Suliman S. Olayan
School of Business (OSB)
Suliman S. Olayan School of Business (OSB)

Officers of the School

Peter F. Dorman  President of the University
Ahmad Dallal  Provost, ex-officio
George K. Najjar  Dean
Assem Safieddine  Associate Dean for Academic Programs and Faculty Affairs
Ibrahim Osman  Associate Dean for Research
Karim Rebeiz  Assistant Dean for Student Services (Acting)
Mohamad Zeidan  Assistant Dean for Corporate Programs
Moueen Salameh  Registrar, ex-officio
Salim Kanaan  Director of Admissions, ex-officio
Lokman Meho  University Librarian, ex-officio

Professional Staff

Soughit Abdelnour  Internship and Placement Officer
Bijan Azad  Co-Director of Innovation Management and Entrepreneurship
Hala Azar  Assistant to the Dean
Antoine Feghali  Director of Corporate Relations, and Co-Director for Innovation Management and Entrepreneurship
Carla Sayegh Hilton  Director of Continuous Improvement
Fida Kanaan  Director of Executive Education
Rula Karam  EMBA Officer
Elias Khater  Institutional Research Officer
Nada Khalidy Kouzi  Executive Officer
Antoine Sabbagh  Director of Student Services and Alumni Relations
Maya El Helou Shaib  Senior Graduate Program Officer

Program Directors

Salim Chahine  Director of the MBA Program
Riad Dimechkie  Director of the Executive MBA Program

International Board of Overseers

HE Sheikh Salem Al Subah  Governor, Central Bank of Kuwait/Kuwait
Ali Fekrat  Professor Emeritus, McDonough School of Business, Georgetown University/Washington, DC, USA
Yash Gupta  Dean, John Hopkins Carey Business School/Baltimore, USA
Gabriel Hawawini  Former Dean, INSEAD/India
Samuel Hayes  Jacob H. Schiff Professor of Investment Banking, Emeritus, Harvard Business School/Boston, Massachusetts, USA
Erik Hoffmeyer  Former Governor, National Bank of Denmark/Copenhagen, Denmark
Abdallah Jumah  Former CEO and President, Saudi Arabian Oil Company/ Dhahran, Saudi Arabia
HE Najib Mikati  Trustee and Prime Minister of Lebanon
Jacques Nasser  Managing Director, Equity One Partners/New York, USA
Khaled Olayan  CEO, The Olayan Group/Al Khobar, Saudi Arabia
Sir Geoffrey Owen  Former Editor, Financial Times, Lecturer, LSE/London, UK
Richard Schmalensee  Howard W. Johnson Professor of Management, Sloan School of Management, MIT/Cambridge, Massachusetts, USA
Peter Wodtke  Businessman/Washington Connecticut, USA

Middle East Advisory Board

Yousef Abu Khadra  Former Member, Invest Corporation International Ltd./London, UK
Diraar Alghanim  President, Alghanim International Corporation/Kuwait
H.E. Badr Al-Humaidhi  Former Minister of Finance/Al Safat, Kuwait
Rachid Al Miraj  Governor, Central Bank of Bahrain/Bahrain
Sabah Almoayyed  General Manager, The Housing Bank/Manama, Bahrain
Faysal Al Mutawa  Vice President/Managing Director, Abdel Wahab Sons/Kuwait
Saad Azhari  Vice Chairman and General Manager, BLOM Bank/Beirut, Lebanon
Nabil Bustross  Chairman and CEO, Midis Group Ltd/Beirut, Lebanon
Said Darwazah  CEO, Hikma Pharmaceuticals/Amman, Jordan
Fawzi Farah  CEO, Corporate Finance House/Beirut, Lebanon
Nehmat Frem  General Manager, INDEVCO/Beirut, Lebanon
Fadi Ghandour  President/CEO, ARAMEX/Amman, Jordan
Abdel Hamid Hallab  Special Adviser to the President, AUB/Beirut, Lebanon
Marwan Kheireddine  General Manager, Al-Mawarid Bank/Beirut, Lebanon
Usama Mikdashi  Central Bank/Beirut, Lebanon
Murad A. Murad  Chairman of the Board, Bank of Bahrain and Kuwait/Manama, Bahrain
Hisham Abdelrazzaq Al Razouki  Chief Executive Officer and General Manager, Gulf Investment Corporation/Kuwait
Nehmeh Sabbagh  Executive General Manager, Arab Bank/Amman, Jordan
Constantin Salameh  COO, Private Investment/Ah Nahyan Family/Abu Dhabi, UAE
Elia Samaha  General Manager/Head of Regional Expansion, Audi-Saradar Group/Beirut, Lebanon
Talal Shair  Chairman/CEO, Dar Al Handasah/Shair and Partners/Amman, Jordan
Antoine Wakim  Chairman/CEO, Société Nationale d’Assurance/Beirut, Lebanon
The Finance, Accounting, and Managerial Economics Track

Convener: Samer Khalil
Professors: Chahine, Salim; Safieddine, Assem
Visiting Associate Professor El-Jahel, Lina
Assistant Professors: Dbouk, Wassim; Ghanem, Abdel Jalil; Hossari, Ghassan; Jamali, Ibrahim; Khalil, Samer; Manassian, Armond; Mazboudi, Mohamad; McNamara, Steven; Rkein, Ali; Saade, Samer; Safar, Walid; Termos, Ali
Instructors: El-Hajj, Sana; Hout, Bassima; Tannir-Fawaz, Lina; Uwaydah-Mardini, Rania

The Management, Marketing, and Entrepreneurship Track

Convener: Jamali, Dima
Professors: Jamali, Dima; Najjar, George K.
Associate Professors: Rebeiz, Karim; Sidani, Yusuf
Assistant Professors: Al-Horr, Hadi; Afiouni, Fida; Al Husseiny, Wissam; Apaydin, Marina; Bastian, Bettina; Daouk, Lina; El Jurdi, Hounaida; Kamel, Yehia; Karam, Charlotte; Khakhar, Priyan; Koks, Mehmet Haluk; Khoury, Haitham; Leigh, Laurence; Yehia, Nadine; Zeidan, Mohamad-Jamal; Zghieb, Philip
Senior Lecturers: Abdallah, Hanin; Cotran, Khalil; Dimechkie, Riad; Kettaneh, Tarek
Lecturer: Thornberry, Jon
Instructors: Kfouri, Michael; Khauli-Hanna, Leila; Standen, David

Business Information and Decision Systems Track

Convener: Fleszar, Krysztof
Professors: Hindi, Khalil*; Osman, Ibrahim,H.
Associate Professors: Azad, Bijan; Fleszar, Krysztof
Assistant Professors: Anouz, Abdel Latef; Arakji, Reina; Araman, Victor; Bou Hamad, Imad; Feghali, Antoine; King, Nelson; Moussawi, Lama; Nasr, Walid; Yorke-Smith, Neil
Lecturer: Majdalani, Elias
Instructors: Geutcherian, Rita; Salamoun Sioufi, Randa

* On leave
History and Overview

Business education at AUB started in 1900 and was provided either by a department or a semi-autonomous school under the University’s Faculty of Arts and Sciences for approximately one hundred years. In celebration of the hundred-year anniversary of offering business programs, AUB established in September 2000 an independent School of Business (later named the Suliman S. Olayan School of Business, OSB) as the sixth faculty of the University.

To date, AUB has graduated over 6,500 students from its undergraduate business programs and over 1,300 from its graduate business programs. Since its formal establishment as a distinct school, OSB has grown its full-time faculty complement from 13 in the academic year 2000-01 to 56 today. It now graduates approximately 350 students from its undergraduate program and 60 students from its graduate programs every year.

OSB currently offers five degree programs: an Executive Master of Business Administration (herein referred to as the Executive MBA), a Master of Business Administration (herein referred to as the MBA), a Masters in Finance1 (herein referred to as the MF), a Masters in Human Resource Management (herein referred to as the MHRM) and a Bachelor of Business Administration (herein referred to as the BBA).

The First AUB Faculty to Be Named

In June 2003, the AUB School of Business was named the Suliman S. Olayan School of Business, in honor of the late international Saudi businessman and AUB trustee whose family has always been a major supporter of AUB.

This watershed event triggered a series of major developments intended to broaden and deepen the delivery of quality undergraduate and graduate business programs at AUB. An entirely new curriculum was introduced for the BBA and MBA degrees in the fall of 2001. Both degrees were redesigned to follow leading trends in international business education. In the spring of 2004, OSB launched the Executive MBA program in response to the professional development needs of senior corporate leaders in the region. In 2012, OSB introduced a Specialized Masters in Finance1 and a Specialized Masters in Human Resource Management to its suite of graduate degree program offerings as part of its strategy to better serve the region, increase its graduate enrollment and further enhance AUB’s global brand as the regional business education leader.

Accreditation

The degree programs of OSB are accredited by the Association to Advance Collegiate Schools of Business (AACSB International). Requiring rigorous quality audits and adherence to best academic practices, AACSB accreditation, which is attained by less than five percent of business schools worldwide, is the international quality-assurance standard for business education programs.

1 Pending Final Approval of New York Board of Education
Our Vision

To become globally recognized as the leading business school between Europe and South Asia in terms of academic research, teaching excellence and business impact.

Our Mission

Building on over a century of prominence in business education, the Suliman S. Olayan School of Business (OSB) is committed to providing quality undergraduate and graduate programs aimed at developing business leaders in, for or from the Middle East region and beyond. The School's undergraduate program (BBA) accentuates a liberal arts-based operational focus whereas the Executive MBA has a distinct leadership and strategy orientation. The MBA program imparts globally current, regionally relevant general management competencies to the next generation of business leaders and the specialized masters programs are designed to graduate expert practitioners. OSB's role in knowledge dissemination and service is reinforced by the School's contribution to knowledge generation through basic and applied research. OSB upholds and promotes the highest ethical standards and a continuous improvement ethos in all its activities.

Ethics and Integrity

OSB is committed to the highest standards of academic integrity and expects its faculty and students to exhibit exemplary behavior in this regard. All business students are responsible for familiarizing themselves with and always abiding by the AUB policies, rules, and regulations that define standards for academic integrity.

Organization and Governance

The school is run by the dean and guided by two independent boards: an International Board of Overseers (the IBO) comprising international leaders in business and education and a Middle East Advisory Board (the MEAB) composed of accomplished regional thought leaders and trend setters in business. The IBO and MEAB advise the dean and the dean's Advisory Committee on major strategic initiatives and act as a preliminary screening authority prior to the approval of the university provost, the university president and the university Board of Trustees (BOT). The dean's Advisory Committee is an elected body as per AUB's faculty bylaws.

The school is organized into the functional equivalent of multi-disciplinary departments, referred to as “tracks.” While each track has its distinct identity and designated faculty members, a track is markedly different from a department; it allows for multiple faculty membership, offers fertile soil for cross-disciplinary synergy and facilitates faculty cooperation.

The school has three tracks, each encompassing a cluster of distinct academic business disciplines (or “concentrations”) and headed by a track convener (a highly-qualified OSB faculty member). The tracks (with their respective concentrations) are:

1. Finance, Accounting and Managerial Economics (FAME)
   Concentrations (2): Finance and Accounting
2. Management, Marketing and Entrepreneurship (MM&E)
   Concentrations (3): Management, Marketing and Entrepreneurship
3. Business Information and Decision Systems (BIDS)
   Concentration (1): Information and Decision Systems

Track conveners report directly to the dean of the school. The school is managed by the dean, the associate dean(s), the assistant dean for Student Services, the assistant dean for corporate programs, the track conveners, the program directors, the administrative officers of the school, and ten standing committees, and operates under a set of school bylaws available at: www.aub.edu.lb/provost/Documents/Faculty_Bylaws-Nov-18-2011-BOT%20approved.pdf

Undergraduate Program: The BBA Program

OSB currently offers a bachelor’s degree in business administration (the BBA).

Philosophy

The BBA program is for university entrants focused on translating their thinking and interests into career opportunities in business. The program combines business and arts and sciences in a rigorous learning environment to help students gain a holistic understanding of the social, cultural and economic environment in which they operate. The curriculum’s liberal arts-based operational focus is deeply grounded in analytics, while emphasizing soft skill areas such as leadership, decision-making and ethical reasoning.

Admission to the Program

Normally, there are two admission deadlines a year; in February, for enrollment in the following fall, and in November, for enrollment in the following spring.

Criteria for Admission to the BBA Program

Students are admitted as sophomores to the BBA program either through direct admission, through transfer from other Faculties at AUB or through transfer from other universities. Students may also be admitted as junior transfers from other Faculties at AUB or from outside AUB.

Direct Admission

These students are normally admitted directly from secondary school into the sophomore class at OSB. For complete and detailed information regarding admission to the University, see the Admissions section of this catalogue. All direct admissions are decided by the University Unified Admissions Committee.

Transfer into OSB

As per OSB’s bylaws, all transfer decisions are made by the school’s Admissions Committee.
Transfer from the Freshman Class of the Faculty of Arts and Sciences

Eligibility conditions are:
• successful completion of at least 24 credits
• a minimum cumulative average of 77
• a minimum grade of 70 in MATH 101, MATH 102 or MATH 203

All final admissions decisions depend on the overall quality of the eligible applicant pool and the number of available places for the term in question.

Transfer from other Faculties at AUB

Non-OSB students at AUB, other than those from the freshman class of the Faculty of Arts and Sciences, may apply for a transfer to OSB in order to pursue a BBA degree. To be eligible for an internal transfer, the applicant must:
• have completed at least 24 sophomore credits (or 54 credits including freshman credits)
• not be on probation
• have achieved a minimum overall cumulative average of 77. Students with a minimum overall cumulative average of less than 77 may be considered for an internal transfer provided they have taken a minimum of 15 credit hours of business courses and provided they have a minimum cumulative average of 80 in these business courses.

All final admissions decisions depend on the overall quality of the eligible applicant pool and the number of available places for the term in question.

It is important to note that for transfer purposes, late freshman students who have taken more than 30 credits but less than or equal to 45 credits are treated as freshman students (i.e., they must meet freshman transfer requirements).

Transfer from Outside AUB (Other Universities)

Students currently pursuing an undergraduate degree at another university in Lebanon or abroad may apply for transfer to the OSB sophomore or junior class. To be eligible for admission to AUB and to OSB’s business program, the applicant must:
• be transferring from an appropriately accredited university or institution of higher education recognized by AUB
• have completed at least 30 sophomore credits (or 60 credits inclusive of the freshman year)
• have achieved a minimum overall cumulative average equivalent to the AUB average of 77. As stated in the General University Academic Information section of the catalogue, applicants should meet the English Language Proficiency Requirement before registration.

All final admissions decisions depend on the overall quality of the eligible applicant pool and the number of available places for the term in question.

It is important to note that:
• transfer of credit is considered only for courses completed in the five-year period preceding the proposed date of joining the BBA program
• a student transferring to OSB from another institution will not normally be granted equivalency credits for core business courses. Please refer to the appropriate section of the catalogue for the list of core business courses and their descriptions
• the student must have achieved a grade equivalent to 77 or higher at AUB in each of the Business courses for which transfer of credit is sought
• the Administrative Committee reserves the right to require the student to sit for an exemption test prior to the approval of transferred courses. Exemption tests are available for a non-refundable fee of $100 per test. An exemption test may be taken only once.

Business as a Second Degree

The OSB Admissions Committee evaluates all applications for the BBA as a second degree and makes recommendations to the Dean. To be eligible for admission, the student must have a first degree from an appropriately accredited institution of higher education recognized by AUB with a cumulative average of no less than 75 (or its equivalent).

All final admissions decisions depend on the overall quality of the eligible applicant pool and the number of available places for the term in question.

Dual Degree

Students may, upon approval of the Faculty concerned, complete the requirements for a second degree while registered in another Faculty at AUB. In such a case, a student will be granted two degrees at the same time upon graduation. If tuition differs, students will pay the higher of the tuitions. To be eligible for a dual degree with OSB, the applicant must:
• have completed at least 24 sophomore credits (or 54 credits including freshman credits)
• not be on probation
• have achieved a minimum overall cumulative average of 77

All final admissions decisions depend on the overall quality of the eligible applicant pool and the number of available places for the term in question.

Information about deadlines and applications are available on the following link: http://www.aub.edu.lb/registrar/Documents/pdfdoc/dualdegree.pdf

Business as a Minor Field of Study

Students who wish to obtain a minor in business are required to:
• complete a minimum of 18 credit hours in the following business courses: ACCT 210 (Financial Accounting, 3 cr.), DCSN 200 (Operations Management, 3 cr.), FINA 210 (Business Finance, 3 cr.), INFO 200 (Foundations of Information Systems, 3 cr.), MKTG 210 (Principles of Marketing, 3 cr.) and MNGT 215 (Fundamentals of Management and Organizational Behavior, 3 cr.)
• pass the required six courses (ACCT 210, FINA 210, MNGT 215, MKTG 210, INFO 200, and DCSN 200), and
• maintain a minimum overall average of 77 in all business courses taken.
It is important to note that:

- students pursuing a minor in business and whose faculty requires them to take business courses as part of their program can use only one of those required courses for their minor degree. In all cases, course prerequisites, as stipulated in OSB’s curriculum, apply and are strictly enforced.

- computer science and engineering students must obtain approval from the Business Information and Decision Systems (BIDS) track convener prior to registering for DCSN 200 or INFO 200. If these students have taken comparable courses as part of their major Faculty degree requirements, equivalency may be granted, subject to the approval of the OSB Admissions Committee. In such cases, the student must take additional business electives to achieve the total 18 credits required for the minor.

**Academic Policies**

For more information on registration requirements, categories of students, class attendance, correct use of language, cross registration, course (and credit) loads, dean’s honor list, directed study, disclosure of student records, English proficiency, grading system, graduation with distinction and high distinction, and policy on transfer within the University, refer to the General University Academic Information section of this catalogue.

Other OSB-specific academic rules and regulations follow.

**Academic Advisers**

Each BBA student is assigned an academic adviser who plays the role of a mentor. The adviser communicates the culture of the institution, mainly as it relates to “life-long learning, personal integrity and civic responsibility and leadership” (AUB Mission Statement), and plays an important role in guiding students through a curriculum that balances broad liberal arts exposure with deep knowledge of business fundamentals. In addition, the adviser helps the students in assessing future graduate studies opportunities and career choices.

**Classification of Students**

A BBA student shall be considered to have completed a class level (i.e. freshman, sophomore, junior or senior) when s/he has successfully completed 30 or more credits beyond the requirements for the previous class. A student may be granted a certificate stating that s/he has completed a class only when s/he has completed the specified courses in the regular program for that class and has acquired the requisite number of credits.

The credit requirements are as follows:

<table>
<thead>
<tr>
<th>Class Level</th>
<th>Credit Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>For the completion of the freshman class:</td>
<td>30 credits</td>
</tr>
<tr>
<td>For the completion of the sophomore class:</td>
<td>60 credits (cumulative)</td>
</tr>
<tr>
<td>For the completion of the junior class:</td>
<td>90 credits (cumulative)</td>
</tr>
</tbody>
</table>
Credit Load

Students may register for up to 17 credit hours in a regular academic semester (e.g. fall or spring) and 10 credit hours in the summer term. Junior and senior, but not sophomore, students who wish to increase their credit load to 18 credit hours in a semester must have completed ENGL 203 and ENGL 204 and then petition the OSB Administrative Committee for permission to do so. Normally, junior and senior students with an overall average of at least 80 or an average of at least 80 in the last two semesters are given such permission.

The credit load of a student who is in his/her first semester on probation (P1) shall not be fewer than 12 credit hours and shall not exceed 17 credit hours. The load of a student who continues to be placed on probation (P2) shall not be fewer than 12 credit hours and shall not exceed 13 credit hours.

Students who are registered in the BUSS 245 course (the internship) may register for no more than 3 other credit hours, provided that the other course(s) taken do not conflict with the working hours of the summer internship. Honor students may petition to be allowed to register for a maximum of 7 credit hours, including the internship.

Internship Requirements

All BBA students must successfully complete the internship requirement (BUSS 245). Normally, the internship takes place in the summer term directly following the completion of the junior year. Students must register for the summer internship (through an on-line application on the OSB website) by March 31, and provide the school with an employer's acceptance by April 31. All students applying for the internship program must:

• be juniors;
• have completed: FINA 210, MNGT 215, MKTG 210, and INFO 200;
• have completed by the end of the fall semester:
  a) at least 38 credit hours if they were admitted to the University as sophomores
  b) or at least 68 credit hours if they were admitted to the University as freshmen.

Normally, internships are assigned and/or allocated by the internship and placement officer. However, students may solicit their own internships.

Internship Guidelines

• The internship is normally two months in duration and takes place during the summer term (i.e., any two months between June 15 and August 31)
• The student must comply with the policy of the host company regarding working days and working hours
• The work week must not be less than 5 working days
• Working hours are according to host company policies
• The student will be supervised by a faculty member from OSB and the work supervisor at the company throughout the internship period
• The internship is graded. The grade is based on the evaluations of both the direct work supervisor and the OSB faculty supervisor
• The internship grade is included in the computation of the student's overall average.
Academic Probation

Placement on Academic Probation
University regulations apply; refer to the General University Academic Information section of this catalogue.

In addition, note that:
• Students who are attending 4 courses including BUSS 211 i.e. with a load of 11 credits are subject to probation regulations
• If a student on probation drops the whole semester, then that semester is not counted for continued probation purposes.

Removal of Probation
University regulations apply; refer to the General University Academic Information section of this catalogue.

Dismissal
University regulations apply; refer to the General University Academic Information section of this catalogue.

Readmission
University regulations apply; refer to the General University Academic Information section of this catalogue.

Transfer credits are considered after evaluation of a student's coursework. The student must have achieved a minimum grade equivalent to the AUB average of 77 in each of the courses for which transfer of credits may be granted.

Regulations on readmission also apply to students who are dropped from other AUB Faculties and apply for admission to OSB.

Readmission of students dropped from the school by the Administrative Committee requires the approval of that Committee, whereas readmission of students dropped from other AUB Faculties requires the approval of the OSB Admissions Committee.

Failing and Repeating Courses
University regulations apply; refer to the General University Academic Information section of this catalogue.

A student who at the end of the senior year fails to fulfill the graduation requirements pertaining to cumulative grade averages and is not dismissed must repeat the courses with low grades, in order to raise the overall averages to the required minimums.
Incompletes

A student who, at the end of a term, receives an incomplete grade for missing a major requirement of a course (e.g., final examination, term project or paper) must present a valid excuse in order for him/her to apply for permission to complete that course. Medical reports and/or qualified professional opinions issued by an AUB employee, AUBMC doctor or by the University Health Services are normally accepted. Should there be a question about the validity of an excuse, the OSB Administrative Committee may not allow the student to sit for a makeup.

In order to receive permission to complete a course, the student must, within two weeks of the end of term, submit to the OSB Administrative Committee a makeup request (form available at the OSB Student Services Office) approved by the instructor, along with evidence of a valid excuse. If granted permission, the makeup must be completed within one month of the start of the next regular semester. In rare and exceptional circumstances, the OSB Administrative Committee may grant the student additional time. A student who has already sat for a final examination may not re-take that examination.

Incomplete course work is reported as an “I” followed by a numerical grade reflecting the evaluation of the student, based on available information. The evaluation is based on a grade of zero on all missed work and is reported in units of five. If the work is not completed within the period specified, the “I” is dropped and the numerical grade becomes the final grade.

Examinations and Quizzes

Undergraduate business courses, other than tutorial and seminar courses, have final examinations, unless otherwise authorized by the OSB Academic Committee. In all courses in which final examinations are given, a student would not receive a passing grade without taking a final examination. Even though final examinations are not required in tutorial and seminar courses, the instructor may choose to give a final examination.

At the beginning of each semester, the instructor announces the examinations and quizzes policy that s/he intends to follow. The instructor assumes final responsibility for dealing with students missing an examination or a quiz during the term. Normally, students who miss an announced examination or quiz during the term must present an excuse considered valid by the instructor. Only then may the instructor allow the student to take a makeup.

Cross-Registration

A business student who wants to register for a course at another recognized institution must meet all requirements for cross-registration as stipulated in the General University Academic Information section of this catalogue.

Study Abroad

A business student who started his/her undergraduate program at AUB and wishes to study abroad may seek prior approval from the OSB Academic Committee to spend up to one year and earn up to 30 credits at another university. However, the student must spend his/her last semester at AUB. The student must achieve a grade equivalent to the AUB average of 77 in each of the courses for which transfer credits may be granted. An OSB student wishing to study
abroad would not be granted equivalency credits for core business courses. Exceptions may be granted on a case by case basis by the Assistant Dean for Student Services.

Graduation Requirements

Graduation requirements for the Bachelor of Business Administration (BBA) are as follows:

• A minimum of six semesters beginning with the sophomore class is required.

• A maximum of six calendar years is allowed for graduation of students who begin with the sophomore class, four calendar years for juniors and two calendar years for seniors. A student who fails to complete his/her degree program within these specified times must petition the OSB Administrative Committee for an extension.

• A student transferring to AUB from another recognized institution of higher learning must register in the final three regular semesters and must complete at least 45 credits at AUB, of which a minimum of 24 credits must be in business before s/he is allowed to graduate with a BBA. For purposes of this requirement, two summer sessions shall be considered equivalent to one semester.

• A transfer student from within AUB must meet the residency requirement before s/he graduates with a BBA degree. The residency requirement stipulates that a student must spend a minimum of one regular semester (i.e. fall or spring) and one summer session in the school, during which s/he must complete a minimum of 24 credits, 12 of which are business credits. During this period, the student must meet all minimum academic standards set forth by the school.

• Completion of a minimum of 90 credits for students who enter as sophomores. With the approval of the OSB Academic Committee, tracks may establish programs that exceed these minimum credit requirements.

• Completion of 48 credits in business courses comprising 39 credits of core courses and 9 credits of business electives in a concentration area. Students must achieve a cumulative average of at least 70 in these 48 credits.

• For students to graduate with a concentration, the 9 credits in the concentration area must be completed with a cumulative grade average of at least 70. Normally a maximum of one course completed outside OSB may count toward the concentration upon the approval of the track convener.

• Completion of three required zero-credit business workshops.

• Successful completion of the Assurance of Learning Requirements.

• When a student repeats a course, the highest grade obtained in the course is used in computing the student’s average for graduation purposes. The student may repeat any course s/he chooses.

• Grades of 70 or more in at least 50 credits numbered 200 or above.

• All Arabic-speaking business students (except those officially exempted) must satisfy the Arabic language requirements and all students entering at the sophomore, junior or senior level must take one Arabic course.

• All business students must take English communication skills courses as determined by placement upon matriculation, and these required courses may be taken immediately on matriculation and must be continued without interruption until completed through ENGL 208. For example, a student entering at the lowest level may take five semesters of English (Intensive ENGL 100A or 100B if required 102, 203, 204, and 208); a student entering at the third level must take 3 semesters (203, 204, and 208; i.e., nine credits). A student who enters
at ENGL 204 must take, in addition to this course, ENGL 208 and any other elective course from the offerings of other AUB faculties.

- All business students must take MATH 203, MATH 204, and CMPS 209. A student who is exempted from MATH 203 must take, in addition to MATH 204 and CMPS 209, any other non-business elective course from offerings at other AUB faculties.

- All business students must take ECON 211 and 212.

- As per the University General Education requirement, all business students must take two courses (six credits) from the General Education Humanities List 1. In addition, apart from BUSS 215 which is designated as a humanities course for the General Education requirement (List 2), a student must take one course (three credits) from either List 1 or List 2 of the General Education Humanities courses.

- All business students must take two Natural Sciences from the General Education Natural Sciences courses.

- All Business students must satisfy the General Education requirements as specified for all AUB students.

- Students already holding a bachelor's degree outside business and wishing to obtain a BBA must complete, after admission, 48 business credit hours. However, students who have completed a minor in business or have taken 18 or more business credit hours prior to applying for the BBA as a second degree must take no fewer than 30 business credit hours. All second-degree students must also fulfill other non-business graduation requirements.

- All senior-level BBA students must complete an online survey (through the OSB website) in order to be cleared for graduation.

### Program Outline

The undergraduate program, leading to a BBA degree, requires students to complete 120 credit hours for those beginning at the freshman level and 90 credit hours for those joining the University as sophomores. Of the total required credit hours, the BBA program requires that 48 credit hours, including a one credit internship program, be satisfactorily completed in business courses, with the remainder allocated to liberal arts/non-business courses. In addition and as a condition for graduation, all students are required to complete successfully three zero-credit pass/fail workshops designed to enhance their soft skills.

### Assurance of Learning Requirements

To comply with AACSB Assurance of Learning guidelines and standards, all students are required, as a condition for graduation, to complete successfully during their last semester work assigned by the school for this purpose.

### Business Requirements

Of the total required credit hours, 48 must be satisfactorily completed in business courses. Of these 48, a general business core comprising 39 credit hours is common to all business students. In addition to this general business core (which includes the three zero-credit workshops mentioned above), the student must complete 9 additional credit hours of business electives.
in one of the following concentration areas: accounting, finance, management, marketing, entrepreneurship and business information and decision systems. All courses qualifying as business electives must be offered by OSB. Students who do not opt for a concentration must complete the 39 core credit hours in addition to at least 9 credit hours in free business electives.

A student may also choose a second concentration by taking an additional 9 credit hours. Thus a business student who chooses to pursue two concentrations must complete 9 credits in each concentration. A BBA student is allowed to graduate with a maximum of two concentrations, and the student must declare concentration(s) (or lack thereof) no later than the end of the junior year.

**Required Core Business Courses (39 credits)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 210</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 215</td>
<td>Management Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUSS 200</td>
<td>Business Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>BUSS 211</td>
<td>Business Law</td>
<td>2</td>
</tr>
<tr>
<td>BUSS 215</td>
<td>Business Ethics</td>
<td>3</td>
</tr>
<tr>
<td>BUSS 230</td>
<td>Managerial Economics</td>
<td>3</td>
</tr>
<tr>
<td>BUSS 239</td>
<td>Business Communication Skills Workshop</td>
<td>0</td>
</tr>
<tr>
<td>BUSS 240</td>
<td>Strategic Career Planning Workshop</td>
<td>0</td>
</tr>
<tr>
<td>BUSS 245</td>
<td>Internship/Practicum</td>
<td>1</td>
</tr>
<tr>
<td>BUSS 248</td>
<td>Developing Business Plans Workshop</td>
<td>0</td>
</tr>
<tr>
<td>BUSS 249</td>
<td>Strategic Management</td>
<td>3</td>
</tr>
<tr>
<td>DCSN 200</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>DCSN 205</td>
<td>Managerial Decision Making</td>
<td>3</td>
</tr>
<tr>
<td>FINA 210</td>
<td>Business Finance</td>
<td>3</td>
</tr>
<tr>
<td>INFO 200</td>
<td>Foundations of Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>MNGT 215</td>
<td>Fundamentals of Management and Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 210</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Required Electives</td>
<td>Business Courses</td>
<td>9</td>
</tr>
</tbody>
</table>

**Total Business Credits** 48

**Non-Business, General Education Requirements**

Starting at the sophomore level, of the required 90 credit hours of the BBA program, 42 credit hours must be satisfactorily completed in non-business courses. These include 9 credit hours of English, 6 credit hours of economics (social sciences), 12 credit hours of humanities including BUSS 215 (considered a List 2 General Education Humanities course), 6 credit hours of mathematics (quantitative thought), 3 credit hours of computer science (quantitative thought), 3 credit hours of Arabic and 6 credit hours of Natural Sciences. For a list of specific required non-business courses, refer to the next section.

Students who have taken required non-business courses in their freshman year are exempted from them in the sophomore year. These students must, however, take additional free electives to fulfill the credit hour minimum of 42 required for graduation.
Program Delivery

A proposed study plan for the BBA program is presented next.

Year I

Freshman Year  Total Credits 30
Refer to the Admissions section of this catalogue.

Year II

All the below courses are required of every student unless otherwise indicated.

<table>
<thead>
<tr>
<th>Semester 1 (Fall)</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 203</td>
<td>Academic English 3</td>
</tr>
<tr>
<td>MATH 203</td>
<td>Mathematics for Social Sciences I 3</td>
</tr>
<tr>
<td>ACCT 210</td>
<td>Financial Accounting 3</td>
</tr>
<tr>
<td><strong>Two of the following three courses:</strong></td>
<td></td>
</tr>
<tr>
<td>ECON 211</td>
<td>Elementary Microeconomic Theory 3</td>
</tr>
<tr>
<td>ECON 212</td>
<td>Elementary Macroeconomic Theory 3</td>
</tr>
<tr>
<td>CMPS 209</td>
<td>Computers and Programming for the Sciences 3</td>
</tr>
<tr>
<td><strong>Total 15</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 2 (Spring)</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 204</td>
<td>Advanced Academic English 3</td>
</tr>
<tr>
<td>BUSS 239</td>
<td>Business Communication Skills Workshop 0</td>
</tr>
<tr>
<td>MATH 204</td>
<td>Mathematics for Social Sciences II 3</td>
</tr>
<tr>
<td>DCSN 200</td>
<td>Operations Management 3</td>
</tr>
<tr>
<td>FINA 210</td>
<td>Business Finance 3</td>
</tr>
<tr>
<td><strong>One of the following three courses:</strong></td>
<td></td>
</tr>
<tr>
<td>ECON 211</td>
<td>Elementary Microeconomic Theory 3</td>
</tr>
<tr>
<td>ECON 212</td>
<td>Elementary Macroeconomic Theory 3</td>
</tr>
<tr>
<td>CMPS 209</td>
<td>Computers and Programming for the Sciences 3</td>
</tr>
<tr>
<td><strong>Total 15</strong></td>
<td></td>
</tr>
</tbody>
</table>

Year III

<table>
<thead>
<tr>
<th>Semester 3 (Fall)</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFO 200</td>
<td>Information Systems Design and Development 3</td>
</tr>
<tr>
<td>MNGT 215</td>
<td>Fundamentals of Management and Organizational Behavior 3</td>
</tr>
<tr>
<td>DCSN or ACCT 205</td>
<td>Managerial Decision Making or Management Accounting 3</td>
</tr>
<tr>
<td>MKTG 210</td>
<td>Principles of Marketing 3</td>
</tr>
<tr>
<td>Humanities</td>
<td>Any course from the General Education Humanities List 1 3</td>
</tr>
<tr>
<td><strong>Total 15</strong></td>
<td></td>
</tr>
<tr>
<td>Semester 4 (Spring)</td>
<td>Credits</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------</td>
</tr>
<tr>
<td>BUSS 200 Business Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>BUSS 215 Business Ethics</td>
<td>3</td>
</tr>
<tr>
<td>DCSN 205 Managerial Decision Making</td>
<td>3</td>
</tr>
<tr>
<td>or ACCT 215 Management Accounting</td>
<td></td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 208 English for International Business</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total 15</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year III Summer Session</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSS 245 Internship/Practicum</td>
<td>1</td>
</tr>
</tbody>
</table>

**Year IV**

<table>
<thead>
<tr>
<th>Semester 5 (Fall)</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARAB Basic Arabic Communication Skills, or Readings in Arabic Literature or any higher level Arabic course based on the Arabic placement test</td>
<td>3</td>
</tr>
<tr>
<td>BUSS 211 Business Law</td>
<td>2</td>
</tr>
<tr>
<td>BUSS 230 Managerial Economics</td>
<td>3</td>
</tr>
<tr>
<td>BUSS 240 Strategic Career Planning Workshop</td>
<td>0</td>
</tr>
<tr>
<td>Business Elective For Concentration Students: Business Elective from the area of concentration For Generic Students: Any Business Elective</td>
<td>3</td>
</tr>
<tr>
<td>Humanities Humanities (List 1 or List 2)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total 14</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 6 (Spring)</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSS 248 Developing Business Plans Workshop</td>
<td>0</td>
</tr>
<tr>
<td>BUSS 249 Strategic Management</td>
<td>3</td>
</tr>
<tr>
<td>Business Elective For Concentration Students: Business Elective from the area of concentration. For Generic Students: Any Business Elective</td>
<td>3</td>
</tr>
<tr>
<td>Business Elective For Concentration Students: Business Elective from the area of concentration. For Generic Students: Any Business Elective</td>
<td>3</td>
</tr>
<tr>
<td>Natural Sciences Natural Sciences</td>
<td>3</td>
</tr>
<tr>
<td>Humanities Any course from the General Education Humanities List 1</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total 15</strong></td>
<td></td>
</tr>
</tbody>
</table>
It is important to note the following:

• Philosophy and Economics Bacc II majors must take MATH 203 and MATH 204. Math and Science BACC II majors must take only MATH 204 and an additional elective to substitute for MATH 203 as per the minimum credit hour requirements for degree completion. International Baccalaureate Diploma holders who have completed either a) the Math Higher Level examination with a grade of 6 or above or b) the Further Math Subsidiary Level examination with a grade of 6 or above or c) the Math Methods Subsidiary Level with Further Calculus examination with a grade of 6 or above, are also exempted from MATH 203. They must take only MATH 204 and an additional elective to substitute for MATH 203 as per the minimum credit hour requirements for degree completion.

• In order to complete the Humanities requirement, students must complete 12 credit hours of Humanities courses. 6 credits must be completed from Humanities List 1. In addition, 3 credits must be completed from either Humanities List 1 or Humanities List 2. The remainder of the requirement may be fulfilled by BUSS 215 (Humanities List 2). Please refer to the catalogue General Education section for more detail.

• Natural Sciences courses must be chosen as per the university General Education guidelines (please refer to the catalogue General Education section).

• The Business Communication Skills workshop, the Strategic Career Planning workshop and the Developing Business Plans workshop are graded on a P/F basis.

• ECON 213, EDUC 219, EDUC 227, ENMG 500, AGSC 212, STAT 201, STAT 210, as well as any other course that significantly overlaps with OSB core courses cannot be given equivalence to OSB required courses. These courses cannot be counted for credit as business or non-business free electives.

• Courses that may significantly overlap with business elective courses, such as SOAN 231, SOAN 234, SOAN 235, and SOAN 243, may be taken as free electives. However, students will not receive credit for any of these courses if they have taken the respective equivalent business elective.

• Students who are exempted from any required courses such as MATH 203, ENGL 203 and Arabic have to meet the 90 credit-hour graduation requirement by taking additional free electives.

### Undergraduate Business Courses

#### Undergraduate Business Course Prefixes

BBA courses all have a prefix labeled after the discipline name: ACCT (accounting), DCSN (Business Decision Systems), ENTM (Entrepreneurship), FINA (Finance), INFO (Business Information Systems), MKTG (Marketing), and MNGT (Management). A detailed description of courses under each discipline is available in its respective track section. Interdisciplinary and integrative courses that do not belong to a particular discipline are labeled by the prefix BUSS.
BUSS Courses

BUSS 200  Business Data Analysis  3 cr.
This course covers basic statistical concepts and introduces some advanced concepts and tools that are useful for decision-makers in business and management. Topics include descriptive statistics, probability distributions, statistical inference (hypothesis testing and analysis of variance) from small and large samples of data, correlation and regression, non-parametric statistics. An emphasis will be given to the understanding and applicability of statistical analysis, and interpretation of the output of analyses using Excel spreadsheet tools and short real-life cases. Business majors only. Prerequisites: MATH 204, CMPS 209.

BUSS 211  Business Law  2 cr.
The main objective of the course is to help business students understand the Lebanese and American legal aspect of common business activities and the formation and functioning of commercial companies along with the related ethical principles. Business majors only. Prerequisite: MNGT 215.

BUSS 215  Business Ethics  3 cr.
This is an introductory course that provides students with an overview of business ethics at the individual, organizational, and societal level. Issues such as corruption, sexual harassment, fair trade, fraud, whistle-blowing, corporate social responsibility, ethical norms, ethical values, environmental responsibility and many more will be examined both in the international as well as local Lebanese context. Ultimately, the course is designed to not only introduce students to a wide array of current ethical issues in business but to also foster skills related to critically analyzing the ethical and social dimensions of business-related problems in order to build more ethically-informed rationales for decision making. General Education/Humanities list II course. Prerequisite: MNGT 215.

BUSS 230  Managerial Economics  3 cr.
Managerial Economics is the use of economic theory and mathematical and statistical techniques in order to examine how a firm can make economic decisions given the constraints it faces. Topics covered include: goals of the firm, marginal analysis, demand theory and estimation, time series and forecasting, theory of production and estimation, cost theory and estimation, pricing and output determination under different market structures, game theory, and pricing in practice. Business majors only. Prerequisites: ECON 211, BUSS 200.

BUSS 235  Macro Business Analysis  3 cr.
A course that combines theory with cases that require group work and discussions. The theoretical part of this course covers monetary, fiscal, and exchange rate policy, and an overview of economic development strategies. Cases are used to train students in developing rigorous arguments to analyze interactions between firms in domestic as well as global economic scenarios. Business majors only. Prerequisite: ECON 212.

BUSS 239  Business Communication Skills Workshop  0 cr.
A ten-hour workshop designed to introduce students to the various communication skills needed in a typical work environment. Mastering these skills plays a profound role in shaping and advancing professional careers in all types of industries and work scopes. The workshop introduces specific guidelines for the effective use of a variety of communication skills in the workplace, in an interactive manner simulating the work environment. Business majors only.
BUSS 240  Strategic Career Planning Workshop  0 cr.
A ten-hour workshop designed to build awareness of changing career patterns and major personal and professional influences that impact future careers. Issues such as preparing for joining the labor market, basic career guidance, understanding career stages, and practicing self-assessment are emphasized. Business majors only. Co-requisite: BUSS 245

BUSS 245  Internship/Practicum  1 cr.
A summer period of guided work experience under faculty supervision by a mentor, and corporate guidance by a preceptor, designed to acquaint students with the world of work and help them acquire core values and basic skills necessary for an understanding of the global economy. Business majors only. Prerequisites: FINA 210, MNGT 215, MKTG 210, INFO 200 and business junior standing.

BUSS 246  Honors Seminar in Business  3 cr.
A tutorial research course that can be counted for any undergraduate concentration. This course involves directed readings and emphasizes individual original and independent research in any business-related area. This course requires, among other things, that the student prepare an honors research paper under the supervision of one or more faculty members in the particular area of concentration. The honors paper is normally presented at a school seminar. Prerequisite: approval of track convener.

BUSS 247  Project  3 cr.
A practicum course that can be counted for any undergraduate concentration. This course focuses on analysis of contemporary business issues and problems. The project requires, among other things, that the student works on a problem faced by one of the local or regional businesses, and recommends a set of possible solutions under the supervision of one or more faculty members in the particular area of concentration. The results of the project are normally presented in a meeting in the presence of representatives from the business subject to the consulting assignment. Prerequisite: approval of track convener.

BUSS 248  Developing Business Plans Workshop  0 cr.
A ten-hour workshop focusing on starting your own business from inception to IPO, passing through the stages of feasibility study, VC financing, launching, and operating. Business majors only. Prerequisites: ACCT 215, FINA 210, MNGT 215, MKTG 210, BUSS 200, BUSS 215, INFO 200, DCSN 205.

BUSS 249  Strategic Management  3 cr.
A course that exposes students to the strategic management process of local, regional, and multinational corporations. Emphasis is placed on identifying the tools needed for strategic analysis of the firm and the industry, and on comprehending the key strategic issues that managers face in managing corporations. Business majors only. Prerequisites: ACCT 215, FINA 210, MNGT 215, MKTG 210, BUSS 200, BUSS 215, INFO 200, DCSN 200.

FAME Track Courses
In addition to the 42 credit general undergraduate requirements from outside the school (listed earlier) and the 39 credits required in the business core (ACCT 210, ACCT 215, BUSS 200, BUSS 211, BUSS 215, BUSS 230, BUSS 239, BUSS 240, BUSS 245, BUSS 248, BUSS 249, DCSN 200, DCSN 205, FINA 210, INFO 200, MKTG 210, MNGT 215), the track requires students wishing to follow one of its general concentrations, either Accounting or Finance to take 9 credits of any course in the concentration area.
Accounting Courses

ACCT 210  Financial Accounting  3 cr.
An introduction to financial accounting that covers the use, interpretation, and analysis of the principal financial statements and other sources of financial information from a national and international perspective.

ACCT 215  Management Accounting  3 cr.
A course that covers the use, interpretation, and analysis of management accounting information for management decision-making, planning, and control of operations. The focus is on cost behavior, cost measurement, budgeting, performance measurement and evaluation, responsibility accounting, and product costing. Business majors only. Prerequisite: ACCT 210.

ACCT 217  Strategic Managerial Accounting  3 cr.
In-depth coverage of topics such as value chain analysis, activity-based costing, JIT systems, analysis of firm's cost structures, and the provision and use of information for strategic decisions. A rigorous analysis of some widely-used financial and non-financial measures, such as Return on Investment, EVA, and the balanced scorecard is also undertaken. Business majors only. Prerequisite: ACCT 215.

ACCT 221  Intermediate Financial Accounting I  3 cr.
This is the first of two professional courses in this area. This course covers concepts and standards of external financial reporting, systems to record and prepare financial accounting information, contents and presentation of basic financial statements, and financial reporting issues of assets. Business majors only. Prerequisite: ACCT 220.

ACCT 222  Cost Accounting  3 cr.
A course on accounting in manufacturing operations; cost concepts and classifications; cost accounting cycle; accounting for materials, labor, and burden; process cost accounting; budgeting; standard costs; cost reports; direct costing and differential cost analysis; cost-volume-profit analysis and gross profit analysis. Business majors only. Prerequisite: ACCT 215.

ACCT 223  Intermediate Financial Accounting II  3 cr.
Continuation of ACCT 221. This course covers financial reporting issues relating to liabilities, ownership equity, selected financial reporting issues, and financial reporting disclosure. Business majors only. Prerequisite: ACCT 221.

ACCT 230  Introduction to External Auditing  3 cr.
An introduction to auditing and the professional responsibilities of a career in accounting. Topics include the legal and ethical responsibilities of accountants; professional auditing standards; international auditing standards; the acquisition, evaluation, and documentation of audit evidence; reports on the results of the engagement, evaluation in internal control, compliance testing, substantive testing, and statistical sampling and auditing EDP. Business majors only. Prerequisite: ACCT 221.

ACCT 231  Fraud Examination and Internal Audit  3 cr.
A course on fraud examination and internal audit. This course covers concepts and topics of fraud detection, deterrence, and prevention; types of financial statement and occupational fraud; and investigation and interviewing techniques. It also covers functions of internal audit, audit committees and corporate governance, planning and performing the internal auditing engagement, and coordination of internal auditing and external auditing. Business majors only. Prerequisite: ACCT 215.
ACCT 232  Accounting Information Systems  3 cr.
A course that explores in detail several typical Accounting Information System (AIS) application subsystems, such as order entry/sales, billing/receivables/cash receipts, inventory, purchasing/accounts payable/cash disbursements, payroll, and materials planning/production. This course includes understanding, documenting, designing, using, and auditing these application subsystems. Business majors only. Prerequisites: ACCT 210, INFO 200.

ACCT 235  Taxation  3 cr.
A study of the Lebanese Tax Code and its application as it relates to individuals and business entities. This course includes the laws governing direct taxation (income tax), indirect taxation (stamp duty and VAT), and the basic principles of the National Social Security Fund (NSSF). Business majors only. Prerequisite: ACCT 210.

ACCT 240  Fund Accounting  3 cr.
A course that provides an alternative perspective of accounting that meets the needs of not-for-profit and governmental organizations. This course involves the interpretation and use of fund accounting as a means of reporting and controlling activities. Business majors only. Prerequisite: ACCT 215.

ACCT 241  Profit Planning and Budgeting Control  3 cr.
A broad view of profit planning and control. Topics covered include sales planning and control, planning production, materials purchase and usage, planning and controlling direct labor costs and overhead, planning expenses, planning and controlling capital expenditures, and completion and application of the profit plan. Business majors only. Prerequisite: ACCT 215.

ACCT 246  International Accounting  3 cr.
A course on selected topics faced by professional accountants in international business, including financial reporting standards, foreign currency, budgeting, management control, and performance evaluation. Business majors only. Prerequisite: ACCT 215.

ACCT 250  Special Topics 1, 2, or 3 cr.
A course that deals with special issues and concerns in accounting not included in regular courses. This course may be repeated for credit when the topics vary. Prerequisites vary with the topic and are noted in the course schedule. Credits depend on the course offered. Prerequisite: approval of track convener.

ACCT 251  Accounting Tutorial 0.5-3 cr.
Tutorials provide opportunities for students to pursue directed study readings and preliminary research relevant to their concentration where existing courses do not offer the required subject matter. Tutorials include a presentation of a report on the work. Prerequisite: Approval of track convener.

Finance Courses

FINA 210  Business Finance  3 cr.
This course teaches the tools that determine and analyze the major decisions a financial manager has to make, including identification of the firm’s goals, time value of money, use of discount cash flow models, capital budgeting under certainty, capital structure as it relates to cost of capital, dividend policy, and ethics in finance. Prerequisite: ACCT 210.
FINA 215  Financial Markets and Institutions  3 cr.
A study of the functions and operations of financial institutions. This course covers analysis of existing financial systems, money and capital markets, banks and non-bank financial intermediaries, term structure of interest rates, and securities markets including the stock and bond exchanges. Business majors only. Prerequisite: FINA 210.

FINA 218  Risk Management in Financial Institutions  3 cr.
This course covers the role of risk management in the financial institutions industry, use of insurance in risk management, quantitative and qualitative measures of risk, management of interest rate fluctuations, credit risks and policies, gap analysis, management of market risks and foreign exchange risk, management of operational and sovereign risks, portfolio analysis, the role of asset and liability management, and risk control processes. Business majors only. Prerequisite: FINA 210.

FINA 220  Investment Management  3 cr.
A study of the operations of securities markets, investment policies, valuation of individual securities, and techniques of investing in securities. This course also introduces students to analysis of investment information, evaluation of risks and returns, and principles of portfolio selection in investment decisions. Business majors only. Prerequisite: FINA 210.

FINA 222  Valuation Methods  3 cr.
This course covers techniques used by investment bankers and analysts for enterprise valuation. The techniques used are divided into intrinsic valuation and relative valuation. Intrinsic valuation includes dividend discount models, free cash flow to equity, free cash flow to firm. Relative valuation measures are price-to-earnings, price-to-sales, price-to-book, price-to-cash flow. The focus is on applications and insights as to when and why we use one measure versus another. Business majors only. Prerequisite: FINA 210.

FINA 225  Commercial Bank Management  3 cr.
Defines functions, operations, and objectives of commercial banks as compared to other financial institutions. The course studies the management aspects of commercial banks, financial analysis of bank statements, liquidity management, assets and liability management, profitability, capital adequacy, credit analysis, trade finance, and banking regulations. Business majors only. Prerequisite: FINA 210.

FINA 227  Insurance  3 cr.
An operational approach to risk management in business and personal affairs. The major thrust of this course is to introduce students to the various types of insurance contracts including life, health, property, and liability insurance, and how to measure and manage risk. This course also covers reinsurance and the know-how to make the best use of insurance contracts and coverage. Business majors only. Prerequisite: FINA 210.

FINA 228  Credit and Risk Analysis  3 cr.
The goal of this course is to learn to focus on “Risk” as a basic income-generating product of banks and financial institutions. The aim is to have the student acquire the tools used by financial institutions to identify, review, analyze and measure risk. The student will learn to establish adequate pricing and structuring of bank credit facilities and of third party financing. The course will introduce risk concepts, risk ratings, and risk review procedures. It will concentrate on financial spread sheet and ratio analysis and will allow the assessment of various risk aspects of corporations. Business majors only. Prerequisite: FINA 210.
FINA 230  International Financial Management  3 cr.
An analysis of the opportunities, problems, and financial decisions confronting multinational
companies. The focus of this course is on understanding international regulatory and
environment differences, access to money and capital markets, use of derivatives to hedge
exchange rate risk, exposure to political risk and other types of risk, and international

FINA 232/ ENTM 232  Real Estate Management  3 cr.
This course is designed to give the student a general overview of the real estate space. Topics
include an introduction to real estate markets (sources of demand), real estate finance, project
evaluation, elements of real estate law, appraisals, property development and property
management. Business majors only. Prerequisite: FINA 210.

FINA 234  Real Estate Finance and Investment  3 cr.
This course examines selected issues in real estate finance and investment: Techniques for
analyzing financial decisions in property development and investment; property income
streams, pro forma analysis, equity valuation, taxes, risk types, and sensitivity analysis. It
also introduces the fundamentals of mortgage securitization and public markets in real estate
securities. Business majors only. Prerequisite: FINA 210.

FINA 235  Personal Financial Planning  3 cr.
A course that deals with planning and managing personal finance. This course focuses on topics
such as the financial planner's role and environment, cash flow budgeting, consumer credit,
debt management, insurance, taxation and financial planning, retirement planning, estate
planning and wills, personal bankruptcy and insolvency, and preparation of financial plans.
Business majors only. Prerequisite: FINA 210.

FINA 240/ DCSN 220  Financial Simulation Modeling  3 cr.
This course introduces elements of computerized simulation, including modeling deterministic
and stochastic systems, generation of random numbers and variables, and probability and
statistics related to modeling, validating, running, and interpreting computer simulations.
Simulation projects on corporate finance issues, and investment portfolio analysis form an
integral part of the course. Prerequisite: BUSS 200 or equivalent.

FINA 241/ ENTM 241  Venture Capital Management  3 cr.
This course provides students with an understanding of the approaches and techniques used
by Venture Capitalists to: assess the prospects of success of a venture; develop and negotiate
investment terms including valuation; monitor the investee and understand exit routes such as
trade sale and IPO. It also provides the student with conceptual and practical knowledge about
key operating and strategic aspects of an entrepreneurial business, from the pre-commercial
stage to IPO. Business majors only. Prerequisite: FINA 210.

FINA 242  Advanced Venture Capital and Private Equity  3 cr.
This course covers special types of financing for capital investment proposals. The course will
use the case approach to assess the organization and strategies of the private equity industry,
the use of financial and economic tools in Leveraged Buyout and venture capital investing,
types of private equity transactions, study of transactions with options and hybrid financing
structures, financing of IPOs, incubators, and corporate venture capital. Business majors only.
Prerequisites: FINA 210 and FINA 241/ENTM 241.
FINA 243  Private Banking  3 cr.
This course offers students the opportunity to learn how to manage high net worth client relationships. It tackles client approach techniques as well as the financial know-how, knowledge of markets’ functioning, products, and services. Business majors only. Prerequisite: FINA 210.

FINA 247  Case Studies in Finance  3 cr.
This course provides a deep understanding of the financing issues that firms must deal with, using the case approach. The topics covered include cost of capital for a multidivisional firm, capital structure and estimation of debt benefits, pricing Initial Public Offerings (IPOs), Leveraged Buyout (LBO), mergers and acquisitions, warrants and convertibles, and financial distress. Business majors only. Prerequisite: FINA 210.

FINA 250  Special Topics  1, 2, or 3 cr.
A course that deals with special issues and concerns in finance not included in regular courses. This course may be repeated for credit when the topics vary. Prerequisites vary with the topic and are noted in the course schedule. Credits depend on the course offered. Prerequisite: approval of track convener.

FINA 251  Finance Tutorial  0.5-3 cr.
Tutorials provide opportunities for students to pursue directed study readings and preliminary research relevant to their concentration when existing courses do not offer the required subject matter. Tutorials include a presentation of a report on the work. Prerequisite: approval of track convener.

MM&E Track Courses
In addition to the 42 credit general undergraduate requirements from outside the school (listed earlier) and the 39 credits required in the business core (ACCT 210, ACCT 215, BUSS 200, BUSS 211, BUSS215, BUSS 230, BUSS 239, BUSS 240, BUSS 245, BUSS 248, BUSS 249, DCSN 200, DCSN 205, FINA 210, INFO 200, MKTG 210, MNGT 215), the track requires students following one of its concentrations, either Management, Marketing or Entrepreneurship, to take 9 credits of any course in the concentration area. Students may choose to pursue an HR focus within management by taking MNGT 220 and two of the following: MNGT 218, MNGT 225, MNGT 229, and any HR-designated MNGT 250 course. MKTG 222 is a required course for all marketing concentration students.

Entrepreneurship Courses
ENTM 220  Managing a Small Business for Growth  3 cr.
An identification of the management, organization, and operational issues critical to the growth of small business enterprises. This course emphasizes the resolution of managerial problems from the perspective of small business focusing mainly on marketing, finance and HR areas. It is targeted at junior and senior students who expect to hold senior management positions in SMEs. Prerequisite: MNGT 215.

ENTM 225  Business Environment of the Firm  3 cr.
A course that focuses on how to analyze the impact of the environment on small firms, the growing role of NGOs and stakeholders in shaping strategies, with special emphasis on the role of government policy. Prerequisite: MNGT 215.
ENTM 230  Decision making Skills for Entrepreneurs  3 cr.
This course will introduce the theories, processes, skills, and techniques relating to effective decision-making at the individual and group level. Good decision makers know how to recognize decision situations, how to represent the essential structure of the situations, and how to analyze them. This course will move back and forth between formal models and behavioral, descriptive models to help students understand and improve their native decision making abilities. Prerequisite: MNGT 215.

ENTM 232/3 FINA 232
Real Estate Management  3 cr.
This course is designed to give the student a general overview of the real estate space. Topics include an introduction to real estate markets (sources of demand), real estate finance, project evaluation, elements of real estate law, appraisals, property development and property management. Business majors only. Prerequisite: FINA 210.

ENTM 235  Family Business: Issues and Solutions  3 cr.
A course that focuses on family businesses: their importance, structure, governance, management, challenges; issues of succession, inheritance, family versus non-family management, and rivalry between siblings, cousins, or across generations. Prerequisite: MNGT 215.

ENTM 241/3 FINA 241
Venture Capital Management  3 cr.
This course provides students with an understanding of the approaches and techniques used by Venture Capitalists to: assess the prospects of success of a venture; develop and negotiate investment terms including valuation; monitor the investee and understand exit routes such as trade sale and IPO. It also provides the student with conceptual and practical knowledge about key operating and strategic aspects of an entrepreneurial business, from the pre-commercial stage to IPO. Business majors only. Prerequisite: FINA 210.

ENTM 250  Special Topics  1, 2, or 3 cr.
A course that deals with special issues and concerns in entrepreneurship not included in regular courses. This course may be repeated for credit when the topics vary. Prerequisites vary with the topic and are noted in the course schedule. Credits depend on the course offered. Prerequisite: approval of track convener.

ENTM 251  Entrepreneurship Tutorial  0.5-3 cr.
Tutorials provide opportunities for students to pursue directed study readings and preliminary research relevant to their concentration where existing courses do not offer the required subject matter. Tutorials include a presentation of a report on the work. Prerequisite: approval of track convener.

ENTM 270 Launching a New Venture  3 cr.
This course focuses on the founding and development of new business organizations. It identifies the prerequisites for successful new ventures, the threats to their survival, and the practical actions entrepreneurs may take to overcome them and successfully grow their venture. Prerequisites: MNGT 215 and FINA 210.
Management Courses

MNGT 215 Fundamentals of Management and Organizational Behavior 3 cr.
A course that focuses on the management of the modern organization and the employees within, preparing students for their role as future managers and leaders. It explores essential management concepts, processes and techniques from an organizational behavior perspective. Main topics covered include management history and evolution, motivation, decision-making, leadership, power and politics, learning and perception, communication, managing groups and teams, and human resource management. General Education/Social Science list I course. Prerequisite: ENGL 204.

MNGT 218 Advanced Topics in Organizational Behavior 3 cr.
This course provides an advanced perspective of the field of organizational behavior including social learning theory/organizational behavior models, managerial activities/behaviors, cross-cultural/ international research, and leadership. It introduces the research methodology in organizational behavior and provides an exposure to contemporary practices of select organizational behavior topics. Prerequisite: MNGT 215.

MNGT 220 Human Resource Management 3 cr.
This course introduces the principles of human resource management. It helps students acquire the basic HRM concepts and equips them with the tools necessary for the effective management of people in organizations. Main topics covered include strategic HRM, planning and staffing, training and development, performance management, compensation, career management and global HRM. Prerequisite: MNGT 215.

MNGT 225 Employee Development 3 cr.
This is a senior level, seminar style course that is designed to expose students to employee training and development within an organization. Specifically, it is designed to help students develop skills that will enable them to effectively design, implement, and evaluate training systems from an applied perspective. The course also sheds light on career planning and development as essential functions in maintaining competency, motivation, and commitment. Prerequisites: MNGT 215, MNGT 220.

MNGT 229 Contemporary Issues in Human Capital Management 3 cr.
This course addresses contemporary issues in human resource management theories and practices in terms of their ability to have a positive impact on organizational results and to encourage desired employee attitudes and behaviors. Main topics examined pertain to organizational culture, international HRM, diversity and work life balance, downsizing, employee participation, knowledge management, employment ethics, emotions at work, flexibility and workplace bullying. Prerequisite: MNGT 215.

MNGT 230 International Management 3 cr.
A course on the management function in a global economy. Topics covered include substantive and stylistic challenges for senior and middle management in international cross continent corporations and conglomerates, standardization and diffusion of authority and operations, mobility and self-reinvention, and integration and differentiation. Prerequisite: MNGT 215.

MNGT 250 Special Topics 1, 2, or 3 cr.
A course that deals with special issues and concerns in management not included in regular courses. This course may be repeated for credit when the topics vary. Prerequisites vary with the topic and are noted in the course schedule. Credits depend on the course offered. Prerequisite: approval of track convener.
MNGT 251  Management Tutorial 0.5-3 cr.
Tutorials provide opportunities for students to pursue directed study readings and preliminary research relevant to their concentration where existing courses do not offer the required subject matter. Tutorials include a presentation of a report on the work. Prerequisite: approval of track convener.

Marketing Courses

MKTG 210  Principles of Marketing 3 cr.
An overview of marketing activities including marketing inputs in strategic planning, global marketing, marketing research, analysis of buyer behavior, market segmentation and positioning, and development of the marketing mix elements. Prerequisite: ENGL 204.

MKTG 215  Services Marketing 3 cr.
An overview of the process of marketing services. This course includes a study of the characteristics of services and their marketing implications, developing marketing strategies, creating value, pricing and promoting the service performance, and ensuring a positive customer experience. Business majors only. Prerequisite: MKTG 210.

MKTG 222  Marketing Research 3 cr.
A course that provides thorough coverage of various marketing research tools along an applied orientation, including a systematic analysis of the steps comprising the marketing research process, starting with research problem definition and terminating with data collection, analysis, and presentation. Business majors only. Prerequisites: MKTG 210, BUSS 200.

MKTG 225  Marketing Communications 3 cr.
An overview of promotion management and integrated marketing communications. Topics covered include behavioral foundations of marketing communications, environmental influences on marketing communications, and the promotion management process and its execution. Business majors only. Prerequisite: MKTG 210. Students cannot receive credit for both SOAN 231 and MKTG 225 or for both SOAN 235 and MKTG 225.

MKTG 230  Sales Management 3 cr.
An overview of selling and sales management. Topics covered include sales management functions and strategies, developing the selling function, sales goals and structure, building a sales program, and leading and motivating the sales force. Business majors only. Prerequisite: MKTG 210.

MKTG 235  Retailing and Merchandising 3 cr.
This course examines the opportunities and problems faced by marketers in contemporary retail formats. The principle issues involved in retailing are explored, including store location and layout, merchandise planning, buying and selling, category management, and coordination of store activities. Overall the course allows students to develop appropriate skills and knowledge for effective and efficient decision making in the contemporary retail environment. Business majors only. Prerequisite: MKTG 210.
MKTG 238  Public Relations  3 cr.
This course focuses on the communication between an individual or organization and the public to promote stakeholder acceptance and approval. Students explore traditional and emerging components of the public relations process through mass media, as well as the needs of different types of businesses, such as corporations, non-profit organizations, and government offices. *Business majors only. Prerequisite: MKTG 210. Students cannot receive credit for both SOAN 234 and MKTG 238.*

MKTG 240  Consumer Behavior  3 cr.
A course that focuses on the customer as the key to market success. Topics covered include the roles of a customer, market values a customer seeks, determinants of customer behavior, the customer’s mindset, customer decision-making, and customer-focused marketing. *Business majors only. Prerequisite: MKTG 210.*

MKTG 245  International Marketing  3 cr.
An overview of the scope and challenge of international marketing. Topics covered include the cultural environment of global markets, assessing global market opportunities, and developing and implementing global marketing strategies. *Business majors only. Prerequisite: MKTG 210.*

MKTG 250  Special Topics  1, 2, or 3 cr.
A course that deals with special issues and concerns in marketing not included in regular courses. It may be repeated for credit when the topics vary. Prerequisites vary with the topic and are noted in the course schedule. Credits depend on the course offered. *Prerequisite: approval of track convener.*

MKTG 251  Marketing Tutorial  0.5-3 cr.
Tutorials provide opportunities for students to pursue directed study readings and preliminary research relevant to their concentration when existing courses do not offer the required subject matter. Tutorials include a presentation of a report on the work. *Prerequisite: approval of track convener.*

BIDS Track Courses

In addition to the 42 credits of general undergraduate requirements from outside the school (listed earlier) and the 39 credits required in the business core (ACCT 210, ACCT 215, BUSS 200, BUSS 211, BUSS 215, BUSS 230, BUSS 239, BUSS 240, BUSS 245, BUSS 248, BUSS 249, DCSN 200, DCSN 205, FINA 210, INFO 200, MKTG 210, MNGT 215), the track requires all students concentrating in Business Information and Decision Systems to take any combination of elective courses totaling 9 credits from the Decision Systems courses (denoted by DCSN) and the Information Systems courses (denoted by INFO).

Decision Systems Courses

DCSN 200  Operations Management  3 cr.
A foundational overview of how managers make strategic decisions in operating a firm, whether in manufacturing or service sectors, thereby giving their firms a sustainable competitive advantage in a global marketplace. The course focuses on the systematic planning, design, and operations analysis of the main processes required for the production of goods and the delivery of services. Specific topics include operations strategy framework; product and service design; customer order management; process design and management; capacity
and material planning; statistical quality control and management; inventory and supply chain. *Students are expected to have some prior familiarity with Microsoft Excel. CMPS 209 or equivalent is recommended.*

**DCSN 205 Managerial Decision Making 3 cr.**
An introduction to the tools and techniques of modern managerial decision-making, using spreadsheets as a modelling and analysis tool. The course addresses formulation of models that can be used to analyze complex problems taken from various functional areas of management, including finance, marketing, operations, and human resources. The goal is to understand how business decisions are reached, what tradeoffs are made, and how outcomes depend on the underlying data. Decision-making is studied: under certainty (linear, integer and non-linear programming; networks; project management; and multi-objectives); under uncertainty (decision analysis and decision trees) and under risk (simulation). Software tools such as Microsoft Excel, Excel Solver Add-in, Tree Plan, Risk Solver Platform, and Microsoft Project will be used for hands-on experiences. *Business majors only; Prerequisites: MATH 204 and CMPS 209.*

**DCSN 210 Business Logistics 3 cr.**
Addresses the planning, organizing, and controlling of such activities as transportation, inventory maintenance, facility location, order processing, purchasing, warehousing, materials handling, packaging, customer service standards, and product scheduling. The course is specifically designed to help managers analyze and resolve challenges encountered in the real business world and a competitive environment.

**DCSN 215 Advanced Managerial Decision Making Models 3 cr.**
Addresses advanced models for decision making from functional areas of management, including finance, marketing, operations, and human resources, through case studies and use of applications software. *Prerequisite: DCSN 205.*

**DCSN 220/ FINA 240 Financial Simulation Modeling 3 cr.**
Introduces elements of computerized simulation, including modeling deterministic and stochastic systems, generation of random numbers and variables, and probability and statistics related to modeling, validating, running, and interpreting computer simulations. Simulation projects on corporate finance issues, and investment and portfolio analysis form an integral part of the course. *Prerequisite: BUSS 200 or equivalent.*

**DCSN 250 Special Topics 1, 2, or 3 cr.**
Special issues and concerns in business decision systems not included in regular courses. This course may be repeated for credit when the topics vary. Prerequisites vary with the topic and are noted in the course schedule. Credits depend on the course offered. *Prerequisite: approval of track convener.*

**DCSN 251 Decision Systems Tutorial 0.5-3 cr.**
Tutorials provide opportunities for students to pursue directed study readings and preliminary research relevant to their concentration where existing courses do not offer the required subject matter. Tutorials include a presentation of a report on the work. *Prerequisite: approval of track convener.*
Management Information Systems Courses

INFO 200  
**Foundations of Information Systems**  
3 cr.  
Introduces information systems that raise productivity, create customer value and sustain competitive advantage. The course shows how the integration of information technology and information systems in the organization's work processes adds value for the business and its customers. It focuses on the following topical areas: competitiveness, functional information systems, e-commerce and supply chain systems, business intelligence systems, and systems development. **Prerequisite: CMPS 209 or equivalent.**

INFO 205  
**Information Systems Design and Development**  
3 cr.  
This course emphasizes the issues facing business and management in the design and development of information systems: properly formulating business problems; targeting the appropriate processes and functions; delineating the planned data needs and user groups; estimating the value of the solution; and the requisite design and implementation processes, phases, and timeframe. Cases will underscore these issues and problems in the context of practical design and development projects. **Prerequisite: INFO 200.**

INFO 210  
**Business Database Systems**  
3 cr.  
This course introduces the central role of database management systems (DBMS) and their applications in the business IT/IS environment, including an overview of database design, implementation, query and use based on using features of a commercial structured query language-based (SQL) DBMS. The course includes a case study that requires a basic information model (conceptual/physical design) and the development of a multiple table database satisfying a real business need. **Prerequisite: INFO 200.**

INFO 215  
**Managing Information Technology Resources**  
3 cr.  
This course introduces the management of IT/IS as a critical business resource. It examines information economics and business strategy; IS strategies; data resources; IS support provided to business processes and decisions; technical (hardware/network/telecommunication) infrastructure of IS; IS maintenance policies and procedures; staffing and funding approaches for IS services; and IS security measures. **Prerequisite: INFO 200.**

INFO 220/ MKTG 220  
**E-Commerce/ Electronic Marketing**  
3 cr.  
This course is an overview of electronic marketing development and its impact on marketing transactions and management of organizations. Topics covered include e-marketing as an economic and strategic approach; business to business and business to consumer e-commerce and e-marketing; management of an e-marketing project; and financial, legal, and security issues. **Prerequisites: MKTG 210, INFO 200.**

INFO 225  
**Enterprise Systems Design and Implementation**  
3 cr.  
DCSN 225  
Introduces the problems of coordination in business caused by insufficient integration of systems and processes. The course offers solutions through a combination of enterprise systems (enterprise resource planning) and enterprise application/data integration. A semester-long project requires students working in teams to develop a business integration solution through the application of systems integration principles based on use of software. **Prerequisites: INFO 200, DCSN 200.**
NFO 230  Knowledge Management  3 cr.
This course addresses capturing, transferring, sharing, and managing knowledge. Topics include understanding knowledge; knowledge management systems life cycle; knowledge creation; capturing knowledge; knowledge transfer and knowledge sharing; learning from data; data mining; and ethical and legal issues.  Prerequisite: INFO 200.

INFO 232/  Accounting Information Systems  3 cr.
ACCT 232
A course that explores in detail several typical Accounting Information System (AIS) application sub-systems, such as order entry/sales, billing/receivables/cash receipts, inventory, purchasing/accounts payable/cash disbursements, payroll, and materials planning/production. This course includes understanding, documenting, designing, using, and auditing these application subsystems.  Business majors only. Prerequisites: ACCT 210, INFO 200.

INFO 250  Special Topics  1, 2, or 3 cr.
Special issues and concerns in business information systems not included in regular courses. This course may be repeated for credit when the topics vary. Prerequisites vary with the topic and are noted in the course schedule. Credits depend on the course offered.  Prerequisite: approval of track convener.

INFO 251  Information Systems Tutorial  0.5-3 cr.
Tutorials provide opportunities for students to pursue directed study readings and preliminary research relevant to their concentration where existing courses do not offer the required subject matter. Tutorials include a presentation of a report on the work.  Prerequisite: approval of track convener.