REPORT OF THE SENATE COMMITTEE ON ACADEMIC POLICY AND AWARDS

(SCAPA)

Faculty of Engineering: Introduction of a Structural Engineering with International Development Option (Option G)

Schulich School of Medicine & Dentistry and Faculty of Science: Introduction of Medical Health Informatics as an Undergraduate Subject Area

Brescia University College: Introduction of a Major in Spirituality and Community Leadership

School of Graduate and Postdoctoral Studies: Introduction of "Composite Materials" as a New Field in the MEng Program (Mechanical and Materials Engineering)

School of Graduate and Postdoctoral Studies: Change from MEd in Educational Studies to MA in Education Studies

Report of the Subcommittee on Program Review – Graduate: Review of French Studies Program

Report of the Subcommittee on Program Review – Undergraduate

New Awards and Bursary

Faculty of Arts and Humanities: Withdrawal of the Minor in Dramatic Literature

FOR APPROVAL

1. **Faculty of Engineering: Introduction of a Structural Engineering with International Development Option (Option G)**

Recommended: That a Structural Engineering with International Development Option (Option G) be introduced in the Faculty of Engineering, effective September 1, 2012.

NEW CALENDAR COPY
http://www.westerncalendar.uwo.ca/2011/pg1418.html

G. STRUCTURAL ENGINEERING WITH INTERNATIONAL DEVELOPMENT

Admission

Students entering the Structural Engineering with International Development Option must have completed the common first-year curriculum in the Faculty of Engineering with a minimum year-weighted average (YWA) of 75%.

Second-Year Program
Applied Mathematics 2411, CEE 2202A/B, 2217A/B, 2219A/B, 2220A/B, 2221A/B, 2224, Earth Sciences 2281A/B, ES 2211F/G, Statistical Sciences 2141A/B*

*Note: A student may, with the permission of the department counselor, substitute Statistical Sciences 2143A/B FOR STATISTICAL SCIENCES 2141A/B.

Note: CEE 3324A/B (Surveying) is available each summer (15 days) and must be completed before a student may graduate from the Civil Engineering program.

Third-Year Program
CEE 3326, 3327A/B, 3328A/B, 3340A/B, 3342A/B, 3346A/B, 3347A/B, 3348A/B, 3358A/B, 3369A/B, 3384A/B

Fourth-Year Program
CEE 4441, 4404A/B, 4426A/B, 4478A/B, 4490, ES 4498F/G, Business Administration 2299, 1.0 technical electives

Technical Electives: Structural Engineering with International Development Option:
CEE 4440, CEE 3355A/B, CEE 4418A/B (effective September 2013), CEE 4428A/B, CEE 4429A/B, CEE 4458A/B, CEE4461A/B, CEE 4465A/B, CEE 4476A/B, CEE 4477A/B, Earth Sciences 3340A/B, Earth Sciences 4440A/B

Background:

This new Option is intended to extend the International Development Option to the many CEE students who prefer structural engineering to environmental engineering and so increase total enrolment in the International Development Options. Currently, approximately 75% of CEE second-year students choose Option A (Civil and Structural) and the majority of the rest choose Option B (Environmental), so the current pool of potential students for the existing International Development Option is small. Structural Engineering is an important facet of International Development (buildings, other above-ground and buried infrastructure, engineering materials) and so this is a suitable choice for interested students. It is hoped that this change will increase the number of students taking the International Development Options and ensure the long-term sustainability of the three existing International Development courses.

No new resources are required to offer this proposed new option as currently, all courses are offered by Civil and Environmental Engineering. The proposal parallels the current Option F (Environmental Engineering with International Development), which is essentially Option B (Environmental Engineering) with three International Development Courses replacing a required course, a technical elective and a non-technical elective.

2. **Schulich School of Medicine & Dentistry and Faculty of Science: Introduction of Medical Health Informatics as an Undergraduate Subject Area**

Recommended: That effective September 1, 2012, Medical Health Informatics be introduced as an undergraduate subject area and be included in the "Medical Science" list in Category C of the Breadth Requirements for Bachelor Degrees.

REVISED CALENDAR COPY
http://westerncalendar.uwo.ca/2012/pg81.html

BREADTH REQUIREMENTS FOR BACHELORS DEGREES

Category C
Medical Science
Anatomy and Cell Biology, Biochemistry, Chemical Biology, Epidemiology and Biostatistics, Medical Biophysics, ***Medical Health Informatics***, Medical Sciences, Microbiology and Immunology, Neuroscience, Pathology, Pathology and Toxicology, Pharmacology, Physiology

Also add to list of course subject areas offered: http://www.westerncalendar.uwo.ca/2012/pg882.html.

Background:

The new Honors Specialization in Medical Health Informatics was approved by SCAPA on May 30, 2012, and by Senate on June 8, 2012.

Medical Health Informatics (MHI) is being proposed as a subject area to support the approved Honors Specialization in Medical Health Informatics. Medical Health Informatics 4980E: Seminar and Research Project (to be submitted for approval through the DAP process) will be offered jointly by the Departments of Pathology, Schulich School of Medicine & Dentistry, and Computer Science, Faculty of Science, as the capstone course of the proposed Honors Specialization in Medical Health Informatics. Students will undertake a research project that will cross disciplines and be supervised by a faculty member from either the computer science or one of the basic medical science departments or, depending on the project, under co-supervision. Pathology 4100F: Health Informatics and Pathology 4110G: Health Information Management will be re-named as Medical Health Informatics 4100F and 4110G, reflecting the nature of the courses. The re-naming of the courses will be submitted for approval through the DAP process. With this preparation at the undergraduate level, students will be well-suited for more in-depth studies at the graduate level in informatics or for entry-level positions within government, health care, and industry.

3. **Brescia University College: Introduction of a Major in Spirituality and Community Leadership**

Recommended: That a Major in Spirituality and Community Leadership be introduced at Brescia University College, effective September 1, 2012.

NEW CALENDAR COPY
(http://www.westerncalendar.uwo.ca/2012/pg1049.html)

MAJOR IN SPIRITUALITY AND COMMUNITY LEADERSHIP

Admission Requirements
Completion of first-year requirements, including Religious Studies 1031E, Dimensions of Leadership 1031, and Sociology 1020, or permission of the Department.

Module
6.0 courses:
1.0 course: Religious Studies 2288E (recommended in Year 2 of the program)
1.5 courses from: Religious Studies 2222F/G, 2232F/G, 2236A/B, 3257F/G, 3482F/G
1.5 courses from: Dimensions of Leadership 2232A/B, 2233A/B, 3339A/B, Sociology 3335A/B
2.0 courses: Sociology 2215A/B, 3330F/G, 3331F/G, 3334A/B

Background:

The Major in Spirituality and Community Leadership builds on Brescia's mission to "educate women to think critically and to participate actively in society... [and to] lead with wisdom, justice and compassion in a changing world." This interdisciplinary module will enhance Brescia's already-existing strengths in Religious Studies, Community Development, and Dimensions of Leadership. Courses in Religious Studies have a strong social justice component and encourage students to be self-reflective and cognizant of the wide range of critical issues facing the human community. Brescia has a strong, well-established program in Community Development that has at its foundation community service-learning as a pedagogical approach.

This module does not require any additional resources. It will be supported by at least five full-time, tenured faculty members from Religious Studies, Community Development and Leadership. This module is made up of already-existing courses taught at Brescia.

4. **School of Graduate and Postdoctoral Studies:**

4a Introduction of "Composite Materials" as a New Field in the MEng Program (Mechanical and Materials Engineering)

Recommended: That effective September 1, 2012, "Composite Materials" be introduced as a new field in the Master of Engineering (MEng) in Mechanical and Materials Engineering program in the School of Graduate and Postdoctoral Studies, as set out in **Appendix 1**.

Background:

Composite materials, due to their lightweight nature and cost-effective advantage, are rapidly becoming a major choice of material within many industries such as aerospace, automotive, marine, construction, pipeline, sports, wind energy and electronics. Accordingly, composite processing also has become a mainstream technology in the manufacturing sector.

Western has competitive strength in composite technologies. Recently, the International Composites Research Centre (ICRC), jointly founded by Western and the Fraunhofer Institute of Chemical Technology, has been located at the newly-developed Advanced Manufacturing Park in London. Equipped with $25-million facilities, ICRC will become a leading site for advanced composite-materials research and for industry-scale demonstration of composite processing and testing. ICRC is mainly focused on fibre composites for lightweight construction in a variety of industries with special emphasis on the automotive sector , which is a major economic driver in Ontario thereby providing a potential job market for MEng students of this composites field. It is also a potential recruiting ground for MEng students.

The objective of the proposed MEng field is to assist qualified engineers to improve their theoretical and practical skills in areas necessary to address key technological challenges in the composite area. The field is specially structured to provide students with a comprehensive education in design, analysis, testing, prototyping, processing development and project management of composite manufacturing.

4b Change from MEd in Educational Studies to MA in Education Studies

Recommended: That the Master of Education (MEd) in Educational Studies be changed to the Master of Arts (MA) in Education Studies, effective September 1, 2013;

That students enrolled in the MEd program on September 1, 2013, have the option to transfer into the new MA program or to finish their MEd program; and,

That the MEd in Educational Studies program be withdrawn effective September 1, 2015.

Background:

The Faculty of Education proposes the following changes to its MEd in Educational Studies program:

1) Change the degree's name from *Educational Studies* to *Education Studies* in order to be consistent with the PhD program in Education Studies.

2) Change the designation of the current program from *Master of Education* to *Master of Arts* in order to ensure funding for master's students in research-intensive programs and to attract the best students.

3) Change the structure of the current course-based MEd program to a research-intensive MA program that requires a thesis or a Master Research Project (MRP). The students can select the thesis route (6 courses and a thesis) or the MRP route (8 courses and a major research project).

4) Eliminate all fields that currently are offered as part of the MEd program with the exception of the Counselling Psychology field. The offering of fields is structurally and financially unsustainable and students have no previous knowledge of the fields at the time of registration. As a result, they make frequent changes as they progress in the program. Elimination of fields will provide students with more flexibility and choice.

5) Require students admitted to the MA program to take a half course in research methods. There will also be additional advanced research methods courses available to students to support them in their research (Qualitative, Quantitative and Mix-methods).

FOR INFORMATION

5. **Report of the Subcommittee on Program Review – Graduate: Review of French Studies Program**

SCAPA has approved on behalf of the Senate the recommendations of the Subcommittee on Program Review – Graduate (SUPR-G) with respect to the review of the graduate program in French Studies as detailed in **Appendix 2**.

Background:

The review of the graduate program in French Studies took place on March 1 - 2, 2012.

6. **Report of the Subcommittee on Program Review – Undergraduate**

SCAPA has approved on behalf of the Senate the recommendations of the Subcommittee on Program Review – Undergraduate (SUPR-U) with respect to the cyclical reviews of the undergraduate programs detailed in **Appendix 3**.

Background:

The following cyclical reviews of undergraduate programs were conducted in 2011 – 2012:

Faculty/Affiliates	Program	Date of Review	SUPR-U recommendation
Arts and Humanities	Film Studies	Feb. 10, 2012	Good Quality
Arts and Humanities	French Studies	Mar. 14, 2012	Good Quality
Science	Earth Sciences	Mar. 20, 2012	Good Quality
Science	Environmental Science	Mar. 6, 2012	Good Quality with Report in One Year
Science	Statistical and Actuarial Science	Mar. 19, 2012	Good Quality
Social Science	History	Mar. 8, 2012	Good Quality
Brescia	English	Mar. 2, 2012	Good Quality
Brescia	Foods and Nutrition	Mar. 30, 2012	Good Quality
Huron	History	Jan. 19-20, 2012	Good Quality with Report in One Year
King's	Philosophy	Feb. 6, 2012	Good Quality
King's	Religious Studies	Feb. 17, 2012	Good Quality

The detailed Final Summary Reports of each of these reviews are attached as **Appendix 3**.

7. **New Awards and Bursary**

SCAPA has approved on behalf of the Senate, for recommendation to the Board of Governors through the President & Vice-Chancellor, the Terms of Reference for the new awards and bursary set out in **Appendix 4.**

8. **Faculty of Arts and Humanities: Withdrawal of the Minor in Dramatic Literature**

SCAPA and Senate approved the withdrawal of the Minor in Dramatic Literature effective January 1, 2012. The proposal indicated that there were no students registered in the module at that time. However, it became apparent in June 2012 that at least five students were still registered in this module. Students registered in the Minor in Dramatic Literature will now have the option to complete the module no later than August 31, 2015.

New Field "Composite Materials" in the Master of Engineering (MEng) Program

OVERVIEW OF THE NEW FIELD

Composite materials, due to their lightweight nature and cost-effective advantage, are rapidly becoming a major choice of material within many industries such as aerospace, automotive, marine, construction, pipeline, sports, wind energy and electronics. Accordingly, composite processing has also become a mainstream technology in the manufacturing sector. The global composite market is anticipated to reach US$ 6 billion in 2012[1]. North America Automotive Composites Market is expected to reach $1.581 billion in 2014[2]. Canada is one of the leading countries in composite manufacturing and is rich in the natural fibres and biomass that can be used as raw materials for composites. Hence, composite technologies are strategically important to Canada's economy. Canada's major industry sectors, such as aerospace, always have demand for highly skilled composite workers. For example, Boeing Winnipeg, one of the largest aerospace composite manufacturers in Canada, has created over 1,400 jobs and produces about 1,000 different kinds of composite parts and assemblies for Boeing Commercial Airplanes[3].

Western has competitive strength in composite technologies. Recently, the International Composites Research Centre (ICRC), jointly founded by Western and the Fraunhofer Institute of Chemical Technology, has been located at the newly developed Advanced Manufacturing Park in London. Equipped with $25-million facilities, ICRC will become a leading site for advanced composite materials research and for industry-scale demonstration of composite processing and testing. ICRC is mainly focused on fibre composites for lightweight construction in a variety of industries with special emphasis on the automotive sector[4], which is a major economic driver in Ontario thereby providing a potential job market for MEng students of this composites field. It is also a potential recruiting ground for MEng students. London is located at the centre of this auto-company area. Other local companies such as General Dynamics, Diamond Aircraft and Armatec would be interested in this program.

Envisaging the industry-driven demand for composite technologies, The Department of Mechanical and Materials Engineering (MME) proposes to develop a new Non-thesis Master of Engineering (MEng) field in composite materials. The Department of Mechanical and Materials Engineering (MME) has 24 full-time faculty members excelling in a variety of research and teaching subjects. The department houses excellent facilities for material fabrication, processing, characterization and testing. A group of MME faculty members have complementary expertise in research and teaching of composite materials. A number of courses currently offered by MME are related to the proposed composites field, thereby providing a strong foundation for the proposed new MEng field in composite materials.

OBJECTIVE OF THE NEW FIELD:

The objective of the proposed MEng field is to assist qualified engineers to improve their theoretical and practical skills necessary to address key technological challenges in the area of composite materials. The field is specially structured to provide students with a comprehensive education in design, analysis, testing, prototyping, processing development and project management of composite manufacturing.

STRATEGIC VALUE TO WESTERN:

The proposed new field falls in two signature areas of the university's strategic research plan: Environmental Sustainability (from energy efficiency and material saving aspects) and Materials (from new materials, material processing and manufacturing aspects), which are also strategic areas of Western Engineering as stated in the Western Engineering Strategic Academic Plan 2011-14.

---

[1] *Global Composites Quarterly Market Analysis Q4 2009–Q4 2012: Market Trends, Profit Outlook, and Forecasts, December 2011*

[2] *http://www.lucintel.com/press_NA_Auto_Composites.aspx*

[3] *http://mb.cme-mec.ca/manitoba/2012-national-lean-conference/tours.html*

[4] *http://communications.uwo.ca/media/fraunhofer/*

FIELD DETAILS:

Mechanical or Materials Engineering graduates with an honors Bachelor's degree in Engineering, or an equivalent degree from an accredited University with a minimum of 70% (computed based on the last two years of a Bachelor's degree marks, or on their previous graduate marks), will be eligible to register in the proposed field in the existing MEng Program. If enrolled full-time, a student is expected to complete the degree within two years. Part-time students will need additional time to fulfill the program requirements. The program is comprised of 10 half courses or 8 half courses and a project (equivalent to two half courses), divided into three categories.

The first category (Category A) is comprised of courses that cover essential knowledge in mechanical and materials engineering to prepare the Bachelor's degree students for the graduate level. There are six core half courses in this category, as listed below, and students have to complete four out of the six courses including the two mandatory core courses labeled with *.

The second category (Category B) is comprised of professional engineering courses which are general requirements for any MEng program in the Faculty of Engineering.

The third category (Category C) is composed of a set of the specialized courses concerning composite materials and their associated processing. There are six technical half courses in this category, as listed below, and students have to complete four out of the six courses including the two mandatory technical courses labeled with [#].

A) 4 of the 6 core half courses in Mechanical and Materials Engineering;
MME 9518 Mechanical Properties of Materials (*)
MME 9612 Finite Element Methods (*)
MME 9611 Continuum Mechanics
MME 9621 Computational Methods in Engineering
MME 9622 Advanced Dynamics and Kinematics
MME 9623 Theory and Practice of Plasticity

Note that the courses in this category are offered on a regular basis as part of the graduate program in the Department of Mechanical and Materials Engineering.

B) 2 of the 4 core half courses in Professional Engineering (offered in the Summer term);and
CBE 9185 Risk Assessment and Management in Engineering Systems
CEE 9510 Engineering Planning and Project Management
ECE 9010 Intellectual Property for Engineers
MME 9670 Engineering Communication

Note that the courses in this category are offered on a regular basis as part of the Master of Engineering program in the Faculty of Engineering.

C) 4 technical half courses (if not enrolling in a MEng Project), or 2 technical half courses with the MEng Project.
MME 9616 Composite Materials (#)
MME 9618 Fracture of Materials
MME 9620 Nanomaterials and Nanotechnology
MME 9643 Composite Processing (#)
CBE 9455 Advanced Polymerization Engineering
MME 9614 Applied Computational Fluid Dynamics and Heat Transfer

---

[*] *Mandatory core courses*

[#] *Mandatory technical courses*

Note that MME 9616, MME 9618, MME 9620 and MME 9614 are offered on a regular basis as part of the graduate program in the Department of Mechanical and Materials Engineering. CBE 9455 is currently offered every other year in the Department of Chemical and Biochemical Engineering. MME 9643 is a new course to be taught by either the new faculty member specializing in composites or Dr. Frank Henning from Fraunhofer Institute of Chemical Technology, who is also an adjunct professor of MME.

Interested students may also be able to enroll in other 96xx-level and 97xx-level courses offered by the MME Department, as an extra course load, with the approval of the course instructor and the MME Associate Chair (Graduate Professional Program).

The outlines of all courses are provided in the Appendix.

GOALS AND OBJECTIVES OF THE FIELD IN RELATION TO THE GRADUATE DEGREE LEVEL EXPECTATIONS

The overall objective of the proposed new field as a major modification to the existing MEng program is to strengthen and widen students' knowledge and practical skills to the expected graduate level, and thus to assist them to become highly qualified professionals with speciality in composite materials. The program is specially structured to provide students with a comprehensive education in design, analysis, testing, prototyping, processing development and project management of composite manufacturing.

DEPTH AND BREADTH OF KNOWLEDGE

The courses in Category A cover a broad range of knowledge in mechanical and materials engineering, which is essential to prepare the Bachelor's degree students for additional graduate level study and training for the specialty of composite materials. For example, MME 9518 (Mechanical Properties of Materials) introduces basic knowledge and concepts related to material forming such as stress and strain, plasticity and yield criteria; forging, extrusion and rolling; MME 9612 (Finite Element Methods) covers the stress analysis which is useful from the structural aspects; MME 9611 (Continuum Mechanics) provides students with a unified approach and understanding of both solid and fluid mechanics, which is essential to engineering research and advanced specialized graduate courses in mechanical engineering; MME 9621 (Computational Methods in Engineering) covers important methods and techniques used in the numerical analysis of mechanical engineering problems, which could be helpful in the general analyses; MME 9622 (Advanced Dynamics and Kinematics) builds on the basic understanding of topics in kinematics and dynamics, and provides an in-depth understanding of selected advanced topics in the area of three dimensional kinematics, three dimensional dynamics as well as flexible body dynamics; MME 9623 (Theory and Practice of Plasticity) presents the theories and observed phenomena that describe the plastic deformation of engineering materials.

The courses in Category B provide students with non-technical skills that are essential for professional engineers.

The courses in Category C cover all relevant technical aspects of composites at the graduate level. A brief review of each of these courses is provided below:

MME 9616 (Composite Materials) introduces students to microstructures and properties, and microstructure-property relationships of composite materials. The topics include microstructure and properties of matrix materials, structure and properties of reinforcing components, and micromechanics models describing strength, stiffness, fracture and failure, and microstructure-property relationships of composite materials. This course gives students a broad overview of composite materials. Through assignments and literature review, students will learn the most up-to-date technical innovations in this field.

MME 9618 (Fracture of Materials) introduces fundamental and practical knowledge of fracture mechanisms of materials. The topics include stress concentration at notch tips, strain energy release, elasticity and plasticity at the crack tip, stress analysis for determining stress intensity factor, impact and fatigue tests, etc.. This course provides students with an in-depth understanding of material failure. This course is essential for composite design and testing.

MME 9620 (Nanomaterials and Nanotechnology) is an interdisciplinary course that covers multidisciplinary topics of nanomaterial synthesis, physical, chemical and mechanical properties of nanomaterials, material characterization and a wide range of applications of nanomaterials. It provides students with deep understanding of the fundamentals and experimental approaches of the recent advancement in fabrication, properties and characterization of nanomaterials as well as their potential applications. The material characterization methods such as TEM, SEM, AFM, XPS, XRD, Raman and FTIR are general approaches for analysis of any materials including composites. Nanocomposites using functional nanomaterials as fillers have become an important area of composites. This course not only strengthens students' knowledge in material synthesis, but also broadens students' view of materials and their applications. This course brings students the newest knowledge in nanomaterials including nanocomposites and nanotechnology applications. Such information will increase students' creativity in design of novel functional composite materials.

MME 9643 (Composite Processing) introduces students to various composite processing technologies. Manufacture of composite materials involves different processes according to combination of fiber and resin, composite structure and mechanical and physical properties of polymers. Selection and development of composite processes needs thorough understanding of chemistry, rheology, mechanics, selection criteria and material behaviors. This course covers all these topics giving enough breadth and depth of knowledge of composite manufacturing. This is a very practical and technical course.

CBE 9455 (Advanced Polymerization Engineering) provides students with basic knowledge of polymers or polymerization. Students will be exposed to emerging areas of polymer and nanoscience with a focus on the basics and advanced concepts in polymer synthesis, kinetics and reactor engineering. Existing and emerging polymer manufacturing processes will be examined with a focus on sustainability. Advanced polymer architecture synthesis and kinetics of advanced materials (e.g. nanocomposites) are described. Polymers are the matrix materials of composites. For those who have no or little knowledge in polymers, this course will help students fill the gap of knowledge in polymer physics and chemistry.

MME 9614 (Applied Computational Fluid Dynamics and Heat Transfer) introduces the computational fluid dynamics (CFD) method and its applications. Students will develop the ability of using the CFD method including commercial CFD software like FLUENT to predict fluid flow, heat transfer, and related processes. All of the composite processes involve fluid flow and heat transfer. This course provides students with good computational tools to simulate processes of composite manufacturing, and thus to design, develop and control composite processing

RESEARCH AND SCHOLARSHIP

The MEng Program is a non-thesis Master program and as such does not have a major research component. However, the students who choose to do a MEng project will conduct research under supervision of faculty members. These MEng projects are very practical and mainly industry-oriented. MME MEng committee members and other composite researchers will periodically contact relevant companies and attend meetings of regional manufacturing associations to introduce this program, to understand the emerging and existing technical hurdles in industry, and to develop new collaborative projects together with industrial experts. While conducting a project, the student and the supervisor will have regular meetings to discuss the results and progress. Students will have opportunities to visit companies and gain on-site experience. Currently Professor Jeffrey Wood is leading an ORF-RE project, with a team of researchers, to develop new lightweight polymer composites for automotive applications. Together with the ORF-RE project, the newly developed International Composites Research Centre (ICRC), Advanced Manufacturing Park in London, and local companies (e.g. General Dynamics, Diamond Aircraft and Armatec) will provide numerous MEng projects to students to gain practical experience. There are already companies having showed great interest in this program. It is anticipated that more and more research projects and university-industry collaborations will be developed in the future.

LEVEL OF APPLICATION OF KNOWLEDGE

The field within the MEng program offers a high level of knowledge application in the form of design projects. Those technical courses in Category C have a significant component of composite design and

design of processing. In addition, the abundant sources of MEng projects offer students many excellent opportunities to apply the knowledge in the real practical field through industry-oriented projects.

PROFESSIONAL CAPACITY / AUTONOMY

The four professional engineering courses of Category B which are also listed below focus on enhancing non-technical professional engineering skills from various aspects of project planning and management, intellectual property and engineering communication.

CBE 9185 Risk Assessment and Management in Engineering Systems
CEE 9510 Engineering Planning and Project Management
ECE 9010 Intellectual Property for Engineers
MME 9670 Engineering Communication

LEVEL OF COMMUNICATION SKILLS

The proposed field in the MEng program enhances the communication skills of the students in different ways; several courses have projects and project presentations and MME 9670 (Engineering Communications) which students can take as one of the professional engineering courses, is specifically focused on developing different forms of communication skills from the professional engineering perspective. When graduate, students are expected to have skills in clearly and concisely communicating engineering information orally, in writing and graphically in a professional manner.

AWARENESS OF LIMITS OF KNOWLEDGE

Nowadays technology develops very quickly, which requires new knowledge and innovations. Our instructors will update the course materials to incorporate the newest development of knowledge/technologies. Guest lectures/seminars by invited industrial experts will highlight the existing challenges and the future technical directions. The analyses of real-world problems via industry-oriented MEng projects will also generate this awareness.

CONSULTATION PROCESS IN THE PREPARATION OF THE BRIEF, INCLUDING FACULTY AND STUDENT INPUT AND INVOLVEMENT

This proposal was prepared by all participating faculty members. It was reviewed, discussed and approved unanimously by the MME Graduate Professional Programs Committee and by the MME Department Council. Also consulted were Professors Jeff Wood and Andy Hrymak who are experts in this field. The proposal was then reviewed, discussed and approved unanimously at the Graduate Chairs Committee meeting of Faculty of Engineering. Finally, the proposal was reviewed, discussed and approved unanimously by the Faculty Council of Engineering.

EVIDENCE TO SUPPORT THE INTRODUCTION OF THE FIELD

It is definitely the technology trend to use more and more composite materials in many industries, expanding traditionally from aerospace to automotive, and to other sectors such as wind energy and construction. For example, Boeing's 787 has extensive use of composites, 80% composite materials by volume and 50% by weight; sports cars are produced with 80% composite materials. It is anticipated that more and more composite parts/components will used in other types of vehicles. Therefore, there is a growing demand by the local and global industries for highly qualified engineers specializing in composites.

Western has competitive strength in R&D of composites. Foreseeing the significant growth of the composite industry, Western has recently built the International Composites Research Centre (ICRC) that is becoming a leading composite research organization in Ontario. The newly developed Advanced Manufacturing Park in London has attracted composite manufacturers. Existing local companies such as General Dynamics, Diamond Aircraft and Armatec are interested in and will support this new field of study. Professor Jeffrey Wood is leading an ORF-RE project, with a team of researchers, to develop new lightweight polymer composites for automotive applications. As a result, there will be numerous industry-oriented projects available to our MEng students. The automotive industry is a major economic driver in Ontario thereby providing a potential job market for MEng graduates of this new

field of study. It is also a potential recruiting ground for MEng students. With all necessary supports from the university and the relevant industry, MME is very confident that this program will run successfully.

SPECIAL MATTERS AND INNOVATIVE FEATURES

The proposed new field is a new speciality area that will be offered within the existing MEng program based on the competitive strength of Western in composite technology. To the best of our knowledge, this field is unique in Ontario as well as Canada. Even very few universities in the US or around the world offer graduate programs in composites. Therefore, it would serve as a niche area for Western Engineering. Due to the uniqueness of the program and the fast growing demand in industry, this field will be very attractive to domestic and international students.

INDICATE WHETHER THE FIELD, OR PART OF THE FIELD, WILL BE OFFERED OFF-CAMPUS OR ON-LINE

Currently MME plans to offer the proposed field mainly on campus and on the in-classroom teaching basis. MME may explore other opportunities to offer the whole or part of the program in other models in the future. Plans have been discussed conceptually at both the department and faculty levels.

The Faculty of Engineering has all the infrastructure to support the current teaching model.

Modular Courses: Graduate courses may be offered in modular format, in evenings, or on weekends to accommodate students who cannot take time off work during the work week on a regular basis. Offering graduate courses in evenings is already in place in departments of Faculty of Engineering

In the future, we will also consider integrating into the program other courses related to polymer composites from other universities in Ontario such as University of Windsor, and some special topics courses that would be offered by industry professionals and/or international faculty (e.g. visiting professors) who may wish to spend a period of time in teaching at Western.

RESEARCH AND SCHOLARLY DEVELOPMENT FACILITIES

The department also has all required experimental facilities, laboratory resources and computational resources for teaching and research in composites. For example, computational resources include work stations and software for material design and modeling. These laboratories are also available for teaching and doing MEng projects:

Dynamic and Sensing Systems Research Laboratory;
Laboratory for Complex Flow Systems and Cyber Engineering
Advanced Materials Modeling Research Laboratory
Micro Mechanical Testing Research Laboratory
Experimental Fluid Dynamics Research Laboratory
Polymeric Materials Processing Research Laboratory
Nanomaterials and Clean Energy Lab
Computational Fluid Dynamics Research Laboratory
Heat Transfer Laboratory
Mechanical Testing Laboratory
Material Characterization Laboratory
Heat Treatment Laboratory
Optical Microscopy Laboratory
Specimen Preparation Laboratory
Computational Material Science Laboratory

In addition, many university-wide facilities are accessible to students. International Composites Research Centre (ICRC) is equipped with $25-million facilities including industry-scale demonstration of composite processing and testing. Western Nanofabrication Facility and Surface Science Western are also well equipped with excellent facilities for material fabrication and characterization.

COMPUTER FACILITIES

The Faculty of Engineering is equipped with 8 computer labs with a total of 175 Windows-based computers as well as 2 scanners, 3 network printers and 3 High-Speed network printers. A large number of software applications are installed in the common labs. These computers can access all centrally installed applications.

Students have access to all the computers in the main Engineering building on a 24 hour / 7 days a week basis. These labs are managed by the Information Technology Group (ITG) and are exclusively for use by the Engineering students. Students that own laptops may use them on campus as the entire university has wireless access points across campus.

PROGRAM REGULATIONS AND COURSES

The intellectual development and the educational experience of the student
The Department of Mechanical and Materials Engineering has a long history of offering course-based M. Eng. program. During the last few years, the department expanded the course-based M. Eng. program due to the increase of the desire of practicing engineers with Bachelor's degree in engineering from Canadian and overseas institutions, to upgrade their qualifications in the highly competitive present day job market, by providing opportunities for students to specialize in areas of high industrial demand.

The graduate courses to be offered in the proposed field emphasize the fundamentals of engineering science, applications of advanced mathematical and computational methods, and through projects and assignments, applications of knowledge to practical problems. The relationship between the instructor and the student is cordial. Professors are encouraged to spend time with the graduate students taking their courses.

With regard to the enhancement of students' communication skills, several courses in the proposed field have a significant component for in-class presentations. In addition, the Department and the Faculty invite few speakers from outside the university to give lectures and seminars. The invited speakers are highly regarded in their fields of specialization.

PROJECTED ENROLMENT

It is expected that 15-20 students will enrol in the proposed field every year.

Final Assessment Report
Submitted by SUPR-G to SCAPA

Program	**French Studies**
Degrees Offered	MA, PhD
Approved Fields	Pre-modern French literature (Medieval to the Revolution) Modern French literature (Revolution to the present) Quebecois and Francophone literatures Literary and cultural theory and the history of ideas Theoretical and applied linguistics
Date of Site Visit	March 1-2, 2012
Evaluation	Good Quality

Summary:

The graduate program in French Studies is very strong. The faculty are all highly competent in their respective fields, and the representation of the various subdisciplines is appropriate to the fields of the program. The curricular requirements are reasonable and sufficiently supported through course offerings. The quality of the students' research is high; their publication records are strong; and there is good success in finding appropriate employment after graduation. Student support is adequate and compares favourably with that of other programs in the country, although there are concerns about support for Year 5 PhD students. Library and other resources are adequate to the needs of the program.

Recommendation	Responsibility
Review supervisory responsibilities with respect to communication and providing timely feedback	Graduate Chair and Program Committee, Department Chair
Revisit the examination process for PhD field exams with respect to the types of examination and timelines to avoid delaying program time-to-completion	Graduate Chair and Program Committee, Department Chair

FINAL SUMMARY REPORT OF PROGRAM REVIEW

Undergraduate Program	**Film Studies**
Degrees Offered	BA and BA(Hons) plus Major and Minor modules MA
Program Description	Historical, critical and theoretical study of film and media, with a supplementary film and media production component.
Date of Site Visit	10th February 2012
Evaluation	Good Quality

Summary:

Highly positive report. Reviewers praise the department for the extraordinarily high degree of student satisfaction in spite of the small size of the department and limited resources. The ability to attract highly acclaimed guest speakers speaks to the quality of the programs. The reviewers also note that the department faculty is acclaimed internationally and praise the undergraduate program's flexible modular structure.

Reviewers feel that the department barely makes critical mass and further support in the way of faculty and facilities is necessary for further growth and development.

Recommendation	Responsibility
In order to enhance the program's diversity, two hires are recommended: one in Asian Cinemas, and one in either African or Middle Eastern Cinemas.	Department/ Dean of A&H
There is a pressing need to establish a second Film Program-dedicated classroom space of appropriate size and with up-to-date screening facilities for 8mm, 16mm, video, and DVD	Department/ Dean of A&H
The department should continue exploring possible connections and collaborations with other departments, programs, and initiatives at UWO, in Ontario, and across the region. We would recommend that the department continue developing new initiatives in service learning. Consider the possibility of enhanced cooperation with Visual Arts	Department

FINAL SUMMARY REPORT OF PROGRAM REVIEW

Undergraduate Program	**Department of French Studies**
New or Cyclical Program Review (please indicate)	Cyclical Program Review
Degree(s) Offered	• Honors Specializations: o French Language and Literature o French Language and Linguistics o French Linguistics and Literature • Specialization in French • Majors: o French Language and Literature o French Language and Linguistics o French Studies • Certificate and Diploma Programs: o Français des affaires (Business French) o Français pratique (Practical French)
Date of Site Visit	March 14 2012
Evaluation	Good Quality

Summary:

The reviewers, Johanne Bénard (Queen's University) and Anne-Marie Brousseau (University of Toronto), met with the major constituency groups including Faculty members, Undergraduates, Graduate Teaching Assistants, the Chair and Undergraduate Chair of the Department as well as the Associate Dean and the Vice Provost. Their impression of the French Studies program was quite positive and they evaluated the quality of training as high.

They commended the department for its work on reviewing and improving the curriculum since the departmental review in 2008. They noted that the development of the curriculum is, as it should be, an ongoing process in the Department. Thus the reviewers offered suggestions for change within the context that the training was already very good and that the reputation of the department was excellent. To quote from the report: "All Majors, Specializations and Honours Specializations in the program are globally successful in developing the knowledge and abilities students must have acquired at the time of graduation."

The department, for the most part, concurred with the suggestions the reviewers made to improve the program. One area where the two deviated was with respect to the department's decision to align language courses to the Common European Framework of Reference. The reviewers thought the department should reconsider this decision since they believed the framework reduced Canadian Content and that energies might be better invested in other projects. The department, however, notes that the framework doesn't prescribe content but rather linguistic skills sets and outcomes. Given that Ontario Secondary Schools are following this model, it makes good sense to continue with the Common European Framework of Reference, and now that the second-year course has been revised, revisions in other courses are expected to be less time consuming.

Both the reviewers and the Department recognized the need to ensure students in first year receive qualified instruction. The reviewers suggested using faculty for this purpose, but the Department pointed out that these small classes would not be a good use of the faculty members' time and that they are obligated to use graduate students to deliver first-year language courses.

Recommendation	Responsibility
Reduce redundancy in courses particularly with respect to French 4900	Department
Introduce a research-based capstone course	Department
Consider requiring at least 0.5 credit at the fourth-year level of Majors	Department working group
Provide support for international experience initiatives	Department & University
Rationalize translation courses	Department
Suggestions to redesign courses to combat enrolment concerns in literature courses.	Working group of department
Ensure qualified people teach first-year courses – department is implementing a program to better train TA's	Department
Find a better placement test	Department
Continue to encourage experiential learning	Department working group
Collect quality indicators such as success rates, academic awards, attrition	University

FINAL SUMMARY REPORT OF PROGRAM REVIEW

Undergraduate Program	**Earth Sciences**
New or Cyclical Program Review (please indicate)	Cyclical
Degree(s) Offered	BSc, Geology (Professional Registration, Hons Spec, Spec) BSc, Environmental Geoscience (Professional Registration, Hons Spec, Spec) BSc, Geophysics (Professional Registration, Hons Spec, Spec, Minor) BSc, Geology and Biology (Honors Specialization, Specialization) BSc, Earth and Planetary Sciences (Major, Minor)
Date of Site Visit	March 20, 2012
Evaluation	Good Quality

Summary:

The Earth Sciences program was reviewed by Dr. Carolyn Eyles (McMaster University) and Dr. Ian Ferguson (University of Manitoba), assisted by Dr. Derek McLachlin (Western, Biochemistry). No student reviewer participated. During their visit, the reviewers met with the department Chair and Undergraduate Chair, many faculty members and instructors from the department, a selected group of graduate TAs and undergraduate students, and representatives of other constituencies of the university. The meetings were cordial, and participants exchanged ideas and information freely and often with enthusiasm.

Overall, the reviewers were complimentary, stating:

> The undergraduate programs offered by the Department of Earth Sciences at Western University are modern geoscience programs meeting the educational and training requirements of the geoscience profession and graduate studies in geoscience. Students receive a quality education in their field, and with the completion of the appropriate program they will meet professional registration requirements and they will be very employable in the geoscience profession.

In particular the reviewers noted the strong experiential learning components incorporated into the program. The reviewers applauded the department for being able to implement the Honors Programs for Professional Registration, which are outside of the norm of the module system at Western and yet are vital to the professional success of Earth Sciences graduates. The reviewers stated that the wide variety of courses available at the third- and fourth-year levels set Western's program apart from programs at other institutions, and also lauded the "exciting, and in some cases innovative, first year courses".

The reviewers commented favourably on the high completion rates for Earth Sciences students, high student satisfaction as reported on exit surveys and communicated directly by the students, the engagement of the faculty and TAs with the undergraduate education mission, and the strong alumni support for the undergraduate program. The department has adequate resources to sustain the program, although imminent faculty departures will have to be replaced, and technical support for the program relies heavily on staff supported by research funds.

The main challenge to the undergraduate program identified by the reviewers is the difficulty in attracting first-year students in Science and the Biological and Medical Sciences to Earth Sciences courses, and therefore to the program as a whole. This difficulty is an unfortunate consequence of the entry requirements of modules in the Bachelor of Medical Sciences program. The department is keenly aware of this challenge and has adjusted its modules to allow students to enter into second year without first-year Earth Sciences courses. In addition to making their first-year course offerings as attractive as

possible, the department has engaged in a variety of outreach activities aimed at high school students and BMSc students.

In addition to several recommendations relating to attracting students and understanding where students in the program come from, to enhance the department's undergraduate enrolment the reviewers recommended exploring greater involvement of the department in Planetary Science and Environmental Science modules, and in interdisciplinary teaching. The department is in fact planning to offer modules in Planetary Science to replace modules being withdrawn by the Department of Physics & Astronomy.

Other challenges identified by the reviewers include teaching "soft" skills and written communication, and the lack of a resource handbook for first-year students. In their response the department expressed a willingness to examine these aspects of their program.

Recommendation	Responsibility
Map the curriculum to ensure students are appropriately instructed in terms of knowledge, technique, and "soft" skills, particularly written communication.	Department
Pursue additional opportunities for interdisciplinary collaboration and teaching.	Department, in cooperation with other departments
Explore ways to attract more students to Earth Science courses and develop outreach materials that promote career options.	Department, Faculty
Consider assuming administration of Planetary Science programs from Physics and Astronomy Dept.	Department, Faculty

FINAL SUMMARY REPORT OF PROGRAM REVIEW

Undergraduate Program	**Center for Environment and Sustainability**
Degrees Offered	Undergraduate Program in Environmental Science
Program Description	Environmental Science at Western is a ***discipline*** within the Faculty of Science and not a Department. Students completing Environmental Science modules will earn a Bachelor of Science in Environmental Science. The Environmental Science programs are offered through the Centre for Environment and Sustainability.
Date of Site Visit	March 6, 2012
Evaluation	Good quality with report in one year

Summary:

The program review was completed by Dr. Michael Moss and Dr. Stephen Murphy, following a close scrutiny of the department's self-assessment, accompanied by a day-long site visit on March 6, 2012, accompanied by Dr. Grant Campbell as the SUPR-U Internal Reviewer, and Jessica Habib as the student reviewer.

The review involved interviews with the Director and Undergraduate Chair, academic counselors, the Associate Dean, Academic, the Undergraduate Advisory Committee and Upper Year Instructors, followed by a lunch with five students in the program. Further interviews included the Vice-Provosts of both Academic Planning and Academic Programs and Students, first-year instructors, teaching assistants, and undergraduate chairs from the partner departments of Biology and Geography.

In their final report, the reviewers praised the high level of commitment shown both by the faculty and the staff, and the high levels of commitment, dedication and enthusiasm shown by the students. They also praised the considerable ingenuity with which all involved navigated the complexities of an interdisciplinary program that draws on human and physical resources from multiple sources to combine them in imaginative intellectual ways.

The reviewers noted three primary concerns:

1. The Center needs to integrate its program into a clearer and more entrenched context of environmental studies in the wider academic community, through:

    - Involvement with the Canadian Universities Environmental Science Network (CUESN);
    - Further involvement in professional associations;
    - Seeking accreditation;
    - Aligning its curriculum more closely to national curriculum guidelines for undergraduate environmental studies programs.

In their response to the report, Dr Greg Thorn and Dr. Gordon Southam expressed general agreement. The Center intends to rejoin CUESN, seek accreditation, and initiate a service-learning component to the program to foster professional involvement. They felt, however, that the reviewers overestimated the Center's deviation from the national curriculum guidelines, pointing out that extensive course counseling enables the students to exercise their freedom under the Academic Choices model while selecting modules that are appropriate according to national guidelines.

2. Although the reviewers applauded the energy and ingenuity of the seconded faculty and staff, they emphatically insist that the program cannot sustain any long-term momentum without:

    - Securing a recognizable home base to foster a sense of identity among the students and faculty;
    - Resolving whatever problems have impeded the hiring of a Director with a firm 3-5-year contract;
    - Converting some of the existing sessional positions to permanent positions.

3. Funding is a distinct concern for two reasons:

- All of the recommendations, particularly the accreditation initiative, will involve financial support; the administration will need to be an "angel investor," by allocating funds ahead of increasing enrolments;
- There appears to be confusion among the faculty and administrators interviewed about the nature of the funding for interdisciplinary programs such as this one. Given that many of the program's courses are offered in other departments, it is unclear whether the BIU allocation is weighted upon program enrolment, or if it is weighted to the specific department offering the course. If the BIU allocation goes to CES, departments offering instructional and TA support are doing so merely through good will; if allocation goes to the departments, CES could be starved of funding.

The reviewers made five formal recommendations; no information for responsibility, resources or timelines was supplied. These are listed at the beginning of their report. Culling from the reviewers' report and the Center's response, these can be more tangibly expressed as the following recommendations:

Recommendation	Responsibility
Hire a Director	Program Director, Faculty
Rejoin CUESN	
Seek accreditation	
Introduce a service learning component into the program	
Submit a business plan that reflects accurate consensus from all parties on funding model, including a plan for growth and the conversion of limited-duties positions into long-term appointments.	

FINAL SUMMARY REPORT OF PROGRAM REVIEW

Undergraduate Program	**Department of Statistical and Actuarial Sciences**
New or Cyclical Program Review (please indicate)	Cyclical
Degree(s) Offered	BSc, Actuarial Science (Honors Specialization or Major) BSc, Financial Modelling (Honors Specialization or Major) BSc, Statistics (Honors Specialization) BSc, Applied Statistics (Major)
Date of Site Visit	March 19, 2012
Evaluation	Good Quality

Summary:

The review committee was impressed by the overall quality of the undergraduate programs offered by the department. The current program structure reflects the outcome of a significant curriculum renewal that was implemented beginning in 2009 as well as responses to an external review performed in 2008 prior to re-appointment of the department Chair. The department's strengths include a pioneering 3 + 1 + 1 international program with multiple universities in China, the accreditation of the Actuarial Science program by the Canadian Institute of Actuaries as well as the designation of the department as a Centre of Actuarial Excellence, the department's ongoing efforts to develop interdisciplinary programs in fields such as environmental and health statistics, and the attention devoted to learning outcomes in the department's multiple introductory-level service courses.

The current undergraduates interviewed by the committee were uniformly well spoken and highly motivated students who strongly identified with their programs and offered positive assessments of the programs' quality and effectiveness. A majority of the students are enrolled in an Actuarial Science module and are intending professional careers as licensed actuaries. The department facilitates this career path by organizing the Actuarial Science curriculum to enable to students to begin writing their licensing exams prior to fourth year. The remainder of the students in the Financial Modelling and Statistics modules generally progress to graduate programs in those fields or related disciplines.

The review committee's report includes six recommendations, each of which have been acknowledged by the department in its response. Many of the recommendations focus on ensuring that the department is able to maintain its current positive trajectory.

1. *Develop a strategic plan and determine faculty hiring priorities.* The committee was provided with a working draft version of the department's academic plan for 2011-15 as well a summary of updates to that plan in the self-appraisal document. This concern arose from the committee's impression of a mismatch between the department's stated research priorities and the expertise of recently recruited faculty members and, in particular, reflects mixed messages the committee received during the site visit about the relative priority assigned to health statistics and environmental statistics.

2. *Increase cooperation with Department of Epidemiology and Biostatistics*. An undergraduate program in health statistics or biostatistics would be a natural fit with Western's academic strengths. The department expressed a strong desire to develop such a program but reported that it was proving difficult to establish a partnership with Epidemiology and Biostatistics. The review committee supports this direction and encourages any impediments to cooperation between the two departments to be addressed at the decanal level if necessary.

3. *Increase enrolment in Financial Modelling and Statistics modules*. The current enrolment data indicate that the projected enrolments in the Financial Modelling and Statistics programs for 2012-13 through 2014-15 may be inflated. The committee was concerned that the enrolment projections may mislead the department's long-term planning. Further discussion revealed that the Financial Modelling program in particular is not adequately publicized to prospective undergraduates, so an opportunity may exist to address this issue through more aggressive recruiting.

4. *Improve effectiveness of teaching assistants*. Many of the undergraduate students interviewed expressed concerns about the communication abilities of a subset of the teaching assistants as well as the opinion that the TAs staffing the department's Help Centre were not prepared to support upper-level courses. While acknowledging that such issues are difficult to avoid in technically oriented programs, the committee suggests that the communications skills of individual TAs be considered when assigning their duties.

5. *Encourage and facilitate junior faculty to obtain actuarial designations*. Each of the three faculty members who hold actuarial designations are within ten years of retirement. It is in the department's interest to renew its roster of faculty with actuarial designations to ensure Centre of Actuarial Excellence status and Canadian Institute of Actuaries accreditation of the Actuarial Science program is maintained. Adjustments to the workload of selected junior faculty should be considered to support those faculty members in preparing for and writing the relevant fellowship examinations.

Recommendation	Responsibility
Develop a strategic plan and determine faculty hiring priorities	Department
Increase cooperation with Department of Epidemiology and Biostatistics	Department, Faculty, Schulich
Increase enrolment in Financial Modelling and Statistics modules	Department, Faculty
Improve effectiveness of teaching assistants	Department, Faculty
Encourage and facilitate junior faculty to obtain actuarial designation	Department

FINAL SUMMARY REPORT OF PROGRAM REVIEW

Undergraduate Program	**Department of History**
New or Cyclical Program Review (please indicate)	Cyclical
Degree(s) Offered	BA, MA, PhD
Date of Site Visit	March 8, 2012
Evaluation	Good Quality

Summary:

The external review was conducted by Professors Juanita De Barros (History Department, McMaster University) and Marcel Martel (History Department, York University). They met with Professor Alan Weedon, Vice-Provost (Academic Planning, Policy, and Faculty), Dr. John Doerksen, Vice-Provost (Academic Programs and Students), Professor Brian Timney, Dean (Faculty of Social Science), Professor Margaret Kellow, Chair of the History Department, Professor Margaret McGlynn, Undergraduate Chair, Professor Francine McKenzie, Director of the International Relations Program, the faculty members of the History Department, Eeva K. Munoz (Associate University Librarian), Liz Mantz (Subject Librarian-History), Rebecca Dashford, Undergraduate Program Advisor, and various undergraduate students.

The review of the Department of History is overall quite favourable. The reviewers identified a number of areas for improvement, many of which the Department was already aware of and was in the process of rectifying at the time of the review. In terms of undergraduate programs, the reviewers highlighted problems with the mandatory 2000-level Canadian history course (HIST 2201E), the only mandatory course in all of the Department's offerings. It was felt that little was being done to revamp the course and make it more innovative and relevant, precisely because it is mandatory. The Department has already dealt with this problem by making changes to the delivery of the course, which should help considerably. This concern, in turn, brought up for the reviewers the “difficulties in attracting undergraduate students to the 3000- and 4000- Canadian history courses.” This problem is part and parcel of a continuing concern with enrollments in 3rd and 4th-year courses in History and in a number of other Departments across the University. The relatively recent shift from being a department that is largely a service course provider to a strong research unit in Social Science should help make history a more viable disciplinary pursuit at Western. The introduction of new 1000 and 2000-level courses, the rationalizing or "cleaning" of the curriculum, the continued internationalization (generally in terms of exchange opportunities and, specifically, by building on the success of the International Relations module) and development of internships should increase the interest in history as well. The latter two, however, will require a further investment in resources to make them an integral component of the Department's programs or, in the case of the International Relations module, further its important role in the Department.

The reviewers commended the Department's commitment to having tenure-track faculty teaching the 1000-level courses, however, the delivery of courses will be a challenge as there are no new anticipated hires in the next few years beyond replacing recent retirements, departures, etc. This necessitated in part the "cleaning" of the curriculum, namely in terms of rotating the course offerings so that some will now be taught every second year rather than every year. The constraints on staffing will obviously limit new initiatives. Nevertheless, the Department is developing a Middle East Studies program, and will be involved in the new Medieval Studies Minor housed in the Faculty of Arts and Humanities that will start in September.

The reviewers applauded the high level of commitment on the part of the Department's faculty members, noting in particular their involvement with extracurricular student activities. Conversely, they were a bit concerned at a perceived lack of communication between the Department and the Administration. The Department, in its response, did identify this as a problem but one that is well underway to being mended.

One last item that was mentioned by the reviewers but not directly relevant to the Department itself was the recommendation that such reviews occur over two days rather than one.

Recommendation	Responsibility
Review of HIST 2201E as to whether it should be a mandatory requirement and in terms of the course delivery.	Department
Introduction of initiatives to increase the interest in senior Canadian history courses.	Department
Rationalizing of curriculum and its delivery.	Department
Growth of internships.	Department & Faculty
Review of promotion of internationalization.	Department, Faculty & University

FINAL SUMMARY REPORT OF PROGRAM REVIEW

Undergraduate Program	**English (Brescia)**
New or Cyclical Program Review (please indicate)	Cyclical
Degree(s) Offered	BA (Specialization/Honors Specialization in English Language and Literature, Major in English Language and Literature, Minor in English Language and Literature, Minor in General English, Minor in English for Teachers)
Date of Site Visit	March 2, 2012
Evaluation	Good Quality

Summary:

The departmental self-assessment, the report of the external reviewer, and the department's response all confirm the quality of the programs. In the reviewer's words, "Though modestly resourced, the program provides excellent value to Brescia and the University of Western Ontario in terms of outstanding teaching, significant research, the achievement of approved learning outcomes, and student satisfaction." Main challenges identified were student recruitment, balance between Writing courses and English courses, range of available courses.

Recommendation	Responsibility
1. Review the rationale for the existing Writing courses and consider assigning prerequisites as appropriate.	Chair, EPC
2. That the Department work with other academic units to revise the list of courses that meet the requirement for a Writing course and explore the use of designated English Literature offerings in place of Writing courses.	Chair, Dean, EPC
3. That the Department work with the administration to review the current size of Writing and develop a plan for the planning and management of future development.	Chair, Dean, EPC, Registrar
4. Consider offering students opportunities to do a wider array of kinds of writing, such as those found in scholarly editions, those required by cultural organizations, and those appropriate for electronic media.	Chair, Faculty
5. Explore means by which they might 1) encourage English students to take advantage of the opportunities for service learning and experiential learning and 2) integrate students' employment, travel, and volunteer experiences into course work.	Chair, Faculty, Dean, EPC
6. Consider offering a follow-up course in "Creative Writing" for which the first would remain as a pre-requisite.	Chair, Dean EPC

FINAL SUMMARY REPORT OF PROGRAM REVIEW

Undergraduate Program	**Food and Nutritional Sciences (Brescia)**
New or Cyclical Program Review	Cyclical
Degree(s) Offered	BScFN
Date of Site Visit	March 30, 2012
Evaluation	Good Quality

Summary:

The challenges faced by the program relate primarily to the growth in the program over the last several years. Students are, overall, satisfied with the program, and the program attracts both students who are entering university directly from high school and students for whom this is a second degree. Challenges include increased class sizes, faculty workload, and incorporating additional experiential learning opportunities.

Recommendation	Responsibility
1. Increase the number of full-time faculty and reduce the number of courses taught by contract faculty.	Dean, Principal
2. Address faculty concerns over teaching loads.	Chair, Dean, Faculty Association
3. Upgrade laboratory facilities to enhance quality of learning of students.	Principal, Foundation
4. Increase opportunities for experiential learning.	Chair, Faculty
5. Increase support for academic and career counseling.	Chair, Dean, Registrar's Office

FINAL SUMMARY REPORT OF PROGRAM REVIEW

Undergraduate Program	**History Modules, Huron University College**
Degree(s) Offered	BA
Program Description	Honors, Major, Specialization, and Minor
Date of Site Visit	19-20 January 2012
Evaluation	Good Quality with Report in One Year

Summary:

The external review was conducted by Dr. Bruce Strang, Dean of Arts, Brandon University. The internal reviewer representing SUPRU was Dean John Mitchell from Brescia University College. Dr Strang was very enthusiastic in his praise for the program.

Dr. Strang pointed to the strong classroom teaching in the program, emphasizing the engagement of faculty members with students, the bringing alive of research in the classroom, and the collegial character of the department. He noted that the offerings in History at Huron fit well within the Western system but have many unique hallmarks, including an early engagement of students with problems of historiography. Library resources in support of the program were judged to be excellent. Dr. Strang noted that the department has done an excellent job of developing clear learning outcomes, "including abilities to assess both primary and secondary sources' merits and limitations, forming research questions, devising and sustaining arguments, ability to evaluate quantitative and qualitative evidence, to communicate the results of research and analysis orally and in writing, and to understand the limits of historical knowledge."

The review notes some mixed feelings among students about the role of History 3801E (The Historian's Craft) in the program.

Recommendations (summarized in tabular form below) revolved around staffing, the role of two signature courses in the program (History 1801E and 3801E), and enhancing the relationship of the History program with other programs at Huron.

Recommendation	**Responsibility**
Reconsideration of the role of History 3801E (The Historian's Craft) in the program; and reconsideration of its format	Department, Dean, and Educational Policy Committee
Consideration of making History 1801E at Huron mandatory for students in Huron History modules	Department, Dean, and Educational Policy Committee
Consideration of making History 1801E into two 0.5 courses	Department, Dean, and Educational Policy Committee
Avoidance of converting 3-hour courses to 2-hour courses	Department, Dean, and Educational Policy Committee
Consideration of ability to motivate and to support development of an interdisciplinary program in gender or women's studies or imperialism	Department, Dean and EPC
Reduced reliance on print materials in favour of electronic materials	Department

FINAL SUMMARY REPORT OF PROGRAM REVIEW

Undergraduate Program	**Philosophy at King's University College**
New or Cyclical Program Review (please indicate)	Cyclical Program Review
Degree(s) Offered	BA
Date of Site Visit	February 6, 2012
Evaluation	Good Quality

Summary:

Dr. Jeffrey Bloechl, the external consultant, met with representatives of all the stakeholders and with the internal reviewer, Dr. J. Mitchell, Dean at Brescia College, in accordance with Western's IQAP policy.

The external consultant notes that King's has done a remarkable job of developing a course of studies in Philosophy that moves from a solid grounding in key texts and fundamental methods into a set of available specializations; that students receive an impassioned and well-grounded introduction to the study of Philosophy; that Philosophy at King's has excellent resources; that the Philosophy faculty are highly competent; that space and IT support are at least adequate and that library facilities are quite good. Dr. Bloechl also states that he favours the orientation of Philosophy at King's because it provides the programs at King's with a distinctive profile vis-à-vis the program at Western; it supports a distinctive contribution to the intellectual community of Western and its affiliated colleges, and makes important contributions to the Religious Studies programs offered by the same Department. The students who met with the external consultant were unanimous and outspoken in their love for Philosophy at King's.

While the review raises no issues of an urgent nature that require immediate attention, it does encourage greater cooperation between other Philosophy programs at the other campuses at Western, expresses concern with the low enrolment in the Philosophy and Religion modules, suggests a course in Analytic Philosophy, and comments on the need for more faculty research time given their heavy teaching responsibilities. These and other suggestions flowing from the report are listed below.

On the whole, King's is very pleased with this review and will see to it that its academic planning is informed by its recommendations.

Recommendation	**Responsibility**
More ties with the Department of Philosophy at Western	Chair and Philosophy Faculty of the Department
Review of the Philosophy and Religion Modules	Department Chair and EPC
A course in Eastern Philosophy	Department Chair and EPC
A course in Analytic Philosophy	Department Chair and EPC
Formal advising of students	Department Chair and EPC
An MA in Philosophy	Main campus department and King's department

FINAL SUMMARY REPORT OF PROGRAM REVIEW

Undergraduate Program	**Religious Studies at King's University College**
New or Cyclical Program Review (please indicate)	Cyclical Program Review
Degree(s) Offered	BA
Date of Site Visit	February 17, 2012
Evaluation	Good Quality

Summary:

Dr. Paul C. Burns, the external consultant, conducted his site visit on February 17, 2012 and met with representatives of all the stakeholders and with the internal reviewer, Dr. Nelson Heapy.

In his Report Dr. Burns notes the significant and positive changes the Department of Philosophy and Religious Studies has made, since its last review, in the delivery of its Religious Studies programs. The new programs in Catholic Studies and World Religions and Culture were found to be comprehensive, rigorous and well-designed with a clear and detailed list of objectives and outcomes. Further to this point, Dr. Burns notes that the broad range of topics in the Catholic Studies program reflects the content of Masters programs in Theology and Divinity at some universities and colleges in Canada. Dr. Burns points out that the full-time faculty complement has more than doubled since the last review (to 7.33); that all the new faculty hires had completed their doctorates at prestigious universities in Canada, the US, and Europe; that all the faculty in Religious Studies have doctorates; that the faculty teaching evaluations are impressive and that there are positive signs of a healthy publishing record. The Department is complimented on its Catholic Studies for Teachers Program in partnership with the Faculty of Education, on its experiential trip to Rome initiative, and on its plans to establish a Centre for Research in Catholic Thought and Culture. Dr. Burns reports a high level of student engagement, tremendous industry and insight on behalf of the Chair, the availability of career and academic paths for graduates, and more than adequate library resources.

Although no urgent measures appear to be necessary, Dr. Burns does suggest a new hire in Systematic Theology, a redesign of the old Religious Studies modules, a research forum comparable to the successful one on the Philosophy side of the Department, more release time for the Chair and the exploration of Web-based pedagogies. On the whole, King's is very pleased with this review and will see to it that its academic planning is informed by its recommendations.

Recommendation	**Responsibility**
Expand Catholic Studies with an additional new hire in Systematic Theology	Department and EPC
Redesign the Old Religious Studies Modules	Department and EPC
New Centre for Research in Catholic Thought and Culture	Department and EPC
First Nations in both Catholic Studies and World Religions and Culture	Department and EPC
Work Load of Chair	Board of Directors
Web-based Pedagogies	EPC and Faculty Council
Formal recognition for participation in Pedagogical Workshops	Faculty activity reports allow for recognition
Faculty participation in academic advising	High quality advising is already available in the Dean's Office
Faculty involvement with Recruitment Projects	The Registrar does invite Department participation from time to time

New Awards and Bursary

Sigma Chi Leadership Entrance Award (Any Undergraduate Faculty)
Awarded annually to a full-time undergraduate student entering first-year in any faculty and any program with academic achievement. A one-page statement must be submitted to the Office of the Registrar by September 30. The statement must include details outlining how the student has exhibited the characteristics most desired by Sigma Chi: being of good character, with ambitious purposes, a congenial disposition, a high sense of honour, and a deep sense of personal responsibility. The recipient will be selected by the Office of the Registrar. This award was established by the Sigma Chi Canadian Foundation.

Value: 1 at $1,500
Effective: 2012-13 to 2016-2017 academic years inclusive

Norman E. Nixon and Marie Rämö Nixon Award (School of Graduate and Postdoctoral Studies, Robarts Research Institute)
Awarded to a full-time graduate student in a Masters or PhD program at Western with academic achievement and research merit, who is working with a Robarts Research Institute Scientist. The Scholarship and Awards Committee of the Schulich School of Medicine & Dentistry will select the recipient each fall. At least one of the committee members will hold membership in the School of Graduate and Postdoctoral Studies. This award was established by a generous donation from Mrs. Marie Nixon.

Value: 1 at $1,000
Effective: May 2012

Lylia K. Grieves Memorial Bursary (Richard Ivey School of Business)
Awarded annually to a full-time undergraduate student in either year of the HBA program who has demonstrated financial need. Online financial need assessment applications are available through the Office of the Registrar's Web site and must be submitted by October 31. This bursary was established with a generous gift from Mr. William Bell Grieves in memory of his mother, Lylia K. Grieves.

Value: 1 at $1,000
Effective: 2012-2013 academic year

Left Turn MBA Award (School of Graduate and Postdoctoral Studies, Business)
Awarded annually to a full-time MBA student at the Richard Ivey School of Business whose motivation for enrolling in the Ivey MBA Program is to facilitate a radical transition from a non-business to a business career. The MBA Scholarship Review Committee will select the award recipient. This award is made possible through a generous donation by Mike McKenna, MBA '05.

Value: 1 at $2,000
Effective: May 2013 to April 2018 inclusive

Keith R Halpenny HBA Award (Richard Ivey School of Business)
Awarded annually to a student enrolled in the HBA Program at the Richard Ivey School of Business with demonstrated financial need, who has graduated from a publicly-funded high school. Candidates must complete a financial assistance application, available on-line through the Office of the Registrar, by April 30. The Office of the Registrar will determine financial need eligibility and the HBA Scholarship Committee will make the final selection of the recipient. This award was established with a generous gift from Keith R Halpenny, HBA '55 with Foundation Western.

Value: 1 at $1,000
Effective: 2012-2013 academic year