

The following proposals, received on DAP between June 16-30, 2011, have now been approved.
For more information on the DAP process, see the Academic Handbook at www.uwo.ca/univsec/handbook.

FACULTY OF ENGINEERING

CHEMICAL AND BIOCHEMICAL ENGINEERING

Effective **September 1, 2011**, the following courses will be introduced:

Green Process Engineering 3325A/B - Particulate Operations with Green Engineering Applications

This course introduces the main unit operations for particulate material. Fundamentals of particulate unit operations, including particulate characterization, particulate dynamics, flow through porous beds, filtration, fluidization, sedimentation, mixing and centrifugation.

Prerequisite(s): CBE 2220A/B, CBE 2221A/B.

Corequisite(s): GPE 3395Y.

3 lecture hours, 1 tutorial hour, 0.5 course.

Green Process Engineering 3395Y - Green Process Engineering Laboratory Course

This course focuses on a laboratory, green engineering project. It applies and integrates the concepts reviewed in heat and mass transfer operations, process dynamics and control, and particulate operations.

Prerequisite(s): CBE 2220A/B, CBE 2221A/B, AM 2411 or 2415, CBE 2291A/B.

Corequisite(s): GPE 3322A/B, GPE 3310A/B, GPE 3324A/B, GPE 3325A/B.

6 laboratory hours, 0.5 course.

Green Process Engineering 4415 - Green Process Engineering Project

Selection and investigation of a green engineering problem. Analytical and/or experimental work is carried out by individual students or project groups under the supervision of a faculty member. Progress reports and a final engineering report are prepared; each student must deliver a public lecture.

Prerequisite(s): Completion of third year of the Green Process Engineering program.

Antirequisite(s): CBE 4415, CEE 4440, ECE 4416, MME 4499, SE 4450.

3 lecture hours, 1.0 course.

Effective **September 1, 2011**, the following courses will be revised:

Chemical and Biochemical Engineering 4403A/B - Biochemical Separation Processes

The main objective of this course is to introduce the student to the basic fundamentals of downstream separation and purification processes such as membrane separation processes, protein separation and purification and other separation processes of economic importance to fermentation industry.

Prerequisite(s): CBE 2290A/B, **or Biology 1001A and Biology 1002B**, or the former Biology 1222 or Biology 1223.

3 lecture hours, 1 tutorial hour, 0.5 course.

Chemical and Biochemical Engineering 4424A/B - Biosensor Principles and Applications

The fundamentals of biosensors and their applications in biotechnology, environmental and biochemical engineering will be discussed. Fundamentals of intelligent biosensor design are introduced. Basic concepts of micro- and nano-biosensors are discussed.

Prerequisite(s): Chemistry 1024A/B, CBE 2290A/B, **or Biology 1001A and Biology 1002B**, or the former Biology 1222 or 1223.

3 lecture hours, 1 tutorial hour, 0.5 course.

Green Process Engineering 3310A/B - Process Dynamics and Control with Green Engineering Applications

The course covers the dynamic behaviour, modelling and control of chemical processes. The principles of feedback, feedforward and cascade control of commonly-encountered systems such as level, flow, temperature, pressure, are described. Theory is introduced to illustrate current practice. Simulations of dynamic behaviour of processes will make use of the MATLAB/Simulink programming environment.

Antirequisite(s): The former CBE 4410A/B.

Prerequisite(s): Applied Mathematics 2411 or 2415, CBE 2291A/B.

Corequisite(s): **GPE 3395Y**.

3 lecture hours, ~~3 laboratory hours~~, **1 tutorial**, 0.5 course.

Green Process Engineering 3322A/B - Heat Transfer Operations with Green Engineering Applications

This course will introduce green engineering students to the basics of heat transfer, including conduction, convection, radiation and phase change. This knowledge will be used for the design of various types of equipment, such as heat exchangers with and without phase change agitated reactors, evaporators, condensers. Students do experiments related to green applications such as solar heat transfer, heat integration, etc.

Prerequisite(s): CBE 2221A/B.

Corequisite(s): GPE 3395Y.

3 lecture hours, 2 laboratory hours, 1 tutorial hour per week, 0.5 course.

Green Process Engineering 3324A/B - Mass Transfer Operations with Green Engineering

This course reviews the fundamentals of interphase mass transfer and transfer units and then reviews the design of differential mass transfer equipment, with special emphasis on absorption, stripping, humidification and drying. The laboratory component of the course focuses on the operation of mass transfer process with green applications.

Prerequisite(s): CBE 2221A/B, CBE 2220A/B.

Corequisite(s): GPE 3395Y.

3 lecture hours, 2 laboratory hours, 1 tutorial hour, 0.5 course.

Effective **September 1, 2011**, the following module will be revised:

GREEN PROCESS ENGINEERING**Admission Requirements**

Students entering the Green Process Engineering Program must have completed the common first year curriculum of Engineering with a minimum year-weighted average (YWA) of 70%.

Green Process Engineering Program**Third-Year Program**

CBE 3317Y, CBE 3323A/B, CBE 3325A/B, GPE 3310A/B, GPE 3315A/B, GPE 3322A/B, GPE 3324A/B, GPE 3325A/B, GPE 3382A/B, GPE 3383A/B, GPE 3385A/B, GPE 3395Y, Statistical Sciences 2143A/B.

Fourth-Year Program

Business Administration 2299, GPE 4484A/B, GPE 4497, GPE 4415*, one of: CBE 4407A/B, CBE 4409A/B or the former CBE 3363A/B, CEE 4405A/B, two 0.5 technical electives*, 0.5 non-technical elective ** ES 4498F/G

*A student may substitute two 0.5 technical electives from the list below for GPE 4415.

*** Green Process Engineering Program Technical Electives**

CBE 4407A/B, CBE 4409A/B or the former CBE 3363A/B, CBE 4417A/B, CBE 4418A/B, the former CBE 3321A/B, the former CBE 4425A/B, CBE 4432A/B, CBE 4433A/B, CBE 4493A/B or the former CBE 3392A/B, CEE 4405A/B, CEE 3362A/B.

**Selection of the non-technical elective must be approved by the Department Counsellor to satisfy the CEAB requirements of subject matter that deals with central issues, methodologies, and thought processes of the humanities and social sciences. An approved list can be found on the Engineering website.

CIVIL AND ENVIRONMENTAL ENGINEERING

Effective **September 1, 2011**, the following courses will be revised:

Civil and Environmental Engineering 3347A/B - Concrete Design

Introduction to reinforced concrete design including serviceability and strength limit states. The background to appropriate building codes is considered with reference to the design of beams, columns, other units and assemblages. The design of small structures and the solution of design problems are included.

Prerequisite(s): CEE 2202A/B, CEE 2221A/B, Applied Mathematics 2411 or 2415.

3 lecture hours, 3 tutorial/laboratory hours, 0.5 course.

Civil and Environmental Engineering 4441 - Civil Engineering Design Project

Students undertake a comprehensive engineering design project which involves the creative, interactive process of designing a structure/system to meet a specific need subject to economic, health, safety and environmental constraints. ~~Each student is required to write an engineering report and deliver a public lecture.~~
 Each group of students is required to write an engineering report and deliver a public lecture.

Antirequisite(s): CBE 4497, ECE 4416, MME 4499, SE 4450, ES 4499.

Prerequisite(s): Completion of third year of the Civil Engineering program.

1 lecture hour, 4 laboratory hours, 1.0 course

ELECTRICAL AND COMPUTER ENGINEERING

Effective **September 1, 2011**, the following course will be revised:

Electrical and Computer Engineering 3370A/B - Communication Electronics I

Principles of communications, modulation; high frequency amplifiers, power amplifiers, matching networks; stability, oscillators, modulators and demodulators; phase locked loops; introduction to digital communications.

This course deals with fundamental principles of wireless RF communications, AM, FM, and PM modulation, demodulation and spectra, and frequency shifting and mixing. Practical linear and nonlinear circuits for a heterodyne radio receiver are studied, including RF/IF amplifiers, matching networks, oscillators, mixers, modulators, demodulators, and phased-locked loops.

Prerequisite(s): ECE 2231A/B, ECE 2233A/B, ECE 3337A/B.

3 lecture hours, 1.5 laboratory hours, 1 tutorial hour, 0.5 course.

MECHATRONIC SYSTEMS ENGINEERING

Effective **September 1, 2011**, the following course will be revised:

Mechatronic Systems Engineering 4499 - Mechatronic Design Project

The aim of the course is to develop and practice the interdisciplinary skills required to solve open-ended engineering design problems from a mechatronics perspective. Students will experience all phases of the design process, including: problem definition, generation and evaluation of concepts, engineering analysis and testing, and preparation of design documentation. Project management and communications skills will also be emphasized. A faculty advisor will supervise project teams and an interdisciplinary committee comprised of Mechatronics program faculty members will assess project outcomes.

Antirequisite(s): CBE 4445 **4497**, the former MME 4419, CEE 4440 **4441**, **GPE 4497**, SE 4450, MME 4499, ECE 4416, ES 4499.

Prerequisite(s): Completion of third year of the Mechatronic Systems Engineering program.

6 laboratory/project hours, 1.0 course.

Restricted to students enrolled in the Mechatronic Systems Engineering program.

Effective **September 1, 2011**, the following module will be revised:

MECHATRONIC SYSTEMS ENGINEERING**Third Year Program**

Applied Mathematics 3415A/B, MSE 3301A/B, MSE 3302A/B, ECE ~~2227A/B~~ **2277A/B**, ECE 3330A/B, ECE 3332A/B, ECE 3331A/B, ECE 3375A/B, MME 3360A/B, MME 3381A/B, MME 3380A/B, 0.5 non- technical elective*.

SCHULICH SCHOOL OF MEDICINE & DENTISTRY**DENTISTRY**

Effective **September 1, 2011**, the following courses will be introduced:

Dentistry 5255 - Practice Administration

This course consists of lectures on inter-personal communications and patient management on various topics such as Informed Consent, Conflicts of Interest, Conflict Resolution, Managing Difficult Patients, and Handling Error.

16 lecture hours; 0 lab hours (Total 16 hours).

Dentistry 5321 - Diagnosis & Treatment Planning

This course expands the concepts presented in D5221. Students will develop diagnosis and treatment plans for a variety of multidisciplinary, complex cases.

27 lecture hours; 0 lab hours (Total 27 hours)

Dentistry 5331 - Patient Management

To introduce specific concerns in dealing with a geriatric population in a general dental practice. Students will be introduced to biological, physiological, psychological and behavioral changes in a geriatric patient and common disease processes which affect the oral cavity. Assessment and treatment planning of the geriatric patient are emphasized.

10 lecture hours; 0 lab hours (Total 10 hours)

Dentistry 5332 - Patient Assessment

This case-based course will provide students with experience in recording a description, developing a diagnosis and management of a variety of lesions involving soft tissue or bone.

22 lecture hours; 0 lab hours (Total 22 hours)

Dentistry 5333 - Paediatric Dentistry

Paediatric Dentistry course program consists of comprehensive management of evidence based management of dental problems in children. The lecture and clinical course will place emphasis to give students the best experience in diagnosis, treatment planning and treatment procedures in children. A patient centered, up to date clinical program, provides the experience and necessary fundamentals to be applied to general practice

24 lecture hours; 4 seminar hours (Total 28 hours)

Dentistry 5324 - Orthodontics

The course will introduce the students to orthodontic therapy for mixed dentition, early permanent dentition and adults. The labs will provide experience in the analysis of diagnostic records and the fabrication of the most common orthodontic appliances. Clinical activities will relate to diagnosis and treatment planning of common orthodontic problems.

28 lecture/seminar hours; 18 lab hours (Total 46 hours)

Dentistry 5329 - Integrated Restorative

This course builds on previously taught courses and materials in fixed, removable & implant prosthodontics, operative dentistry, endodontics and occlusion. The course amalgamates all the mentioned disciplines together to present the applied clinical aspect of restorative dentistry. Different approaches to various clinical situations, techniques and re-emphasis on previously taught techniques and ideas is presented. The course promotes a multidisciplinary approach when treating a patient.

59 lecture hours; 0 lab hours (Total 59 hours)

Dentistry 5335 - Oral Diseases

This course is a continuation of Oral Diseases II, including wider aspects of odontogenic, salivary, mucocutaneous and connective tissue diseases.

30.5 lecture hours; 6 lab hours (Total 36.5 hours)

Dentistry 5368 - Dento-Facial Trauma

The objectives of this course are 1) to establish in our students an understanding of the management of wound healing as it relates to trauma of the dento-facial complex; 2) to develop a multi-disciplinary approach to the application of the clinical principles of diagnosis and management of maxillofacial trauma.

13 lecture hour; 3 lab hours (Total 16 hours)

Dentistry 5390 - Introduction to Clinics (section 003 ITD students only)

This foundation course reviews basic dental concepts and introduces the ITD1 student to the principles and practices followed in Dentistry.

122.5 lecture hours; 122 lab hours; (Total 244.5 hours)

Dentistry 5320 - Clinical Practice

This course encompasses all clinical patient care provided by dental students under direct supervision in all areas of dentistry.

0 lecture hours; 0 lab hours; up to 648 clinic hours (Total: up to 648 hours)

Effective **September 1, 2011**, the following courses will be withdrawn:

Dentistry 5304 001 - Oral Pathology (Section 001 only, Section 003 to remain)

Dentistry 5346 - Oral Radiology

Dentistry 5362 - Ortho & Paediatric Dentistry

Dentistry 5345b - Oral Medicine

Dentistry 5326: Removable Prosthodontics

FACULTY OF SCIENCE**APPLIED MATHEMATICS**

Effective **September 1, 2011**, the following courses will be revised:

Applied Mathematics 2813B - Numerical Analysis

Introduction to numerical analysis; polynomial interpolation, numerical integration, matrix computations, linear systems, nonlinear equations and optimization, the initial value problem. Assignments using a computer and the software package, Matlab, are an important component of this course.

Antirequisite(s): Applied Mathematics 2413.

Prerequisite(s): A minimum mark of 55% in Mathematics 1600A/B or the former Linear Algebra 1600A/B.

Corequisite(s): Calculus 2302A/B, **2402A/B** or 2502A/B.

3 lecture hours, 1 laboratory hour, 0.5 course.

Applied Mathematics 3615A/B - Mathematical Biology

An introduction to mathematical biology. Case studies from neuroscience, immunology, medical imaging, cell biology, molecular evolution and ecology will give an overview of this diverse field, illustrating standard mathematical approaches such as compartmental analysis and evolutionary game theory.

Prerequisite(s): One of Calculus 2302A/B, **2402A/B**, 2502A/B or the former Applied Mathematics 290a; plus one of Mathematics 1600A/B or the former Linear Algebra 1600A/B, Applied Mathematics 1411A/B or the former Applied Mathematics 291b.

3 lecture hours, 0.5 course.

FACULTY OF SOCIAL SCIENCE**ECONOMICS**

Effective **September 1, 2011**, the following module will be revised:

ECONOMICS/HBA COMBINED DEGREE PROGRAM**Year 3 (HBA1)**

~~7.5 courses: Business Administration 3300, 3301, 3302Y, 3303, 3304, 3307, 3311, 3316.~~

Year 4

~~2.5 courses, normally taken in the third year of the chosen Honors Specialization module in the Department of Economics, including:~~

At least 0.5 course toward the requirement of 1.0 course in Economics at the 2200 or 3000 level with an F/G designation.

For students in the Economics HSP: Economics 3320A/B and 3382A/B.

2.25 courses: Business Administration 4415Q/R/S/T, 4466A/B, 4505A/B, 4430 or 4410.

1.0 Business Administration elective course chosen from 4000-level courses.

Year 5

1.0 senior research/thesis course: Economics 4400E.

2.0 additional courses from the chosen Honors Specialization module in the Department of Economics.

For students in the Economics HSP: Economics 3388A/B (recommended but not required for students in the other two modules).

Completion of all additional requirements for the chosen module.

1.5 Business Administration elective courses chosen from the available 4000-series.

0.5 other elective course at the 2000 level or higher.

All other breadth and essay requirements for graduation must be completed by the end of Year 5.

Year 3 (HBA1)

The third year of the undergraduate program in Business Administration consists of an integrated set of courses (8.25 courses) designed to give a basic understanding of the functions and the interrelationships of the major areas of management, as well as to develop problem-solving and action-planning skills.

All students will take: Business Administration 3300K, 3301K, 3302K, 3303K, 3304K, 3307K, 3311K, 3316K, 3321K, 3322K, 3323K.

No substitute for any of the above courses is permitted under any circumstances.

Years 4 and 5 (HBA2 Requirements can be taken over year 4 or 5 - no course is restricted to either year)

2.0 courses:

International Perspective Requirement: Business Administration 4505A/B.

Corporations and Society Perspective Requirement: at least one 0.5 course from Business Administration 4521A/B, 4522A/B, 4523A/B or other business elective as determined and approved by the HBA Program Director to satisfy this requirement.

Applied Project Requirement: At least one of Business Administration 4430 (1.0 course) or Business Administration 4410 (1.0 course).

3.5 additional business elective courses.

Years 4 and 5 (Economics)

2.5 courses, normally taken in the third year of the chosen Honors Specialization module in the Department of Economics, including:

at least 0.5 course toward the requirement of 1.0 course in Economics at the 2200 or 3000 level with an F/G designation.

for students in the Economics HSP: Economics 3320A/B and 3382A/B.

senior research/thesis course: Economics 4400E.

2.0 additional courses from the chosen Honors Specialization module in the Department of Economics.

For students in the Economics HSP: Economics 3388A/B (recommended but not required for students in the other two modules).

Completion of all additional requirements for the chosen module.

All other breadth and essay requirements for graduation must be completed by the end of Year 5.

BRESCIA UNIVERSITY COLLEGE

PSYCHOLOGY

Effective **September 1, 2011**, the following modules will be revised:

SPECIALIZATION IN PSYCHOLOGY

Module

9.0 courses:

1.0 course Psychology 2850A/B and 2851A/B, or Psychology 2810 or the former Psychology 2885.

1.0 course Psychology 2855F/G and 2856F/G, or Psychology 2800E.
 0.5 course in Psychology numbered 2100-2299.
 0.5 course in Psychology numbered 2300-2799.
~~0.5 course Psychology 2990A/B.~~
 0.5 course from: Writing 1020F/G or 2101F/G.
~~5.0~~ **5.5** additional courses in Psychology at the 2000 level or above.

MAJOR IN PSYCHOLOGY

Module

6.0 courses:

1.0 course normally taken in second year: Psychology 2850A/B, 2855F/G.
 0.5 course in Psychology numbered 2100-2299.
 0.5 course in Psychology numbered 2300-2799.
 1.0 course in Psychology numbered 2100-3999.
 3.0 courses in Psychology at the 2000 level or above (~~Psychology 2990A/B is recommended~~).

Note: Students who may wish to enter the Honors Specialization or Specialization modules in Psychology should take Writing 2101F/G.

MINOR IN PSYCHOLOGY

Module

4.0 courses:

0.5 course in Psychology numbered 2100-2299.
 0.5 course in Psychology numbered 2300-2799.
 3.0 additional courses in Psychology at the 2000 level or above (~~Psychology 2990A/B is recommended~~).

KING'S UNIVERSITY COLLEGE

ENGLISH

Effective **September 1, 2011**, the following modules will be revised:

HONORS SPECIALIZATION IN ENGLISH LANGUAGE AND LITERATURE

Admission Requirements

Completion of first-year requirements with no failures. Students must have an average of at least 70% in 3.0 principal courses, including 1.0 course from English 1020E or 1022E or 1024E or 1035E or 1036E or both of (English 1027F/G and 1028F/G) **or 1901E** plus 2.0 additional courses, with no mark in these principal courses below 60%.

MAJOR IN ENGLISH LANGUAGE AND LITERATURE

Admission Requirements

Completion of first-year requirements, including 1.0 from English 1020E or 1022E or 1024E or 1035E or 1036E or both of (English 1027F/G and 1028F/G) **or 1901E** with a mark of at least 60%. Students will be eligible for an Honors BA with double major if they obtain 70% average in the courses of each major module with no mark less than 60% in each course. No failures on options.

SPECIALIZATION IN ENGLISH LANGUAGE AND LITERATURE

Admission Requirements

Completion of first-year requirements, including 1.0 from English 1020E or 1022E or 1024E or 1035E or 1036E or both of (English 1027F/G and 1028F/G) **or 1901E**, with a mark of at least 60%. Students should consult with the Department prior to admission.

MINOR IN ENGLISH LANGUAGE AND LITERATURE**Admission Requirements**

Completion of first-year requirements, including 1.0 from English 1020E or 1022E or 1024E or 1035E or 1036E or both of (English 1027F/G and 1028F/G) or 1901E, with a mark of at least 60%. Students should consult with the Department prior to admission.

MINOR IN ENGLISH FOR TEACHERS**Admission Requirements**

Completion of first-year requirements, including 1.0 from English 1020E or 1022E or 1024E or 1035E or 1036E or both of (English 1027F/G and 1028F/G) or 1901E, with a mark of at least 60%. Students should consult with the Department prior to admission.

MINOR IN GENERAL ENGLISH**Admission Requirements**

Completion of first-year requirements, including 1.0 from English 1020E or 1022E or 1024E or 1035E or 1036E or both of (English 1027F/G and 1028F/G) or 1901E, with a mark of at least 60%. Students should consult with the Department prior to admission.

MINOR IN DRAMATIC LITERATURE**Admission Requirements**

Completion of first-year requirements, including 1.0 from English 1020E or 1022E or 1024E or 1035E or 1036E or both of (English 1027F/G and 1028F/G) or 1901E, with a mark of at least 60%. Students should consult with the Department prior to admission.

HISTORY

Effective September 1, 2011, the following modules will be revised:

HONORS SPECIALIZATION IN HISTORY**Admission Requirements**

Completion of first-year requirements with no failures. Students must have an average of at least 70% in 3.0 principal courses, including History 1401E or 1403E or 1801E or 1901E offered at King's University College, or any other 1000-1999 level history course, plus 2.0 additional courses, with no mark in these principal courses below 60%.

MAJOR IN HISTORY**Admission Requirements**

Completion of first-year requirements including History 1401E or 1403E or 1801E or 1901E offered at King's University College, or any other history course at the 1000-1999 level, with a mark of at least 60%.

MINOR IN HISTORY**Admission Requirements**

Completion of first-year requirements including History 1401E or 1403E or 1801E or 1901E offered at King's University College, or any other history course at the 1000-1999 level, with a mark of at least 60%.

MANAGEMENT AND ORGANIZATIONAL STUDIES

Effective **September 1, 2011**, the following course will be introduced:

Management and Organizational Studies 2275A/B - Business Law I

An introduction to the field of business (commercial) law with emphasis on the principal features of Canada's legal system, the law of torts, the law of contract, and four special contractual relationships: the employment relationship, labour law, the sale of goods, and consumer protection.

Antirequisite(s): Business Administration 4450A/B, Law 5210A/B, 5510A/B.

Prerequisite(s): Enrollment in the BMOS or the Honors Specialization in Urban Development or Technical Entrepreneurship Certificate (TEC) or the Honors Specialization or Specialization in Foods and Nutrition.

3 lecture hours, 0.5 course.

(Brescia, Huron, King's)