## M LES 579 Legal and Ethical Issues for Business. (2–4) fall and spring

Studies legal and ethical components of business decisions; self-regulation and social responsibility as strategies. Prerequisites: ACC 503; FIN 502; MGT 502; MKT 502.

**Omnibus Courses.** For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 56.

### **REAL ESTATE (REA)**

**REA Note 1.** In addition to individual course prerequisites, nonbusiness students must have at least a 2.50 ASU cumulative GPA, a 2.50 ASU business GPA, and 56 earned semester hours to register for any upper-division business course unless otherwise noted.

#### REA 401 Real Estate Appraisal. (3)

once a year

Factors affecting the value of real estate. Theory and practice of appraising and preparation of the appraisal report. Appraisal techniques. See REA Note 1. Prerequisites: REA 300; professional program business student.

## REA 441 Real Estate Land Development. (3) once a year

Neighborhood and city growth. Municipal planning and zoning. Development of residential, commercial, industrial, and special purpose properties. See REA Note 1. Prerequisites: REA 300; professional program business student.

REA 456 Real Estate Investments. (3)

#### once a year

Analyzes investment decisions for various property types. Cash flow and rate of return analysis. See REA Note 1. Prerequisites: FIN 300; professional program business student.

Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 56.

### QUANTITATIVE BUSINESS ANALYSIS (QBA) Department of Supply Chain Management

For more QBA courses, see "Course Prefix Index," or access www.asu.edu/aad/catalogs/courses. The campus designation—E (East), M (Tempe), or W (West)—may affect how courses may be used to fulfill requirements.

#### M QBA 505 Management Science. (3)

#### selected semesters

Quantitative approaches to decision making, including linear programming and simulation, with emphasis on business applications. Prerequisites: MAT 210; QBA 502.

## M QBA 508 Product and Service Innovation. (3) fall and spring

Develops strategies for innovation in products and services. Prerequisites: basic algebra; basic probability concepts; elementary knowledge of Windows.

## M QBA 550 Intermediate Decision Analysis. (3) selected semesters

Quantitative decision analysis methods for business decision making under uncertainty, including decision diagrams, subjective probabilities, and preference assessment. Prerequisites: MAT 210; QBA 502.

#### M QBA 591 Seminar. (1–12) fall and spring

Current topics in quantitative business analysis.

M QBA 593 Applied Project. (1–12) selected semesters

#### M QBA 599 Thesis. (1-12)

selected semesters

# M QBA 791 Doctoral Seminars in Quantitative Business Analysis. (1–12)

selected semesters

Advanced topics in quantitative business analysis.

Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 56.

#### SUPPLY CHAIN MANAGEMENT (SCM)

**SCM Note 1.** In addition to individual course prerequisites, nonbusiness students must have at least a 2.50 ASU cumulative GPA, a 2.50 ASU business GPA, and 56 earned semester hours to register for any upper-division business course unless otherwise noted.

#### SCM 405 Urban Transportation. (3)

#### selected semesters

Economic, social, political, and business aspects of passenger transportation. Public policy and government aid to urban transportation development. See SCM Note 1. Prerequisites: both SCM 345 and upper-division standing or only instructor approval.

# SCM 432 Planning and Control Systems for Supply Chain Management. (3)

#### fall and spring

Planning and control systems for product and service flows in supply chain: production planning, master scheduling, MRP, ERP, inventory management. Lab. Fee. See SCM Note 1. Prerequisites: SCM 300, 345; professional program business student majoring in Supply Chain Management. Pre- or corequisite: SCM 355.

## SCM 440 Quality Management and Measurement. (3) fall and spring

Quality management and measurement, relationships with suppliers and customers, quality awards, certifications, programs, tools for process improvement and cost analyses. See SCM Note 1. Prerequisites: SCM 300; professional program business student majoring in Supply Chain Management. Pre- or corequisites: SCM 345, 355.

#### SCM 455 Research and Negotiation. (3)

#### fall and spring

Current philosophy, methods, techniques for conducting strategic and tactical supply chain research and negotiations. Includes supplier price and cost analysis. See SCM Note 1. Prerequisite: professional program business student majoring in Supply Chain Management. Prerequisite with a grade of "C" (2.00) or higher: SCM 355.

#### SCM 460 Carrier Management. (3)

#### selected semesters

Analyzes carrier economics, regulation, management, and ratemaking practice; evaluates public policy issues related to carrier transportation. See SCM Note 1. Prerequisites: both SCM 345 and upperdivision standing or only instructor approval.

#### SCM 463 Global Supply Chain Management. (3)

#### once a year

Supply chain activities in international business with special emphasis on management of transportation, global sourcing, customs issues, and facility location in a global environment. See SCM Note 1. Prerequisite: upper-division standing.

## SCM 479 Supply Chain Strategy. (3)

#### fall and spring

Integrated supply chain strategies synthesizing supply management, production, logistics, and enterprise systems. Provides a comprehensive perspective of supply chain management. See SCM Note 1. Prerequisite: professional program business student majoring in Supply Chain Management. Prerequisites with a grade of "C" (2.00) or higher: SCM 345, 355, 432.

# SCM 502 Operations and Supply Management. (2–4) fall and spring

Contemporary management issues, including environmental, project, and supply chain management; new product development; quality control; TQM. Prerequisite: MBA degree program student.

### SCM 511 Integrated Supply Chain Management. (2-4)

#### once a year

Management of sourcing, operations, and logistics as an integrated process.

## SCM 515 Decision Models for Supply Chain Management. (2–4) once a vear

Decision modeling approaches for supply chain management such as optimization, simulation, and decision analysis. Emphasizes spread-sheet-oriented approaches.

## SCM 521 Supply Management and Negotiation. (2-4)

once a year Selecting, developing, and executing appropriate sourcing strategies and processes.

# SCM 532 Supply Chain Cost and Design Issues. (2–4) once a year

Strategic design and development of supply chains. Focus on costmanagement tools applied to supply chain design and supplier management.

#### SCM 541 Logistics in the Supply Chain. (2-4)

#### once a year

Critical issues for customer perception of supply chain performance, including inventory planning, transportation, warehousing, information technology, and integrated logistics service.

## SCM 551 Operations Planning and Execution. (2–4)

Managing the conversion of raw materials to finished goods, including scheduling, work-in-process inventory management, and postpone-ment/customization.

# SCM 581 Management of Technology and Innovation. (2–4) once a year

Technology life cycles, technology forecasting, new product development process, innovation teams, innovation best practices. Prerequisite: MBA degree program student.

## SCM 583 Project Management in Service Organizations. (2–3) once a year

Project management planning, leadership, and control in service organizations. Discussion, lecture, class exercises, cases. Prerequisite: MBA degree program student.

## SCM 586 High-Technology Project Management. (2–3) fall

Project management processes for high-technology organizations, including planning, scheduling, team development, and control. Pre-requisite: MBA degree program student.

### SCM 587 Project Management. (2-4)

once a year

Planning, scheduling, and controlling of projects in R & D, manufacturing, construction, and services. Project selection, financial considerations, and resource management. Prerequisite: QBA 502.

## SCM 588 Strategic Project Management. (2–3) fall

fall Overview of strategic project management processes, project planning and control, project portfolio management, resource allocation,

management of strategic project partners. Discussion, lecture, class exercises, cases. Prerequisite: MBA degree program student. SCM 591 Seminar. (1–12)

#### SCM 591 Seminar. (1-1

fall and spring Selected topics in supply chain management.

#### SCM 791 Doctoral Seminar. (1-12)

once a year

Advanced topics in supply chain management.

Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 56.

## **Economics**

### Master's and Doctoral Programs

wpcarey.asu.edu/ecn/programs.cfm

480/965-3531 BAC 659

### Arthur E. Blakemore, Chair

**Professors:** Blakemore, Boyes, Brada, Burdick, Burgess, DeSerpa, Happel, Hoffman, Kingston, Low, Manelli, Mayer, McDowell, McPheters, Melvin, Méndez, Ormiston, Rogerson, Santos, Schlee, Zhou

Associate Professors: Ahn, Chade, Datta, Reffett, Reiser, Wilson

Senior Lecturer: Roberts

Admission. See "Admission to the Division of Graduate Studies," page 58. In addition, each applicant to either graduate program must submit three letters of recommendation from academic sources and test scores for the general aptitude portion of the Graduate Record Examination (GRE). Submission of scores from the GRE advanced test in economics is recommended. Applications should be received at the Department of Economics by March 1 if the student is seeking a graduate assistantship.

Students are expected to have demonstrated competency in economics at a minimum level through ECN 313 and 314 and in mathematics through MAT 271. Passing grades in the equivalents of these courses taken at other colleges are accepted as a demonstration of competency. Additional courses in calculus, linear algebra, and statistics are recommended before the first semester in the program.

Students with inadequate undergraduate preparation in economics or mathematics may be required to remove deficiencies before enrolling in graduate courses.

### MASTER OF SCIENCE

The MS program in Economics is designed to give students a broad understanding of critical analysis of business problems and the quantitative skills necessary for their analysis. Graduates of the program will have distinctive capabilities in quantitative skills and business data analysis applied to markets and firm behavior, customer behavior, business strategies and processes, and global impacts on business.

Program of Study. See "Master's Degrees," page 67, for general requirements. See the Department of Economics Graduate Student Handbook for specific requirements.

Course Load. Students are limited to 15 semester hours per semester.

#### Foreign Language Requirements. None.

Thesis Requirements. Students have the option of a nonthesis or thesis track. For the nonthesis track, students are required to conduct an applied research project under the supervision of a faculty member. The applied research project often is conducted in conjunction with an internship, and three hours of credit is granted for the project. For the thesis option, six semester hours of credit is granted for completion of the thesis.

Final Examination. A final oral examination in defense of the thesis or applied research project is required.

## DOCTOR OF PHILOSOPHY

The PhD degree program is designed to provide the student with a more fundamental command of basic economic analysis and of the subject matter in several specialized fields. It is designed to qualify students for teaching at higher education institutions and for research positions in public agencies and private business organizations.

Program of Study. See "Doctor of Philosophy," page 69, for general requirements. In addition to completing 60 semester hours of credit beyond the bachelor's degree (30 semester hours beyond the master's degree) and 24 semester hours research dissertation credit, the PhD student must accomplish five tasks:

- 1. meet the qualification requirement,
- 2. present at least two fields of study,
- 3. pass the comprehensive examination,
- 4. pass the dissertation proposal defense, and
- 5. complete a dissertation with an oral defense.

See the Department of Economics Graduate Student Handbook for details concerning these tasks.

Qualifying Examinations. The student must demonstrate proficiency in economic theory and application by passing both the microeconomic and macroeconomic qualifying

examinations. These examinations are given at the beginning of the fall semester of the second year of graduate study.

Fields of Study. Students are required to present at least one primary field and one secondary field for the PhD. The primary field must be the one in which the comprehensive examination is taken; usually this is the field in which dissertation work is contemplated.

Comprehensive Examination. The comprehensive examination consists of a written and oral test. The written examination consists of questions designed to test the student's knowledge of the proposed research area. Examination questions are designed to cause the student to examine the research topic in considerable depth and breadth. The oral examination consists of questions designed to test the student's knowledge of the proposed research area. Examination questions are designed to expand on the written examination as well as to provide guidance on the dissertation research.

Dissertation Proposal Defense. Students prepare a preliminary draft of the dissertation proposal before taking the comprehensive examination. Upon passing the comprehensive examination, students submit a revised dissertation proposal to their supervisory committee that formalizes the research agenda and incorporates the supervisory committee's suggestions. The dissertation proposal must be defended orally.

Admission to Candidacy. The student should apply promptly for admission to candidacy after passing the comprehensive field examination, oral examination, and the dissertation proposal defense.

Dissertation Requirements. A dissertation representing original research work of high quality, demonstrating the student's proficiency in the field, is required.

### Foreign Language Requirements. None.

Final Examination. An oral examination in defense of the dissertation is required.

#### ECONOMICS (ECN)

For more ECN courses, see "Course Prefix Index," or access www.asu.edu/aad/catalogs/courses. The campus designation-E (East), M (Tempe), or W (West)-may affect how courses may be used to fulfill requirements.

#### M ECN 502 Managerial Economics. (2-4) fall and spring

Applies microeconomic analysis to managerial decision making in areas of demand, production, cost, and pricing. Evaluates competitive strategies. Prerequisite: MBA degree program student.

#### M ECN 503 Global Business Environment. (2-4) fall and spring

Macroeconomic analysis of issues related to economic growth, inflation, interest rates behavior, unemployment, exchange rate determination, and global competitiveness. Prerequisite: MBA degree program student

#### M ECN 504 History of Economic Thought. (3) once a vear

Historical development of economic theory. Emphasizes the development of economic analysis from preclassical economics through Keynes. Prerequisite: ECN 510 or instructor approval.

# M ECN 509 Macroeconomic Theory and Applications. (2–4) $_{\it fall}$

Theory of income, output, employment, and price level. Influence on business and economic environment. Prerequisites: both ECN 111 and calculus or only instructor approval.

# M ECN 510 Microeconomic Theory and Applications. (2–4) fall

Applies economic theory to production, consumer demand, exchange, and pricing in a market economy. Prerequisites: both ECN 112 and calculus or only instructor approval.

## M ECN 517 Monetary Theory. (3)

#### fall

Traditional and post-Keynesian monetary theory, interest rate determination, the demand and supply of money. Prerequisite: ECN 711 or instructor approval.

### M ECN 541 Public Economics. (3)

#### fall

Economics of collective action, public spending, taxation, and politics. Impact of central governmental activity on resource allocation and income distribution. Prerequisite: ECN 510 or instructor approval.

#### M ECN 584 Economics Internship. (1–3)

#### summer

Academic credit for professional work organized through the Internship Program. Prerequisites: both ECN 510 and 711 or only instructor approval.

#### M ECN 591 Economics Seminar. (1-3)

fall, spring, summer

Presentations by outside speakers, department faculty, and graduate students of work in progress. Prerequisite: instructor approval.

#### M ECN 593 Applied Projects. (3)

#### fall

Preparation of a supervised applied project typically in conjunction with an internship. Prerequisites: ECN 510, 711.

## M ECN 594 Conference and Workshop in Economics. (1–12) fall

Workshops offered include: economic analysis, microeconomic analysis, macroeconomics.

#### M ECN 598 Special Topics. (3)

selected semesters

Advanced topics in economics. Consult the *Schedule of Classes* for offerings. Prerequisite: instructor approval.

## M ECN 711 Macroeconomic Analysis I. (3)

fall

Current theories of output, employment, inflation, and asset prices as well as major aggregates. Introduces dynamic optimization techniques. Prerequisites: both ECN 313 and calculus or only instructor approval.

### M ECN 712 Microeconomic Analysis I. (3)

fall

Theory of production, consumer demand, resource use, and pricing in a market economy. Prerequisites: both ECN 314 and calculus or only instructor approval.

### M ECN 713 Macroeconomic Analysis II. (3)

spring

Focuses on growth theory, dynamic general equilibrium models, monetary theory, open-economy issues. Prerequisite: ECN 711 or instructor approval.

### M ECN 714 Microeconomic Analysis II. (3)

spring

General equilibrium, welfare economics, production, and capital theory. Prerequisite: ECN 712 or instructor approval.

#### M ECN 715 Advanced Macroeconomic Analysis. (3)

#### fall

Focuses on current research areas in macroeconomics and monetary theory with emphasis on methods in economic dynamics and numerical techniques. Prerequisite: ECN 711 or instructor approval.

# M ECN 716 Economics of Uncertainty, Information, and Strategic Behavior. (3)

fall

Economic behavior under uncertainty; markets and contracts under asymmetric information; the theory of games with incomplete information and applications. Prerequisite: ECN 712 or instructor approval.

## M ECN 721 Labor Economics. (3)

#### spring

Development of basic theoretical models for analyzing labor market issues. Prerequisites: both ECN 713 and 714 or only instructor approval.

## M ECN 722 The Aggregate Labor Market. (3) selected semesters

Extensions/criticisms of labor market theories. Applications to a variety of policy issues. Prerequisites: both ECN 713 and 714 or only instructor approval.

## M ECN 725 Econometrics I. (3)

### spring

Problems in the formulation of econometric models. Emphasizes estimation, hypothesis testing, and forecast of general linear models. Prerequisite: 6 hours in statistics or instructor approval.

#### M ECN 726 Econometrics II. (3)

#### fall

Estimation and inference of qualitative and limited dependent variable models as well as general multiple equation models. Prerequisite: ECN 725 or instructor approval.

# M ECN 727 Quantitative Methods in Economics. (3) spring

Generalized method of moment estimation, estimation with censored and truncated samples, nonlinear models, panel-data models, econometrics of nonstationarities. Prerequisite: ECN 726 or instructor approval.

### M ECN 736 International Trade Theory. (3)

### selected semesters

Theories of comparative advantage and their empirical verification. Theory and political economy of commercial policy. Resource transfers and the role of the multinational corporation. Prerequisites: both ECN 713 and 714 or only instructor approval.

# M ECN 738 International Monetary Theory and Policy. (3) selected semesters

Foreign exchange market, balance of payments, and international financial institutions and arrangements; theory and applications. Pre-requisites: both ECN 713 and 714 or only instructor approval.

### M ECN 753 Industrial Organization. (3)

selected semesters Analyzes structure, conduct, and performance in industrial markets; the economics of organizations. Prerequisites: both ECN 713 and 714 or only instructor approval.

## M ECN 760 Economics of Growth and Development. (3)

selected semesters

Economic problems, issues, and policy decisions facing the developing nations of the world. Prerequisites: both ECN 713 and 714 or only instructor approval.

#### M ECN 770 Mathematics for Economists. (3)

fall Survey of mathematical ideas encountered in economics and econometrics: nonlinear programming, the Kuhn-Tucker theorem, concave programming, optimization over time. Prerequisite: calculus or instructor approval.

Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 56.

### QUANTITATIVE BUSINESS ANALYSIS (QBA) Department of Economics

For more QBA courses, see "Course Prefix Index," or access www.asu.edu/aad/catalogs/courses. The campus designation—E (East), M (Tempe), or W (West)—may affect how courses may be used to fulfill requirements.

## M QBA 502 Managerial Decision Analysis. (2–4) fall and spring

Fundamentals of quantitative analysis to aid management decision making under uncertainty. Prerequisites: MAT 210; computer literacy; graduate degree program student.

## M QBA 525 Applied Regression Models. (3)

once a year

Simple linear regression, multiple regression, indicator variables, and logistic regression. Emphasizes business and economic applications. Prerequisite: MAT 210.

### HEALTH SECTOR MANAGEMENT

#### M QBA 527 Categorical Data Analysis. (3)

#### once a year

Discrete data analysis in business research. Multidimensional contingency tables and other discrete models. Prerequisite: QBA 525. **M QBA 530 Experimental Design. (3)** 

once a vear

Experimental designs used in business research. Balanced and unbalanced factorial designs, repeated measures designs, and multivariate analysis of variance. Prerequisite: QBA 525 (or its equivalent).

## M QBA 535 Multivariate Methods. (3)

once a year

Advanced statistical methods used in business research. Multivariate analysis of association and interdependence. Prerequisite: QBA 525. M QBA 540 Forecasting. (2–4)

## selected semesters

Foundation of statistical forecasts and forecast intervals; applies classical and computer-assisted forecasting methods to business forecasting problems. Prerequisites: MAT 210; QBA 502.

M QBA 593 Applied Project. (1–12)

selected semesters

M QBA 599 Thesis. (1-12)

selected semesters

Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 56.

## Health Industry Leadership

### **Certificate Program**

For information on the new Graduate Certificate in Health Industry Leadership, call the School of Health Management and Policy at 480/965-7778.

## **Health Sector Management**

Master's Program

wpcarey.asu.edu/hap

480/965-7778

BA 318

#### Jeffrey R. Wilson, Director

Professors: Baldwin, Johnson, Kirkman-Liff, Schneller

Associate Professors: Reiser, Wilson

Assistant Professors: Furukawa, Jehn

Clinical Professor: Warne

Associate Research Professor: Schwenke

Assistant Research Professor: Patton

The faculty in the School of Health Management and Policy of the W. P. Carey School of Business offer a graduate program leading to the Master of Health Sector Management.

### MASTER OF HEALTH SECTOR MANAGEMENT

The MBA/MHSM is a concurrent degree program structured to prepare students to become managers and leaders in contemporary health-related industries and systems. The curriculum is designed to equip graduates with knowledge of the broad continuum of healthcare products and services, advanced managerial knowledge and analytical skills, as well as in-depth preparation in one of the MBA areas of study that include: financial management and markets, information management, services marketing and management, and supply chain management. Students graduate from this program prepared to assume advanced leadership roles in a wide range of settings, including biotechnology corporations, consulting firms, delivery systems, health financing, health information organizations, and pharmaceutical industry. This preparation consists of the core MBA curriculum, a series of eight MHSM courses, a summer internship, and one of the MBA areas of study.

Admission. Applications should be submitted online. For the general requirements, see "Admission to the Division of Graduate Studies," page 58. Applicants are required to submit evidence of their ability to pursue a graduate degree program in health services administration successfully. All students must take the GMAT. For more information, call 609/921-9000, or write

EDUCATIONAL TESTING SERVICE ROSEDALE ROAD PRINCETON NJ 08541-6108

Students must apply separately to the MBA and MHSM degree programs. Applicants must submit two applications for admission and two copies of all transcripts directly to the Division of Graduate Studies. Two recommendations commenting on the student's motivation, commitment, achievements, work experience, and opportunity for success in the program are required. The application includes the MBA supplemental application, which contains a box that must be checked, indicating your interest in the MHSM degree program. In addition, applicants are required to submit a statement of personal objectives and a professional interest statement that reflects their interest in health-related industries and systems. Students should identify their preliminary interest in one of the four MBA specialization areas. Because the MBA/MHSM program begins in early June, preference for admission and financial assistance is given to applicants applying by March 1. It is recommended that students visit the campus for a personal interview. In cases where this creates a hardship, a student may ask for a telephone interview with an MHSM faculty member when the application file is complete. Materials describing the MHSM are available by calling 480/965-7778, accessing the Web site at wpcarey.asu.edu/mba/ft, or writing

SCHOOL OF HEALTH MANAGEMENT AND POLICY W. P. CAREY SCHOOL OF BUSINESS ARIZONA STATE UNIVERSITY PO BOX 874506 TEMPE AZ 85287-4506

**Program of Study.** The program of study for the concurrent MBA/MHSM consists of a minimum of 72 semester hours. The total amount of semester hours a student is required to take is dependent upon his or her choice of MBA specialization area.

Additional semester hours (prerequisites) may be required to strengthen preparation in a given specialty. Subject to availability, students may complete an optional residency/fellowship for a period of up to one year (following completion of the degree program).

**Prerequisites.** Students lacking sufficient background in business fundamentals are encouraged to take a basic financial accounting course. Those without a basic course in computer skills are required to complete CIS 200. Students must demonstrate strong quantitative ability. This may be accomplished by taking a calculus course (MAT 210).

#### Foreign Language Requirements. None.

**Comprehensive Examination.** All students must successfully complete the integrative seminar, which meets the comprehensive requirement established by the W. P. Carey School and Division of Graduate Studies for the MHSM degree.

Thesis Requirements. None.

### HEALTH SECTOR MANAGEMENT (HSM)

#### HSM 502 Health Care Organization. (3)

once a year

Concepts, structures, functions, and values that characterize contemporary health care systems in the United States.

## HSM 505 Managerial and Population Epidemiology. (3) once a year

Quantitative tools to make health care management decisions, including biostatistics, epidemiology, and cost-effectiveness analysis. Prerequisite: HSM 561 or a course in basic statistics.

### HSM 512 Health Care Economics. (3)

once a year

Economics of production and distribution of health care services, with special emphasis on the impact of regulation, competition, and economic incentives. Prerequisite: HSM 502.

# HSM 520 Pharmaceutical, Biotechnology, and Medical Technology Industries. (3)

once a year

In-depth background on the pharmaceutical, biotechnology, and medical equipment industries. Negotiation of alliances among pharmaceutical and biotechnology firms and understanding of global health care markets. Prerequisite: HSM 502.

# HSM 522 Health Sector Information and Knowledge Management. (3)

once a year

Information technology and knowledge management applications in the health sector, including care delivery and financing institutions and in the pharmaceutical and biotechnology industries. Prerequisites: HSM 505; QBA 502.

# HSM 532 Financial Management of Health Services. (3) once a year

Acquisition, allocation, and management of financial resources within the health care enterprise. Budgeting, cost analysis, financial planning, and internal controls. Prerequisites: ACC 503; FIN 502; HSM 502.

## HSM 542 Health Care Jurisprudence. (3)

once a year Legal aspects of health care delivery for hospital and health services administration. Legal responsibilities of the hospital administrator and staff. Prerequisites: HSM 505, 520.

# HSM 560 Health Services Administration and Policy. (3) fall and spring

Introduces organizational theory and management of complex organizations within the historical and contemporary contexts of the U.S. public health.

## HSM 561 Biostatistics. (3) fall

Aspects of descriptive statistics and statistical inference most relevant to health issues, including data, rates, and confidence intervals.

# HSM 562 Health Care Organization and Systems. (3) once a year

Functional relationships among managerial elements of health care institutions with major focus on hospital governance and policy dynamics.

## HSM 563 Economics for Public Health Management. (3) fall

Introduces concepts and methods used to direct and understand production and distribution of health care services.

## HSM 564 Health Care Finance. (3)

once a year Overview of the acquisition, allocation, and management of financial resources by health care providers. Focuses on economic, financial, and accounting principles.

## HSM 565 Policy Issues in Health Care. (3) once a year

Current policy issues in health through concepts of access, cost, and quality; issues relating to disease trends and policy formulation.

### HSM 566 Basic Principles of Epidemiology. (3)

spring

Basic principles of epidemiology, evaluation of etiology, natural history, intervention therapy, and disease prevention. Lecture, lab. Prerequisite: Master of Public Health major or instructor approval.

## HSM 573 Comparative Health Systems. (3) once a year

Comparison of health care financing and delivery in industrialized countries; covers insurance, hospital management, and physician payment. Lecture, discussion.

#### HSM 575 Chronic Care Administration. (3)

selected semesters

Management of long-term care services and facilities, including behavioral health and rehabilitation programs.

## HSM 589 Integrative Seminar. (3)

fall, spring, summer

Capstone assessment of current policies, problems, and controversies across the broad spectrum of health services administration. Prerequisites: HSM 505, 520, 522, 532.

### HSM 591 Seminar. (1–12)

#### once a year

- Topics may include the following:
- Behavioral Health. (3)
- Cost Containment and Quality Assurance. (3)
- Health Care Economic Outcomes. (3)
- Health Care Policy. (3)
  - Managing Physicians. (3)
  - Topics in Health Services Research. (3)

### HSM 593 Applied Project. (3)

#### fall, spring, summer

Optional on-site experience in advanced development of managerial skills in health services administration and policy. Minimum of 10 weeks. Prerequisites: 18 hours of credit toward program of study; director approval.

## HSM 598 Special Topics. (1-4)

once a year

Topics may include the following:

### Epidemiology. (3)

Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 56.

## Information Management

Master's Program

wpcarey.asu.edu/is

480/965-3252

BA 223

#### Robert St. Louis, Chair

Professors: Goul, Roy, St. Louis, Steinbart, Vinze

Associate Professors: David, Iyer, Keim, Kulkarni, O'Leary

Assistant Professors: Chen, Corral, Demirkan, Ravindran, Roussinov, Santanam, Shao

Senior Lecturers: Birney, Hayes, Shrednick

Lecturer: McCarthy

### MASTER OF SCIENCE

The program leading to the MS degree in Information Management educates working professionals to develop and apply quantitative and computer methods to support business decision making. The program prepares graduates to progress in careers in computer information systems/management, systems development, and business consulting.

Admission. All applicants are required to submit the supplemental application materials required by the department. Complete application instructions may be obtained from the department's Web site at wpcarey.asu.edu/is.

Applicants must also submit scores from the Graduate Management Admission Test or the Graduate Record Examination. International applicants whose native language is not English must submit scores from the Test of English as a Foreign Language and Test of Spoken English exams.

**Prerequisites.** Applicants must complete the program prerequisites. Refer to the department's Web site for a current list of required course prerequisites.

**Program of Study.** The program of study consists of a minimum of 30 semester hours and is continually updated. Access the department's Web site for a list of courses.

#### Foreign Language Requirements. None.

Thesis Requirements. None.

**Final Examination.** For the MS degree, all students must successfully complete the comprehensive requirement established by the department and the Division of Graduate Studies. The comprehensive requirement may take the form of a final written examination or may be integrated into the applied project, depending on the program of study.

### **RESEARCH ACTIVITY**

For current information about research activity, access the department's Web site at wpcarey.asu.edu/is.

#### **COMPUTER INFORMATION SYSTEMS (CIS)**

For more CIS courses, see "Course Prefix Index," or access www.asu.edu/aad/catalogs/courses. The campus designation—E (East), M (Tempe), or W (West)—may affect how courses may be used to fulfill requirements.

#### M CIS 502 Information Systems. (2-4)

#### once a year

Contemporary management issues regarding information systems, including the strategic uses of IT, enterprise systems, and data-driven decision making. Prerequisite: MBA degree program student.

# M CIS 505 Object-Oriented Modeling and Programming. (1–4) once a year

Object-oriented modeling of business information systems, abstract data types and object-oriented programming using a visual language. Prerequisite: MS in Information Management degree program student or MAIS degree program student.

# M CIS 506 Business Database Systems. (1–4) once a year

Hierarchical, network, relational, and other recent data models for database systems. Processing issues such as concurrency control, query optimization, and distributed processing. Prerequisite: MS in Information Management degree program student or MAIS degree program student.

#### M CIS 512 Intelligent Decision Systems and Knowledge Management. (1–4)

once a vear

Definition, description, construction, and evaluation of computerbased decision systems. Prerequisite: MS in Information Management degree program student or MAIS degree program student.

## M CIS 515 Management Information Systems. (1–4) selected semesters

Systems theory concepts applied to the collection, retention, and dissemination of information for management decision making. Prerequisite: MS in Information Management degree program student or MAIS degree program student.

# M CIS 520 Systems Design and Evaluation. (1–4) selected semesters

Methodologies of systems analysis and design. Issues include project management, interface, organizational requirements, constraints, documentation, implementation, control, and performance evaluation. Prerequisite: MS in Information Management degree program student or MAIS degree program student.

# M CIS 530 Information Systems Development. (1–4) once a year

Object-oriented and interprocess communication and control concepts for information systems; applications based on languages such as C++ and platforms such as networked UNIX. Prerequisite: MS in Information Management degree program student or MAIS degree program student.

# M CIS 535 Distributed and Mixed-Media Information Systems. (1–4)

once a year

Modern communications protocols for wireless and mobile computing, overview of network and distributed database management systems, overview of storage and multimedia delivery issues, and shared virtual reality technologies. Prerequisite: MS in Information Management degree program student or MAIS degree program student.

M CIS 591 Seminar on Selected CIS Topics. (1-12)

once a year

Topics may include the following:

- Computer Security
- Computing Architectures
  Data Warehouse and Data Mining
- Electronic Commerce
- Enterprise Modeling

Prerequisite: MS in Information Management degree program student or MAIS degree program student. M CIS 593 Applied Project. (1–12) once a year Omnibus Courses. For an explanation of courses offered but not

specifically listed in this catalog, see "Omnibus Courses," page 56.

## Statistics

### Interdisciplinary Master's and Certificate Programs

The committee, which sets program requirements and supervises programs of study, is composed of faculty from several departments in the Ira A. Fulton School of Engineering, the College of Liberal Arts and Sciences, and the W. P. Carey School of Business.

For more information, see "Statistics," page 83.

## Taxation

#### Master's Program

wpcarey.asu.edu/acc 480/965-3631 BA 223

#### James R. Boatsman, Director

**Professors:** J.R. Boatsman, Christian, Gupta, Johnson, Kaplan, Pany, Pei, Reckers, Schultz

Associate Professors: Golen, Hwang, Regier, Whitecotton

Assistant Professors: Comprix, Lee, O'Donnell, Petersen, Robinson, Roussinov, Rowe, Weiss

Senior Lecturers: Geiger, Goldman, Maccracken

Lecturer: J.L. Boatsman, Levendowski, Munshi, Wigal

### MASTER OF TAXATION

The faculty in the School of Accountancy offer specialized professional programs leading to the Master of Taxation and Master of Accountancy and Information Systems," page 111). The MTax is a specialized degree program designed to equip students with the highly technical and demanding skills required to provide tax and business advice in the private sector and to administer the tax laws in the public sector of the economy. The program prepares students for entry-level positions in taxation and provides graduate-level education for tax professionals who desire to enhance their skills.

The faculty also participate in offering the program leading to the Master of Business Administration degree (see "Master of Business Administration," page 113) and PhD degree in Business Administration (see "Doctor of Philosophy," page 114).

For more information on faculty, programs, and courses, access the school's Web site at wpcarey.asu.edu/acc.

Admission. All applicants are required to submit the supplemental application materials required by the school. Complete application packets and instructions may be obtained from the school's Web site.

Students applying to this program must submit scores from the Graduate Management Admission Test. International applicants whose native language is not English must submit scores from the Test of English as a Foreign Language and the Test of Spoken English exams. Preference in admission is given to those with degrees in accounting and business, although other exceptional candidates are considered.

**Prerequisites.** Access the school's Web site for a current list of the program prerequisites.

Program of Study. The Master of Taxation consists of a minimum of 30 semester hours and is continually updated. Students acquire core knowledge and a set of professional skills from course work drawn from financial and managerial accounting, auditing, taxation, and information systems. These core courses, recommended by the American Institute of Certified Public Accountants as "a fundamental part of any graduate level accounting curriculum," build on a base level of knowledge and skills that students are presumed to have acquired from an undergraduate degree. Additionally, students take a sequence of courses on tax research, corporate and shareholder taxation, the taxation of flow-through entities, family tax planning, multijurisdictional taxation, and other special topics in taxation. Completion of the program results in students possessing an expanded understanding of the strategic role of accounting in business organizations and society. The significance of taxes in business decisions and tax compliance are also emphasized. Professional responsibilities and the ethical standards of the accounting profession, and especially the tax practice, are highlighted as well. Access the school's Web site for a current program of study.

**Course Load.** Students are limited to 12 hours per trimester.

Foreign Language Requirements. None.

Thesis Requirements. None.

**Final Examination.** A final comprehensive written examination is required of all candidates.

### **RESEARCH ACTIVITY**

For current information about research activity, access the School of Accountancy Web site at wpcarey.asu.edu/acc.

### COURSES

For courses, see "Accountancy (ACC)," page 111.