Management

This section presents the requirements for programs in:

- M.Sc. Management
- Ph.D. Management

Program Requirements

M.Sc. Management (5.0 credits)

Requirements (5.0 credits):

1. 1.5 credits in:

- BUSI 5980 [0.5] Foundations of Management Theory and Research
- BUSI 5981 [0.5] Statistics for Business Research
- BUSI 5982 [0.5] Research Methodology in Business

2. 0.5 credit from:

- BUSI 5983 [0.5] Qualitative Research Design
- BUSI 5984 [0.5] Quantitative Research Design

3. 1.0 credit from:

- BUSI 5080 [0.5] Seminar in Accounting I
- BUSI 5081 [0.5] Seminar in Accounting II
- BUSI 5180 [0.5] Seminar in Management I: Modern Organization Theory
- BUSI 5181 [0.5] Seminar in Management II: Current Topics in Organizational Behaviour
- BUSI 5280 [0.5] Seminar in Marketing I: Management and Strategy
- BUSI 5281 [0.5] Seminar in Marketing II: Consumer Behaviour
- BUSI 5380 [0.5] Seminar in Management of Production/Operations I: Strategic Management of Production Systems
- BUSI 5381 [0.5] Seminar in Management of Production/Operations II: Production/Technology/Strategy Interface
- BUSI 5383 [0.5] Systems Optimization: Methods and Models
- BUSI 5480 [0.5] Seminar in Information Systems I: Research Issues
- BUSI 5481 [0.5] Seminar in Information Systems II: Current Trends
- BUSI 5580 [0.5] Seminar in Finance I: Topical Issues in Investments
- BUSI 5581 [0.5] Seminar in Finance II: Theories and Empirical Methods in Corporate Finance
- BUSI 5780 [0.5] Seminar in International Business I: International Markets and Strategy
- BUSI 5781 [0.5] Seminar in International Business II: Managing in a Global Environment

or elective courses taken with the permission of the Director of the Graduate Research Program

4. Completion of the Research Tutorial

5. 2.0 credits in:


Total Credits 5.0

Research Tutorial

Students working with their supervisors will identify appropriate research topics and questions and will be mentored on how to conduct their thesis research. Research seminar attendance and participation are required.

Thesis

BUSI 5989 [2.0] M.Sc. Thesis is equivalent to 2.0 credits and should relate to issues consistent with the general focus of the M.Sc. program. The thesis must represent the results of the candidate’s independent research undertaken after being admitted to graduate studies at Carleton University’s Sprott School of Business. Previous work of the candidate may be used only as introductory or background material for the thesis.

A candidate may carry on research work related to the thesis off-campus, provided that the work is approved in advance and arrangements have been made for regular supervision of research thesis activities with the Director of Graduate Research Programs.

All students require the Sprott School’s approval for their research topic.

Each candidate submitting a thesis will be required to pass an oral examination on the subject of the thesis.

Transfer from the Master’s to the Ph.D. Program

Students enrolled full-time in the M.Sc. in Management program at Carleton University may be permitted to transfer into the Ph.D. program without completing the master’s program, provided they meet the following conditions:

- Completion of 2.5 credits of master’s courses with a minimum average of A
- Have demonstrated exceptional research potential
- Make a formal application for admission to the Ph.D. program no later than the third term of initial registration in the M.Sc. program
- Have permission of the Director of Graduate Research Programs.

Ph.D. Management (10.0 credits)

This degree can be pursued on a full-time or part-time basis.

Requirements:

1. 1.5 credits in research and analysis methods
2. 1.5 credits in seminar courses in functional areas of business, including at least one two-course sequence
3. 1.5 credits from a selection of course electives approved by the thesis supervisor or mentor
4. Presentation and oral defence of the thesis proposal
5. 5.0 credits in a Thesis, which must be defended at an oral examination
6. One written and one oral comprehensive examination
7. Participation in the Sprott School of Business research seminar series
8. Participation in the Sprott School of Business teaching seminar series

9. Classroom teaching or equivalent research supported seminar delivery to professional audiences

| Total Credits | 10.0 |

**Specific course requirements**

All students in the doctoral program are required to complete the following courses successfully:

1. 1.5 credits (BUSI 6902 and BUSI 6905 are mandatory) in:

   - BUSI 6902 [0.5] Research Methodology in Business
   - BUSI 6903 [0.5] Qualitative Research Design
   - BUSI 6904 [0.5] Quantitative Research Design
   - BUSI 6905 [0.5] Advanced Statistical Methods for Business Research

2. 1.5 credits in seminars including at least one two-course sequence, from the following doctoral seminar courses:

   - BUSI 6000 [0.5] Seminar in Accounting I & BUSI 6001 [0.5] Seminar in Accounting II
   - BUSI 6100 [0.5] Seminar in Management I: Modern Organization Theory & BUSI 6101 [0.5] Seminar in Management II: Current Topics in Organizational Behaviour
   - BUSI 6103 [0.5] Seminar in Strategic Management
   - BUSI 6200 [0.5] Seminar in Marketing I: Management and Strategy & BUSI 6201 [0.5] Seminar in Marketing II: Consumer Behaviour
   - BUSI 6300 [0.5] Seminar in Management of Production/Operations I: Strategic Management of Production Systems & BUSI 6301 [0.5] Seminar in Management of Production/Operations II: Production/Technology/Strategy Interface
   - BUSI 6400 [0.5] Seminar in Information Systems I: Research Issues & BUSI 6401 [0.5] Seminar in Information Systems II: Current Trends
   - BUSI 6500 [0.5] Seminar in Finance I: Topical issues in Investments & BUSI 6501 [0.5] Seminar in Finance II: Theories and Empirical Methods in Corporate Finance
   - BUSI 6600 [0.5] Entrepreneurship
   - BUSI 6700 [0.5] Seminar in International Business I: International Markets and Strategy & BUSI 6705 [0.5] Seminar in International Business II: Managing in a Global Environment

3. The remaining 1.5 credits will be electives that are chosen with the approval of the thesis supervisor to assist in the thesis research process. Courses may be chosen from the list below, from the lists above or from outside the School in a supporting discipline with permission.

   - BUSI 6009 [0.5] Special Topics in Accounting
   - BUSI 6104 [0.5] Managing the Change Process
   - BUSI 6105 [0.5] Women in Management
   - BUSI 6109 [0.5] Special Topics in Management
   - BUSI 6209 [0.5] Special Topics in Marketing
   - BUSI 6303 [0.5] Systems Optimization: Methods and Models
   - BUSI 6304 [0.5] Management of Innovation and Technology
   - BUSI 6306 [0.5] Advanced Methods and Models of Management Science
   - BUSI 6309 [0.5] Special Topics in Operations Management
   - BUSI 6409 [0.5] Special Topics in Information Systems
   - BUSI 6509 [0.5] Special Topics in Finance
   - BUSI 6709 [0.5] Special Topics in International Business
   - BUSI 6900 [0.5] Directed Readings
   - BUSI 6901 [0.5] Special Topics

4. 0.5 credits in:

   - BUSI 6907 [0.5] Ph.D. Thesis Tutorial

**Directed Reading:** a student may, with the approval of his or her thesis supervisor, take up to two directed readings courses (BUSI 6900 Directed Readings). These courses should relate directly to the student's thesis work.

**Comprehensive Examinations**

All Ph.D. candidates are required to successfully complete a comprehensive examination. The examination will cover material relating to the student's area of specialization, research methodology associated with that area, and seminal and important works in the management field. Questions for the examination will be set by the student's comprehensive examination committee. The comprehensive examination will take place over a period of two to three weeks and will consist of a written and an oral part.

The comprehensive examinations must be completed successfully before the Ph.D. proposal defense is scheduled. Under normal circumstances, the written comprehensive and the oral defense must occur within eight terms of a full-time student's initial registration in the Ph.D. program. Part-time students should complete the comprehensives within sixteen terms of initial registration in the Ph.D. program. Students who do not fulfill this requirement will be asked to withdraw from the program.

**Thesis**

All Ph.D. candidates are required to complete successfully a thesis normally equivalent to a minimum of 5.0 credits on a topic approved by the School. Students with appropriate background will be reviewed for possible adjustment of thesis weight.

**Regulations**

See the General Regulations section of this Calendar.

**Academic Standing**

A grade of B- or higher is normally required in each credit counted towards the degree. However, a candidate may, with the recommendation of the School and the approval of the Dean of the Faculty of Graduate and Postdoctoral Affairs, be allowed to count a grade of C+ in 0.5 credit.

Withdrawal from the program will be required if an M.Sc. student:
• Receives a grade of lower than B- in 1.0 credit or more, or
• Fails to achieve a weighted GPA of 7.0 after completing 2.0 credits of study, or to maintain it, or
• Receives a grade lower than C+ in the same course more than once.

M.Sc. Management
Admission into the M.Sc. in Management program will be judged primarily on the applicant’s potential to undertake research successfully and his/her prospects for completion of the program. Applicants will submit a research proposal statement on applying to the program.

The normal requirement for admission to the master’s program in management is an Honours Bachelor of Commerce degree (or equivalent, e.g. 4-year Commerce, Bachelor of Business Administration or similar degrees) with at least a B+ average. Applicants who do not meet the normal requirements for admission may be required to complete additional courses, extra to the normal program requirements.

All applicants to the program are required to submit a GMAT (Graduate Management Admission Test) score with a minimum of 600 or an equivalent GRE (Graduate Record Exam) score. To calculate the equivalent GRE score, applicants can use the GRE Comparison Table for Business Schools.

Transfer from the Master’s to the Ph.D. Program
Students enrolled full-time in the M.Sc. in Management program at Carleton University may be permitted to transfer into the Ph.D. program without completing the master’s program, provided they meet the following conditions:

• Completion of 2.5 credits of master’s courses with a minimum average of A
• Have demonstrated exceptional research potential
• Make a formal application for admission to the Ph.D. program no later than the third term of initial registration in the M.Sc. program
• Have permission of the Director of Graduate Research Programs.

Regulations - PhD
See the General Regulations section of this Calendar.

Academic Standing: doctoral students must normally obtain a grade of B- or better in each credit, and Satisfactory on the comprehensive examinations, the Ph.D. thesis and its oral defence.

Ph.D. Management
Admission into the Ph.D. Management program will be judged primarily on the applicant’s ability to undertake research successfully and his/her prospects for completion of the program.

The normal requirement for admission to the doctoral program in management is a master’s degree (or equivalent) in business or a related field with an A-average and a bachelor’s degree. A number of years of work experience is desirable.

A student enrolled in a research-based master's program in business who has completed a minimum of 2.5 credits and who has shown outstanding academic performance and research promise may be admitted to the Ph.D. program without completing the master’s program. Normal Ph.D. program requirements, as stated below, will apply. Each case will be considered on an individual basis for advanced standing in the Ph.D. program. Advanced standing will be considered for a maximum of 1.5 credits.

Applicants who have completed a thesis-based master’s program in business or a related area may have their program requirements adjusted at the time of admission, as set out below.

All Ph.D. candidates, regardless of their previous field of specialization, are expected to have or to acquire a basic knowledge of statistics and at least two of the following areas of management: accounting, finance, information systems, international business, management science, marketing, organizational behaviour, and productions/operations management. Students will be admitted to the program with a course of study designed where appropriate to supplement previous education, experience, and training.

Graduate Management Admission Test (GMAT) - the School requires that all applicants submit scores obtained in the Graduate Management Admission Test (GMAT) offered by the Graduate Management Admission Council (GMAC). Successful candidates will normally have a GMAT score of at least 600. Equivalent GRE scores (as defined by the Educational Testing Service) may be considered.

All applicants whose first language is not English must be tested for proficiency in the English language. See Section 3.6 of the General Regulations section of this Calendar for details.

Transfer from the Master’s to the Ph.D. Program
Students enrolled full-time in the M.Sc. in Management program at Carleton University may be permitted to transfer into the Ph.D. program without completing the master’s program, provided they meet the following conditions:

• Completion of 2.5 credits of master’s courses with a minimum average of A
• Have demonstrated exceptional research potential
• Make a formal application for admission to the Ph.D. program no later than the third term of initial registration in the M.Sc. program
• Have permission of the Director of Graduate Research Programs.
**Business (BUSI) Courses**

**BUSI 5080 [0.5 credit]**
Seminar in Accounting I

**BUSI 5081 [0.5 credit]**
Seminar in Accounting II
Research methods, theory and practice in reporting, performance measurement, control, risk management and governance.

**BUSI 5106 [0.25 credit]**
Business Case Analysis and Presentations
Introduction to, and practical application of, the methods and tools of rigorous business case analysis and the design of strategic responses, including the preparation and delivery of presentations designed to convince decision makers of the validity of the analysis and strategic response.
Includes: Experiential Learning Activity

**BUSI 5108 [0.25 credit]**
Sustainable Business Development
Includes: Experiential Learning Activity

**BUSI 5180 [0.5 credit]**
Seminar in Management I: Modern Organization Theory
The development of post-structuralist organization theory is examined. Theories of organizational culture and symbolism, political theories of organization, ethnomethodological, decision-based and population ecology approaches are investigated. The social, economic, and intellectual forces shaping organization theory provides a major focus.
Also offered, with different requirements, as BUSI 6100, for which additional credit is precluded.

**BUSI 5181 [0.5 credit]**
Seminar in Management II: Current Topics in Organizational Behaviour
Current topics and debates in the research on organizational behaviour. Potential topics include motivation, learning, communication, decision-making, small group behaviour, leadership, careers, power and conflict.
Also offered, with different requirements, as BUSI 6101, for which additional credit is precluded.

**BUSI 5280 [0.5 credit]**
Seminar in Marketing I: Management and Strategy
Marketing theory, history, and developments through the analysis, synthesis, and extension of theoretical and empirical papers on marketing management and strategy including all aspects of the marketing mix plus alliances, competitive advantage, global marketing strategies and segmenting, targeting and positioning.
Also offered, with different requirements, as BUSI 6200, for which additional credit is precluded.

**BUSI 5281 [0.5 credit]**
Seminar in Marketing II: Consumer Behaviour
Consumer decision making theory and practice including information processing, behavioural decision theory and consumer culture theory perspectives.
Also offered, with different requirements, as BUSI 6201, for which additional credit is precluded.

**BUSI 5380 [0.5 credit]**
Seminar in Management of Production/Operations I: Strategic Management of Production Systems
Developing a firm's strategies with respect to facilities, locations, technologies, vertical integration and sourcing arrangements. Recent developments in management policies and practices that enable production systems to excel and grow in the era of innovation-, cost-, time- and quality-based competition.
Also offered, with different requirements, as BUSI 6300, for which additional credit is precluded.

**BUSI 5381 [0.5 credit]**
Seminar in Management of Production/Operations II: Production/Technology/Strategy Interface
The evolution and management of process innovation; management of productivity and sustainability using process technologies; integration of production strategy and technology; and supply chain interactions with development chain. Topics include process re-engineering, quality function deployment, supply chain restructuring and the deployment of process innovations.
Also offered, with different requirements, as BUSI 6301, for which additional credit is precluded.

**BUSI 5383 [0.5 credit]**
Systems Optimization: Methods and Models
Management science approaches in modeling systems for decision-making under certainty and uncertainty. Linear programming, network flow problems and applications, discrete optimization models, heuristics and metaheuristics, dynamic programming, nonlinear programming, simulation. Links between theory and application will be illustrated through case studies and applied modeling.
Includes: Experiential Learning Activity
Also offered, with different requirements, as BUSI 6303, for which additional credit is precluded.
BUSI 5480 [0.5 credit]
Seminar in Information Systems I: Research Issues
Research themes, approaches, and methods prevalent in the Information Systems area. Students will engage in examining research issues in IS and perform critical analyses of the research methodologies used to investigate and report on them.
Includes: Experiential Learning Activity
Also offered, with different requirements, as BUSI 6400, for which additional credit is precluded.

BUSI 5481 [0.5 credit]
Seminar in Information Systems II: Current Trends
Theory and practice in current information systems research.
Also offered, with different requirements, as BUSI 6401, for which additional credit is precluded.

BUSI 5580 [0.5 credit]
Seminar in Finance I: Topical Issues in Investments
Selected topics in financial theory. Topics chosen according to new developments in theory and with the interests of the students in mind and may include theory of derivatives, pricing theory, information asymmetries, agency theory, economic efficiency, and empirical methods.
Also offered, with different requirements, as BUSI 6500, for which additional credit is precluded.

BUSI 5581 [0.5 credit]
Seminar in Finance II: Theories and Empirical Methods in Corporate Finance
Foundations for empirical research methodologies used in selected papers in finance; informational issues and their impact on capital market efficiency; economics of mergers and acquisitions, dividend and information; and emerging areas in finance such as market failures, corporate governance, financial crisis, and behavioural finance.
Also offered, with different requirements, as BUSI 6501, for which additional credit is precluded.

BUSI 5801 [0.25 credit]
Statistics for Managers
Precludes additional credit for BUSI 5904.

BUSI 5802 [0.25 credit]
Business Ethics
Impact of corporate decisions on society. Models and standards of business ethics and corporate social responsibility (CSR). Methods of measuring and reporting. The rise of corporate power, stakeholder analysis, corporate governance, sustainability, national and international pressures on CSR.

BUSI 5900 [0.5 credit]
Tutorials/Directed Studies in Business
Tutorials or directed readings in selected areas of business, involving presentation of papers as the basis for discussion with the tutor.
Prerequisite(s): GPA of 10.0 or higher and permission of the School.

BUSI 5905 [0.5 credit]
Special Topics
At the discretion of the School, a course dealing with selected topics of interest to students in the MBA Program. Topics will vary from year to year, and will be announced in advance of the registration period.
Prerequisite(s): Permission of the School.

BUSI 5906 [0.25 credit]
Special Topics
At the discretion of the School, a course dealing with selected topics of interest to students in the MBA Program. Topics will vary from year to year, and will be announced in advance of the registration period.
Prerequisite(s): permission of the School.
BUSI 5907 [0.5 credit]
M.B.A. Thesis Tutorial
A seminar designed to help the student formulate and evaluate specific research topics. The successful submission of a thesis proposal is necessary for the completion of the course.
Prerequisite(s): admission to the program prior to the fall term of 2008 and permission of the M.B.A. Program Director.

BUSI 5908 [1.0 credit]
M.B.A. Research Project
Includes: Experiential Learning Activity
Prerequisite(s): admission to the program prior to the fall term of 2008 and permission of the M.B.A. Program Director.

BUSI 5909 [1.5 credit]
M.B.A. Thesis Research
Includes: Experiential Learning Activity
Prerequisite(s): BUSI 5907 and admission to the program prior to the fall term of 2008 and permission of the M.B.A. Program Director.

BUSI 5980 [0.5 credit]
Foundations of Management Theory and Research
Exploration of seminal and foundational works in management theory and research. Review of the foundational thinking of scholars that influenced and shaped the management discipline.

BUSI 5981 [0.5 credit]
Statistics for Business Research
In-depth examination and critique of statistical inference. Linear regression. Statistical computing software will be used.

BUSI 5982 [0.5 credit]
Research Methodology in Business
The study of research techniques commonly used in research on business and management issues. The development of knowledge of these methodologies and their application, and their possible use in the thesis research of the student.
Also offered, with different requirements, as BUSI 6902, for which additional credit is precluded.

BUSI 5983 [0.5 credit]
Qualitative Research Design
The use of qualitative data in business research. Discussion of research design, data collection, analysis and interpretation techniques; overview of philosophy of science debates regarding epistemological and ontological stance, with practical experience.
Includes: Experiential Learning Activity
Prerequisite(s): BUSI 5982.
Also offered, with different requirements, as BUSI 6903, for which additional credit is precluded.

BUSI 5984 [0.5 credit]
Quantitative Research Design
In-depth study of theories and assumptions of quantitative research design methodologies in management; exploration of alternative research designs; conceptual understanding and application of statistical methods for data analysis; critique of research from a variety of practice settings applying quantitative design methods; design a research project.
Includes: Experiential Learning Activity
Prerequisite(s): BUSI 5982.
Also offered, with different requirements, as BUSI 6904, for which additional credit is precluded.

BUSI 5989 [2.0 credits]
M.Sc. Thesis
Includes: Experiential Learning Activity

BUSI 5992 [0.25 credit]
Tutorials/Directed Studies in Business
Tutorials or directed readings in selected areas of business, involving presentation of papers as the basis for discussion with the tutor.
Includes: Experiential Learning Activity
Prerequisite(s): permission of the School of Business.

BUSI 5998 [0.0 credit]
MBA Skills Workshop
Provides preparation for the MBA program, as well as professional and career development. The course is graded SAT/UNSAT based on attendance and engagement.
Includes: Experiential Learning Activity

BUSI 5999 [1.0 credit]
Internship
A degree requirement for students with less than two years of relevant experience within a professional environment. Focus on the application of MBA course knowledge and building management skills in a business environment.
Includes: Experiential Learning Activity
Prerequisite(s): successful completion of two academic terms; subject to approval by the MBA Office.
Minimum 480 hours.

BUSI 6000 [0.5 credit]
Seminar in Accounting I
Also offered, with different requirements, as BUSI 5080, for which additional credit is precluded.

BUSI 6001 [0.5 credit]
Seminar in Accounting II
Research methods, theory and practice in reporting, performance measurement, control, risk management and governance.
Also offered, with different requirements, as BUSI 5081, for which additional credit is precluded.
BUSI 6009 [0.5 credit]
Special Topics in Accounting
Designed to expose students to new and emerging issues in selected areas of accounting research. The topics covered vary from year to year according to varied research expertise among the area faculty.
Prerequisite(s): permission of the School.

BUSI 6100 [0.5 credit]
Seminar in Management I: Modern Organization Theory
The development of post-structuralist organization theory is examined. Theories of organizational culture and symbolism, political theories of organization, ethnomethodological, decision-based and population ecology approaches are investigated. The social, economic, and intellectual forces shaping organization theory provides a major focus.
Also offered, with different requirements, as BUSI 5180, for which additional credit is precluded.

BUSI 6101 [0.5 credit]
Seminar in Management II: Current Topics in Organizational Behaviour
Current topics and debates in the research on organizational behaviour. Potential topics include motivation, learning, communication, decision-making, small group behaviour, leadership, careers, power and conflict.
Also offered, with different requirements, as BUSI 5181, for which additional credit is precluded.

BUSI 6103 [0.5 credit]
Seminar in Strategic Management
Current topics and debates in the research on strategic management, sustainable business development and corporate governance. Foundational theories to be reviewed may include agency, institutional, network, resource-based view, resource dependence, stakeholder, stewardship and transaction cost economics theories.
Precludes additional credit for BUSI 6803 (no longer offered).

BUSI 6104 [0.5 credit]
Managing the Change Process
The process of organizational change and the external forces which drive such changes. Topics include both micro and macro theories of change and issues around change management such as leadership and resistance to change.
Precludes additional credit for BUSI 6704 (no longer offered).

BUSI 6105 [0.5 credit]
Women in Management
An exploration of the research and organizational challenges arising from changing gender roles. Topics include: the sex segregation of work, gender differences in management styles, work-family conflict, women's careers, managing sexual harassment, employment equity and pay equity.
Precludes additional credit for BUSI 6802 (no longer offered).

BUSI 6109 [0.5 credit]
Special Topics in Management
Designed to expose students to new and emerging issues in selected areas of management research. The topics covered vary from year to year according to varied research expertise among the area faculty.
Prerequisite(s): permission of the School.

BUSI 6200 [0.5 credit]
Seminar in Marketing I: Management and Strategy
Marketing theory, history, and developments through the analysis, synthesis, and extension of theoretical and empirical papers on marketing management and strategy including all aspects of the marketing mix plus alliances, competitive advantage, global marketing strategies and segmenting, targeting and positioning.
Also offered, with different requirements, as BUSI 5280, for which additional credit is precluded.

BUSI 6201 [0.5 credit]
Seminar in Marketing II: Consumer Behaviour
Consumer decision making theory and practice including information processing, behavioural decision theory and consumer culture theory perspectives.
Also offered, with different requirements, as BUSI 5281, for which additional credit is precluded.

BUSI 6209 [0.5 credit]
Special Topics in Marketing
Designed to expose students to new and emerging issues in selected areas of marketing research. The topics covered vary from year to year according to varied research expertise among the area faculty.
Prerequisite(s): permission of the School.

BUSI 6300 [0.5 credit]
Seminar in Management of Production/Operations I: Strategic Management of Production Systems
Developing a firm's strategies with respect to facilities, locations, technologies, vertical integration and sourcing arrangements. Recent developments in management policies and practices that enable production systems to excel and grow in the era of innovation-, cost-, time- and quality-based competition.
Also offered, with different requirements, as BUSI 5380, for which additional credit is precluded.
BUSI 6301 [0.5 credit]  
Seminar in Management of Production/Operations II: Production/Technology/Strategy Interface  
The evolution and management of process innovation; management of productivity and sustainability using process technologies; integration of production strategy and technology; and supply chain interactions with development chain. Topics include process reengineering, quality function deployment, supply chain restructuring and the deployment of process innovations. Also offered, with different requirements, as BUSI 5381, for which additional credit is precluded.

BUSI 6303 [0.5 credit]  
Systems Optimization: Methods and Models  
Management science approaches in modeling systems for decision-making under certainty and uncertainty. Linear programming, network flows problems and applications, discrete optimization models, heuristics and metaheuristics, dynamic programming, nonlinear programming, simulation. Links between theory and application will be illustrated through case studies and applied modeling. Includes: Experiential Learning Activity  
Precludes additional credit for BUSI 6703.  
Prerequisite(s): permission of the School.  
Also offered, with different requirements, as BUSI 5383, for which additional credit is precluded.

BUSI 6304 [0.5 credit]  
Management of Innovation and Technology  
Introduction to issues in the management of technology. Topics include: technology strategy and policy, technology forecasting and planning, the process of technology innovation from concept to market, research and development management, technology adoption, diffusion and implementation, technology transfer, and technology and social issues.  
Precludes additional credit for BUSI 6801 (no longer offered).

BUSI 6306 [0.5 credit]  
Advanced Methods and Models of Management Science  
Advanced study of decision-making under certainty and uncertainty. Preprocessing and reformulation methods, optimization theory for large scale problems; stochastic programming; metaheuristics; multicriteria analysis; simulation. Links between theory and application will be illustrated through case studies and applied modeling. Includes: Experiential Learning Activity  
Precludes additional credit for BUSI 6906 (no longer offered).  
Prerequisite(s): BUSI 6303 or permission of the School.

BUSI 6309 [0.5 credit]  
Special Topics in Operations Management  
Designed to expose students to new and emerging issues in selected areas of operations management research. The topics covered vary from year to year according to varied research expertise among the area faculty. Includes: Experiential Learning Activity  
Prerequisite(s): permission of the School.

BUSI 6400 [0.5 credit]  
Seminar in Information Systems I: Research Issues  
Research themes, approaches, and methods prevalent in the Information Systems area. Students will engage in examining research issues in IS and perform critical analyses of the research methodologies used to investigate and report on them. Also offered, with different requirements, as BUSI 5480, for which additional credit is precluded.

BUSI 6401 [0.5 credit]  
Seminar in Information Systems II: Current Trends  
Theory and practice in current information systems research.  
Also offered, with different requirements, as BUSI 5481, for which additional credit is precluded.

BUSI 6409 [0.5 credit]  
Special Topics in Information Systems  
Designed to expose students to new and emerging issues in selected areas of information systems research. The topics covered vary from year to year according to varied research expertise among the area faculty.  
Prerequisite(s): permission of the School.

BUSI 6500 [0.5 credit]  
Seminar in Finance I: Topical issues in Investments  
Selected topics in financial theory. Topics chosen according to new developments in theory and with the interests of the students in mind and may include theory of derivatives, pricing theory, information asymmetries, agency theory, economic efficiency, and empirical methods.  
Prerequisite(s): graduate-level finance courses or permission of the School.  
Also offered, with different requirements, as BUSI 5580, for which additional credit is precluded.

BUSI 6501 [0.5 credit]  
Seminar in Finance II: Theories and Empirical Methods in Corporate Finance  
Foundations for empirical research methodologies used in selected papers in finance; informational issues and their impact on capital market efficiency; economics of mergers and acquisitions, dividend and information; and emerging areas in finance such as market failures, corporate governance, financial crisis, and behavioural finance.  
Prerequisite(s): graduate-level finance courses or permission of the School.  
Also offered, with different requirements, as BUSI 5581, for which additional credit is precluded.
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<tr>
<th>Course Code</th>
<th>Title</th>
<th>Description</th>
<th>Prerequisite(s)</th>
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<tr>
<td>BUSI 6509</td>
<td>Special Topics in Finance</td>
<td>Designed to expose students to new and emerging issues in selected areas of finance research. The topics covered vary from year to year according to varied research expertise among the area faculty. Prerequisite(s): permission of the School.</td>
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<tr>
<td>BUSI 6600</td>
<td>Entrepreneurship</td>
<td>An examination of research in entrepreneurship focusing on theory building and empirical testing of factors that shapes the identification, evaluation and exploitation of opportunities and the creation of new organizations. Precludes additional credit for BUSI 6806 (no longer offered).</td>
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<tr>
<td>BUSI 6700</td>
<td>Seminar in International Business I: International Markets and Strategy</td>
<td>An advanced examination of contemporary theory on the international expansion of the firm: Globalization, trade and investment flows, trade blocs, and free trade zones; consumers and culture; key actors in global markets; sequential internationalization, expansion modes, and location theory; strategy by firm size. Precludes additional credit for BUSI 6804 (no longer offered). Also offered, with different requirements, as BUSI 5780, for which additional credit is precluded.</td>
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<tr>
<td>BUSI 6705</td>
<td>Seminar in International Business II: Managing in a Global Environment</td>
<td>The role of culture, cognition, and behaviour as it relates to management theory and practices. Issues related to globalization, technology, and workplace diversity are explored through an investigation of cultural theories and their implications for cognition, behaviour, and management. Also offered, with different requirements, as BUSI 5781, for which additional credit is precluded.</td>
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<tr>
<td>BUSI 6709</td>
<td>Special Topics in International Business</td>
<td>Designed to expose students to new and emerging issues in selected areas of international business research. The topics covered vary from year to year according to varied research expertise among the area faculty. Prerequisite(s): permission of the School.</td>
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<tr>
<td>BUSI 6900</td>
<td>Directed Readings</td>
<td>Directed readings in selected areas of business, involving presentation of papers as the basis for discussion. A part of the requirement for the course may be participation in an advanced course at the undergraduate/graduate level. Prerequisite(s): permission of the School.</td>
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<tr>
<td>BUSI 6901</td>
<td>Special Topics</td>
<td>Designed to expose students to new and emerging issues in selected areas of business research. Integrative problems involving two or more areas of business research are also explored. The topics covered may vary from year to year. Prerequisite(s): permission of the School.</td>
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<tr>
<td>BUSI 6902</td>
<td>Research Methodology in Business</td>
<td>Research techniques commonly used in research on business and management issues. The development of knowledge of these methodologies and their application, and their possible use in the thesis research of the student. Also offered, with different requirements, as BUSI 5982, for which additional credit is precluded.</td>
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<tr>
<td>BUSI 6903</td>
<td>Qualitative Research Design</td>
<td>The use of qualitative data in business research. Discussion of research design, data collection, analysis and interpretation techniques; overview of philosophy of science debates regarding epistemological and ontological stance; with practical experience. Includes: Experiential Learning Activity Prerequisite(s): BUSI 6902. Also offered, with different requirements, as BUSI 5983, for which additional credit is precluded.</td>
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<tr>
<td>BUSI 6904</td>
<td>Quantitative Research Design</td>
<td>In-depth study of theories and assumptions of quantitative research design methodologies in management; exploration of alternative research designs; conceptual understanding and application of statistical methods for data analysis; critique of research from a variety of practice settings applying quantitative design methods; design a research project. Includes: Experiential Learning Activity Prerequisite(s): BUSI 6902. Also offered, with different requirements, as BUSI 5984, for which additional credit is precluded.</td>
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<tr>
<td>BUSI 6905</td>
<td>Advanced Statistical Methods for Business Research</td>
<td>A practical introduction to advanced statistical methods used in business research, with particular focus on discrete categorical data. Topics include the analysis of two-way and three-way tables; loglinear modeling; logistic regression; generalized linear models. Students will analyze real data using appropriate software packages. Includes: Experiential Learning Activity</td>
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<tr>
<td>BUSI 6907</td>
<td>Ph.D. Thesis Tutorial</td>
<td>An intensive preparation for Ph.D. thesis research, under the direction of one or more members of the School. The successful submission of a thesis proposal is necessary for the completion of the course.</td>
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BUSI 6908 [0.0 credit]
Ph.D. Comprehensives
Preparation for comprehensive examinations.

BUSI 6909 [5.0 credits]
Ph.D. Thesis
Includes: Experiential Learning Activity

**Summer session:** some of the courses listed in this Calendar are offered during the summer. Hours and scheduling for summer session courses will differ significantly from those reported in the fall/winter Calendar. To determine the scheduling and hours for summer session classes, consult the class schedule at central.carleton.ca

Not all courses listed are offered in a given year. For an up-to-date statement of course offerings for the current session and to determine the term of offering, consult the class schedule at central.carleton.ca