Minutes of the Sixth Meeting of Senate Friday, February 26, 2016 3:00 – 5:00 pm Room 286A and 287 N, AVC

- Present: A. Abd-El-Aziz (Chair), B. Awosile, R. Bissessur, L. Chilton, T. Doucette, M. Doyle, L. Edwards, N. Etkin, P. Foley, R. Gilmour, K. Gottschall-Pass, G. Irvine, Z. Jarvis, G. Keefe, K. Kielly, J. Krause, N. Kujundzic, G. Lindsay, C. Lacroix, J. MacDonald, R. MacDonald, D. MacLellan, S. McConkey, M. Murray, S. Myers, C. Parker, J. Podger, J. Preston, C. Ryan, N. Saad, J. Sentance, O. Shaw, S. St. Hilaire, K. Teather and S. Wilfeard
- Regrets: A. Braithwaite, B. Campbell, A. Carrothers, G. Conboy, D. Kenny, D. Moses, and J. Rix
- Absent: S. Graham and N. Kujundzic
- **Recorder**: D. MacLean, Administrative Assistant to Senate

President Alaa Abd-El-Aziz called the meeting to order at 3:03 p.m.

- 1. <u>Approval of Agenda</u> MOTION (O. Shaw/Z. Jarvis) to approve the agenda as presented. CARRIED
- 2. <u>Approval of Minutes January 15, 2016</u> MOTION (L. Chilton/J. Sentance) to approve the minutes of January 15, 2016 as presented. CARRIED

3. <u>Business Arising</u>

The President indicated that business arising items from the minutes will be discussed either In Camera or in other reports.

4. <u>President's Report</u>

President Abd-El-Aziz provided Senators with the most recent application numbers. Compared to this time last year, applications for first year Arts, Business and Science are up 34%. Within this number, domestic applications are up by 4%, and international applications are up by 74%. Applications to all programs, all years of study, are up 22%. Overall all, the picture is looking brighter than expected. The President thanked faculty, staff and students for their contributions to making UPEI a place where students want to come, and noted special thanks should go out to the recruiters who are working diligently to increase our application numbers.

President Abd-El-Aziz informed Senators that the Physics Department will be moving into the School of Sustainable Design Engineering Building once it is completed. This is a fiscally responsible plan with programs able to share research labs and technicians. Faculty and staff in both areas unanimously agreed that this would be a good fit.

The President also noted that the inaugural meeting of the Advisory Council of the School of Mathematical and Computational Sciences will be held on March 15th. Of special note, the Deputy Governor of the Bank of Canada, along with other noted officials, have been invited and are attending

this meeting.

5. <u>Senate Reports</u>

a. Senate Steering and Nominating Committee Report

K. Gottschall-Pass presented the Senate Steering and Nominating Committee Report for information and details are noted below:

- 1) Dr. Benet Davetian has resigned from Senate due to personal reasons. A "call for nominations" did not produce a replacement.
- 2) Mr. Donald Moses has been appointed as Interim University Librarian from February 8, 2016 to June 30, 2016, replacing Mark Leggott.
- 3) Jane McCorriston was appointed by the Student Union to sit on the Senate Academic and Student Appeals Committee, but she resigned in October. The Student Union has now appointed Alyssa MacKinnon to sit on this committee as the "student living in residence".

The President acknowledged Senator Davetian's contributions to the Senate, and with Senate's approval, he will send an official letter of thanks. There was unanimous agreement.

b. Senate Academic Planning and Curriculum Committee Report

The following two motions were presented for approval:

Motion (C. Lacroix/D. MacLellan) that Senate approves a proposal for a program modification to the Master of Science to include a Sustainable Design Engineering stream. The content and structure are described in the attached submission. CARRIED

Motion (C. Lacroix/O. Shaw) to approve a proposal for a new program for a Bachelor of Arts in Communications, Leadership and Culture within the Faculty of Arts. The content and structure are described in the attached submission. CARRIED

In reponse to a question from the floor, Lisa Chilton spoke to the program development. She indicated that the new degree essentially takes a traditional Faculty of Arts degree and adds a technical/hands-on focus. The program will be grounded in communication, leadership and cultural skills with future career path exploration at the heart. The degree will involve community and mentoring initiatives. Many courses are cross listed, drawing upon expertise in other departments to address larger world issues. The Student Union fully supports this program, and throughout the development of the degree, students were very instrumental in the planning stages. With the approval of MPHEC, the degree could be available as early as September 2016.

The President thanked the working group involved in the degree planning, a process which took place over a one year period. Special thanks to Lisa Chilton, Vicki Johnson, Wendy Shilton, Shannon Murray, the Faculty of Arts, and the many students who contributed.

i. Sixth Curriculum Report

Faculty of Arts

English Department:

1) Motion (C. Lacroix/G. Lindsay) that English 234: *Public Speaking Workshop* be approved.

234 Public Speaking Workshop

English 234 is an intensive practical course in public speaking that helps students from across the disciplines become confident oral communicators. By learning and applying the techniques that the very best speakers use, students will gain the knowledge and experience they need to overcome performance obstacles and ultimately to find their own voices. The overall aim of the course is to move participants towards an extemporaneous speaking style that they can carry with them through their studies and into their professional lives. Three semester hours

CARRIED

Music Department

OMNIBUS Motion (C. Lacroix/G. Lindsay) that motions 2-12 as noted below be approved:

2) To change the calendar description for Bachelor of Music and Bachelor of Music Education entrance requirements

ENTRANCE REQUIREMENTS In addition to the standard University of Prince Edward Island entrance requirements, candidates for the Bachelor of Music and Bachelor of Music education programs will demonstrate technical proficiency, musical expression and learning potential on their instrument or voice. are expected to have obtained a minimum equivalencyof RCM (Royal Conservatory of Music) Grade VIII in any instrument or voice and RCM-Grade II Theory, as shown in an audition, theory and ear test, and interview;

A personal interview, audition, and <u>diagnostic</u> tests in theory and aural skills will be arranged prior to registration for each student wishing to enter a Music Program. <u>An audition is not</u> <u>required for entrance into the BA Program with Major in Music.</u> <u>The sole prerequisite for</u> <u>entrance into the BA program with a major in Music is a personal interview and the equivalent</u> <u>of RCM Grade II Theory a diagnostic theory and ear test</u>. <u>Students are encouraged to seek</u> <u>advice from music faculty in choosing their arts or science electives</u>.

CARRIED

3) Motion: That the changes to the semester hours of credit in Music 115 and 215 and the resulting changes to arts elective semester hours as well as the altering of music elective requirements be approved as proposed.

Program Overview: Bachelor of Arts (Music) (120 credit hours total)

Year I

	Semester hours of credit
Music 113-114	Theory 6
Music 115 <u>,117</u>	Aural Skills 6
Music 123-124	History 6
Arts and/or Science Electiv	es (<u>12)</u>
OR	
Arts and/or Science Electiv	es (<u>9</u>) and Music 105 (3) 12
	Total 30

Year II

Semester hours of credit
Theory 6
Aural Skills 6
History 3
3
s (<u>12</u>)
s (<u>9</u>) and Music Electives (3)
s (<u>9</u>) and Music 205 (3)
s (<u>6</u>) and Music Electives (3) and

Total 30

NOTE: Ensembles required (see note at end of Year I).

Year III

	Semester hours of credit
Theory/History Elective 6	
Music Electives	
Arts and/or Science Electives	s (18)

OR

Arts and/or Science Electives (15) and Music 305 (3)18 Total 30

NOTE: Ensembles required (see note at end of Year I).

Year IV

Semester hours of credit Music Electives 12 Arts and/or Science Electives (18) OR Arts and/or Science Electives (15) and Music 405 (3)18 Total 30

NOTE: Ensembles required (see note at end of Year I).

COMMENT: Students may take a maximum of six (6) semester hours credit in Music Education toward the Music electives required for Years III and IV.

CARRIED

4) Motion: Subsequent to changes to the semester hours of credit in Music 115 and 215 that the resulting changes to arts elective semester hours as well as the altering of music elective requirements be approved as proposed.

Year I

(common to both Bachelor of Music and Bachelor of Music Education Programs)

	Semester ho	urs of cre	edit
Music 113-114		Theor	у 6
Music 115 <u>,117</u>	Α	ural Skill	s 6
Music 123-124		History	y 6
Music 131-132	Major Instrument or Voice		6
Arts and/or Scie	ence Electives		6
		Total	30

Year II

(common to both Bachelor of Music and Bachelor of Music Education Programs)

Semester hours of credit

Music 213-214	Theory	6
Music 215 <u>,217</u>	Aural Skills	6
Music 223	History	3
Music 231-232 Major Instrument or Voice		6
Music Elective		3
Arts and/or Science Electives at 100-200 level 6		

Total 30

NOTE: Ensembles required (see note at end of Year I).

Year III Bachelor of Music

	Semester hours of credit
Music 331-332	Major Instrument or Voice 6
Theory/History Electives 9	
Music Electives	<u>15</u>
Arts and/or Science Elective	s <u>9</u>
	Total 30

NOTE: Ensembles required (see note at end of Year I).

Year III Bachelor of Music Education

	Semester hours of credit
Music 331-332	Major Instrument or Voice 6
Music 353-354	Elementary Music
	Education Methods 4
Music Education Elective 6	

Theory/History Electives 6 Music electives (may include	Music Education courses) 6	
Arts and/or Science Electives		
	Total <u>31</u>	
Year IV Bachelor of Music		
	Semester hours of credit	
Music 431-432	Major Instrument or Voice	e 6
Theory/History 3		
Music Electives	<u>15</u>	
Arts and/or Science Electives	Total 30	
NOTE: Ensembles required (se	ee note at end of Year I).	
Year IV Bachelor of Music Ed	ucation	
	Se	mester hours of credit
Music 431-432	Major Instrument or Voice	6
Music 453-454	Secondary Music Educatio	n
	Methods	4
Music 462 Teaching Internshi	pl	3
Music Education Elective		<u>2</u>
Music Electives (not from Mu	—	C
Arts and/or Science Electives	<pre>1usic Education courses)</pre>	6 6
For Elementary:		0
Education 402 Meeting the N	ands of the Voung Learner	3
Education 402 Meeting the M	eeus of the foung Leather	<u>5</u>
OR		
Education 411 Learners and L	earning	<u>3</u>
OR		
OR		
Education 415 Inclusive Class	room	3
For Secondary:		
Education 417 Meeting the N	eeds of the Adolescent Learne	er <u>3</u>
OR		_
Education 411 Learners and L	earning	3
	-	_
OR Education 415 Inclusive Class	room	3
	Тс	otal <u>30</u>

NOTE: Ensembles required (see note at end of Year I).

		Semester hours of credit
Music 455-456	Conducting	4
Music 464	Teaching Internship II	3
Music Education Electives		<u>7</u>
Arts and/or Science Electives	<u>5</u>	<u>3</u>
Education 431 Differentiated	Education	<u>3</u> 3
Education 403 The Arts and Social Transformation		<u>3</u>
OR Education 463 Perspectives o	on Culture and Society	<u>3</u>
Education 482 Assessment a	nd Evaluation	3
		J.
		Total 29

5) Motion: That the changes to the course descriptions for Music 115 and Music 215 be approved as proposed.

115 AURAL SKILLS I

CARRIED

This course aims to develop comprehensive musical fluency: a thinking ear and a hearing mind. Students work toward mastery of fundamental musicianship skills, including perception and performance of diatonic melodic material; perception and performance of non-complex rhythms in all meters; and basic contextual listening, ensemble, and improvisation. <u>3 hours credit</u>

215 AURAL SKILLS III

This course aims to develop advanced musicianship skills, including perception and performance of chromatic and modulating melodies; and of non-traditional and atonal collections; perception and performance of complex rhythms; and advanced contextual listening, ensemble, and improvisation. <u>PREREQUISITE: Music 117</u> <u>3 hours credit</u>

CARRIED

6) Motion: That the new course entitled Aural Skills II (Music 117) be approved.

117 AURAL SKILLS

This course builds on the foundation of Music 115 and is designed to strengthen fluency in sight singing and dictation while introducing more complex metrical, rhythmic, and tonal patterns. PREREQUISITE: Music 115

3 hours credit

CARRIED

7) Motion: That the new course entitled Aural Skills IV (Music 217) be approved.

217 AURAL SKILLS IV

This course continues the development of advanced musicianship skills introduced in Music 215, focusing on the consolidation of listening and transcription, sight singing and improvisation in both individual and ensemble contexts; and the development of strategies for handling complex contemporary idioms.

PREREQUISITE: Music 215 3 hours credit

CARRIED

8) Motion: That the changes to the Special Topics in Theory courses Music 311 and Music 411 be approved as proposed.

311 SPECIAL TOPICS IN MUSIC THEORY

This course provides an in-depth examination of selected topics in the area of music theory. PREREQUISITE: Music 214 and permission of the instructor <u>3 hours credit</u>

411 SPECIAL TOPICS IN MUSIC THEORY

This course provides an in-depth examination of selected topics in the area of music theory. PREREQUISITE: Music 214 and permission of the instructor <u>3 hours credit</u>

CARRIED

9) Motion: That the changes to the courses Special Topics in Music History, Music 321 and Music 421 be approved as proposed.

321 SPECIAL TOPICS IN MUSIC HISTORY

This course provides an in-depth examination of selected topics in the area of music history. PREREQUISITE: Music 214 & 223 <u>3 hours credit</u>

421 SPECIAL TOPICS IN MUSIC HISTORY This course provides an in-depth examination of selected topics in the area of music history. PREREQUISITE: Music 214 and 223 <u>3 hours credit</u>

CARRIED

10) Motion: That the changes to the courses Special Topics in Applied Music, Music 337 and Music 437, be approved as proposed.

337 SPECIAL TOPICS IN APPLIED MUSIC

This course provides an in-depth examination of selected topics in the area of applied music. <u>PREREQUISITE</u>: Restricted to 3rd, 4th and 5th year music majors, or permission of the instructor. 3 hours credit OR three hours credit over two semesters

437 SPECIAL TOPICS IN APPLIED MUSIC

This course provides an in-depth examination of selected topics in the area of applied music. <u>PREREQUISITE</u>: Restricted to 3rd, 4th and 5th year music majors, or permission of the instructor. 3 hours credit OR three hours credit over two semesters

CARRIED

11) Motion: That the changes to the courses Special Topics in Music Education Music 341 and 441 be approved as proposed.

341 SPECIAL TOPICS IN MUSIC EDUCATION

This course provides an in-depth examination of selected topics in the area of music education. <u>PREREQUISITE</u>: Restricted to 3rd, 4th and 5th year music majors. <u>3 hours credit</u>

441 SPECIAL TOPICS IN MUSIC EDUCATION

This course provides an in-depth examination of selected topics in the area of music education. <u>PREREQUISITE:</u> Restricted to 3rd, 4th and 5th year music majors. <u>3 hours credit</u>

CARRIED

12) Motion: That the changes to the course Music 458 Musicianship Workshop be approved as proposed.

458 MUSICIANSHIP WORKSHOP 3 hours credit

CARRIED

Psychology Department

OMNIBUS Motion (C. Lacroix/C. Ryan) that motions 13-16 as noted below be approved:

13) Motion: That the change to the Bachelor of Science in Psychology requirements in Mathematics be approved as proposed.

BACHELOR OF SCIENCE

Students pursuing a Bachelor of Science Degree with a major in Psychology will complete the Psychology course requirements as described above for the Bachelor of Arts degree. Students seeking a BSc will also be required to complete a minimum of eight semester courses (24 semester hours) of course work in the Faculty of Science.

Credit in each of the following courses is required

- 1. Biology 131 and 132
- 2. Mathematics 112, OR Mathematics 151 and 152
- 3. Chemistry 111 and 112 OR Physics 111 121 and 122 (or 112)

4. Two courses which have laboratory components at the 200--level or above in one of Biology, Chemistry, Physics, or Foods and Nutrition. Both courses must be in the same discipline.

CARRIED

14) Motion: That a new course, Psychology 202, Introduction to the History and Theory of Psychology, be approved as proposed.

202 INTRODUCTION TO THE HISTORY AND THEORY OF PSYCHOLOGY

This course offers an introduction to the history of psychology, beginning with the early modern period. We examine Enlightenment philosophy, Darwin and the naturalization of the mind, and the experimental revolution of the 19th Century. These developments lead to the main focus for the course: the founding of psychology as a separate discipline. The origins of psychology in North America are contrasted with the development of German psychology, and the impact of the different social and cultural contexts is explored. Students also learn about the first schools of psychology in the early 20th Century, the social and historical construction of normal and abnormal, the role of psychological testing in the professionalization of psychology, and the emergence of various systems in psychology, such as psychoanalysis, behaviourism, humanistic, and cognitive psychologies.

PREREQUISITE/CO-REQUISITE: Psychology 101 & 102 Three hours a week

CARRIED

15) Motion: That the change to Psychology 302 - The Emergence of Modern Psychology course description and title be approved as proposed.

302 MODERN PSYCHOLOGICAL CONCEPTS AND PRACTICE IN HISTORICAL PERSPECTIVE

The focus for this course is the historical evolution of various contemporary psychological concepts and practices. It begins with a general introduction to the intersection of psychology, historiography, and philosophy of science. Then, unlike the traditional "grand narrative" history, students learn about the history of psychological concepts and methods by starting with the present and then investigating their more proximate influences. Topics will vary year to year but may include: the history of statistics, the development of psychotherapy, and the history of introspection and its use as a psychological method; other topics include the history of consciousness, behaviour, memory, the self, race, gender, and sexuality. Debates over how research should proceed with regard to these topics will also be addressed. PREREQUISITE: Psychology 101 102 101 & 102; 278 279 278 & 279, or 251. NOTE: Psychology 301 202 is strongly recommended. Three hours a week

CARRIED

16) MOTION: That the change to Psychology 463 Critical Issues for Contemporary Psychology in the course description be approved as proposed.

463 CRITICAL ISSUES FOR CONTEMPORARY PSYCHOLOGY

This course focuses on the way the major systems of psychology engage in explanation and description. Students review psychology's main theoretical systems, including psychoanalysis, behaviorism, cognitive psychology, and humanistic psychology, and then examine specific critical issues within the field. Topics may include consciousness, emotion, the self, psychotherapy, neuroscience, gender, sexuality and some of the fundamental assumptions and questions in contemporary psychology. It begins with a discussion of psychological methods as forms of social practice, and the resulting product/knowledge of these practices as situated within a sociohistorical context. We then discuss the importance of metaphor, and language in general, for psychological description and explanation, and the historicity this language displays. These issues lead to a review of the most foundational challenge to contemporary psychology: its reception of and reaction to postmodernism. This includes readings and discussion on social constructionist thought, feminist epistemologies, critical psychology, hermeneutics, and qualitative (vs. quantitative) research. The last portion of the course is devoted to student seminars, where students select a topic from class discussion and develop a presentation. PREREQUISITE: Psychology 101-102 101 & 102; 278-279-278 & 279 or 251. NOTE: Psychology 301 and 202 or 302 is strongly recommended. Three hours a week

CARRIED

FACULTY OF SCIENCE Applied Human Sciences Department

17) Motion (C. Lacroix/D. MacLellan) that the course number for FN 483 (PROFESSIONAL PRACTICE IN DIETETICS) be changed to FN 383 to reflect its current placement in the 3rd year of the FN major; and the course description be amended to include introduction to ICDEP, ethics and requirements for dietetic practice, and to remove nutrition education and counselling.

483 383 PROFESSIONAL PRACTICE IN DIETETICS

This course is designed to prepare students for <u>a career in</u> dietetic practice. <u>Students will be</u> <u>introduced to the Integrated Competencies for Dietetic Education and Practice (ICDEP) and</u> <u>develop a professional portfolio which will demonstrate achievement of professional</u> <u>competencies</u>. Topics include: career planning, federal/provincial/territorial requirements for <u>dietetic practice, reflective practice, professional ethics, standards of practice, and professional</u> <u>boundaries</u>. It covers three main topic areas: issues in professional practice, nutrition education and counselling; and evidence based practice. Students will apply theories of teaching and learning relevant to dietetics and further develop their critical-thinking and decision-making skills allowing them to integrate research evidence into professional practice to assist clients to make <u>dietary behavior changes</u>.

PREREQUISITE: Foods and Nutrition 321, 352 and 382 <u>Students must be a third year Foods and</u> <u>Nutrition major intending to enter the field of dietetics.</u>

Three lecture hours

CARRIED

Environmental Studies

OMNIBUS Motion (C. Lacroix/D. MacLellan) that motions 18-22 as noted below is approved:

18) MOTION: Remove Family Science 221 Family Resource Management from the list of approved Science courses for the Bachelor of Environmental Studies as approved by the Environmental Studies Steering committee on Nov 4, 2015.

APPROVED LIST OF SCIENCE, BUSINESS, AND ARTS COURSES for the BES SCIENCE COURSES: Applied Human Sciences: Family Science 221 - Family Resource Management Foods and Nutrition 223 - Nutrition and Dietary Behavior

CARRIED

19) Motion: That the prerequisites be changed for ENV 212 as approved by the Environmental Studies Steering committee on Nov 4, 2015.

ENV 212 EARTH'S PHYSICAL ENVIRONMENT PREREQUISITE: Second year standing ENV 101 or permission of instructor.

CARRIED

20) Motion: That prerequisites be added for ENV 203, 204, 231, 242 as approved by the Environmental Studies Steering committee on Nov 4, 2015.

ENV 203 SOCIETIES AND SUSTAINABILITY: PAST AND PRESENT PREREQUISITE: ENV 101 or permission of the instructor

ENV 204 METHODS OF ENVIRONMENTAL INQUIRY PREREQUISITE: ENV 101 or permission of the instructor

ENV 231 ISLAND ENVIRONMENTAL HISTORIES PREREQUISITE: ENV 101 or permission of the instructor

ENV 242 SOCIETY AND NATURAL RESOURCES PREREQUISITE: ENV 101 or permission of the instructor

CARRIED

21) Motion: That prerequisites be added for ENV 332, 334, 342, 351, 354 as approved by the Environmental Studies Steering committee on Nov 4, 2015.

332 ENVIRONMENTAL INNOVATION AND CHANGE MANAGEMENT SKILLS PREREQUISITE: ENV 101 or ENV 203 or permission of the instructor

334 ENVIRONMENTAL STRESSES ON ISLAND COMMUNITIES PREREQUISITE: ENV 101 or ENV 203 or permission of the instructor

351 SUSTAINABLE COMMUNITY PLANNING PREREQUISITE: ENV 101 or ENV 203 or permission of the instructor

354 ENVIRONMENTALVALUATION: THEORY AND PRACTICE PREREQUISITE: ENV 101 or ENV 203 or permission of the instructor

CARRIED

22) MOTION: That prerequisites be added for ENV 401, 433, 441, 495 as approved by the Environmental Studies Steering committee on Nov 4, 2015.

ENV 401 PUBLIC SCHOLARS ON ENVIRONMENTAL ISSUES PREREQUISITE: ENV 101 or ENV 203 or permission of the instructor

ENV 433 ENVIRONMENTAL COMMUNICATION STRATEGIES PREREQUISITE: ENV 101 or ENV 203 or permission of the instructor

ENV 441 ENVIRONMENT AND INTERNATIONAL RELATIONS PREREQUISITE: ENV 101 or ENV 203 or permission of the instructor

ENV 495 ENVIRONMENTAL STUDIES SYMPOSIUM PREREQUISITE: ENV 101 or ENV 203 or permission of the instructor

CARRIED

School of Sustainable Design Engineering

OMNIBUS Motion (C. Lacroix/P. Foley) that motions 23-36 as noted below be approved:

23) Motion: That the admission processes and criteria for entry to the Bachelor of Science in Engineering (Sustainable Design Engineering) degree be approved as presented.

Admission Requirements <u>Bachelor of Science in Engineering</u> (Sustainable Design Engineering) Diploma in Engineering

High School Applicants:

Students High school applicants wishing to pursue engineering at UPEI apply to the Faculty of Science and MUST indicate a preference for engineering. Minimum academic requirements for admission to the Engineering Degree Diploma include an overall average of 70% in Grade 12 Academic English, Mathematics, Chemistry, Physics and one other Grade 12 academic subject with no grade lower than 65%. Note: High school applicants should apply by March 1 to be considered for entrance scholarships. Students are encouraged to apply by March 1 to take advantage of scholarship opportunities.

Applicants from Dalhousie Associated Universities:

Applicants who have successfully completed a Diploma in Engineering (or equivalent composition of courses) from a Dalhousie Associated University will be considered for entry into the Bachelor of Science in Engineering (Sustainable Design Engineering) degree program based on University Transfer Students admission regulations and the following criteria:

<u>Students with a GPA of 3.0 or greater in the common Associated University diploma requirements</u> and a minimum grade of 70% in Engineering 222 Engineering Projects II (or Associated University equivalent) are guaranteed admission to the Program.

Students with a GPA of between 2.0 and 2.9 in the common Associated University diploma requirements and a minimum grade of 70% in Engineering 222 Engineering Projects II (or Associated University equivalent) will be considered for admission to the Program based on competitive placement and available seats.

Note that Engineering Dynamics (Engineering 234) is required for this degree.

Applicants from other institutions:

Applicants attending or having attended another institution who are seeking to transfer into UPEI's engineering program must meet the same requirements as for High School applicants as well as the requirements for University Transfer Students. Transcripts will be reviewed for possible course transfer credit.

Admission Requirements

Bachelor of Science in Engineering

Students wishing to pursue the sustainable design engineering degree option at UPEI must first complete the UPEI Engineering Diploma or the equivalent level of training from another institution. Students with a GPA of 3.0 or greater in the common Associated University diploma requirements (years one and two) and a minimum grade of 70% in Engineering 222 Design 4: Engineering Projects II (or AU equivalent) are guaranteed placement in the third year of the Bachelor of Science in Engineering (Sustainable Design Engineering). Students with a GPA of between 2.0 and 2.9 in the common core and/or a minimum grade of 70% in Engineering 222 Design 4: Engineering Projects II (or AU equivalent) can be admitted to the sustainable design engineering program based on competitive placement and availability of seats.

• <u>Click here</u> to complete a form to indicate your interest in joining UPEI's Bachelor of Science in Engineering (Sustainable Design Engineering).

Students with a GPA of less than 2.0 and/or a grade of less than 70% in Engineering 222 Design 4: Engineering Projects II (or AU equivalent) should contact the head of the School of Engineering for advice on academic upgrading.

Consistent with the Dalhousie's placeholder system, students must request a place in the sustainable design engineering degree program at the end of their first diploma year. Requests for placement will be managed by the UPEI School of Engineering (see <u>www.upei.ca/science/engineering</u> for more information). Final grades in the common first year courses are required to be eligible forplacement in the degree program. Students will be notified of their placement status prior to the end of June after first year. Degree places are "conditional" and will allow students to select their three discipline specific courses in second year. Once a place is assigned, and provided that the student completes the diploma and any other admission requirements (i.e. minimum grade in Engineering 222 or equivalent), their place and admission to the third year will be confirmed. Students who fail to meet the entrance requirements for the requested placement year must request a new placement by the end April of the year prior to expected entry.

Placements for students taking more than two years to complete foundational diploma requirements will be based on ALL common core course requirements completed to date. Final grades in repeated courses will be the basis for GPA calculations and placement assignments.

CARRIED

24) Motion: That the following calendar entry change for the School of Sustainable Design Engineering be approved as presented.

School of Sustainable Design Engineering http://upei.ca/engineering

Engineering Faculty

Nicholas Krouglicof, Associate Dean Don MacEwen, Professor Amy Hsiao, Associate Professor <u>Trung Ngo, Associate Professor</u> Wayne Peters, Associate Professor <u>Andrew Swingler, Associate Professor</u> <u>Bishnu Achary, Assistant Professor</u> Farooque Aitazaz, Assistant Professor Sadegh (Ben) Babaii, Assistant Professor <u>Aitazaz Farooque, Assistant Professor</u> <u>Acharya Bishnu, Assistant Professor</u> Elizabeth Osgood, Assistant Professor

Overview

The School of Sustainable Design Engineering at UPEI <u>offers a progressive and innovative four-year Bachelor of Science in Engineering (Sustainable Design Engineering) degree which recognizes the need for a broad and balanced engineering education. recognizes the integrating nature of engineers in society and the need for a broad and balanced education. Our The program follows current trends in engineering education and focuses on student outcomes. Small class sizes within an activity-based learning environment allow faculty and staff to be student_centric and to provide specific and timely input to individual students.</u>

Students are exposed to <u>a</u> broad <u>base of</u> knowledge and skills in engineering science, natural science, mathematics, and complementary studies in concert with an applied project-based design stream simulating the engineering profession. Students entering the <u>UPEI Engineering</u> <u>degree</u> program will be actively engaged in the profession of engineering from day one, <u>providing</u> <u>creative and sustainable solutions to society's problems</u>. The <u>UPEI Engineering</u> <u>degree</u> program is designed to provide a highly flexible learning environment that is responsive to the dynamic needs of students and the industries that employ them.

In addition to fundamental science, engineering science and mathematics courses, students are required to develop skills in engineering design, communication, analysis, project management, professional ethics and more. <u>With a solid grounding in these fundamentals, students in Program Years 3 and 4 can enhance their technical knowledge by choosing one of three engineering focus areas: Mechatronics (MT), Sustainable Energy (SE), or Bioresources (BR). The program is delivered in a two plus two orientation where students must first complete a two-year foundational program (engineering diploma) before proceeding into the upper class (degree years three and four). Students who successfully complete the diploma may choose to continue their engineering degree at UPEI in the BSc in Engineering (Sustainable Design Engineering) provided they meet all admission criteria (see admission criteria) or transfer to a more traditional engineering discipline at one of our partner universities. UPEI continues to offer a complete and seamless pathway for a four-year engineering degree in a variety of traditional engineering disciplines as well as now offering an innovative bachelor's degree in sustainable design engineering with focus areas in mechatronics, sustainable energy and bio-resources.</u>

This program is specifically structured to maximize flexibility and mobility for students looking to complete a degree in any engineering discipline. The first two years of the degree program are common with those of our partner institutions. This allows, for instance, students with a Diploma in Engineering from one of the Dalhousie University Associated Universities to transfer into the third year of the Sustainable Design Engineering degree. Similarly, students seeking a degree in a more traditional engineering discipline can complete the first two years of their studies at UPEI before transferring to Dalhousie or the University of New Brunswick to complete their degree.

Engineering Diploma (Foundational Program)

The engineering diploma program at UPEI has a proven history in preparing students for challenging careers as Professional Engineers. Accredited by CEAB as an affiliate with Dalhousie University's Faculty of Engineering, students in the diploma program complete a unique design-based curriculum where most courses are common throughout the Dalhousie Associated University (AU) system (Dalhousie, Saint Mary's, Acadia, St. FX, CBU and UPEI). As part of this affiliated system, the UPEI engineering diploma satisfies the first two years of a four-year Bachelor of Engineering (BEng) at Dalhousie University. You can find more information on the Dalhousie Engineering Associated University system and disciplines offered on the Dalhousie University website.

After a common first year, students select their discipline choice (i.e. civil, mechanical, electrical, chemical etc.) through a competitive grade-point placeholder system. Each separate discipline requires three discipline specific electives to be taken in the second year, which ensures a smooth transition to the chosen discipline. The program allows students to study for two years in a small, supportive environment at UPEI, while providing the opportunity to complete their engineering degree in the specialized disciplines at Dalhousie's Faculty of Engineering in the now standard four-year timeframe. UPEI's new Bachelor of Science in Engineering (Sustainable Design Engineering) provides an additional discipline choice for UPEI Engineering students.

Students with a UPEI Engineering Diploma may also choose to transfer to the University of New Brunswick in Fredericton. UPEI has had a long-standing agreement with UNB giving UPEI transfer students access to their program of choice. UNB now recognizes the UPEI version of the Associated University diploma as a block equivalent to their first two years, allowing students automatic entry into the third year of most UNB engineering programs. For more information on UNB block transfers for engineering, please contact the head of the UPEI School of Engineering at upeiengineer@upei.ca.

As a CEAB accredited program through Dalhousie's Associated University system, UPEI diploma students also have the opportunity to transfer to any engineering degree program in Canada. Most programs will require transcripts of courses taken as well as detailed course outlines to assess course equivalency. Since course transfer is on a course-by-course basis; courses are accepted at the discretion of the receiving university. Students looking to transfer outside the region should seek advice from their faculty advisor early in their program.

Engineering Degree Program

The engineering degree program at UPEI allows students with a UPEI Engineering diploma or equivalent the opportunity to complete a progressive and innovative sustainable design engineering degree in Prince Edward Island. Students in the Bachelor of Science in Engineering (Sustainable Design Engineering) will have the unique opportunity to work on design projects with faculty in a variety of disciplines at UPEI including the natural sciences, kinesiology, mathematics, computer science, veterinary medicine and business.

Operating in a non-departmentalized and generic discipline structure, the UPEI engineering degree program is focused on providing creative and sustainable solutions to society's problems. The integrated, project-based professional practice (PBPP) stream provides an applied foundation where students work on real community and industrial-based projects in every term of their program. Traditional content courses are delivered via an integrated and timely approach with PBPP courses that develop professional practice skills in a simulated workplace environment. It is recognized that design is an essential element of engineering and the curriculum structure reflects this focus.

The program also provides students with three focus area options in mechatronics, sustainable energy and bioresources. These program focus areas have been identified as strategic areas for engineering innovation and employment based on significant consultation with government and industry stakeholders. The Bachelor of Science in Engineering (Sustainable Design Engineering) at UPEI is supported by Engineers PEI as a direct path to a professional engineering designation (PEng) and will undergo a separate accreditation review by the Canadian Engineering Accreditation Board (CEAB) during the next review cycle in 2017.

Design Based Curriculum Engineered by Design

It is increasingly recognized that understanding basic science and mathematics are only two of the many areas that are essential to professional engineering practice. Engineering students in <u>this</u> our program must make responsible decisions based on good judgment and an ability to justify decisions within a structured analytical framework. Based on this generalist philosophy, our <u>this</u> program is designed to develop a student's ability to think. This fundamental requirement of engineers to think critically in response to ever-changing and complex situations is accomplished through a design stream core <u>which relies</u> relying heavily on inquiry-based learning supported by traditional lecture-based knowledge. The program and beyond through appreciation of lifelong learning and professional development.

An integrated, project-based professional practice (PBPP) stream provides an applied foundation where students work on real community and industry-based projects in every semester of their program. Traditional content courses are delivered via an integrated and timely approach with the PBPP courses so that professional practice skills are developed in a simulated workplace environment. This program emphasizes design as an essential element of engineering as reflected in the Community Design Program (Year 1), and the Junior Design (Year 2) and Senior Design (Years 3 and 4) Clinics.

The following core design courses must be taken in succession to support the students' developing skills.

Community Design Program (Program Year 1)

<u>1. Engineering 121—Engineering Communication</u> <u>2. Engineering 122—Engineering Analysis</u>

Junior Design Clinic (Program Year 2)

3. Engineering 221—Engineering Projects I

4. Engineering 222—Engineering Projects II

Senior Design Clinic (Program Years 3 and 4)

- 5. Engineering 371—Project-Based Professional Practice I
- 6. Engineering 372—Project-Based Professional Practice II
- 7. Engineering 471—Project-Based Professional Practice III
- 8. Engineering 472—Project-Based Professional Practice IV
- 1. Engineering 121—Design 1: Engineering Communication
- 2. Engineering 122—Design 2: Engineering Analysis
- 3. Engineering 221—Design 3: Engineering Projects
- 4. Engineering 222—Design 4: Engineering Projects II
- 5. Engineering 371—Project-Based Professional Practice I
- 6. Engineering 372—Project Based Professional Practice II
- 7. Engineering 471—Project-Based Professional Practice III
- 8. Engineering 472—Project-Based Professional Practice IV

Recommended Program of Study for Engineering Diploma Sustainable Design Engineering Degree

Students are strongly encouraged to meet with a faculty advisor early in the program to review course selection. The following is the recommended course sequence for the <u>four-year degree</u>: <u>diploma program</u>.

Years 1 and 2 (24-Course Foundational Program)

First Program Year <u>1</u>—Term 1

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Engineering 121—Design 1: Engineering Communications

Engineering 131—Computer Programming with Engineering Applications

Engineering 151—Engineering and the Biosphere

Physics 111—General Physics I
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Chemistry 111—General Chemistry I Mathematics <u>191</u><u>151</u>—Introductory <u>Single Variable</u> Calculus I UPEI 101—Writing Studies—Engaging Writing, Rhetoric, and Communications

First Program Year 1—Term 2

Engineering 122—Design 2: Engineering Analysis Engineering 152—Engineering and the Biosphere Engineering 132—Computer Programming with Engineering Applications Physics 112—General Physics II Chemistry 112—General Chemistry II Mathematics 192 152—Single Variable Calculus II Mathematics 221—Introductory Statistics I

Second Program Year 2—Term 3

Engineering 221—Design 3: Engineering Projects I Engineering 231—Strength of Materials Engineering 261—Thermofluids Thermo Fluids I Engineering 281—Electric Circuits I Mathematics 261—Linear Algebra Mathematics 253291—Multivariable and Vector Calculus for Engineers One (1) discipline specific engineering elective

Second Program Year 2—Term 4

Engineering 222—Design 4: Engineering Projects II Engineering 234—Engineering Dynamics Mathematics 261—Linear Algebra Mathematics 301—Differential Equations Two (2) technical electives* One (1) humanities elective (courses typically offered by the Faculty of Arts, except basic languages or <u>and</u> economics) Two (2) discipline specific engineering electives

<u>* Students should consult with a faculty advisor for a list of acceptable technical electives.</u> Discipline specific electives for the UPEI Bachelor of Science In Engineering (Sustainable Design Engineering) are Engineering 234—Dynamics, Engineering 243—Engineering Economics, and Engineering 262—Thermofluids II or Associated University equivalents.

For selection of discipline-specific electives for Dalhousie or UNB programs, as well as admission criteria, please refer to http://www.dal.ca or <u>www.unb.ca</u>.

If you have any questions or concerns about the UPEI diploma requirements, please consult your faculty advisor or contact the head of the UPEI School of Engineering at mailto:upeiengineer@upei.ca

BACHELOR OF SCIENCE WITH A MAJOR IN MATHEMATICS FOR ENGINEERING DIPLOMA STUDENTS (under revision) See Mathematics and Statistics section. **BACHELOR OF SCIENCE WITH A MAJOR IN PHYSICS FOR ENGINEERING DIPLOMA STUDENTS** (under revision) See Physics section.

Required Program of Study for Bachelor of Science in Engineering (Sustainable Design Engineering)

The sustainable design engineering degree program at UPEI is cohort based and, therefore, students must have first completed the diploma requirements and then will follow a common program of study as follows:

Years 3 and 4 (18 Course Degree Program)

Third Program Year 3—Term 5

Engineering 371—Project-Based Professional Practice I Engineering 322—Engineering Measurements Engineering 326—Materials, Mechanics, and Manufacturing Engineering 381—Systems Engineering One (1) introductory engineering focus area elective*<u>*</u>

Third Program Year 3—Term 6

Engineering 372—Project-Based Professional Practice II Engineering 327—Machines & Automatic Controls Engineering 363—Thermofluids III with Heat Transfer Engineering 382—System Dynamics with Simulation One (1) engineering focus area elective<u>**</u>

Fourth Program Year 4—Term 7

Engineering 471—Project-Based Professional Practice III Engineering 421—Facilitated Study & Experimental Practice Engineering 443423—Technical Management & Entrepreneurship One (1) engineering focus area elective<u>**</u>

Fourth Program Year 4—Term 8

Engineering 472—Project-Based Professional Practice IV One (1) engineering focus area elective<u>**</u> One (1) science or business elective One (1) complementary study (humanities elective) One (1) humanities elective (courses typically offered by the Faculty of Arts, except basic languages or and economics)

<u>**</u> The first engineering focus area elective <u>(Program Year 3, Term 5)</u> must be the introductory <u>elective</u> course in <u>either</u> mechatronics, sustainable energy, or bio-resources. All other <u>engineering</u> focus area electives must be selected from the approved list for that focus area and at least one of the <u>engineering</u> focus area electives must be at the 400 level. Before selecting <u>engineering</u> focus area or other electives, please consult with you're a faculty advisor-or the head of the <u>School of Engineering</u>.

Degree Transfer Option

In addition to its own four-year engineering degree program, UPEI offers a seamless transfer pathway for the completion of a four-year engineering degree in a variety of traditional engineering disciplines at one of our partner institutions. Students who successfully complete the 24-courses in Program Years 1 and 2 at UPEI may choose to continue their engineering degree studies at either Dalhousie University (DAL) or at the University of New Brunswick (UNB). These 24 courses satisfy the first two years of an engineering degree at either DAL or UNB. Students interested in the degree transfer option to either DAL or UNB should consult with a faculty advisor for proper course selection in Program Years 1 and 2.

CARRIED

25) Motion: That Engineering 344 (Introduction to Sustainable Energy) be approved as presented.

344 INTRODUCTION TO SUSTAINABLE ENERGY

This introductory course considers current and promising future energy systems. Topics introduced include available resources, extraction requirements, energy conversion technologies and end use applications and technologies. An emphasis is placed on meeting the needs of a future of global energy supply and its associated challenges. Students will develop a technical and analytical framework with which they can evaluate energy supply alternatives in the context of political, economic, environmental and social goals. Life cycle analysis is also considered. Topics introduced in this course may be covered in greater depth in other sustainable energy focus-area electives.

PREREQUISITE/CO-REQUISITE: Engineering 371 must be completed or taken at least concurrently. Three hours of lecture and three hours of lab per week.

CARRIED

26) Motion: That Engineering 347 (Renewable Energy Power Systems) be approved as presented.

347 RENEWABLE ENERGY POWER SYSTEMS

This course examines the two most prolific renewable energy technologies of today: solar photovoltaic (PV) and wind. Students will be introduced to the fundamental operating principles, power conversion technologies and grid integration details. Energy storage technologies and their associated integration to the grid will be considered. Emphasis will be placed on electrical characteristics and electric power conversion technologies. A background in electric circuits, machines and power conversion will be useful and further developed. Students will develop a working background in the technology fundamentals for the solar and wind industry. PREREQUISITE/CO-REQUISITE: Engineering 344 Three hours of lecture and three hours of lab per week

CARRIED

27) Motion: That Engineering 349 (Energy Conversion) be approved as presented.

349 ENERGY CONVERSION

This course covers fundamentals of thermodynamics, chemistry, flow and transport processes as

applied to energy systems. Topics include analysis of energy conversion in thermomechanical, thermochemical, electrochemical, and photoelectric processes in existing and future power and transportation systems, with emphasis on efficiency, environmental impact and performance. Systems utilizing fossil fuels, hydrogen, nuclear and renewable resources, over a range of sizes and scales are discussed. Applications include fuel reforming, hydrogen and synthetic fuel production, fuel cells and batteries, combustion, hybrids, catalysis, supercritical and combined cycles, photovoltaics, etc. The course also deals with different forms of energy storage and transmission, and optimal source utilization and fuel-life cycle analysis. PREREQUISITE/CO-REQUISITE: Engineering 344 Three hours of lecture and three hours of lab per week

CARRIED

28) Motion: That Engineering 354 (Introduction to Bioresources Engineering) be approved as presented.

354 INTRODUCTION TO BIORESOURCES ENGINEERING

Growing environmental problems created by unsustainable use of fossil resources is forcing us to move from a synthetic-based economy to a bio-based one. This introductory course will provide the fundamental skills in developing environmental technologies to enable students to pursue career opportunities in a range of industries. Looking into different resources available within the biosphere, students will learn to apply engineering knowledge for its sustainable use. Concepts of a bio-refinery will be introduced for developing fundamental understanding of integrated conversion processes (thermal, chemical and biological). Understanding the concepts of enzymatic and cellular kinetics, students will learn to design bioreactors. This course will also review the fundamental concepts of life-cycle analysis and explore the application of it to selected environmental projects.

PREREQUISITE/CO-REQUISITE: Engineering 371 must be completed or taken at least concurrently Three hours of lecture and three hours of lab per week

CARRIED

29) Motion: That Engineering 357 (Engineering Applications of Biological Materials) be approved as presented.

357 ENGINEERING APPLICATIONS OF BIOLOGICAL MATERIALS

This course will focus on the understanding of the basic molecular structures of biological materials, such as wood, bioplastics, biocomposites and biofuels, and their engineering applications. It will develop the fundamental understanding of relationships between composition, structure and properties of various materials of biological origin. It will also address molecular design of new biological materials applying the molecular structural principles. The long-term goal of this course is to teach molecular design of new biological materials for a broad range of applications. A brief history of biological materials and its future perspective as well as its impact to the society will also be discussed.

PREREQUISITE/CO-REQUISITE: Engineering 354

Three hours of lecture and three hours of lab per week

CARRIED

30) Motion: That Engineering 359 (Chemical and Biological Processes) be approved as presented.

359 CHEMICAL AND BIOLOGICAL PROCESSES

Processes used in the chemical and biological industries, which emphasize underlying physical, chemical, and biological principles, will be introduced. By carrying out the mass and energy balances, student will conduct design and economic assessment of major chemical and biological engineering processes. Introduction to modelling of chemical processes will be covered in this course.

PREREQUISITE/CO-REQUISITE: Engineering 354 Three hours of lecture and three hours of lab per week

CARRIED

31) Motion: That Engineering 385 (Engineering Applications of Numerical Methods) be approved as presented.

385 ENGINEERING APPLICATIONS OF NUMERICAL METHODS

This course focuses on the use of numerical techniques and engineering tools, including industrial statistical tools for the design of experiments (DOE), to solve complex real world engineering problems. Students are introduced to numerical algorithms with primary objective of the course to be development of the basic understanding of the construction of applicability and limits of these algorithms and their appropriate use. Recommended list of topics includes accuracy and efficiency of numerical approximation, root finding of nonlinear equations, interpolation and approximation, numerical differentiation, numerical integration and quadrature, Fourier Transform and its applications and solution of differential equations and boundary value problems. Extensive use of high level programing tools like MATLAB is expected. PREREQUISITE/CO-REQUISITE: Admission to the Engineering Program and Math 301 Three hours of lecture and three hours of lab per week

CARRIED

32) Motion: That Engineering 431 (Advanced Fabrication Techniques and Computer-Integrated Manufacturing) be approved as presented.

431 ADVANCED FABRICATION TECHNIQUES AND COMPUTER-INTEGRATED MANUFACTURING

This course concentrates on manufacturing knowledge with a focus on advanced fabrication techniques (AFT) and Computer Integrated Manufacturing (CIM). Students will expand their knowledge of traditional processes including CAD/CAM, forming, welding, milling, etc. leading into innovative advanced fabrication techniques in additive and precision manufacturing, next generation electronics, robotics and smart automation (CIM), and sustainable and green manufacturing modeling and simulation in the manufacturing process developed through lectures and labs. Integration of CIM into supply chain design and management is emphasized based on synergistic application of mechatronics approach and philosophy. PREREQUISITE/CO-REQUISITE: Engineering 326 and Engineering 334 Three hours of lecture and three hours of lab per week

CARRIED

33) MOTION: That Engineering 433 (Innovations in Biomedical Engineering) be approved as presented.

433 INNOVATIONS IN BIOMEDICAL ENGINEERING

This course introduces the study of medicine by focusing on innovations in medical devices, and future trends in materials, especially the increasing use of bio-resources, informatics, and mechatronics engineering applications in orthopedic, rehabilitation, simulation and education technologies. In its broader context, this course focuses on four areas of biotechnology, biomechanics, biomaterials and biosignals. Through a hands-on approach, the course focuses on innovative product development related to bio-signal, instrumentation, sensing, and image processing. Students will also gain an appreciation for the collaborative, interdisciplinary nature of engineering in medicine and its potential impact on society. PREREQUISITE/CO-REQUISITE: Engineering 371 Three hours of lecture and three hours of lab per week

CARRIED

34) Motion: That Engineering 435 (Advanced Robotic Dynamics and Control) be approved as presented.

435 ADVANCED ROBOTIC DYNAMICS AND CONTROL

This course advances the fundamentals of robotics through exposure to in-depth knowledge and understanding of kinematics, dynamics, control and trajectory with applications to autonomous vehicles, automated manufacturing and processing and mobile robotics. Areas of interest include: position transformation and control, rigid body motion, kinematic control, compliance and force control.

PREREQUISITE/CO-REQUISITE: Engineering 334 Three hours of lecture and three hours of lab per week

CARRIED

35) MOTION: That the course number for Engineering 443 (Technology Management and Entrepreneurship) be changed to Engineering 423 (Technology Management and Entrepreneurship.

423 443 TECHNOLOGY MANAGEMENT AND ENTREPRENEURSHIP

CARRIED

36) Motion: That the prerequisites for Engineering 121, 221, 261, 322, 326, 334, 371, 372, 381, 471 and 472 be changed as presented.

121 ENGINEERING COMMUNICATIONS

PREREQUISITE: Admission to the Engineering Program. Math 191, Physics 111, and Engineering 131 must be completed or taken at least concurrently

221 ENGINEERING PROJECTS I

PREREQUISITE: Engineering 122 with a grade of at least 60%, Engineering 131, Engineering 152, Physics 112, <u>Chemistry 112, Math 221</u> and Math 192

261 THERMO FLUIDS I

PREREQUISITE: Engineering 122, Engineering 131 and Engineering 152. Math 291 must be <u>completed or</u> taken at least concurrently

322 ENGINEERING MEASUREMENTS

PREREQUISITE: <u>Engineering 371 must be completed or taken concurrently</u> Admission to the Sustainable Design Engineering Degree Program

326 MATERIALS, MECHANICS, AND MANUFACTURING

PREREQUISITE: <u>Engineering 371 must be completed or taken concurrently</u> Admission to the Sustainable Design Engineering Degree Program

334 INTRODUCTION TO MECHATRONICS ENGINEERING

PREREQUISITE: <u>Engineering 371 must be completed or taken concurrently</u> Admission to the Sustainable Design Engineering Degree Program

371 PROJECT-BASED PROFESSIONAL PRACTICE I

PREREQUISITE: Engineering 222 with a grade of at least 70%, Engineering 231, Engineering 234, Engineering 261, Engineering 281, Math 261 and Math 301 Admission to the Sustainable Design Engineering Degree

372 PROJECT-BASED PROFESSIONAL PRACTICE II

PREREQUISITE: Engineering 371 with a grade of at least 60%

381 SYSTEMS ENGINEERING

PREREQUISITE: <u>Engineering 371 must be completed or taken concurrently</u> Admission to the Sustainable Design Engineering Degree Program

471 PROJECT-BASED PROFESSIONAL PRACTICE III

PREREQUISITE: Engineering 372 with a grade of at least 60%, Engineering 327, Engineering 363, Engineering 372, and Engineering 382

472 PROJECT-BASED PROFESSIONAL PRACTICE IV

PREREQUISITE: Engineering 471 with a grade of at least 60%

CARRIED

School of Business

OMNIBUS Motion (C. Lacroix/J. Krause) that motions 37-41 as noted below be approved:

37) Motion: To approve the change of the course number for BUS 421 Personal Finance to BUS 334.

421 334 PERSONAL FINANCE CARRIED

- 38) Motion: To approve the addition of BUS 334 Personal Finance as an alternative for the BUS 333 Integrated Cases in Corporate Finance requirement and update the calendar entry information.
 - Under the Bachelor of Business Administration Degree Requirements
 300-Level Courses:
 Business 301 (Business Law Part I)
 Business 333 (Integrated Cases in Corporate Finance) (formerly 415) <u>OR Business 334 (Personal Finance) (formerly 421)</u>
 - Under the Accelerated Bachelor of Business Administration Program the list of THIRD year courses

Required courses recommended to be taken in a student's **THIRD year** at UPEI: Business 333 (formerly 415) - Integrated Cases in Corporate Finance <u>OR Business 334 (formerly 421) – Personal Finance</u>

• Under the Bachelor of Business in Tourism and Hospitality – the list of SECOND year courses Required courses recommended to be taken in a student's **SECOND year** at UPEI:

 Business 333 (formerly 415) - Integrated Cases in Corporate Finance <u>OR Business 334</u> (formerly 421) – Personal Finance

• Under the Bachelor of Business Studies – SECOND year courses Required courses recommended to be taken in a student's SECOND year at UPEI:

- Business 333 (formerly 415) Integrated Cases in Corporate Finance <u>OR Business 334</u> (formerly 421) – Personal Finance
- Under the Minor in Business Administration
- Business 333 (formerly 415) Integrated Cases in Corporate Finance <u>OR Business 334</u> (formerly 421) - Personal Finance
- Under the Certificate in Business the list of courses
- Business 333 (formerly 415) Integrated Cases in Corporate Finance Business 334 (formerly 421) – Personal Finance

CARRIED

39) Motion: That the revisions to the calendar entry for School of Business Specializations be updated as presented.

Specialization in Accounting

A specialization in accounting is intended for business students wishing to pursue a Chartered Professional Accountant (CPA) designation after graduation. In addition to the core courses required to fulfill the BBA requirements, the following additional courses will be required to obtain the specialization:

- Accounting 202 (Introductory Financial Accounting Part II)
- Accounting 301 (Intermediate Accounting Part I)
- Accounting 302 (Intermediate Accounting Part II)
- Accounting 401 (Advanced Financial Accounting Part I)
- Accounting 402 (Advanced Financial Accounting Part II)
- Accounting 412 (Cost Accounting)
- Accounting 415 (Auditing)
- Accounting 416 (Auditing, Accounting and Society)
- Accounting 431 (Income Taxation)

In addition, it is recommended that students planning to pursue their CPA designation take Business 333 (Integrated Cases in Corporate Finance), as it is a required course for entry into the CPA program.

Specialization in Entrepreneurship

In addition to the core BBA program, completion of the specialization in entrepreneurship requires successful completion of the following courses:

Required:

- Business 265 (Introduction to Small Business and Entrepreneurship)
- Business 365 (Small Business Management: Opportunity Analysis & Development)
- Business 366 (Entrepreneurial Finance)
- Business 468 (Self-Employment Behind the Scene)
- Business 421 (Personal Finances
- Business 446 (Personal Selling and Sales)

Any FOUR of the following courses:

- Business 287 (International Business)
- Business 461 (Communications)
- Business 465 (Project Management)
- Business 471 (Organizational Development and Change)
- Business 475 (E-commerce)
- Business 476 (Intercultural Management)
- Philosophy 111 (Critical Thinking)
- Psychology 331 (Creativity)
- <u>Sociology 292/Diversity and Social Justice Studies 292 (Work and Society)</u>
- Sociology 311 (Small Groups)

Some of the above-listed courses have prerequisites, such as Sociology 101 and 102, or Psychology 101 and 102. For example, many non-business courses that are 200-level and above, require 100-level introductory courses (such as Sociology 101 or Psychology 101 and 102) and may have additional 200-level or 300-level prerequisites. Students are advised to plan ahead accordingly.

Specialization in Finance

Required:

- Math 112 (Calculus for Managerial, Social and Life Sciences) <u>OR Math 151 (Introductory</u> <u>Calculus I)</u>-Math 191 (Single Variable Calculus I) (It is recommended that students take this <u>their required Math</u> course before they begin their third year of studies.)
- Accounting 202 (Introductory Financial Accounting Part II)
- Business 333 (Integrated Cases in Corporate Finance) (formerly 415) (see note below)
- Business 334 (Personal Finance) (formerly 421) (see note below)
- Business 366 (Entrepreneurial Finance)
- Business 421 (Personal Finance)
- Business 439 (International Finance)

Any **FOUR** of the following courses:

- Business 287 (International Business)
- Business 302 (Business Law Part II)
- Business 432 (Applied Investment Management)
- Economics 203 (Intermediate Microeconomics)
- Economics 204 (Intermediate Macroeconomics)
- Economics 231 (Mathematical Economics)
- Economics 242 (Economics of Tourism)
- Economics 371 (Economics of Sports)
- Economics 283 (Agricultural Economics)
- Economics 291 (Managerial Economics)
- Economics 405 (Financial Economics)
- Economics 412 (Public Finance)
- Math 222 (Statistics II)

Note regarding Business 333 and 334: The core BBA program requires students to take Business 333 or 334, but students taking the specialization in finance must take both courses.

To qualify for a specialization in finance, students are required to have an overall average of 70% in the nine ten courses of this specialization.

Specialization in International Business

- 3. Completion of any **FIVE** of the following courses:
 - any course designated as Business 387 (International Business Elective)
 - any courses offered by the Department of Modern Languages
 - any courses offered by Asian Studies
 - any History courses listed under the US, British, European, Global or Greek & Roman streams
 - any Political Science courses listed in the Comparative Politics field of courses or the International field of courses
 - Anthropology 105 (Introduction to Anthropology I)
 - Anthropology 106 (Introduction to Anthropology II)
 - Anthropology 201 (Cultural Anthropology)
 - Anthropology 404 (Applied and Public Interest Public Policy)
 - Economics 331 (International Trade)
 - Economics 332 (International Monetary Economics)

- Economics 341 (Economic Development Theory)
- Economics 342 (Economic Development Policy)
- <u>Psychology</u> 472/Diversity and Social Justice Studies 472 (Social Justice in <u>Psychology</u>)
- Religious Studies 101 (Religions of the World Western Traditions)
- Religious Studies 102 (Religions of the World Eastern Traditions)
- <u>Religious Studies 105 (World Religions</u>
- Sociology/Anthropology 212 (Peoples of South Asia)
- Sociology/Anthropology 242 (Peoples of Oceania)
- Sociology/Anthropology 251 (Peoples of Africa)
- Sociology/Anthropology 261 (Sex, Gender and Society)
- Sociology/Anthropology 263 /Diversity and Social Justice Studies 263 (Global Youth Cultures)
- Sociology/Anthropology 355 /Diversity and Social Justice Studies 355 (Globalization)

Some of the above-listed courses have prerequisites, such as Sociology 101 and 102, or Psychology 101 and 102. For example, many non-business courses that are 200-level and above, require 100-level introductory courses (such as Sociology 101 or Psychology 101 and 102) and may have additional 200-level or 300-level prerequisites. Students are advised to plan ahead accordingly.

Specialization in Marketing

Any THREE of the following courses:

- Business 465 (Project Management)
- Psychology 222 (Psychology of Personal Experience)
- Psychology 242 (Introduction to Social Psychology)
- Psychology 303/Diversity and Social Justice Studies 303 (Psychology of Aging)
- Psychology 305 (Adolescent Development and Adjustment)
- Psychology 308 (Child Development)
- Psychology 309 (Adult Development)
- Psychology 321 (Learning and Motivation: Basic Processes)
- Psychology 331 (Creativity)
- Psychology 351 (Theories of Personality)
- Psychology 391/Diversity and Social Justice Studies 391 (Psychology of Women)
- Sociology 392 (Media and Society)
- Anthropology 310/Diversity and Social Justice Studies 310/English 314 (Identity and Popular Culture)
- Family Science 221 (Family Resource Management)
- Family Science 241 /Kinesiology 241 (Human Development)
- Theatre Studies 244 (Introduction to Theatre Study)
- Sociology/Anthropology 261/Diversity and Social Justice Studies 261 (Sex, Gender and Society)
- <u>Sociology/Anthropology 271 (Self and Society)</u>

Some of the above-listed courses have prerequisites, such as Sociology 101 and 102, or Psychology 101 and 102. For example, many non-business courses that are 200-level and above, require 100-level introductory courses (such as Sociology 101 or Psychology 101 and 102) and may have additional 200-level or 300-level prerequisites. Students are advised to plan ahead accordingly.

Specialization in Organizational Management

THREE courses from the following list of business courses ("List A"):

- Business 372 (Industrial Relations)
- Business 461 (Communications)
- Business 465 (Project Management)
- Business 471 (Organizational Development and Change)
- Business 476 (Intercultural Management)
- Business 488 (Management in Perspective)
- Business 407 (Special topics in Organizational Management)
- University 203 (Introduction to Leadership Studies)
- University 303 (Leadership Theory and Practice)

Some of the above-listed courses have prerequisites, such as Sociology 101 and 102, or Psychology 101 and 102. For example, many non-business courses that are 200-level and above, require 100-level introductory courses (such as Sociology 101 or Psychology 101 and 102) and may have additional 200-level or 300-level prerequisites. Students are advised to plan ahead accordingly.

Specialization in Tourism and Hospitality

List B:

- Anthropology 105 (Introduction to Anthropology I)
- Anthropology 106 (Introduction to Anthropology II)
- Anthropology 201 (Cultural Anthropology)
- Religious Studies 101 (Religions of the World Western Traditions)
- Religious Studies 102 (Religions of the World Eastern Traditions)
- Religious Studies 105 (World Religions)
- Sociology/Anthropology 212 (Peoples of South Asia)
- Sociology/Anthropology 242 (Peoples of Oceania)
- Sociology/Anthropology 251 (Peoples of Africa)
- Sociology/Anthropology 263/ Diversity and Social Justice Studies 263 (Global Youth Cultures)
- Sociology/Anthropology 355/Diversity and Social Justice Studies 355 (Globalization)

Some of the above-listed courses have prerequisites. For example, many non-business courses that are 200-level and above, require 100-level introductory courses (such as Sociology 101 or Psychology 101 and 102) and may have additional 200-level or 300-level prerequisites. Students are advised to plan ahead accordingly.

CARRIED

40) Motion: That a new course entitled BUS 727 Negotiation and Conflict Management be approved.

727 NEGOTIATION AND CONFLICT MANAGEMENT

This course teaches the dynamics of conflict in the workplace and the use of negotiation and conflict management skills to effectively manage such situations. Through a combination of discussion sessions, workshop exercises and simulation, participants will learn and apply essential negotiation strategies and approaches. In addition, participants will have an opportunity to focus on developing conflict management skills and negotiator styles through a series of self-assessments and role-playing exercises. PREREQUISITE/CO-REQUISIATE: Permission of the Instructor Three semester hours

CARRIED

41) Motion: To update the course description for BUS 801 Business Research in Practice be approved as requested.

BUS 801 BUSINESS RESEARCH IN PRACTICE

This course requires students to complete a project or set of projects involving an in-depth research study concerning a current and critical issue(s) in an organization. Potential projects include academic research papers, business plans, business case analyses or business consulting. To ensure integration of knowledge and skills, students will be expected to apply the concepts learned in the core courses of the EMBA program and to make evidence-based recommendations. The research outcome is expected to be an evidence-based recommendation addressing the organization's identified issue(s).

PREREQUISITES: Business 608 plus at least 5 of the other 7 core courses HOURS OF CREDIT: 6

Miscellaneous

42) Motion: To approve Academic Dates for 2016 – 2017 – all programs except Veterinary Medicine.

UPEI Calendar Dates (First Semester) 1st Academic Semester – September – December 2016 All programs except Veterinary Medicine

September 2016	
7 Wednesday	Classes Begin
16 Friday	FINAL DAY FOR LATE REGISTRATION, FOR CHANGING COURSES OR
	SECTIONS, FOR CANCELLATION OF COURSES OR SECTIONS, FOR
	CANCELLATION OF COURSES WITH FULL REFUND; FINAL DAY FOR
	PAYMENT OF FEES OR FORMAL ARRANGEMENT WITH THE
	ACCOUNTING OFFICE TO PAY LATE.
30 Friday	Last day for discontinuing courses – 60% refund

October 2016	
10 Monday	Thanksgiving Day. No classes
31 Monday	Final date to apply to graduate
	Last day for discontinuing courses – 40% refund. No discontinuation after this date.
November 2016	
10 Thursday	Student Development Day. No Classes
11 Friday	Remembrance Day. No Classes
December 2016	
2 Friday	Final Day of First Semester Classes. Deadline for application for second semester.
7-17 (Wed-Sat)	EXAMINATIONS - No examinations will be held during the period 21 November to 2 December inclusive without the permission of the Chair and appropriate Dean. Note: Please see Academic Regulation #13.
21 Wednesday	End of first semester. Course grades to be submitted to Registrar's Office by noon on this date.

60 teaching days

UPEI Calendar Dates (Second Semester) 2nd Academic Semester January – May 2017 All programs except Veterinary Medicine

January 2017 4 Wednesday 13 Friday	Classes Begin FINAL DAY FOR LATE REGISTRATION, FOR CHANGING COURSES OR SECTIONS, FOR CANCELLATION OF COURSES OR SECTIONS, FOR CANCELLATION OF COURSES WITH FULL REFUND; FINAL DAY FOR PAYMENT OF FEES OR FORMAL ARRANGEMENT WITH THE ACCOUNTING OFFICE TO PAY LATE.
31 Tuesday	Last day for discontinuing courses – 60% refund.
February 2017	
20-24(Mon-Fri)	Islander Day and Mid-semester break. No classes
21 Tuesday	Registration begins for SUMMER SESSIONS 2017
27 Monday	Classes resume
28 Tuesday	Last day for discontinuing courses – 40% refund. No discontinuations after this date.
April 2017	
4 Tuesday	Final day of classes
7-21 (Fri-Fri)	EXAMINATIONS. Note: No examinations will be held during the period
	21 March to 4 April inclusive without the permission of the Chair and appropriate Dean. Note: Please see Academic Regulation #13.
14 Friday	Good Friday. No classes/exams

Easter Monday. No classes/exams End of Second Semester. Course grades for fourth year students to be
submitted to the Registrar's Office by noon on this date.
Course grades for third year, second year, first year and part-time
students to be submitted to Registrar's Office by noon on this date.
Convocation
First day of classes for Summer Session
REGISTRATION begins for September 2017 & January 2018. Students with fourth year standing on May 30, third year on May 31, second year on June 1, all others on June 2.

60 teaching days

SUMMER SESSION DATES 2017 FIRST SUMMER SESSION 2017

FEBRUARY 2017 21 Tuesday	REGISTRATION begins for Summer Sessions 2017
MAY 2017	
15 Monday	First Summer Session classes begin
19 Friday	Last day to register late for First Summer Session courses; last day to cancel registration for full refund; last day for changing courses or sections; late fee is in effect for First Summer Session courses.
22 Monday	Victoria Day – No classes
26 Friday	Last day to discontinue from First Summer session courses*
30 Tuesday	REGISTRATION begins for September 2017 & January 2018. Students with fourth year standing on May 30, third year on May 31, second year on June 1, all others on June 2.

JUNE 2017

22 Thursday	Last day of First Summer Session classes
26-27 (Mon-Tues)	Exams for First Summer Session
30 Friday	First Summer Session grades must be submitted to Registrar's Office by
	noon

28 Teaching Days

SECOND SUMMER SESSION 2017

JULY 2017	
4 Tuesday	Second Summer Session classes begin
7 Friday	Last day to register late for First Summer Session courses; last day to
	cancel registration for full refund; last day for changing courses or
	sections; late fee is in effect for First Summer Session courses.
11 Tuesday	REGISTRATION begins for September 2017 and January 2018. Students
	with fourth year standing on July 11; third year on July 12; second year

	on July 13, all others on July 14
28 Friday	Last day to discontinue from Second Summer Session courses*
AUGUST 2017	
10 Thursday	Last day of Second Summer Session classes
14-15 (Mon-Tues)	Exams for Second Summer Session courses
21 Monday	Second Summer Session grades must be submitted to the Registrar's
	Office by noon
	28 Teaching Days

*For courses that begin on the dates prior to the regularly scheduled Summer Session dates, and for regularly scheduled summer session courses, please contact the Registrar's Office for refund schedule and late fee schedule.

Senate Dates 2016-2017 Fridays at 3:00 p.m.

- September 16
- October 14
- November 4
- December 2
- January 13
- February 10
- March 10
- March 31
- May 5

c. Senate Scholarships and Awards Committee Report

The report was circulated for information.

SENATE MOVED TO CLOSED SESSION

SENATE MOVED TO OPEN SESSION

6. <u>Decanal Search Committee Update – School of Nursing</u>

C. Lacroix reported that the Search Committee has recommended that Dr. Gulrose Jiwani be appointed as Dean of the School of Nursing for a six-year term, effective June 1, 2016 to June 30, 2022. The UPEI Board of Governors approved this recommendation at their meeting in January, 2016. C. Lacroix stated that communication will be coming out early next week on this appointment.

7. Other Business

None.

8. <u>Adjournment</u>

MOTION (L. Edwards/J. Krause) moved the meeting be adjourned at 4:05 p.m.

Respectfully Submitted

Kathleen Kielly Secretary of Senate