College of Business and Innovation

Administration

Anand S. Kunnathur, Ph.D.
Executive Associate Dean
Stranahan Hall-South Room 5020
Phone: 419.530.5644

Robert Detwiler, Ph.D., adviser/recruiter for undergraduate and master’s programs
Stranahan Hall-North 3130
Phone: 419.530.2087

Hassan HassabElnaby, Ph.D., director, Ph.D. in manufacturing and technology management program
Stranahan Hall-South Room 3034
Phone: 419.530.2780

Darlene Miller, Senior EMBA Administrator
Stranahan Hall-North Room 2200
Phone: 419.530.7982

Barb Robertson, director of advising and student success
Stranahan Hall-North 3130
Phone: 419.530.2087

Donald Saftner, Ph.D., director, M.S. in accounting program
Stranahan Hall-South Room 3045
Phone: 419.530.2327

Degrees Offered

The College of Business and Innovation is accredited by the Association to Advance Collegiate Schools of Business (AACSB International) for undergraduate and graduate work. The graduate division of the college affords students an excellent opportunity to earn a degree on a full-time or part-time basis. The College of Business and Innovation offers the following degrees at the graduate level:

- Master of business administration (M.B.A.)
- A dual juris doctor/master of business administration (J.D./M.B.A.)
- A dual doctor of medicine/master of business administration (M.D./MBA)
- A dual master of public health/master of business administration (MPH/MBA)
- A dual bachelor of science in engineering/master of business administration (B.S./M.B.A)
- Master of science in accounting (M.S.A.)
- Doctor of philosophy in manufacturing and technology management (Ph.D.)

Specializations within the Master of Business Administration Program

- Administration
- Entrepreneurship & Technology Commercialization
- Executive Management
- Finance
- Healthcare Systems Management
- Human Resource Management
- Information Systems
- International Business
- Leadership
- Marketing
- Operations Management
Admissions Policies

General Requirements

Refer to the College of Graduate Studies admissions section of this catalog for University of Toledo College of Graduate Studies admissions requirements and classification of graduate students.

Admission to Master of Business Administration (M.B.A.) Program

Admission to the M.B.A. program is available to those students who have completed an undergraduate degree and can demonstrate high promise of success in a graduate business degree program. The college has adopted qualitative admissions standards in which applicants are considered on the basis of their merits, with weight given to the quality of prior academic achievement, the Graduate Management Admissions Test (GMAT) scores, professional experience indicating increased levels of responsibility, and other relevant information that the candidate may share with the admissions committee.

Although the M.B.A. Admissions Committee requires a 2.7 undergraduate GPA and 450 on the GMAT for admission, GMAT scores and undergraduate GPA will not be the sole basis for admissions decisions.

The following documents are required for admission to the program:

1. Official transcripts from each post-secondary institution attended.
2. Official GMAT scores sent directly from the Graduate Management Admissions Council (GMAC) to the College of Graduate Studies. GMAT scores must be no more than five years old. For students applying to the J.D./M.B.A. dual degree program, the LSAT must have been taken within the last three years.
3. Three letters of reference from individuals who know the applicant in a professional capacity.
4. The statement of purpose as required on the application for admission.
5. In the case of students whose native language is not English, a score of at least 550 (paper based), 213 (computer based), or 80 (internet based) on the Test of English as a Foreign Language (TOEFL) or a score of 6.5 on the International English Language Testing System (IELTS) test is mandatory. The College of Graduate Studies determines whether applicants must take the TOEFL or IELTS examination.

Applications for admission are considered on a rolling basis. However, students are encouraged to submit their applications by the following dates:

- Domestic students:
  - Fall semester: August 1
  - Spring semester: November 15
  - Summer semester: April 15

- International students:
  - Fall semester: May 1
  - Spring semester: October 1
  - Summer semester: March 1

Final admissions decisions will be withheld until the application for admission is complete. No materials submitted to the University will be returned to the applicant.

Admission to Joint J.D./M.B.A. Program

Students applying for the J.D./M.B.A. program must have earned a bachelor’s degree. A student must apply and be admitted to the College of Law and College of Business and Innovation separately to be admitted to the J.D./M.B.A. dual degree program. The LSAT will be accepted by the College of Business and Innovation in lieu of GMAT scores.

Admission to one program does not guarantee admission to the other program. Refer to the College of Law and M.B.A. sections of this catalog for specific admission standards for each program. Applications for admission to the J.D. program are accepted for fall entry only.
Admission to Joint M.D./M.B.A. Program

Students applying for the M.D./M.B.A. program must have earned a bachelor's degree. A student must apply and be admitted to the College of Medicine and Life Sciences and the College of Business and Innovation separately to be admitted to the M.D./M.B.A dual degree program. The MCAT will be accepted by the College of Business and Innovation in lieu of GMAT scores.

Admission to one program does not guarantee admission to the other program. Refer to the College of Medicine and M.B.A. sections of this catalog for specific admission standards for each program. Applications for admission to the M.D. program are accepted for fall entry only.

Admission to Joint MPH/M.B.A. Program

Students applying for the Master of Public Health/M.B.A. dual degree program must have earned a bachelor's degree. A student must apply and be admitted to the College of Medicine and Life Sciences and the College of Business and Innovation separately to be admitted to the MPH/M.B.A dual degree program. If the applicant is required to take the GRE by the MPH Admission Committee, the College of Business and Innovation will accept GRE scores in lieu of the GMAT. If the applicant does not need to take the GRE for admission to the MPH program, the applicant must then take the GMAT examination for admission to the MBA Program.

Admission to one program does not guarantee admission to the other program. Refer to the College of Medicine and Life Sciences and M.B.A. sections of this catalog for specific admission standards for each program.

Admission to Joint B.S./M.B.A. Degree Program

The College of Business and Innovation in conjunction with the College of Engineering offers a program whereby qualified students can earn simultaneously both a B.S. in engineering and an M.B.A. This program provides a unique opportunity to combine business and engineering skills to prepare graduates for global competitiveness. It supports the mission of the College of Business and Innovation to prepare corporate leaders for the future. The program should be particularly attractive to students interested in starting their own companies or those who want to develop an appreciation for how engineering and business complement each other.

This program will allow engineering students in their final two semesters of study to begin taking M.B.A. courses while completing their B.S. This arrangement should reduce the time it takes a student to receive both degrees by a year. The business undergraduate prerequisites can be satisfied as part of the undergraduate curriculum.

Students who wish to pursue the program should make this known to the senior associate dean for undergraduate studies in the College of Engineering by the end of their sophomore year. Interested students will take the GMAT at the end of their junior year and should apply for admission to the program to the College of Graduate Studies before the fall of their senior year. To be admitted to the program, students must have senior standing, score a minimum of 450 on the GMAT, and have at least a 3.0 cumulative GPA. Undergraduate requirements for the general business minor must also be completed. Upon admission to the program by the College of Graduate Studies, the College of Business and Innovation and the College of Engineering, students will be take graduate courses while simultaneously completing the requirements for the B.S. in engineering.

Students’ special status must be tracked by the Office of Student Retention and Academic Success to assure AASCB compliance and to assure the B.S. degree is granted prior to graduating with the M.B.A.

Admission to Executive Master of Business Administration (E.M.B.A.) Program

The E.M.B.A. program is designed for executives and professionals with a minimum of three to five years of management or professional experience. The E.M.B.A. Admissions Committee seeks candidates with proven leadership potential. The following documents are required for admission to the program:

1. Official transcripts from each post-secondary institution attended.
2. Official GMAT® scores sent directly from the Graduate Management Admissions Council (GMAC) to the
College of Graduate Studies. GMAT scores must be no more than five years old.

3. A current resume to allow the Admissions Committee the opportunity to assess the individual’s work experience.

4. Three letters of reference from individuals who know the applicant in a professional capacity, one of which must be from the applicant’s employer. Self-employed applicants may substitute the employer nomination with a third professional reference.

* The GMAT can be waived for applicants with sufficient supervisory experience.

All applicants to the EMBA program are also required to interview with the Admissions Committee. The interview will take place once the application for admission has been completed. Applications for admission are considered on a rolling basis for fall entry only. Final admissions decisions will be withheld until the application for admission is complete. No materials submitted to the University will be returned to the applicant.

Admission to Master of Science in Accounting (M.S.A.) Program

All decisions regarding admissions to the M.S.A. program are made through the office of the director of graduate programs in accounting. Admission to the M.S.A. program is available for those students who demonstrate high promise of success in a graduate program. All applicants are considered on the basis of their merit with weight given to the quality of prior academic achievement, GMAT test scores, professional experience, and other relevant information. The following documents are required for admission to the program:

1. Official transcripts from each post-secondary institution attended.
2. Official GMAT scores sent directly from the Graduate Management Admissions Council (GMAC) to the College of Graduate Studies. GMAT scores must be no more than five years old.
3. Three letters of reference from individuals who know the applicant in a professional capacity.
4. The statement of purpose as required on the application for admission.
5. In the case of students whose native language is not English, a score of at least 550 (paper based), 213 (computer based), or 80 (internet based) on the Test of English as a Foreign Language (TOEFL) or a score of 6.5 on the International English Language Testing System (IELTS) test is mandatory.

Applications for admission are considered on a rolling basis. However, students are encouraged to submit their applications by the following dates:

- **Domestic students:**
  - Fall semester: August 1
  - Spring semester: November 15
  - Summer semester: April 15

- **International students:**
  - Fall semester: May 1
  - Spring semester: October 1
  - Summer semester: March 1

Final admissions decisions will be withheld until the application for admission is complete. No materials submitted to the University will be returned to the applicant. The M.S.A. program admits students to the program on a rolling admissions basis.

Admission to Doctor of Philosophy in Manufacturing and Technology Management (Ph.D.) Program

Applicants with a master’s degree in a technical field or business are preferred. Applicants with a bachelor’s degree in a technical field or business may also be considered. Letters of reference from college faculty or employers acquainted with the student’s character and ability, and official transcripts of all prior college work must be supplied. Applicants are expected to demonstrate preparation for, and a high promise of, success in the doctoral program.

The following will be considered in evaluating an application to the Ph.D. program on an individual basis:

- The student’s undergraduate and graduate record with general academic performance, as well as the trend and comparison of grades over a period of time;
The student’s verbal, quantitative and total scores on the GMAT (in certain cases, depending on the academic background of the student, GRE scores may be substituted for GMAT scores; Evidence of the ability to do research (publications, presentations, etc.); Statement of purpose explaining why the student wants to pursue a Ph.D. in manufacturing and technology management; Three letters of reference; Appropriate experience; And, in the case of students whose native language is not English, acceptable performance on the TOEFL or IELTS is mandatory. The College of Graduate Studies determines whether applicants must take the TOEFL or IELTS examination.

It is to be stressed that, although GMAT and GPA are important, they alone will not be the basis of admissions decisions. While students may come from many academic disciplines, those students with bachelor’s degrees in fields other than business may require more than 93 semester hours in order to satisfy prerequisite and business foundations course requirements. Students admitted to the Ph.D. program will not receive graduate credit for any undergraduate courses they take.

A student should take the Ph.D. comprehensive examination as soon as he/she and his/her adviser believes the student has mastered all the required subject areas and completed all course work. The format and other details of the examination are given in the handbook for Ph.D. students and are available on-line. Following successful completion of the comprehensive examination, the student is admitted to candidacy for the Ph.D. and undertakes dissertation research. The student is responsible for initiating the application to candidacy on a form available from the College of Graduate Studies.

When a student enters the program, the Ph.D. program director will help the student in preparing a plan of study. Each student will be assigned a faculty adviser by the Ph.D. program director at the time of admission. During this first year of study, the student will choose an adviser who will assist the student in choosing a dissertation topic, forming a dissertation committee and in other matters concerning the program. More information is available at: http://www.utoledo.edu/business/PHD/index.html.

Academic Policies

General Requirements

Refer to the general College of Graduate Studies section of this catalog for general academic policies that apply to all graduate students in areas such as advising, minimum enrollment, dishonesty, grievance and probation and dismissal.

Academic Advising

Advising for the M.B.A. program is available in the Office of Student Retention and Academic Success on the third floor of Stranahan Hall-North. Advising for the E.M.B.A., M.S.A. and Ph.D. programs is conducted by the respective program director. Students are encouraged to meet with an adviser regularly. Each student is ultimately responsible for correct and timely completion of degree requirements.

Financial Assistance

A limited number of graduate assistantships, which provide a stipend and/or cover instructional fees, are awarded to students each year. Awards are based upon scholastic achievement, work experience, research experience and extracurricular activities. They are not based on financial need. Applications are due by March 1 for the entire following academic year to the Office of Student Retention and Academic Success for M.B.A. students, and to the Department of Accounting for M.S.A. students. Graduate Assistantships are awarded to qualified Ph.D. students upon admission to the Ph.D. program.

Transfer Students

Students who have taken graduate course work at another AACSB-accredited university or from another college at The
University of Toledo may, upon recommendation of the appropriate department chair and associate dean for graduate studies, be permitted to transfer up to nine semester hours of business-related course work toward the M.B.A. or M.S.A. A grade of B or higher must be achieved in order to transfer any graduate courses, and the transferred credit must not have been applied towards an earned graduate degree.

Degree Requirements

GPA and Grade Requirements

Students in all graduate degree programs at the University of Toledo must complete all requirements for their program of study with at least a 3.0 (4.0 scale) cumulative GPA at the graduate level. All courses that count towards a graduate degree must be passed with a grade of C or better. There are no grade re-calculations at the graduate level; as such, repeated courses will have both grades included in the cumulative GPA calculation.

Master of Business Administration (M.B.A.)

The M.B.A. degree is granted to students who satisfactorily complete a minimum of 33 semester hours at the 6000-level in the College of Business and Innovation. The length of the program will vary depending upon the nature of the undergraduate degree. The program consists of a common body of knowledge (18 hours), core (24 hours) and elective (9 hours) courses. Any or all common body of knowledge courses may be waived for equivalent coverage at the undergraduate or graduate level with a grade of C or better.

Master of Science in Accounting (M.S.A.)

The Master of Science in Accounting degree is granted to students who satisfactorily complete a minimum of 30 semester hours at the 6000-level in the College of Business and Innovation. The M.S.A. program is designed to prepare students for a professional career in accounting and to fulfill the requirements to sit for the Uniform CPA Exam in the state of Ohio. Candidates without a background in accounting can be admitted to the program but will be required to take additional courses.

Doctor of Philosophy in Manufacturing and Technology Management (Ph.D.)

The program requires at least 93 semester hours of study beyond the baccalaureate. For a full-time student with only a bachelor’s degree, the course requirements before entering the dissertation stage can be completed in three years. Full-time students with an M.B.A. or a relevant M.S. degree should be able to complete the course work in two years before entering the dissertation stage. During the first year, the students without prior appropriate undergraduate or graduate work in business or engineering will acquire the foundation knowledge in business, engineering and manufacturing technology. Course waivers are possible at the foundation stage by passing competency examinations in appropriate areas.

Programs of Study

Master of Business Administration (M.B.A.)

Common Body of Knowledge (18 hours maximum)

These courses represent the minimum background required of students prior to taking 6000-level courses in the M.B.A. program. Students admitted to the M.B.A. program can meet the requirements by taking the 5000-level courses or by proficiency examination. If a student can demonstrate that he/she has completed equivalent course work at the undergraduate level prior to admission to the M.B.A. program and has earned a grade of C (2.0) or better in the course(s), the corresponding 5000-level course may be waived. Once admitted to the M.B.A. program, students may
not take an undergraduate course and apply that course towards credit for 5000-level requirements.

ACCT  5000  Financial & Managerial Accounting
BANS  5210  Economics for Business Decisions
FINA  5310  Managerial Finance
MKTG  5410  Marketing Systems
OPMT  5510  Applied Business Statistics
OPMT  5520  Analysis of Manufacturing and Service Systems

MBA Core (24 hours)

These courses are required of all students. They are reflective of business techniques, methodology and processes, and are designed to be cross-functional and integrative.

BUAD  6100  Accounting for Strategic Decisions
BUAD  6200  Financial Systems
BUAD  6300  Strategic Marketing & Analysis
BUAD  6400  Results-Based Management
BUAD  6500  International Business
BUAD  6600  Supply Chain Management
BUAD  6800  Information Technology & E-Business
BUAD  6900  Strategic Management Capstone

Students who complete three or more courses in a functional area (e.g. accounting, finance, marketing) at an AACSB-accredited business school are allowed and encouraged to replace the corresponding 6000-level core class with an elective of their choice.

Elective Courses (9 hours)

Each student may select up to two majors. An alternative is to select the administration major described below, which is designed for students who prefer to take a variety of electives in different areas. The substitution of any courses for a major requires the written approval of the appropriate department chair. No more than one independent study/research paper (three hours) may be taken in lieu of a course to fulfill a specialization requirement, and no more than one course will be allowed to count towards two majors in the M.B.A. program.

Areas of Specialization

Administration

The administration specialization is designed for students who want a general M.B.A. degree and is completed by taking three 6000-level electives within the College of Business and Innovation.

Entrepreneurship & Technology Commercialization

Must take all four of the following:

EFSB  6590  New Venture Creation (Typically offered Fall)
EFSB  6690  Tech Commercialization (Typically offered Spring)
EFSB  6790  Venture Capital Finance (Typically offered Fall)
EFSB  6800  Small Business Practicum (Typically offered Spring)

Finance

The graduate finance curriculum provides students with a background in all major areas of finance including corporate finance, investments and portfolio management, and financial institutions and markets. A student who wants to specialize in finance must take FINA 6130, Managerial Finance (offered Fall and Spring; pre-req FINA 5310/BUAD
3040 but should also take BUAD 6200 before FINA 6130), plus two 6000-level FINA classes of the student’s choice. Recent offerings include:

FINA  6140 Investments & Securities Analysis (Fall; pre-req FINA 5310/BUAD 3040)
FINA  6150 Financial Institutions and Markets (Spring; pre-req FINA 5310/BUAD 3040)
FINA  6330 Seminar in Financial Management
FINA  6340 Seminar in Portfolio Management (Spring; pre-req FINA 5310/BUAD 3040)
FINA  6350 Seminar in Financial Institution Management
FINA  6370 International Financial Management (Spring; pre-req FINA 5310/BUAD 3040)
FINA  6480 Student Managed Portfolio (Fall/Spring year-round commitment; students accepted by dept.)
FINA  6840 Small Business Financial Management (Spring; pre-req FINA 5310/BUAD 3040)

**Healthcare Systems Management**

A specialization in healthcare systems management is designed for students who intend to seek or continue managerial careers in healthcare administration. Four PUBH 6000-level courses of the student’s choice are required for this specialization. Students are not able to count any of these courses towards the General Administration specialization. Students must follow one of the three tracks below:

1. MBA in Health Care System Management with Public Health Administration concentration:
   - PUBH 604 Public Health Administration
   - PUBH 621 Management of Public Health Agencies
   - PUBH 622 Budget and Finance in Public Health
   - PUBH 628 Economics, Marketing, and Human Resources

2. MBA in Health Care System Management with Health Promotion and Education concentration:
   - PUBH 620 Methods and Materials in Public Health
   - PUBH 630 Community Health Organizations
   - PUBH 646 Health Promotion Programs
   - PUBH 680 Evaluation of Health Programs

3. MBA in Health Care System Management with Public Health Epidemiology concentration (PUBH 601 is required for the concentration; select three of the remaining courses below):
   - PUBH 601 Public Health Epidemiology (required for this track)
   - PUBH 600 Public Health Biostatistics
   - PUBH 612 Infectious Disease Epidemiology
   - PUBH 615 Clinical Epidemiology
   - PUBH 618 Cancer Epidemiology
   - PUBH 655 Chronic Disease Epidemiology

**Human Resource Management**

A specialization in human resource management is designed both for students who intend to seek or continue managerial careers in human resources, and for those who are seeking more general leadership positions, but need to understand approaches to attracting, retaining, compensating, motivating and managing employees in contemporary organizations.

Students are required to successfully complete HURM 6700, Human Resource Management, or its equivalent, by completing either an undergraduate degree in human resource management from an AACSB-accredited school, or by certification through the Human Resource Certification Institute (e.g. PHR, SPHR).

In addition to HURM 6700 (typically offered summer and fall terms), students must complete any three additional 6000-level HURM courses of the student’s choice. Recent offerings include:

HURM  6710 Employment and Labor Law (occasionally offered in spring term)
HURM  6720 Advanced Negotiation and Conflict Resolution
HURM  6730 Performance Management (Spring only)
Information Systems

Specialization in information systems provides the student with a managerial overview of computers and information systems. Emphasis is placed on the role and function of the computer as a managerial tool to store, process, analyze and present information. A major in this area includes any three 6000-level INFS classes of the student’s choice. Recent offerings include:

- INFS 6610  Info Storage & Retrieval Structures (Spring)
- INFS 6560  System Analysis & Design (usually offered Fall and Spring)
- INFS 6470  Information Technology
- INFS 6810  Network Communications (Spring)
- INFS 6930  Contemporary Topics (usually offered fall and spring)

International Business

The international business program provides training for entry in careers in corporations with a global orientation, particularly multinational corporations, export-import firms, banks, transportation and logistics, and government and international agencies involved in international trade, finance and economic development. Students majoring in international business must choose three of the following courses.

- FINA 6370  International Financial Management (Fall; pre-req FINA 5310/BUAD 3040)
- IBUS 6360  Management of Multinational Firms (Fall)
- IBUS 6390  International Business
- IBUS 6490  Global Management Systems
- MKTG 6080  International Supply Chain Management
- MKTG 6400  International Marketing (Spring; pre-req MKTG 5410/BUAD 3010)
- IBUS 6100  Study Abroad (Spring; course offered if there is sufficient interest)

Leadership

Students majoring in Leadership must take all four of the following:

- MGMT 6100  Leading through Ethical Decisions (Spring)
- MGMT 6150  Leading and Developing Yourself (Fall)
- MGMT 6160  Leading with Power and Influence (Spring)
- MGMT 6190  Leading Change and Org Improvement (Spring)

Operations Management

The operations management major provides the student with the decision-making and problem-solving skills required for managing people and resources more effectively, whether in manufacturing firms, service industries, nonprofit organizations or government operations.

Required courses:

- OPMT 6680  Total Quality Management and SPC (Spring; pre-req OPMT 5520/BUAD 3020)
- OPMT 6690  Manufacturing Resources Management (Fall; pre-req OPMT 5520/BUAD 3020)

And one of the following:

- OPMT 6100  Time Series Analysis & Forecasting (Spring; pre-req OPMT 5520/BUAD 3020)
- OPMT 6270  Computer Simulation (Fall; pre-req OPMT 5520/BUAD 3020)
- OPMT 6510  Project Management
- OPMT 6720  Manufacturing Systems Design
- OPMT 6930  Contemporary Topics Seminar
- MKTG/IBUS 6080  International Supply Chain Management
Marketing

Students specializing in marketing must take any three 6000-level MKTG courses of the student’s choice. All 6000-level MKTG courses have a pre-req of MKTG 5410/BUAD 3010. Recent offerings include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 6140</td>
<td>Customer Relationship Marketing</td>
<td>Spring</td>
</tr>
<tr>
<td>MKTG 6150</td>
<td>Intelligence Driven Customer Strategy</td>
<td></td>
</tr>
<tr>
<td>MKTG 6220</td>
<td>Integrated Marketing Communications</td>
<td>Fall</td>
</tr>
<tr>
<td>MKTG 6230</td>
<td>Digital Marketing Processes</td>
<td>Spring</td>
</tr>
<tr>
<td>MKTG 6240</td>
<td>Sales Force Leadership</td>
<td>Fall</td>
</tr>
<tr>
<td>MKTG 6250</td>
<td>Strategic Account Management</td>
<td>Spring</td>
</tr>
<tr>
<td>MKTG 6310</td>
<td>Product Commercialization</td>
<td></td>
</tr>
<tr>
<td>MKTG 6320</td>
<td>Strategic Brand Management</td>
<td>Spring</td>
</tr>
<tr>
<td>MKTG 6330</td>
<td>Applied Marketing Research</td>
<td></td>
</tr>
<tr>
<td>MKTG 6400</td>
<td>International Marketing</td>
<td>Spring</td>
</tr>
</tbody>
</table>

Graduate Certificate in Supply Chain Management (15 hours)

This certificate is offered as part of the graduate programs in the College of Business and Innovation. The program requires five graduate courses, totaling 15 hours of graduate credit, including a three-hour prerequisite course that may be waived for applicants who can demonstrate knowledge of the subject area. Applicants may be accepted directly to the certificate program, but must meet the entrance requirements for the M.B.A. program with the exception of the GMAT exam. Students who subsequently apply and are accepted into the M.B.A. program may use these credits to partially satisfy the requirements for that program, subject to University and M.B.A. program regulations.

The certificate is intended for those who wish an entry-level credential into the supply chain management field, and for those currently in the field who wish to deepen their knowledge. Completion of the certificate program should prepare the student to take the first four exams of the APICS CPIM certification, which itself is a prerequisite for the APICS CSCP certification.

Except for the prerequisite course, the courses may be taken in any order:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPMT 5520</td>
<td>Manufacturing and Service Systems</td>
<td></td>
</tr>
<tr>
<td>BUAD 6600</td>
<td>Supply Chain Management</td>
<td>Every term</td>
</tr>
<tr>
<td>MKTG 6080</td>
<td>International Supply Management</td>
<td></td>
</tr>
<tr>
<td>OPMT 6680</td>
<td>Total Quality Management and SPC</td>
<td>Spring</td>
</tr>
<tr>
<td>OPMT 6690</td>
<td>Supply Chain Resources Management</td>
<td>Fall</td>
</tr>
</tbody>
</table>

Graduate Certificate in Healthcare Business Management Excellence (C-HBME)

This certificate is offered collaboratively as part of the graduate programs in the College of Business and Innovation and College of Medicine and Life Sciences. The program requires six graduate courses, totaling 12 hours of graduate credit. This graduate certificate provides learners with broad-based knowledge of business concepts as applied in healthcare, to prepare healthcare managers, leaders, and entrepreneurs! It is suited for practicing physicians, medical students, clinical managers, residents, all healthcare providers, and other graduate students. Courses are offered primarily online with some face-to-face instruction and follow a 16 week and/or 8 week format.

Required Courses:

SHBE 5001: Healthcare Finance
SHBE 5002: Healthcare Policy and Law
SHBE 5003: Healthcare Information Systems
SHBE 5004: Healthcare Marketing and Customer Relationship Management
Graduate Certificate in Physician and Healthcare Executive Development (C-PHED)

This certificate is offered collaboratively as part of the graduate programs in the College of Business and Innovation and College of Medicine and Life Sciences. The program requires three graduate courses, totaling 9 hours of graduate credit. This graduate certificate provides learners with advanced knowledge of cutting-edge business concepts applied in the healthcare setting. It is suited for healthcare managers interested in career growth into executive management with an aim towards an MBA or EMBA. This program is appropriate for physicians with many years of practice experience and other healthcare leaders. Courses are offered primarily online with some face-to-face instruction and follow a 16 week and/or 8 week format.

Required Courses:

SHBE 6010: Foundation for Executive Education in Health Care Leadership Course
SHBE 6020: Creating Effective Operations
SHBE 6030: Healthcare Financial Management

Executive M.B.A. Program

The College of Business and Innovation offers an innovative Executive M.B.A. (E.M.B.A.) program for executives of mid-sized and growing firms. The program curriculum is designed to enhance the ability of managers to manage the change and growth common in today’s competitive environment. To accomplish this, participants in the program take courses built around three major integrative themes – entrepreneurship, e-business, and competition in a global marketplace.

The E.M.B.A. program is designed with experienced managers in mind and is tailored to fit their schedules. Through the use of a structured approach, executives are able to pursue an M.B.A. with their peers at a level and pace appropriate to their business experience. The program is completed in 15 months. Courses are taught in a convenient two-weekend-on, and-one-weekend-off format. Classes are held on Friday evenings and all day Saturday.

Required Courses:

EMBA 5500 Analytical Foundations for Executives
EMBA 6100 Global Competitive Challenge
EMBA 6120 Cultural, Legal & Operational Issues in Doing Business Abroad
EMBA 6200 Entrepreneurship and Personal Strategic Planning
EMBA 6140 Accounting & Financial Foundations for Executives
EMBA 6210 Processes for Ethical Business Decisions
EMBA 6220 Accounting Systems for Operational Control & Strategic Management
EMBA 6230 Market Driven Analysis
EMBA 6240 Entrepreneurial Financial Management
EMBA 6250 Leadership & Performance Management
EMBA 6290 Strategic Management in a Global Environment
EMBA 6300 Global Technology Management
EMBA 6310 Managing Global Supply Chains
EMBA 6320 Product Development
EMBA 6470 Global/E-Business Field Trip
MGMT 6930 Independent Research (elective determined by cohort)
J.D./M.B.A. Dual Degree

This integrated program and curriculum leads to the awarding of two degrees. The Juris Doctor degree is awarded by the College of Law, and the M.B.A. degree is awarded by the College of Business and Innovation.

Juris Doctor (J.D.)
The College of Law requires the successful completion of 89 semester hours. The dual degree program would permit up to 12 semester hours of core courses from the College of Business and Innovation to be applied toward the satisfaction of the 89-hour requirement. All courses taken in the College of Business that are to be applied towards J.D. program requirements must be earned with a grade of B (3.0) or better. The 12 hours of core courses from the College of Business and Innovation are:

- BUAD 6100 Accounting for Decision-Making
- BUAD 6200 Financial Systems
- BUAD 6300 Strategic Marketing & Analysis
- BUAD 6500 International Business
- BUAD 6800 Information Technology & E-Business
- BUAD 6900 Strategic Management Capstone
- EFSB 6590 New Venture Creation
- EFSB 6690 Technology Commercialization
- EFSB 6790 Venture Capital Finance
- EFSB 6890 Small Business Practicum
- FINA 6130 Managerial Finance
- FINA 6140 Investments and Security Analysis
- FINA 6150 Financial Institutions and Markets
- FINA 6270 MBA International Financial Management
- FINA 6840 Small Business Financial Management
- IBUS 6360 Management of Multinational Firms
- IBUS 6490 Global Management Systems
- MGMT 6160 Leading with Power and Influence
- HURM 6720 Advanced Negotiation and Conflict Resolution
- HURM 6760 Recruitment and Retention
- INFS 6810 Network Communications
- MKTG 6140 Customer Relationship Marketing
- MKTG 6400 International Marketing

On written application by the student, and for good cause shown, the Associate Dean for Academic Affairs of the College of Law may substitute another College of Business course for one on the approved list.

M.B.A. Degree

To fulfill requirements for the M.B.A. degree, students must complete 33 semester hours at the 6000 level or above. Students in the joint program may apply up to 12 hours of course work at the College of Law toward satisfaction of the M.B.A. All courses taken in the College of Law that are to be applied towards MBA program requirements must be earned with a grade of C (2.0) or better. All grades earned in College of Law courses that are applied towards MBA program requirements will impact the overall graduate GPA.

One MBA Core course (either BUAD 6500 International Business or BUAD 6800 IT and E-Business) can be replaced with one College of Law Elective (either LAWI 9480 International Business Transactions or LAWI 9020 E-Commerce, respectively).

The other 9 hours may come from the following courses, or others approved by the College of Business and Innovation Associate Dean for Graduate Programs, and will serve as MBA electives:

- LAWG 9010 Business Associations
- LAWG 9610 Secured Transactions
- LAWI 9060 Sales and Leases of Goods
- LAWI 9300 Employment Discrimination
- LAWI 9730 Pension and Employee Benefits
LAWI 9310 Employment Law  
LAWI 9940 White Collar Crime  
LAWN 9050 Negotiation and Settlement  
LAWD 9210 Contracts I  
LAWD 9220 Contracts II  

**MPH/MBA Dual Degree**

The joint MBA/MPH degree is designed to prepare graduates with managerial and executive level career aspirations at the interface of healthcare delivery and business. The dual degree program and curriculum leads to the awarding of two degrees. The Master of Public Health degree is awarded by the College of Medicine and Life Sciences and the MBA is awarded by the College of Business and Innovation. The College of Business and Innovation will allow up to 9 credit hours of appropriate MPH coursework to be credited toward the MBA degree.

Appropriate MPH courses listed under the Healthcare Systems Management specialization area of this catalog will be applied towards the MBA elective area. Three to four courses (6000-level BUAD courses) will apply towards the MPH elective requirement.

Please refer to the College of Medicine and Life Science catalog for more information regarding the program requirements for the MPH degree.

**MD/MBA Dual Degree**

The integrated program and curriculum leads to the awarding of two degrees. The Doctor of Medicine is awarded by the College of Medicine and Life Sciences and the MBA is awarded by the College of Business and Innovation. The College of Business and Innovation will allow up to 9 credit hours of appropriate Medical School coursework to be credited toward the MBA degree.

It is recommended that MD/MBA students take 3 of the 4 Medical School courses below to serve as MBA electives. These courses are already part of the 4th year MD curriculum.

- FMDD 725 Healthcare Systems: Issues, Trends and Perspectives  
- FMDD 770 Health Law  
- MEDI 770 Health Care Administration: Special Topics  
- PEDS 723 Child Health Advocacy

Another option is for MD/MBA students to complete 2 of the 4 Medical School courses listed above, along with 1 elective from the list below. These courses are semester long courses (subject to availability) and cannot be taken during a medical student’s required clerkship or clinical elective time. The course would have to be taken during the dedicated year of MBA study (typically the 3rd year of the MD/MBA program).

This option does allow MD/MBA students the opportunity to fulfill the 4 week basic science elective required for medical school. Students should consult with their MD and MBA Academic Advisors to determine the best approach for completing the dual degree based on their academic background and individual plan of study.

- PUBH 604 Public Health Administration  
- PUBH 621 Management of Public Health Agencies  
- PUBH 622 Budget and Finance in Public Health  
- PUBH 635 Public Health Law  
- MGMT 6100 Leading Through Ethical Decision Making  
- HURM 6700 Human Resource Management  
- HURM 6710 Employment and Labor Law  
- EFSB 6590 New Venture Creation

**Master of Science in Accounting (M.S.A.)**

**Accounting Core Courses:**

- ACCT 6130 External Financial Reporting III (Spring; ACCT 4130 at the undergraduate level)  
- ACCT 6190 Contemporary Financial Accounting Problems (Fall)  
- ACCT 6210 Research in Accounting and Taxation (Spring)  
- ACCT 6310 Advanced Managerial Accounting (Spring)  
- ACCT 6420 Auditing (Summer and Fall; ACCT 4420 at the undergraduate level)
Accounting Electives (Select three):
- ACCT 6150 International Accounting and Taxation (Spring)
- ACCT 6220 Corporate Tax (Spring)
- ACCT 6320 Cost Analysis and Control
- ACCT 6410 Governmental and Not-for-Profit Accounting (Spring and Summer; ACCT 4410 at the undergraduate level)
- ACCT 6330 Advanced Topics in Accounting Info Systems (Spring)
- ACCT 6430 Business Valuation and Analysis (Fall)

Diversification Electives (Select two) (all courses offered every term):
- BUAD 6200 Financial Systems
- BUAD 6300 Strategic Marketing & Analysis
- BUAD 6400 Results Based Management
- BUAD 6500 International Business
- BUAD 6600 Supply Chain Management
- BUAD 6800 Information Technology & E-Business

If a student takes one of the courses above at the undergraduate level (specifically ACCT 4130, 4410 and 4420), these courses may not be taken at the graduate level. This does not reduce the number of credit hours or courses required to earn the MSA degree. The student will select a different option with the Accounting Department Chair and MSA Program Adviser. Other courses from the College of Business and Innovation (or, in the case of a JD/MSA student, a course from the College of Law) may also be approved for the three areas above, with good cause shown, by the Accounting Department Chair and MSA Program Adviser.

MSA Common Body of Knowledge
Based on the candidate’s prior course work, any or all of the MSA Common Body of Knowledge may be waived (each course is three semester hours):

If a student can demonstrate that he/she has completed equivalent course work at the undergraduate level prior to admission to the M.S.A. program and has earned a grade of C (2.0) or better in the course(s), the corresponding course below may be waived. Undergraduate equivalents are in parentheses:
- ACCT 5000 Financial and Managerial Accounting (BUAD 2040 or ACTG 1040; and BUAD 2050 or ACTG 1050)
- ACCT 3100 Financial Accounting and Systems
- ACCT 3110 External Financial Reporting I
- ACCT 3210 Individual Taxation
- ACCT 3310 Accounting Information Systems
- ACCT 5120 External Financial Reporting II (ACCT 4120)
- ACCT 5320 Internal Reporting (ACCT 4310)
- BANS 5210 Economics for Business Decisions (ECON 1150 and 1200)
- FINA 5310 Managerial Finance (BUAD 3040)
- OPMT 5510 Business Statistics with Computer Applications (BUAD 2060 or MATH 2600 or MATH 2630)

Doctor of Philosophy in Manufacturing and Technology Management (Ph.D.)

The purpose of the Ph.D. program is to train scholars to meet traditional standards of excellence in, and contribute to, the manufacturing and technology management field through research, teaching and publication in academic and professional journals. The program is designed for individuals who seek to contribute to the advancement and dissemination of knowledge in manufacturing and technology management through an integrative approach with sound foundations in business, technology, and research methodology. Graduates are expected to pursue careers in academia, consulting, research or manufacturing organizations.

The basic philosophy underlying the doctoral program is researchers in manufacturing and technology management require a careful and creative mix of functional management specialties, economics, technology, supply chain management, manufacturing, commercialization, and information technologies, and analytical tools such as statistics, optimization and research methodology. Therefore, the program is designed to provide students with abilities and skills to integrate and synthesize these diverse yet important related areas.
Prerequisites

One year of calculus
Statistics that include regression and analysis of variance
One academic term of computer systems with applications
Micro- and Macro-economics

Prerequisites should be completed before starting the Ph.D. program.

Business Foundation Courses (18 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 5000</td>
<td>Financial &amp; Managerial Accounting</td>
</tr>
<tr>
<td>MGMT 5110</td>
<td>Principles of Management</td>
</tr>
<tr>
<td>FINA 5310</td>
<td>Managerial Finance</td>
</tr>
<tr>
<td>MKTG 5410</td>
<td>Marketing Systems</td>
</tr>
<tr>
<td>OPMT 5520</td>
<td>Analysis of Manufacturing and Service Systems</td>
</tr>
</tbody>
</table>

Ph.D. Program Curriculum

Quantitative and Research Methods: (12 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFGM 8630</td>
<td>Management Science</td>
</tr>
<tr>
<td>MFGM 8860</td>
<td>Advanced Statistics</td>
</tr>
<tr>
<td>MFGM 8880</td>
<td>Research Methods and Theory Building</td>
</tr>
<tr>
<td>MFGM 8870</td>
<td>Seminar in Statistics/Research Method (or elective)</td>
</tr>
</tbody>
</table>

Major Field: Integrative Seminars: (20 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFGM 8480</td>
<td>Management of Technology</td>
</tr>
<tr>
<td>MFGM 8490</td>
<td>Supply Chain and E-Business Issues in Manufacturing</td>
</tr>
<tr>
<td>MFGM 8690</td>
<td>Innovation and Technology Commercialization</td>
</tr>
<tr>
<td>MFGM 8830</td>
<td>Org. Issues in the Implementation of Technology</td>
</tr>
<tr>
<td>MFGM 8890</td>
<td>Advanced Manufacturing System</td>
</tr>
<tr>
<td>MFGM 8980</td>
<td>Special Topics Seminar</td>
</tr>
<tr>
<td>MFGM 8810</td>
<td>Seminar/Colloquia</td>
</tr>
</tbody>
</table>

Minor Field: (12 hours)

Students can choose one of the following as a minor: operations, marketing and customer relationship management, human resources, international business, information systems. The minor will be a supporting field of three courses at the master’s (MBA) level, and a related advanced seminar with the objective of integrating the Manufacturing and Technology Management major field with developments in the minor field of interest.

Dissertation: MFGM 8990 (16 hours)

Dissertation Research

The dissertation must be based on work initiated and undertaken specifically for that purpose. It must reflect a high level of scholarship, must constitute a substantial piece of work, and must indicate and document its claim to be a significant contribution to knowledge in its subject area.

Details regarding the dissertation research, starting with the dissertation proposal and ending with the final defense, are available in the handbook for Ph.D. students, which is available on the Ph.D. website.