



The following proposals, received on DAP between the dates listed below, have been approved.

DAP Submission Period: April 1-15, 2021

DAP Approval Date: May 01, 2021

[For more information on the DAP process, see the Secretariat's website.](#)

Approval Route: DAP

Faculty of Engineering

CHEMICAL AND BIOCHEMICAL ENGINEERING

Effective September 1, 2021, the following change(s) be made: Program Revision.

A. GENERAL CHEMICAL ENGINEERING OPTION

Second Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2277A/B, CBE 2206A/B, CBE 2207A/B,
CBE 2214A/B, CBE 2220A/B, CBE 2221A/B, CBE 2224A/B,
CBE 2290A/B, CBE 2291A/B, Statistical Sciences 2143A/B, Writing 2130F/G (or the former ES 2211F/G).

Third Year Program

CBE 3307A/B, CBE 3310A/B, CBE 3315A/B, CBE 3316A/B, CBE 3318A/B, CBE 3319A/B, CBE 3322A/B, CBE 3323A/B, CBE 3324A/B, CBE 3395Y, two 0.5 non-technical electives.

Fourth Year Program

CBE 4497, CBE 4415*, **ELI 4110F/G or the former** ES 4498F/G, four 0.5 technical electives†, 0.5 non-technical elective**.

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Effective September 1, 2021, the following change(s) be made: Program Revision.

B. BIOCHEMICAL AND ENVIRONMENTAL ENGINEERING OPTION

Second Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2277A/B, CBE 2206A/B, CBE 2207A/B,
CBE 2214A/B, CBE 2220A/B, CBE 2221A/B, CBE 2224A/B,
CBE 2290A/B, CBE 2291A/B, Statistical Sciences 2143A/B, Writing 2130F/G (or the former ES 2211F/G).

Third Year Program

CBE 3307A/B, CBE 3310A/B, CBE 3315A/B, CBE 3316A/B, CBE 3318A/B, CBE 3319A/B, CBE 3322A/B, CBE 3323A/B, CBE 3324A/B, CBE 3330A/B, CBE 3396Y, CBE 4403A/B.

Fourth Year Program

CBE 4425*, CBE 4498, **ELI 4110F/G or the former** ES 4498F/G, 1.0 technical elective, 1.5 non-technical elective**.

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Effective September 1, 2021, the following change(s) be made: Program Revision.

C. CHEMICAL ENGINEERING/HBA

Second Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2277A/B, CBE 2206A/B, CBE 2207A/B, CBE 2214A/B, CBE 2220A/B, CBE 2221A/B, CBE 2224A/B, CBE 2290A/B, CBE

2291A/B, Business Administration 2257.

Third Year Program

The third year of the undergraduate program in Business Administration consists of an integrated set of courses (7.5 courses) designed to give a basic understanding of the functions and the interrelationships of the major areas of management, as well as to develop problem-solving and action-planning skills.

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

Fourth Year Program

CBE 3307A/B, CBE 3310A/B, CBE 3315A/B, CBE 3316A/B, CBE 3318A/B, CBE 3319A/B, CBE 3322A/B, CBE 3323A/B, CBE 3324A/B, CBE 3395Y, Statistical Sciences 2143A/B.

Applied Project Requirement: Business Administration 4569.

Fifth Year Program

CBE 4497, ELI 4110F/G or the former ES 4498F/G, two 0.5 technical electives*,

3.0 Business Administration courses:

- 0.5 course: International Perspective Requirement: Business Administration 4505A/B.
- 0.5 course: Corporations and Society Perspective Requirement: At least one 0.5 course from Business Administration - Corporations and Society designated electives offered during the academic year (Business Administration 4538A/B, Business Administration 4539A/B, Business Administration 4588A/B, Business Administration 4625A/B) or other business elective as determined and approved by the HBA Program Director to satisfy this requirement.
- 0.5 course: Managerial Accounting Requirement: Business Administration 4624A/B.
- 1.5 elective courses chosen from 4000 level Business courses.

* Students may choose 2 technical electives from the General Chemical Engineering Option Technical Electives list.

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Effective September 1, 2021, the following change(s) be made: Program Revision.

F. CHEMICAL ENGINEERING AND BIOMEDICAL ENGINEERING

Second Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2277A/B, BME 3201A/B, CBE 2206A/B, CBE 2207A/B, CBE 2214A/B, CBE 2220A/B, CBE 2221A/B, CBE 2224A/B, CBE 2290A/B, CBE 2291A/B, Statistical Sciences 2143A/B.

Third Year Program

Biology 1001A, Biology 1002B, CBE 3307A/B, CBE 3310A/B, CBE 3315A/B, CBE 3316A/B, CBE 3318A/B, CBE 3319A/B, CBE 3322A/B, CBE 3323A/B, CBE 3324A/B, CBE 3395Y, 0.5 non-technical elective.

Fourth Year Program

Biochemistry 2280A, BME 3301A/B, BME 3303A/B, ECE 4455A/B, MME 4469A/B, Physiology 2130, 1.5 Biomedical Sciences Electives, 1.0 Healthcare Non-technical Electives, 0.5 open elective.

Fifth Year Program

BME 4400, CBE 4421A/B, CBE 4497, Engineering Science 3330A/B, **Engineering Leadership and Innovation 4110F/G or the former** Engineering Science 4498F/G, 1.0 BME technical electives, 1.0 CBE technical electives.

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CIVIL AND ENVIRONMENTAL ENGINEERING

Effective September 1, 2021, the following change(s) be made: Program Revision.

A. STRUCTURAL ENGINEERING OPTION

Second Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2277A/B, CEE 2202A/B, CEE 2217A/B, CEE 2219A/B, CEE 2220A/B, CEE 2221A/B, CEE 2224, Earth Sciences 2281A/B, Statistical Sciences 2141A/B*, Writing 2130F/G (or the former ES 2211F/G).

*Note: A student may, with the permission of the department counsellor, substitute Statistical Sciences 2143A/B for Statistical Sciences 2141A/B.

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

Third Year Program

CEE 3321A/B, CEE 3322A/B, CEE 3340A/B, CEE 3343A/B, CEE 3344A/B, CEE 3346A/B, CEE 3347A/B, CEE 3348A/B, CEE 3358A/B, CEE 3369A/B, 0.5 non-technical elective.

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

Fourth Year Program

CEE 4424A/B, CEE 4426A/B, CEE 4441, CEE 4478A/B, **ELI 4110F/G or the former** ES 4498F/G, CEE 4491A/B, three 0.5 technical electives, 1.0 non-technical elective.

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Effective September 1, 2021, the following change(s) be made: Program Revision.

B. ENVIRONMENTAL ENGINEERING OPTION

Second Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2277A/B, CEE 2202A/B, CEE 2217A/B, CEE 2219A/B, CEE 2220A/B, CEE 2221A/B, CEE 2224, Earth Sciences 2281A/B, Statistical Sciences 2141A/B*, Writing 2130F/G (or the former ES 2211F/G).

*Note: A student may, with the permission of the department counsellor, substitute Statistical Sciences 2143A/B for Statistical Sciences 2141A/B.

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

Third Year Program

CEE 3321A/B, CEE 3322A/B, CEE 3348A/B, CEE 3355A/B, CEE 3362A/B, CEE 3369A/B, CEE 3386A/B, CBE 4409A/B, CEE 4476A/B, Earth Sciences 3340A/B, 1.0 non-technical elective.

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

Fourth Year Program

CEE 4424A/B, CEE 4426A/B, CEE 4441, CEE 4463A/B, CEE 4465A/B, CEE 4478A/B, ELI 4110F/G or the former ES 4498F/G, three 0.5 technical electives, 1.0 0.5 non-technical elective*.

Students who entered before September 2016 are required to take Business Administration 2299E.

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

Technical electives: Environmental Engineering Option

CEE 4401A/B, CEE 4405A/B, CEE 4418A/B, CEE 4428A/B, CEE 4429A/B, CEE 4438A/B, CEE 4440, CEE 4458A/B, CEE 4463A/B, CEE 4476A/B, CEE 4479A/B, CEE 4480A/B, CEE 4485A/B, CBE 4463A/B, Earth Sciences 4440A/B.

Some technical electives may not be offered in a given academic year.

Effective September 1, 2021, the following change(s) be made: Program Revision.

C. CIVIL ENGINEERING/HBA

Second Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2277A/B, CEE 2202A/B, CEE 2217A/B, CEE 2219A/B, CEE 2220A/B, CEE 2221A/B, CEE 2224, Earth Sciences 2281A/B, Business Administration 2257.

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

Third Year Program

The third year of the undergraduate program in Business Administration consists of an integrated set of courses (7.5 courses) designed to give a basic understanding of the functions and the interrelationships of the major areas of management, as well as to develop problem-solving and action-planning skills.

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

Fourth Year Program

CEE 3321A/B, CEE 3322A/B, CEE 3340A/B, CEE 3343A/B, CEE 3344A/B, CEE 3346A/B, CEE 3347A/B, CEE 3348A/B, CEE 3369A/B, Statistical Sciences 2141A/B or Statistical Sciences 2143A/B.

Applied Project Requirement: Business Administration 4569.

Fifth Year Program

CEE 4424A/B, CEE 4426A/B, CEE 4441, CEE 4465A/B, ELI 4110F/G or the former ES 4498F/G.

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Effective September 1, 2021, the following change(s) be made: Program Revision.

F. ENVIRONMENTAL ENGINEERING WITH INTERNATIONAL DEVELOPMENT

Third Year Program

CEE 3321A/B, CEE 3322A/B, CEE 3327A/B, CEE 3328A/B, CEE 3348A/B, CEE 3355A/B, CEE 3362A/B, CEE 3369A/B, CEE 4476A/B, CBE 4409A/B, Earth Sciences 3340A/B, 0.5 non-technical elective*.

Fourth Year Program

CEE 3386A/B, CEE 4404A/B, CEE 4424A/B, CEE 4426A/B, CEE 4441, CEE 4463A/B, CEE 4465A/B, CEE 4478A/B, ELI 4110F/G or the former ES 4498F/G, two 0.5 technical electives, 1.0 0.5 non-technical elective*.

Students who entered before September 2016 are required to take Business Administration 2299E.

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

Technical Electives: Environmental Engineering with International Development Option

CEE 4401A/B, CEE 4405A/B, CEE 4418A/B, CEE 4424A/B, CEE 4427A/B, CEE 4428A/B, CEE 4429A/B, CEE 4438A/B, CEE 4463A/B, CEE 4476A/B, CEE 4479A/B, CEE 4440, CEE 4480A/B, CEE 4485A/B, Geography 2030A/B, Centre for Global Studies 2002F/G, the former Centre for Global Studies 3004A/B, the former Geography 2020A/B, the former Geography 2040A/B.

Some technical electives may not be offered in a given academic year.

It is recommended that students register for ES 3390 (Summer Community Development Placement) between their third and fourth years, although this is not a mandatory component of the program.

Effective September 1, 2021, the following change(s) be made: Program Revision.

G. STRUCTURAL ENGINEERING WITH INTERNATIONAL DEVELOPMENT

Third-Year Program

CEE 3321A/B, CEE 3322A/B, CEE 3327A/B, CEE 3328A/B, CEE 3340A/B, CEE 3343A/B, CEE 3344A/B, CEE 3346A/B, CEE 3347A/B, CEE 3348A/B, CEE 3358A/B, CEE 3369A/B.

Fourth-Year Program (effective September 2015)

CEE 4441, CEE 4404A/B, CEE 4424A/B, CEE 4426A/B, CEE 4478A/B, CEE 4491A/B, ELI 4110F/G or the former ES 4498F/G, two 0.5 technical electives, 1.0 non-technical elective*.

Students who entered before September 2016 are required to take Business Administration 2299E.

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

Technical Electives: Structural Engineering with International Development Option:

CEE 4401A/B, CEE 4405A/B, CEE 4418A/B, CEE 4427A/B, CEE 4428A/B, CEE 4429A/B, CEE 4438A/B, CEE 4458A/B, CEE 4459A/B, CEE 4476A/B, CEE 4440, CEE 4480A/B, CEE 4485A/B, Geography 2030A/B, Centre for Global Studies 2002F/G, the former

Centre for Global Studies 3004A/B, the former Geography 2020A/B, the former Geography 2040A/B.

Some technical electives may not be offered in a given academic year.

ELECTRICAL AND COMPUTER ENGINEERING

Effective September 1, 2021, the following change(s) be made: Program Revision.

A. ELECTRICAL ENGINEERING PROGRAM

Second Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2276A/B, Computer Science 1027A/B, ECE 2205A/B, ECE 2231A/B, ECE 2233A/B, ECE 2236A/B, ECE 2240A/B, ECE 2242A/B, ECE 2277A/B, MME 2234A/B, Writing 2130F/G (or the former ES 2211F/G).

Third Year Program

Applied Mathematics 3415A/B, ECE 3330A/B, ECE 3331A/B, ECE 3332A/B, ECE 3333A/B, ECE 3336A/B, ECE 3337A/B, ECE 3399A/B, ECE 3370A/B, ECE 3375A/B, Statistical Sciences 2141A/B, 0.5 non-technical elective.

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

Fourth Year Program

ECE 4416, ECE 4429A/B, ECE 4437A/B, **ELI 4110F/G or the former** ES 4498F/G, Five 0.5 technical electives, 1.0 non-technical elective*.

Students who entered before September 2016 are required to take Business Administration 2299E.

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

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Effective September 1, 2021, the following change(s) be made: Program Revision.

B. ELECTRICAL ENGINEERING/HBA

Second Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2276A/B, Computer Science 1027A/B, Business Administration 2257, ECE 2205A/B, ECE 2231A/B, ECE 2233A/B, ECE 2236A/B, ECE 2240A/B, ECE 2242A/B, ECE 2277A/B.

Third Year Program

Business Administration 3300K, Business Administration 3301K, Business Administration 3302K, Business Administration 3303K, Business Administration 3304K, Business Administration 3307K, Business Administration 3311K, Business Administration 3316K, Business Administration 3321K, Business Administration 3322K, Business Administration 3323K.

Fourth Year Program

Applied Mathematics 3415A/B, ECE 3330A/B, ECE 3331A/B, ECE 3332A/B, ECE 3336A/B, ECE 3337A/B, ECE 3370A/B, ECE 3375A/B, ECE 3399A/B, Statistical Sciences 2141A/B.

Applied Project Requirement: Business Administration 4569.

Fifth Year Program

ECE 4416, ECE 4429A/B, ECE 4437A/B, ELI 4110F/G or the former ES 4498F/G, one 0.5 technical elective from the approved list.

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Effective September 1, 2021, the following change(s) be made: Program Revision.

H. ELECTRICAL ENGINEERING AND BIOMEDICAL ENGINEERING

Second Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2276A/B, BME 3201A/B, Computer Science 1027A/B, ECE 2205A/B, ECE 2231A/B, ECE 2233A/B, ECE 2236A/B, ECE 2240A/B, ECE 2242A/B, ECE 2277A/B, 0.5 non-technical elective.

Third Year Program

Applied Mathematics 3415A/B, Biology 1001A, Biology 1002B, ECE 3330A/B, ECE 3331A/B, ECE 3332A/B, ECE 3336A/B, ECE 3337A/B, ECE 3370A/B, ECE 3375A/B, ECE 3399A/B, Statistical Sciences 2141A/B.

Fourth Year Program

Biochemistry 2280A, BME 3301A/B, BME 3303A/B, ECE 4455A/B, MME 4469A/B, Physiology 2130, 1.5 Biomedical Sciences Electives, 1.0 Healthcare Non-technical Electives, 0.5 open elective.

Fifth Year Program

BME 4400, ECE 4416, ECE 4429A/B, ECE 4437A/B, ECE 4445A/B, Engineering Science 3330A/B, Engineering Leadership and Innovation 4110F/G or the former Engineering Science 4498F/G, 1.0 BME Technical Electives, 0.5 ECE Technical Elective.

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ELECTRICAL AND COMPUTER ENGINEERING - COMPUTER ENGINEERING PROGRAM

Effective September 1, 2021, the following change(s) be made: Program Revision.

A. ELECTRONIC DEVICES FOR UBIQUITOUS COMPUTING

Second-Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2276A/B, Computer Science 1027A/B, ECE 2205A/B, ECE 2231A/B, ECE 2233A/B, ECE 2240A/B, ECE 2242A/B, ECE 2277A/B, ECE 3375A/B, ECE 3380A/B, Writing 2130F/G (or the former ES 2211F/G).

Third-Year Program

Computer Science 2211A/B, ECE 2236A/B, ECE 3330A/B, ECE 3331A/B, ECE 3349A/B, ECE 3389A/B, ECE 3390A/B, Mathematics 2151A/B, SE 2203A/B, SE 2205A/B, Statistical Sciences 2141A/B or Statistical Sciences 2143A/B, one 0.5 non-technical elective from the approved list.

Fourth-Year Program

ECE 4415, ECE 4436A/B, ECE 4437A/B, ECE 4460A/B, ELI 4110F/G or the former ES 4498F/G, SE 3313A/B, SE 3314A/B, two 0.5 technical electives from the list below, 1.0 non-technical elective*.

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Effective September 1, 2021, the following change(s) be made: Program Revision.

B. SOFTWARE SYSTEMS FOR UBIQUITOUS COMPUTING

Second-Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2276A/B, ECE 2205A/B, ECE 2277A/B, ECE 3375A/B, ECE 3380A/B, Mathematics 2151A/B, MSE 2233A/B, SE 2202A/B, SE 2203A/B, SE 2205A/B, one of Statistical Sciences 2141A/B or Statistical Sciences 2143A/B.

Third-Year Program

ECE 3330A/B, ECE 3331A/B, ECE 3389A/B, ECE 3390A/B, ECE 4436A/B, ECE 4460A/B, SE 3313A/B, SE 3314A/B, SE 3316A/B, SE 3352A/B, SE 3353A/B, Writing 2130F/G (or the former ES 2211F/G).

Fourth-Year Program

ECE 4415, ECE 4437A/B, ELI 4110F/G or the former ES 4498F/G, SE 4452A/B, SE 4455A/B, three 0.5 technical electives from the list below, 1.5 non-technical electives*.

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Effective September 1, 2021, the following change(s) be made: Program Revision.

C. ELECTRONIC DEVICES FOR UBIQUITOUS COMPUTING/HBA

Second Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2276A/B, Computer Science 1027A/B, ECE 2205A/B, ECE 2277A/B, ECE 2231A/B, ECE 2240A/B, ECE 2242A/B, ECE 3375A/B, ECE 3380A/B, Business Administration 2257

Third Year Program

The third year of the undergraduate program in Business Administration consists of an integrated set of courses (7.5 courses) designed to give a basic understanding of the functions and the interrelationships of the major areas of management, as well as to develop problem-solving and action-planning skills.

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

Fourth Year Program

Computer Science 2210A/B, Computer Science 2211A/B, ECE 2236A/B, ECE 3330A/B, ECE 3331A/B, ECE 3349A/B, ECE 3389A/B, ECE 3390A/B, Mathematics 2151A/B, SE 2203A/B, Statistical Sciences 2143A/B.

Applied Project Requirement: Business Administration 4569

Fifth Year Program

ECE 4415, ECE 4436A/B, ECE 4437A/B, ECE 4460A/B, SE 3313A/B, ELI 4110F/G or the former ES 4498F/G.

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Effective September 1, 2021, the following change(s) be made: Program Revision.

D. SOFTWARE SYSTEMS FOR UBIQUITOUS COMPUTING/HBA

Second Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2276A/B, Mathematics 2151A/B, ECE 2205A/B, ECE 2277A/B, ECE 3375A/B, ECE 3380A/B, SE 2202A/B, SE 2203A/B, SE 2205A/B, MSE 2233A/B, Business Administration 2257

Third Year Program

The third year of the undergraduate program in Business Administration consists of an integrated set of courses (7.5 courses) designed to give a basic understanding of the functions and the interrelationships of the major areas of management, as well as to develop problem-solving and action-planning skills.

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

Fourth Year Program

ECE 3331A/B, ECE 3389A/B, ECE 3390A/B, ECE 4436A/B, ECE 4460A/B, SE 3313A/B, SE 3314A/B, SE 3316A/B, SE 3352A/B, SE 3353A/B, Statistical Sciences 2143A/B.

Applied Project Requirement: Business Administration 4569.

Fifth Year Program

ECE 4415, ECE 3330A/B, ECE 4437A/B, SE 4452A/B, **ELI 4110F/G or the former ES 4498F/G**, the former SE 4453A/B.

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ELECTRICAL AND COMPUTER ENGINEERING - SOFTWARE ENGINEERING PROGRAM

Effective September 1, 2021, the following change(s) be made: Program Revision.

B. SOFTWARE ENGINEERING/HBA

Second Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2276A/B, ECE 2277A/B, ECE 2238A/B, SE 2202A/B, SE 2203A/B, SE 2205A/B, SE 2250A/B, Mathematics 2151A/B, Statistical Sciences 2141A/B, One 0.5 non-technical elective from the approved list. Business Administration 2257.

Third Year Program

The third year of the undergraduate program in Business Administration consists of an integrated set of courses (7.5 courses) designed to give a basic understanding of the functions and the interrelationships of the major areas of management, as well as to develop problem-solving and action-planning skills.

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

Fourth Year Program

ECE 3375A/B, ECE 4436A/B, SE 3309A/B, SE 3310A/B, SE 3313A/B, SE 3314A/B, SE

3316A/B, SE 3350A/B, SE 3351A/B, SE 3352A/B, SE 3353A/B.

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

Fifth Year Program

SE 4450, SE 4452A/B, SE 4455A/B, SE 4472A/B, ELI 4110F/G or the former ES 4498F/G.

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Effective September 1, 2021, the following change(s) be made: Program Revision.

SOFTWARE ENGINEERING PROGRAM

Second Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2276A/B, ECE 2277A/B, ECE 2238A/B, SE 2202A/B, SE 2203A/B, SE 2205A/B, SE 2250A/B, Mathematics 2151A/B, Statistical Sciences 2141A/B, Writing 2130F/G (or the former ES 2211F/G), one 0.5 non-technical elective from the approved list.

Third Year Program

ECE 3375A/B, ECE 4436A/B, SE 3309A/B, SE 3310A/B, SE 3313A/B, SE 3314A/B, SE 3316A/B, SE 3350A/B, SE 3351A/B, SE 3352A/B, SE 3353A/B.

Fourth Year Program

SE 4450, SE 4452A/B, SE 4455A/B, SE 4472A/B, ELI 4110F/G or the former ES 4498F/G, four 0.5 technical electives from the list below, 1.0 non-technical elective*. Students who entered before September 2016 are required to take Business Administration 2299E.

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

Technical Electives: Software Engineering

Data Science 3000A/B, ECE 3389A/B, ECE 3390A/B, ECE 4460A/B, SE 4460A/B, SE 4470A/B, SE 4471A/B, Computer Science 3342A/B, Computer Science 3346A/B, Computer Science 3388A/B, Computer Science 4442A/B, Computer Science 4482A/B, Computer Science 4483A/B.

Some technical electives may not be offered in a given academic year.

**JOHN M. THOMPSON CENTRE OF ENGINEERING
LEADERSHIP AND INNOVATION**

Effective September 1, 2021, the following change(s) be made: Program Revision.

B. INTEGRATED ENGINEERING/HBA

Second Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2276A/B, CBE 2221A/B, CBE 2291A/B, CEE 2202A/B, ECE 2238A/B, ECE 2277A/B, IE 2297A/B, or the former ES 2297A/B, MSE 2214A/B, Statistical Sciences 2143A/B, Business Administration 2257.

Third Year Program

The third year of the undergraduate program in Business Administration consists of an integrated set of courses (7.5 courses) designed to give a basic understanding of the functions and the interrelationships of the major areas of management, as well as to develop problem-solving and action-planning skills.

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

Fourth Year Program

CBE 2220A/B, CBE 3322A/B, CEE 2220A/B, ECE 3374A/B, ELI 3000A/B or the former ES 3331A/B, ELI 3200A/B or the former ES 3330A/B, ELI 4110F/G or the former ES 4498F/G, MME 2285A/B, MSE 2213A/B, MSE 3360A/B.

Applied Project Requirement: Business Administration 4569.

Fifth Year Program

ELI 4100A/B or the former ES 4480A/B, IE 4499 or the former ES 4499, three 0.5 technical electives (see list below).

3.0 Business Administration courses:

- 0.5 course: International Perspective Requirement: Business Administration 4505A/B.
- 0.5 course: Corporations and Society Perspective Requirement: At least one 0.5 course from Business Administration - Corporations and Society designated electives offered during the academic year (Business Administration 4538A/B, Business Administration 4539A/B, Business Administration 4588A/B, Business Administration 4625A/B) or other business elective as determined and approved by the HBA Program Director to satisfy this requirement.
- 0.5 course: Managerial Accounting Requirement: Business Administration 4624A/B.
- 1.5 elective courses chosen from 4000 level Business courses.

Chemical and Biochemical Engineering:

CBE 2290A/B, CBE 3310A/B, CBE 3324A/B, CBE 4421A/B, CBE 4409A/B.

Civil and Environmental Engineering:

CEE 3348A/B, CEE 3362A/B, CEE 4405A/B, CEE 4418A/B, CEE 4458A/B, CEE 4465A/B, CEE 4477A/B.

Electrical and Computer Engineering:

ECE 3349A/B, ECE 3375A/B, ECE 4436A/B, ECE 4468A/B, SE 3314A/B.

Mechanical and Materials Engineering:

MME 3379A/B, MME 3381A/B, MME 4452A/B, MME 4473A/B, MME 4487A/B, MME 4492A/B.

For students who entered the HBA Program in September 2016 and prior, please refer to the 2016-2017 Academic Calendar.

Effective September 1, 2021, the following change(s) be made: Program Revision.

D. INTEGRATED ENGINEERING/LAW

Second Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2276A/B, CBE 2221A/B, CBE 2291A/B, CEE 2202A/B, ECE 2238A/B, ECE 2277A/B, IE 2297A/B or the former ES 2297A/B, MSE 2214A/B, Statistical Sciences 2143A/B, 1.0 non-technical elective*.

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

Third Year Program

CBE 2220A/B, CBE 3322A/B, CEE 2220A/B, CEE 2221A/B, ECE 3374A/B, ELI 3000A/B or the former ES 3331A/B, ELI 3200A/B or the former ES 3330A/B, ELI 4110F/G or the former ES 4498F/G, MME 2285A/B, MME 3379A/B, MSE 2213A/B, MSE 3360A/B.

Fourth Year Program

First year Law curriculum. No courses outside Law may be taken during this year.

Fifth and Sixth Year Programs

ELI 4100 or the former ES 4480A/B, ELI 4200 or the former ES 4481A/B, IE 4499 or the former ES 4499.

In years five and six, students must take courses in Law totaling 45 credit hours. These courses must include the three compulsory upper-year courses and courses that satisfy the Faculty of Law writing requirements. They must also include one of the courses listed below under "Economics" and one listed under "Impact of Technology on Society".

Notes: Fulfillment of the Faculty of Engineering requirement of courses that expose students to economics, ethical issues, and the impact of technology on society must be taken as follows:

Economics: One of Law 5220 Income Taxation, Law 5555 Corporate Finance, or an approved Law Selected Topics course.

Ethical Issues: Law 5150 Legal Ethics and Professionalism.

Impact of Technology on Society: One of Law 5615 Biotechnology Law, Law 5605 Advanced Issues in Technology Law, Law 5350 Media Law, Law 5600 Advanced Intellectual Property, Law 5620 Information Law, Law 5625 Intellectual Property, Law 5630 International Protection of Intellectual Property, Law 5610 Advanced Patent Law, or an approved Law Selected Topics course.

Effective September 1, 2021, the following change(s) be made: Program Revision.

CERTIFICATE IN ENGINEERING LEADERSHIP AND INNOVATION

To complete the Engineering Leadership and Innovation Certificate successfully, students must complete the following in addition to their BEng degree:

3.0 courses:

1.0 course: Business Administration 1299E.

2.0 courses: ELI 3000A/B or the former ES 3331A/B, ELI 3200A/B or the former ES 3330A/B, ELI 4100A/B or the former ES 4480A/B, ELI 4200A/B or the former ES 4481A/B.

Note: Students enrolled in the Integrated Engineering program are not eligible for this certificate.

Effective September 1, 2021, the following change(s) be made: Program Revision.

INTEGRATED ENGINEERING PROGRAM

Second Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2276A/B, CBE 2221A/B, CBE 2291A/B, CEE 2220A/B, ECE 2238A/B, ECE 2277A/B, IE 2297A/B or the former ES

2297A/B, MSE 2214A/B, Statistical Sciences 2143A/B, 1.0 non-technical elective.

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

Third Year Program

CBE 2220A/B, CBE 3322A/B, CEE 2202A/B, CEE 2221A/B, ECE 3374A/B, ELI 3000A/B or the former ES 3331A/B, ELI 3200A/B or the former ES 3330A/B, ELI 4110F/G or the former ES 4498F/G, MME 2285A/B, MSE 2213A/B, MSE 3301A/B, MSE 3360A/B.

Fourth Year Program

ELI 4100A/B or the former ES 4480A/B, ELI 4200A/B or the former ES 4481A/B, IE 4499 or the former ES 4499, six 0.5 technical electives**.

**The following are recommended technical electives from each department. Other courses may be taken if prerequisite requirements are satisfied. Students may elect to substitute up to two 0.5 courses from the Faculty of Science as technical electives. These technical electives must be approved by the Integrated Engineering Curriculum Committee.

Chemical and Biochemical Engineering:

CBE 2290A/B, CBE 3310A/B, CBE 3324A/B, CBE 4421A/B, CBE 4409A/B.

Civil and Environmental Engineering:

CEE 3348A/B, CEE 3362A/B, CEE 4405A/B, CEE 4418A/B, CEE 4458A/B, CEE 4465A/B, CEE 4477A/B.

Electrical and Computer Engineering:

ECE 3349A/B, ECE 3375A/B, ECE 4436A/B, ECE 4468A/B, SE 3314A/B.

Mechanical and Materials Engineering:

MME 3381A/B, MME 4452A/B, MME 4473A/B, MME 4487A/B, MME 4492A/B.

MECHANICAL AND MATERIALS ENGINEERING

Effective September 1, 2021, the following change(s) be made: Program Revision.

A. MECHANICAL ENGINEERING OPTION

Second Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2276A/B, MME 2200Q/R/S/T, MME 2202A/B, MME 2204A/B, MME 2213A/B, MME 2221A/B, MME 2259A/B, MME 2260A/B, MME 2273A/B, MME 2285A/B, Statistical Sciences 2143A/B, Writing 2130F/G.

Third Year Program

ECE 3374A/B MME 3303A/B, MME 3307A/B, MME 3325A/B, MME 3334A/B, MME 3350A/B, MME 3360A/B, MME 3379A/B, MME 3380A/B, MME 3381A/B.

Fourth Year Program

ELI 4110F/G or the former ES 4498F/G, MME 4499. 1.5 non-technical elective*.

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Effective September 1, 2021, the following change(s) be made: Program Revision.

D. MECHANICAL ENGINEERING/HBA

Second Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2276A/B, MME 2200Q/R/S/T, MME 2202A/B, MME 2204A/B, MME 2213A/B, MME 2221A/B, MME 2259A/B, MME 2260A/B, MME 2273A/B, MME 2285A/B, Business Administration 2257.

Third Year Program

The third year of the undergraduate program in Business Administration consists of an integrated set of courses (7.5 courses) designed to give a basic understanding of the functions and the interrelationships of the major areas of management, as well as to develop problem-solving and action-planning skills.

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

Fourth Year Program

ECE 3374A/B, MME 3303A/B, MME 3307A/B, MME 3325A/B, MME 3350A/B, MME 3360A/B, MME 3379A/B, MME 3380A/B, MME 3381A/B, Statistical Sciences 2143A/B.

Applied Project Requirement: Business Administration 4569.

Fifth Year Program

ELI 4110F/G or the former ES 4498F/G, MME 3334A/B, MME 4499.

1.0 technical electives.

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Effective September 1, 2021, the following change(s) be made: Program Revision.

F. MECHANICAL ENGINEERING AND BIOMEDICAL ENGINEERING

Second Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2276A/B, BME 3201A/B, MME 2200Q/R/S/T, MME 2202A/B, MME 2204A/B, MME 2213A/B, MME 2221A/B, MME 2259A/B, MME 2260A/B, MME 2273A/B, MME 2285A/B, Statistical Sciences 2143A/B.

Third Year Program

Biology 1001A, Biology 1002B, MME 3303A/B, MME 3307A/B, MME 3325A/B, MME 3350A/B, MME 3360A/B, MME 3379A/B, MME 3380A/B, MME 3381A/B, ECE 3374A/B, 0.5 non-technical elective.

Fourth Year Program

Biochemistry 2280A, BME 3301A/B, BME 3303A/B, ECE 4455A/B, MME 4469A/B, Physiology 2130, 1.5 Biomedical Sciences Electives, 1.0 Healthcare Non-technical Electives, 0.5 open elective.

Fifth Year Program

BME 4400, MME 3334A/B, MME 4499, Engineering Science 3330A/B, Engineering Leadership and Innovation 4110F/G or the former Engineering Science 4498F/G, 1.5 BME Technical Electives, 1.0 MME Technical Electives.

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MECHATRONIC SYSTEMS ENGINEERING

Effective September 1, 2021, the following change(s) be made: Program Revision.

B. MECHATRONIC SYSTEMS ENGINEERING/HBA

Second Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2276A/B, Computer Science 1037A/B, ECE 2205A/B, MSE 2200Q/R/S/T, MSE 2201A/B, MSE 2202A/B, MSE 2212A/B, MSE 2213A/B, MSE 2214A/B, MSE 2233A/B, MSE 2273A/B, Business Administration 2257.

Third Year Program

The third year of the undergraduate program in Business Administration consists of an integrated set of courses (7.5 courses) designed to give a basic understanding of the functions and the interrelationships of the major areas of management, as well as to develop problem-solving and action-planning skills.

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

Fourth Year Program

Applied Mathematics 3415A/B, ECE 2277A/B, ECE 3330A/B, ECE 3331A/B, ECE 3375A/B, MSE 3301A/B, MSE 3302A/B, MSE 3310A/B, MSE 3360A/B, MSE 3380A/B, MSE 3381A/B.

Applied Project Requirement: Business Administration 4569.

Fifth Year Program

MSE 4499, MSE 4401A/B, ELI 4110F/G or the former ES 4498F/G, Statistical Sciences 2141A/B, two 0.5 TE from the approved list.

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Effective September 1, 2021, the following change(s) be made: Program Revision.

D. MECHATRONIC SYSTEMS ENGINEERING AND BIOMEDICAL ENGINEERING

Second Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2276A/B, BME 3201A/B, Computer Science 1037A/B, ECE 2205A/B, MSE 2200Q/R/S/T, MSE 2201A/B, MSE 2202A/B, MSE 2212A/B, MSE 2213A/B, MSE 2214A/B, MSE 2233A/B, MSE 2273A/B.

Third Year Program

Applied Mathematics 3415A/B, Biology 1001A, Biology 1002B, ECE 2277A/B, ECE 3330A/B, ECE 3331A/B, ECE 3375A/B, MSE 3301A/B, MSE 3302A/B, MSE 3310A/B, MSE 3360A/B, MSE 3380A/B, MSE 3381A/B.

Fourth Year Program

Biochemistry 2280A, BME 3301A/B, BME 3303A/B, ECE 4455A/B, MME 4469A/B, Physiology 2130, Statistical Sciences 2141A/B, 1.5 biomedical sciences electives, 1.0 healthcare non-technical electives.

Fifth Year Program

BME 4400, ECE 4445A/B, Engineering Science 3330A/B, Engineering Leadership and Innovation 4110F/G or the former Engineering Science 4498F/G, MSE 4401A/B, MSE 4499, 1.0 BME technical electives, 0.5 MSE technical elective, 0.5 non-technical elective.

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Effective September 1, 2021, the following change(s) be made: Program Revision.

MECHATRONIC SYSTEMS ENGINEERING

Second Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2276A/B, Computer Science 1037A/B, ECE 2205A/B, MSE 2200Q/R/S/T, MSE 2201A/B, MSE 2202A/B, MSE 2212A/B, MSE 2213A/B, MSE 2214A/B, MSE 2233A/B, MSE 2273A/B, Writing 2130F/G (or the former ES 2211F/G).

Third Year Program

Applied Mathematics 3415A/B, ECE 2277A/B, ECE 3330A/B, ECE 3331A/B, ECE 3375A/B, MSE 3301A/B, MSE 3302A/B, MSE 3310A/B, MSE 3360A/B, MSE 3380A/B, MSE 3381A/B, 0.5 non- technical elective*.

Fourth Year Program

MSE 4401A/B, MSE 4499, ECE 4460A/B, ECE 4469A/B, **ELI 4110F/G or the former** ES 4498F/G, Statistical Sciences 2141A/B, 1.0 non-technical elective, three 0.5 technical electives**.

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Faculty of Science/Schulich School of Medicine & Dentistry; including BMSc and Neuroscience

ANATOMY AND CELL BIOLOGY

Effective September 1, 2021, the following change(s) be made: Module Revision.

HONOURS SPECIALIZATION IN MEDICAL CELL BIOLOGY

Module

11.0 courses:

0.5 course: Biochemistry 2280A with a mark of at least 65%.

0.5 course from: Chemistry 2213A/B or Chemistry 2273A.

0.5 course from: Chemistry 2223B or Chemistry 2283G.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.

1.5 courses: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B.

1.5 courses: Anatomy and Cell Biology 3309, Anatomy and Cell Biology 3329A/B or the former Anatomy and Cell Biology 4429A.

1.0 course from: (Anatomy and Cell Biology 2200A/B and Anatomy and Cell Biology 3200A/B), Physiology 3120, or the former Anatomy and Cell Biology 3319.

1.0 course: Biochemistry 3381A and Biochemistry 3382A with marks of at least 70% in each.

0.5 course from: Biology 3316A/B, Physiology 3140A with a mark of at least 70% in the course taken.

0.5 course from: Biochemistry 3380G, Biology 3326F/G with a mark of at least 70% in the course taken.

1.0 courses: Anatomy and Cell Biology 4410A, Anatomy and Cell Biology 4411B.

0.5 course from: **Anatomy and Cell Biology 4200A, Anatomy and Cell Biology 4201B**, Anatomy and Cell Biology 4451F/G, Anatomy and Cell Biology 4452A/B, Anatomy and Cell Biology 4461B.

1.5 courses: Anatomy and Cell Biology 4480E (Research Project = 1.5 courses).

Notes:

1. For the specific courses that must be completed before Year 4, see the Weighted

Average Chart (MODULES OFFERED IN THE BMSc PROGRAM).

2. Both Anatomy and Cell Biology 4452A/B and Anatomy and Cell Biology 4461B require a minimum mark of 70% in their prerequisite courses. Both Anatomy and Cell Biology 4200A and Anatomy and Cell Biology 4201B require a minimum mark of 80% in their prerequisite courses. See COURSES in the Academic Calendar.

Effective September 1, 2021, the following change(s) be made: Module Revision.

MAJOR IN MEDICAL CELL BIOLOGY

Module

6.0 courses:

0.5 course: Biochemistry 2280A.

0.5 course: Chemistry 2213A/B.

0.5 course: Biology 2382A/B.

0.5 course from: Biology 2290F/G, Biology 2581A/B.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.

0.5 course from: Biology 3316A/B, Physiology 3140A.

1.5 courses: Anatomy and Cell Biology 2200A/B, Anatomy and Cell Biology 3309.

0.5 course from: Anatomy and Cell Biology 3200A/B or Anatomy and Cell Biology 3329A/B, Anatomy and Cell Biology 3700F/G.

1.0 course from: Anatomy and Cell Biology 4200A, Anatomy and Cell Biology 4201B, Anatomy and Cell Biology 4410A, Anatomy and Cell Biology 4411B, Anatomy and Cell Biology 4451F/G, Anatomy and Cell Biology 4452A/B, Anatomy and Cell Biology 4461B, the former Anatomy and Cell Biology 4429A.

Notes:

1. The following 4000-level courses in Anatomy and Cell Biology require a minimum mark of 70% in their prerequisite courses: Anatomy and Cell Biology 4410A, Anatomy and Cell Biology 4411B, Anatomy and Cell Biology 4452A/B, and Anatomy and Cell Biology 4461B. Both Anatomy and Cell Biology 4200A and Anatomy and Cell Biology 4201B require a minimum mark of 80% in their prerequisite courses. See COURSES in the Academic Calendar.

2. To register in Year 4 of a degree containing this module, students must satisfy the Admission Requirements for the module and have the prerequisite to register in at least two of the 4000-level courses in Anatomy and Cell Biology.

3. BSc and BMSc students completing the Major in Medical Cell Biology in addition to another module must adhere to the Common Course Policy if the same courses at the 2000- to 4000-level appear in more than one of the modules (see faculty websites for details).

4. The former Anatomy and Cell Biology 3319 may be used in place of Anatomy and Cell Biology 2200A/B and Anatomy and Cell Biology 3200A/B.

BIOCHEMISTRY

Effective September 1, 2021, the following change(s) be made: Program Revision.

HONOURS BMSc BIOCHEMISTRY/HBA

Year 3: HBA1

The third year of the undergraduate program in Business Administration consists of an integrated set of courses (7.5 courses) designed to give a basic understanding of the functions and the interrelationships of the major areas of management, as well as to develop problem-solving and action-planning skills.

All students will take: Business Administration 3300K, Business Administration 3301K, Business Administration 3302K, Business Administration 3303K, Business Administration

3304K, Business Administration 3311K, Business Administration 3316K, Business Administration 3321K, Business Administration 3322K, Business Administration 3323K.

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

Years 4 and 5: HBA2 requirements

HBA2 Requirements can be taken over Years 4 or 5 - except Business Administration 4569 must be taken in Year 4.

2.5 courses:

International Perspective Requirement: Business Administration 4505A/B (0.5 course).
Corporations and Society Perspectives Requirement: At least one 0.5 course from Business Administration - Corporations and Society designated electives offered during the academic year (Business Administration 4538A/B, Business Administration 4539A/B, Business Administration 4588A/B, Business Administration 4625A/B) or other business elective as determined and approved by the HBA Program Director to satisfy this requirement.

Managerial Accounting Requirement: Business Administration 4624A/B (0.5 course).

Applied Project Requirement: Business Administration 4569 (1.0 course)

3.0 additional business elective courses.

Years 4 and 5: BSc requirements for the Honours Specialization in Biochemistry

Year 4

1.5 courses: Biochemistry 3380G, Biochemistry 3381A and Biochemistry 3382A with marks of at least 70% in each.

0.5 course: Biochemistry 3390B.

Year 5

2.0 courses: Biochemistry 4410A, Biochemistry 4415B, Biochemistry 4420A, Biochemistry 4425B.

0.5 course from: Biochemistry 3385B, Biochemistry 3392F/G, Biochemistry 4450A, the former Biochemistry 4463B.

1.5 courses: Biochemistry 4483E (Research Project = 1.5 courses).

Note: the breadth requirement of a BSc degree must be satisfied, i.e. 1.0 course from Category B must be completed prior to graduation. See GRADUATION REQUIREMENTS FOR HONOURS BACHELOR DEGREES.

EPIDEMIOLOGY AND BIOSTATISTICS

Effective September 1, 2021, the following change(s) be made: Revision to the Social Science Subject list.

HONOURS SPECIALIZATION IN EPIDEMIOLOGY AND BIOSTATISTICS

Module

11.0 courses:

0.5 course: Biochemistry 2280A.

0.5 course: Chemistry 2213A/B.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B with a mark of at least 75%.

1.5 courses: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B.

0.5 course: Epidemiology 2200A/B with a mark of at least 75%.

1.0 course from the Social Science Subject List (see below).

1.0 course: Biostatistics 3100A, Biostatistics 3110B with a mark of at least 70% in each.

1.0 course: Epidemiology 3200A Epidemiology 3210B, with a mark of at least 70% in each.

2.0 courses: Epidemiology 3330F/G, Epidemiology 4310A, Epidemiology 4320A, (one of

Epidemiology 4500B or Epidemiology 4600A).

1.0 course from: Biostatistics 4115B, Epidemiology 3315B, Epidemiology 4600A (if not used above), Epidemiology 4615B, Epidemiology 4715B.

1.5 course: Epidemiology and Biostatistics 4900E (Research Project = 1.5 courses).

Social Science Subject List:

Students must complete 1.0 senior course from one of the subject areas below (e.g. 1.0 course - **one full course or two half courses** in Economics) and it is recommended that this 1.0 course be selected from the number range specified for the subject area. Note that (i) two half courses from two different subject areas will not satisfy this requirement, and (ii) some courses may require a prerequisite.

Anthropology (2200 or above), Economics (2100 or above), First Nations (2100 or above) **Indigenous Studies**, Geography (2200 or above), History (2200 or above), Political Science (2230 or above), Psychology (2100 or above, with the exception of Psychology 2800E, Psychology 2810 and Psychology 2820E), or Sociology (2200 or above).

Notes:

1. For the specific courses that must be completed before Year 4, see the Weighted Average Chart (MODULES OFFERED IN THE BMSc PROGRAM).
2. Students are encouraged to take at least one of the following ethics courses as options: Philosophy 2715F/G – Health Care Ethics, Philosophy 3730F/G – Research Ethics

INTERDISCIPLINARY MEDICAL SCIENCES

Effective September 1, 2021, the following change(s) be made: Module Revision.

MAJOR IN INTERDISCIPLINARY MEDICAL SCIENCES (IMS)

Module

6.0 courses:

0.5 course: Biochemistry 2280A.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.

0.5 course: Biology 2290F/G.

0.5 course from: Biology 2382A/B, Biology 2581A/B.

0.5 course: Chemistry 2213A/B.

2.5 courses from: Groups 1 and 2 (see below) with a minimum of 1.5 courses selected from Group 1 (see Note #1 below).

0.5 course: Medical Sciences 4931F/G.

0.5 course at the 4000-level from any of the following subject areas: Anatomy and Cell Biology, Biochemistry, Biostatistics, Epidemiology, **Medical Bioinformatics**, Medical Biophysics, Medical Sciences, Microbiology and Immunology, Pathology, Pharmacology, Physiology.

Group 1: Anatomy and Cell Biology 2200A/B, **Anatomy and Cell Biology 3200A/B**, Anatomy and Cell Biology 3309, Biochemistry 3381A, Biochemistry 3382A, Biostatistics 3100A, Biostatistics 3110B, Epidemiology 2200A/B, Epidemiology 3200A, Medical Biophysics 3330F/G, Medical Biophysics 3336F/G, Medical Biophysics 3501A, Medical Biophysics 3503G, Medical Biophysics 3505F, Medical Biophysics 3507G, Microbiology and Immunology 2500A/B, Microbiology and Immunology 3100A, Microbiology and Immunology 3300B, Pathology 3500, Pharmacology 3620, Physiology 3120, Physiology 3140A, or any of these former courses: the former Epidemiology and Biostatistics 2200A/B, the former Pathology 3240A, the former Pathology 3245B.

Group 2: **Anatomy and Cell Biology 3200A/B**, **Anatomy and Cell Biology 3329A/B**, Biochemistry 3385B, Biochemistry 3386B, Biochemistry 3390B, Epidemiology 3210B, Epidemiology 3315B, Epidemiology 3330F/G, **Medical Biophysics 3518B**, **Medical Biophysics 3645A**, Microbiology and Immunology 3500B, **Neuroscience 2000**, **One Health**

3300A/B, One Health 3600A/B, Pharmacology 2060A/B, the former Anatomy and Cell Biology 3319.

Notes:

1. Of these 2.5 courses from Groups 1-2, a maximum of 2.0 courses can be from one subject area (e.g. a maximum of 2.0 can be Biochemistry courses). It is not mandatory to complete any Group 2 courses in the Major in IMS. A maximum of ~~one half~~ 1.0 course from the courses listed in Group 3 of the Honours Specialization in IMS may be used in place of ~~a half~~ 1.0 course from Group 2 in the Major in IMS. See the IMS website for more information about the Major in IMS.
2. A maximum of 1.0 "common course" can be double-counted toward two modules in a BMSc degree. See the IMS website for more information about the Common Course Policy as it relates to the Major in IMS.
3. See UNDERGRADUATE COURSE INFORMATION for course requisites and the BMSc website for information about constraints (priority and restricted access) for all basic medical science courses.

Effective September 1, 2021, the following change(s) be made: Module Revision.

SPECIALIZATION IN INTERDISCIPLINARY MEDICAL SCIENCES (IMS)

Module

9.5 courses:

0.5 course: Biochemistry 2280A.

1.5 courses: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B.

0.5 course: Chemistry 2213A/B.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.

0.5 course from: Chemistry numbered 2100-3999 or 0.5 course from Group 1 or 2 - see Note #1.

2.0 courses from Group 1 – see Note #2 (these 2.0 Group 1 courses cannot all be from the same subject area, e.g., these 2.0 Group 1 courses cannot all be Anatomy and Cell Biology courses).

1.0 course from: Group 1 or (0.5 from Group 1 and 0.5 from Group 2) – see Note #2.

0.5 course from: Group 3 or Physiology and Pharmacology 3000E. See Note #3.

2.0 additional courses from: courses from Groups 1-3 and courses numbered 2100 -3999 in Chemistry. These 2.0 courses must include 0.5 – 1.0 course from Group 3. A maximum of 1.0 course from Group 3 and a maximum of 0.5 course in Chemistry can be included within these 2.0 courses.

0.5 course: Medical Sciences 4931F/G.

2.0 additional courses at the 4000-level from at least two of the following subject areas: Anatomy and Cell Biology, Biochemistry, Biostatistics, Epidemiology, **Medical Bioinformatics**, Medical Biophysics, Medical Sciences, Microbiology and Immunology, Pathology, Pharmacology, Physiology. Note: a maximum of 1.5 of these 4000-level courses can be selected from one subject area.

Group 1: Anatomy and Cell Biology 2200A/B, **Anatomy and Cell Biology 3200A/B**, Anatomy and Cell Biology 3309, Biochemistry 3381A, Biochemistry 3382A, Biostatistics 3100A, Biostatistics 3110B, Epidemiology 2200A/B, Epidemiology 3200A, Medical Biophysics 3330F/G, Medical Biophysics 3336F/G, Medical Biophysics 3501A, Medical Biophysics 3503G, Medical Biophysics 3505F, Medical Biophysics 3507G, Microbiology and Immunology 2500A/B, Microbiology and Immunology 3100A, Microbiology and Immunology 3300B, Pathology 3500, Pharmacology 3620, Physiology 3120, Physiology 3140A, any of the former courses: the former Epidemiology and Biostatistics 2200A/B, the former Pathology 3240A, the former Pathology 3245B.

Group 2 (see Note #4 below): **Anatomy and Cell Biology 3200A/B**, **Anatomy and Cell Biology 3329A/B**, Biochemistry 3385B, Biochemistry 3386B, Biochemistry 3390B, Epidemiology 3210B, Epidemiology 3315B, Epidemiology 3330F/G, **Medical Biophysics**

3518B, Medical Biophysics 3645A, Microbiology and Immunology 3500B, Neuroscience 2000, One Health 3300A/B, One Health 3600A/B, Pharmacology 2060A/B, the former Anatomy and Cell Biology 3319.

Group 3: Biochemistry 3380G, Medical Biophysics 3970Z, Medical Sciences 3990E, Medical Sciences 3900F/G/Z, Microbiology and Immunology 3610F, Microbiology and Immunology 3620G, Physiology and Pharmacology 3000E, one of the former Medical Sciences 3900F/G/Z, the former Pharmacology 3580Z, the former Physiology 3130Z.

Notes:

1. Chemistry 2223B is a prerequisite for the following Group 1 and 3 courses: Biochemistry 3381A, Biochemistry 3382A and Microbiology and Immunology 3620G.
2. Of these 3.0 specific courses from Groups 1-2, a maximum of 2.0 courses can be from one subject area (e.g. a maximum of 2.0 can be Biochemistry courses). It is not mandatory to complete any Group 2 courses in the Specialization in IMS. If the former Anatomy and Cell Biology 3319 was taken as a Group 2 course, then the total number of courses required for the module will increase by 0.5 course.
3. If Physiology and Pharmacology 3000E is selected for the Group 3 requirement, then the module will comprise 10.0 courses.
4. See UNDERGRADUATE COURSE INFORMATION for course requisites and the BSc website for information about constraints (priority and restricted access) for all basic medical science courses.

Effective September 1, 2021, the following change(s) be made: Program Revision.

HONOURS BSc INTERDISCIPLINARY MEDICAL SCIENCES/HBA

Years 4 and 5 (HBA Requirements can be taken over year 4 or 5 - except Business Administration 4569 must be taken in Year 4)

2.5 courses:

International Perspective Requirement: Business Administration 4505A/B (0.5 course).
Corporations and Society Perspectives Requirement: At least one 0.5 course from Business Administration - Corporations and Society designated electives offered during the academic year (Business Administration 4538A/B, Business Administration 4539A/B, Business Administration 4588A/B, Business Administration 4625A/B) or other business elective as determined and approved by the HBA Program Director to satisfy this requirement.

Managerial Accounting Requirement: Business Administration 4624A/B (0.5 course).

Applied Project Requirement: Business Administration 4569 (1.0 course).

2.5 additional business elective courses.

Years 4 and 5: BSc requirements for the Honours Specialization in Interdisciplinary Medical Sciences (IMS)

Year 4

2.0 courses from Group 1 – see Note 1 (these 2.0 Group 1 courses cannot all be from the same subject area, e.g., these 2.0 Group 1 courses cannot all be Anatomy and Cell Biology courses).

1.0 course from: Group 1 or (0.5 from Group 1 and 0.5 from Group 2) – see Note 1.

0.5 course from: Group 3 or Physiology and Pharmacology 3000E. See Note 2.

0.5 course from: Chemistry numbered 2100-3999 or 0.5 course from Group 1 or 2 – see Note 3.

2.0 additional courses from: courses from Groups 1-3 and courses numbered 2100 -3999 in Chemistry. These 2.0 courses must include 0.5 – 1.0 course from Group 3. A maximum of 1.0 course from Group 3 and a maximum of 0.5 course in Chemistry can be included within these 2.0 courses.

A maximum of 0.5 course from either Chemistry numbered 2100-3999 or Groups 1-3 2

that is completed prior to admission to the combined program course may be used toward the Year 4 BMSc (IMS) requirements. Any additional course(s) completed prior to admission to the combined program may be used toward the Year 4 BMSc (IMS) requirements only if an additional optional course(s) is completed. A maximum of 0.5 of the courses listed in the Year 4 BMSc (IMS) requirements may be deferred until Year 5.

Group 1: Anatomy and Cell Biology 2200A/B, Anatomy and Cell Biology 3200A/B, Anatomy and Cell Biology 3309, Biochemistry 3381A, Biochemistry 3382A, Biostatistics 3100A, Biostatistics 3110B, Epidemiology 2200A/B, Epidemiology 3200A, Medical Biophysics 3330F/G, Medical Biophysics 3336F/G, Medical Biophysics 3501A, Medical Biophysics 3503G, Medical Biophysics 3505F, Medical Biophysics 3507G, Microbiology and Immunology 2500A/B, Microbiology and Immunology 3100A, Microbiology and Immunology 3300B, Pathology 3500, Pharmacology 3620, Physiology 3120, Physiology 3140A, any of the former courses: the former Epidemiology and Biostatistics 2200A/B, the former Pathology 3240A, the former Pathology 3245B.

Group 2: Anatomy and Cell Biology 3200A/B, Anatomy and Cell Biology 3329A/B, Biochemistry 3385B, Biochemistry 3386B, Biochemistry 3390B, Epidemiology 3210B, Epidemiology 3315B, Epidemiology 3330F/G, Medical Biophysics 3518B, Medical Biophysics 3645A, Microbiology and Immunology 3500B, Neuroscience 2000, One Health 3300A/B, One Health 3600A/B, Pharmacology 2060A/B, the former Anatomy and Cell Biology 3319.

Group 3: Biochemistry 3380G, Medical Biophysics 3970Z, Medical Sciences 3990E, Medical Sciences 3900F/G/Z, Microbiology and Immunology 3610F, Microbiology and Immunology 3620G, Physiology and Pharmacology 3000E, one of the former Medical Sciences 3900F/G/Z, the former Pharmacology 3580Z, the former Physiology 3130Z.

Year 5

1.0 course: Medical Sciences 4990E (or the former Medical Sciences 4900F/G/Z and 0.5 4000-level course from the basic medical science subject areas listed below). Students participating in the Ivey exchange will take Medical Sciences 4991F and an additional half course at the 4000-level from the basic medical science subject areas below in place of Medical Sciences 4990E.

0.5 course: Medical Sciences 4930F/G/Z.

0.5 course from: Medical Sciences 4200A/B, Medical Sciences 4300A/B (students registered in Year 5 in 2021/22 may replace this half course with an additional 4000-level half course from the basic medical science subject areas below).

2.0 1.0 additional courses at the 4000-level from at least two of the following basic medical science subject areas: Anatomy and Cell Biology, Biochemistry, Biostatistics, Epidemiology, Medical Biophysics, Medical Sciences (Medical Sciences 4100F/G), Microbiology and Immunology, Pathology, Pharmacology, Physiology. Note: a maximum of 1.5 of these 4000-level courses can be selected from one subject area.

Notes:

1. Of these 3.0 specific courses from Groups 1-2, a maximum of 2.0 courses can be from one subject area (e.g. a maximum of 2.0 can be Biochemistry courses). It is not mandatory to complete any Group 2 courses.

2. If Physiology and Pharmacology 3000E is selected to satisfy the Group 3 requirement, then the total number of courses required for the Honours Specialization in IMS will increase by 0.5 course.

3. Chemistry 2223B is a prerequisite for the following Group 1 and 3 courses: Biochemistry 3381A, Biochemistry 3382A and Microbiology and Immunology 3620G.

4. 2. See UNDERGRADUATE COURSE INFORMATION for the requisites for 3000- and 4000-level courses, and the BMSc website for information about constraints (priority and restricted access) for all basic medical science courses.

5. 3. The breadth requirements of a BMSc degree must be satisfied. The essay requirement is satisfied with modular courses. See "Graduation Requirements for Honours Bachelor degrees".

MEDICAL BIOPHYSICS

Effective September 1, 2021, the following change(s) be made: Module Revision.

HONOURS SPECIALIZATION IN MEDICAL BIOPHYSICS (Biological Science Concentration)

Module

10.0 courses:

0.5 course: Biochemistry 2280A.

1.0 course from: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B.

0.5 course from: Biology 2244A/B, Statistical Sciences 2244A/B.

0.5 course: Chemistry 2213A/B.

0.5 course: Computer Science 2035A/B.

3.0 courses: Medical Biophysics 3330F/G, Medical Biophysics 3501A, Medical Biophysics 3503G, Medical Biophysics 3505F, Medical Biophysics 3507G, Medical Biophysics 3970Z.

1.0 course: Physiology 2130.

1.5 courses from: Medical Biophysics 4455A/B, Medical Biophysics 4467A/B, Medical Biophysics 4475A/B, Medical Biophysics 4535A/B, Medical Biophysics 4700, **Medical Biophysics 4710A/B**.

1.5 courses: Medical Biophysics 4970E (Research Project = 1.5 courses).

Note: students are encouraged to take Medical Biophysics 2500A/B in second year if they want an introduction to the discipline of Medical Biophysics or are interested in learning how biophysics concepts are applied in translational health research.

Effective September 1, 2021, the following change(s) be made: Module Revision.

HONOURS SPECIALIZATION IN MEDICAL BIOPHYSICS (Clinical Physics Concentration)

Module

11.5 courses:

0.5 course from: Calculus 2302A/B, Calculus 2502A/B.

0.5 course from: Calculus 2303A/B, Calculus 2503A/B.

0.5 course: Mathematics 1600A/B.

1.5 courses: Physics 2101A/B, Physics 2102A/B, Physics 2110A/B.

1.0 course from: Physiology 2130 or Physiology 3120.

3.0 courses: Medical Biophysics 3330F/G, Medical Biophysics 3501A, Medical Biophysics 3503G, Medical Biophysics 3505F, Medical Biophysics 3507G, Medical Biophysics 3970Z.

2.0 courses from: Physics 3151A/B, Physics 3200A/B, Physics 3300A/B, Physics 3380A/B, Physics 3400A/B.

1.0 course from: Medical Biophysics 4467A/B, Medical Biophysics 4475A/B, **Medical Biophysics 4710A/B**.

1.5 courses: Medical Biophysics 4971E. (Research Project = 1.5 courses)

Note: see the Weighted Average Chart (MODULES OFFERED IN THE BMSc PROGRAM) for information about admission to the Honours Specialization modules in Year 4, including which modular courses must be completed prior to Year 4.

Effective September 1, 2021, the following change(s) be made: Module Revision.

**HONOURS SPECIALIZATION IN MEDICAL BIOPHYSICS (Medical Science
Concentration)**

Module

10.0 courses:

0.5 course: Biochemistry 2280A.

0.5 course: Chemistry 2213A/B.

0.5 course: Computer Science 2035A/B.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.

0.5 course from: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B, Chemistry 2214A/B, Medical Biophysics 3336F/G.

1.0 course from: Physics 2101A/B and Physics 2102A/B, Physiology 2130 or Physiology 3120.

3.5 courses: Medical Biophysics 3330F/G, Medical Biophysics 3501A, Medical Biophysics 3503G, Medical Biophysics 3505F, Medical Biophysics 3507G, Medical Biophysics 3645A/B, Medical Biophysics 3970Z.

1.5 courses from: Medical Biophysics 4445A/B, Medical Biophysics 4455A/B, Medical Biophysics 4467A/B, Medical Biophysics 4475A/B, Medical Biophysics 4535A/B, Medical Biophysics 4700B, **Medical Biophysics 4710A/B**.

1.5 courses: Medical Biophysics 4970E (Research Project = 1.5 courses).

Notes:

1. Some modular courses include a mark requirement in their prerequisite(s). See UNDERGRADUATE COURSE INFORMATION.
2. See the Weighted Average Chart (MODULES OFFERED IN THE BMSc PROGRAM) for information about admission to the Honours Specialization modules in Year 4, including which modular courses must be completed prior to Year 4.

Effective September 1, 2021, the following change(s) be made: Module Revision.

**HONOURS SPECIALIZATION IN MEDICAL BIOPHYSICS (Physical Science
Concentration)**

Module

10.0 courses:

1.0 course from: Physics 2101A/B and Physics 2102A/B.

0.5 course from: Calculus 2302A/B, Calculus 2502A/B.

0.5 course from: Calculus 2303A/B, Calculus 2503A/B.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.

0.5 course: Computer Science 2035A/B.

3.5 courses: Medical Biophysics 3330F/G, Medical Biophysics 3501A, Medical Biophysics 3503G, Medical Biophysics 3505F, Medical Biophysics 3507G, Medical Biophysics 3645A/B and Medical Biophysics 3970Z.

1.5 courses: Medical Biophysics 4970E (Research Project = 1.5 courses).

1.0 course from: Medical Biophysics 4445A/B, Medical Biophysics 4455A/B, Medical Biophysics 4467A/B, Medical Biophysics 4475A/B, Medical Biophysics 4535A/B, **Medical Biophysics 4710A/B**.

1.0 course from: Applied Mathematics 2402A, Applied Mathematics 2811B, Applied Mathematics 3615A/B, Chemistry 2213A/B, Chemistry 2214A/B, Chemistry 2223B, Engineering Science 1036A/B, Mathematics 1600A/B, Physics 2110A/B, an additional one or two half courses in Medical Biophysics at the 3000- or 4000-level, the former Applied Mathematics 2813B, the former Physics 2600A/B.

Note: students are encouraged to take Medical Biophysics 2500A/B in second year if they want an introduction to the discipline of Medical Biophysics or are interested in learning how biophysics concepts are applied in translational health research.

Effective September 1, 2021, the following change(s) be made: Module Revision.

HONOURS SPECIALIZATION IN MEDICAL BIOPHYSICS AND BIOCHEMISTRY

Module

10.5 courses:

0.5 course: Biochemistry 2280A.

0.5 course: Biology 2581A/B.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.

0.5 course from: Chemistry 2213A/B or Chemistry 2273A.

0.5 course from: Chemistry 2223B or Chemistry 2283G.

0.5 course: Computer Science 2035A/B.

0.5 course: Medical Biophysics 3518B or the former Medical Biophysics 2582B.

1.0 course: Physiology 2130.

1.0 course: Biochemistry 3381A, Biochemistry 3382A.

1.0 course: Medical Biophysics 3501A, Medical Biophysics 3507G.

0.5 course from: Biochemistry 3380G or Medical Biophysics 3970Z.

1.0 course: Biochemistry 4410A, Biochemistry 4420A.

0.5 course: Medical Biophysics 4518B.

0.5 course from: Medical Biophysics 3645A/B, Medical Biophysics 4467A/B, **Medical Biophysics 4710A/B.**

1.5 courses from: Biochemistry 4483E or Medical Biophysics 4970E.

Note: see the Weighted Average Chart (MODULES OFFERED IN THE BMSc PROGRAM) for information about admission to the Honours Specialization modules in Year 4, including which modular courses must be completed prior to Year 4.

Effective September 1, 2021, the following change(s) be made: Module Revision.

MAJOR IN MEDICAL BIOPHYSICS

Module

6.0 courses:

0.5 course: Computer Science 2035A/B.

1.0 course from: Physics 2101A/B and Physics 2102A/B, Physiology 2130.

3.5 courses: Medical Biophysics 3330F/G, Medical Biophysics 3501A, Medical Biophysics 3503G, Medical Biophysics 3505F, Medical Biophysics 3507G, Medical Biophysics 3645A/B, Medical Biophysics 3970Z.

1.0 course from: Medical Biophysics 4445A/B, Medical Biophysics 4455A/B, Medical Biophysics 4467A/B, Medical Biophysics 4475A/B, Medical Biophysics 4535A/B, **Medical Biophysics 4710A/B.**

Note: Some modular courses include a mark requirement in their prerequisite(s). See UNDERGRADUATE COURSE INFORMATION.

MEDICAL SCIENCES

Effective September 1, 2021, the following change(s) be made: Module Revision.

MAJOR IN MEDICAL SCIENCES

Module

6.0 courses:

0.5 course: Biochemistry 2280A.

0.5 course from: Chemistry 2213A/B or Chemistry 2273A.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.

1.0 course from: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B.

3.0 courses from: Groups 1 and 2 with a minimum of 1.0 course selected from Group 1.

A maximum of 2.0 courses from one subject area (e.g. a maximum of 2.0 courses in Biochemistry) can be used towards this Group requirement.

0.5 course from: Chemistry numbered 2100-3999 or an additional 0.5 course from Group 1 or 2.

Group 1: Anatomy and Cell Biology 2200A/B, **Anatomy and Cell Biology 3200A/B**, Anatomy and Cell Biology 3309, Biochemistry 3381A, Biochemistry 3382A, Biostatistics 3100A, Biostatistics 3110B, Epidemiology 2200A/B, Epidemiology 3200A, Medical Biophysics 3330F/G, Medical Biophysics 3336F/G, Medical Biophysics 3501A, Medical Biophysics 3503G, Medical Biophysics 3505F, Medical Biophysics 3507G, Microbiology and Immunology 2500A/B, Microbiology and Immunology 3100A, Microbiology and Immunology 3300B, Pathology 3500, Pharmacology 3620, Physiology 3120, Physiology 3140A, or any of these former courses: the former Epidemiology and Biostatistics 2200A/B, the former Pathology 3240A, the former Pathology 3245B.

Group 2: **Anatomy and Cell Biology 3200A/B**, **Anatomy and Cell Biology 3329A/B**, Biochemistry 3385B, Biochemistry 3386B, Biochemistry 3390B, Epidemiology 3210B, Epidemiology 3315B, Epidemiology 3330F/G, **Medical Biophysics 3518B**, **Medical Biophysics 3645A**, Microbiology and Immunology 3500B, **Neuroscience 2000**, **One Health 3300A/B**, **One Health 3600A/B**, Pharmacology 2060A/B, the former Anatomy and Cell Biology 3319.

Notes:

1. It is not mandatory to complete any Group 2 courses in the Major in Medical Sciences. A maximum of 1.0 of the following courses may be used in place of up to 1.0 course from Group 2: 4000-level half courses from the basic medical sciences (Anatomy and Cell Biology, Biochemistry, Biostatistics, Epidemiology, **Medical Bioinformatics**, Medical Biophysics, Medical Sciences, Microbiology and Immunology, Pathology, Pharmacology, Physiology) and courses listed in Group 3 of the Honours Specialization in IMS (a maximum of 0.5 course from Group 3 may be substituted for a 0.5 course from Group 2).

2. See UNDERGRADUATE COURSE INFORMATION for the course requisites and the BMSc website for information about constraints (priority and restricted access) for all basic medical science courses (www.schulich.uwo.ca/bmsc)

Effective September 1, 2021, the following change(s) be made: Module Revision.

MINOR IN MEDICAL SCIENCES

Module

4.0 courses:

0.5 course: Biochemistry 2280A.

0.5 course: Chemistry 2213A/B.

1.0 course from: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B.

2.0 courses from: Groups 1 and 2 (see below), with at least 1.0 course selected from Group 1 and no more than 1.5 courses from one subject area.

Group 1: Anatomy and Cell Biology 2200A/B, **Anatomy and Cell Biology 3200A/B**, Anatomy and Cell Biology 3309, Biochemistry 3381A, Biochemistry 3382A, Biostatistics 3100A, Biostatistics 3110B, Epidemiology 2200A/B, Epidemiology 3200A, Medical Biophysics 3330F/G, Medical Biophysics 3336F/G, Medical Biophysics 3501A, Medical Biophysics 3503G, Medical Biophysics 3505F, Medical Biophysics 3507G, Microbiology

and Immunology 2500A/B, Microbiology and Immunology 3100A, Microbiology and Immunology 3300B, Pathology 3500, Pharmacology 3620, Physiology 3120, Physiology 3140A, the former Pathology 3240A, the former Pathology 3245B.

Group 2: Anatomy and Cell Biology 3200A/B, Anatomy and Cell Biology 3329A/B, Biochemistry 3385B, Biochemistry 3386B, Biochemistry 3390B, Epidemiology 3210B, Epidemiology 3315B, Epidemiology 3330F/G, Medical Biophysics 3518B, Medical Biophysics 3645A, Microbiology and Immunology 3500B, Neuroscience 2000, One Health 3300A/B, One Health 3600A/B, Pharmacology 2060A/B, the former Anatomy and Cell Biology 3319.

Notes:

1. See UNDERGRADUATE COURSE INFORMATION for the course requisites and the BMSc website for information about constraints (priority and restricted access) for all basic medical science courses.
2. A maximum of 0.5 1.0 course from Group 3 in the Honours Specialization in IMS may be used in place of a half 1.0 course from Group 2 in the Minor in Medical Sciences.

NEUROSCIENCE

Effective September 1, 2021, the following change(s) be made: Module Revision.

HONOURS SPECIALIZATION IN NEUROSCIENCE

Module

10.5 courses:

0.5 course: Biochemistry 2280A.

0.5 course: Biology 2382A/B.

1.0 course: Neuroscience 2000.

1.0 course: Psychology 2800E.

1.0 course from: Psychology 2810 or the combination of Biology 2244A/B or Statistical Sciences 2244A/B and Computer Science 2120A/B.

0.5 course: Neuroscience 3000F/G.

1.0 course: Pharmacology 3620.

0.5 course: Physiology 3140A.

0.5 course from: Communication Sciences and Disorders 3317A/B, or Medical Sciences 3900F/G/Z, Medical Sciences 3991F, Psychology 3996F, or Psychology 3997G or the former Medical Sciences 3900F/G/Z (see note below).

1.0 course from: Psychology 3138F/G, Psychology 3139A/B, Psychology 3185F/G, Psychology 3209F/G, Psychology 3221F/G, Psychology 3224A/B, Psychology 3225A/B, Psychology 3226A/B, Psychology 3228A/B, Psychology 3230F/G, Psychology 3285F/G, Psychology 3312F/G, Psychology 3316F/G, Psychology 3440F/G, Psychology 3441F/G, Psychology 3442F/G, Psychology 3443F/G, Psychology 3444F/G, Psychology 3485F/G.

1.0 course from: Anatomy and Cell Biology 4451F/G, Anatomy and Cell Biology 4452A/B, Pharmacology 4370A/B, Pharmacology 4380A/B, Physiology 4630A/B, Physiology 4650A/B, Physiology 4680A/B, Physiology 4710A/B.

0.5 course from: Psychology 4190F/G, Psychology 4195F/G, Psychology 4222F/G, Psychology 4223F/G, Psychology 4224F/G, Psychology 4290F/G, Psychology 4295F/G.

1.5 courses: Neuroscience 4000E (Research Project = 1.5 courses).

Note: For students admitted to the Honours Specialization in Neuroscience in September 2018 and prior, please refer to the 2018-19 Academic Calendar.

ONE HEALTH

Effective September 1, 2021, the following change(s) be made: Module Revision.

HONOURS SPECIALIZATION IN ONE HEALTH

Module

11.0 courses:

0.5 course: Biochemistry 2280A.

0.5 course: Biology 2382A/B.

1.0 course: Chemistry 2213A/B and Chemistry 2210A/B.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.

0.5 course: Biology 2483A/B.

1.0 course from: Geography 2030A/B, Geography 2133A/B, Geography 2153A/B, Geography 2156A/B, Geography 2160A/B, Geography 2320A/B, Geography 2411F/G, Geography 2430A/B, Indigenous Studies 2601F/G, Sociology 2179A/B, Sociology 2180A/B, Sociology 2246A/B, Sociology 2247A/B, Sociology 2281A/B.

0.5 course: Environmental Science 3300F/G.

1.0 courses from: Anatomy and Cell Biology 2200A/B, Biology 3316A/B or Physiology 3140A, Epidemiology 2200A/B, Microbiology and Immunology 2500A/B, Pharmacology 3620, Physiology 3120, the former Anatomy and Cell Biology 3319.

0.5 course from: Geography 3431A/B, Geography 3432A/B, Geography 3445F/G, Sociology 3308F/G.

1.5 courses: Pathology 3500 with a minimum mark of 70% (or the former Pathology 3240A and the former Pathology 3245B with marks of at least 70% in each), Pathology 4400A/B.

0.5 course: One Health 3300A/B with a minimum mark of 70%.

1.0 course: One Health 3600A/B, One Health 4100F/G.

0.5 course from: Biology 4230A/B, Biostatistics 3100A, Environmental Science 3350F/G, Medical Health Informatics 4100F, Medical Health Informatics 4110G, Pathology 3700F/G, Pathology 4200A/B.

1.5 courses: One Health 4980E (Research Project = 1.5 courses).

Notes: See the Weighted Average Chart (MODULES OFFERED IN THE BMSc PROGRAM) for information about admission to the Honours Specialization modules in Year 4, including which modular courses must be completed prior to Year 4.

PATHOLOGY AND LABORATORY MEDICINE

Effective September 1, 2021, the following change(s) be made: Module Revision.

HONOURS SPECIALIZATION IN PATHOLOGY

Module

11.0 courses:

0.5 course: Biochemistry 2280A.

0.5 course: Biology 2382A/B.

0.5 course from: Biology 2290F/G, Biology 2581A/B.

0.5 course: Chemistry 2213A/B.

0.5 course from: Chemistry 2211A/B, Chemistry 2214A/B, Chemistry 2223B.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.

1.0 course: Pharmacology 3620.

1.0 course from: Anatomy and Cell Biology 3309, or (Anatomy and Cell Biology 2200A/B and one of Anatomy and Cell Biology 3200A/B or Microbiology and Immunology 2500A/B), or the former Anatomy and Cell Biology 3319.

1.0 course: Physiology 3120.

1.0 course: Pathology 3500 with a mark of at least 70%, or the former Pathology 3240A and the former Pathology 3245B with marks of at least 70% in each.

0.5 course from: Anatomy and Cell Biology 4200A, Anatomy and Cell Biology 4201B,

Biology 3316A/B, Chemistry 2272F, Epidemiology 2200A/B, Physiology 3140A, Medical Health Informatics 4100F, Medical Health Informatics 4110G, Pathology 4425A/B, Pathology 4450A.

1.0 course: Pathology 4400A/B, Pathology 4500B.

1.0 course from: Medical Sciences 4100F/G, Pathology 3700F/G, Pathology 4200A/B.

1.5 courses: Pathology 4980E (Research Project = 1.5 courses).

Note: For the specific courses that must be completed before Year 4, see the Weighted Average Chart (MODULES OFFERED IN THE BSc PROGRAM).

Effective September 1, 2021, the following change(s) be made: Module Revision.

MAJOR IN PATHOLOGY

Module

6.0 courses:

0.5 course: Biochemistry 2280A.

0.5 course: Biology 2382A/B.

0.5 course from: Chemistry 2213A/B, Biology 2244A/B or Statistical Sciences 2244A/B.

1.0 course from: Anatomy and Cell Biology 3309, or (Anatomy and Cell Biology 2200A/B and one of Anatomy and Cell Biology 3200A/B or Microbiology and Immunology 2500A/B), or the former Anatomy and Cell Biology 3319.

1.0 course: Physiology 3120.

1.5 courses: Pathology 3500 with a minimum mark of 70% (or the former Pathology 3240A and the former Pathology 3245B with minimum marks of 70% in each), Pathology 4400A/B.

1.0 course from: Medical Health Informatics 4100F, Medical Health Informatics 4110G, Medical Sciences 4100F/G, Microbiology and Immunology 2500A/B, Pathology 3700F/G, Pathology 4200A/B, Pathology 4425A/B, Pathology 4450A, Pathology 4500B, Physiology 3140A.

Note: A maximum of 1.0 “common course” can be double-counted towards two Major modules in a BSc degree. See the Common Course Policy on the BSc website for more information.

PHYSIOLOGY AND PHARMACOLOGY

Effective September 1, 2021, the following change(s) be made: Module Revision.

HONOURS SPECIALIZATION IN PHARMACOLOGY

Module

10.0 courses:

0.5 course: Biochemistry 2280A.

1.5 courses: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B.

0.5 course: Chemistry 2213A/B.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.

1.5 courses: Physiology 3120 and Physiology 3140A.

1.0 courses: Pharmacology 3620.

1.0 course: Physiology and Pharmacology 3000E (see Notes).

1.5 courses: Physiology and Pharmacology 4980E (Seminar and Research Project = 1.5 courses) or the former Pharmacology 4980E.

2.0 additional courses in Pharmacology, Physiology and Pharmacology, at the 4000-level.

Notes:

1. A minimum average of 75% in the Fall/Winter of the most recent academic year is included in the prerequisite for Physiology and Pharmacology 3000E. The former Pharmacology 3580Z may be used in place of Physiology and Pharmacology 3000E. The module will consist of 9.5 courses if the former Pharmacology 3580Z is included in the module.
2. For the specific courses that must be completed before Year 4, see the Weighted Average Chart (MODULES OFFERED IN THE BMSc PROGRAM).
3. Students may not complete both an Honours Specialization in Pharmacology and a Major in Physiology since these two modules contain too many common courses.

Effective September 1, 2021, the following change(s) be made: Module Revision.

HONOURS SPECIALIZATION IN PHYSIOLOGY

Module

10.0 courses:

0.5 course: Biochemistry 2280A.

1.5 courses: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B.

0.5 course: Chemistry 2213A/B.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.

1.5 courses: Physiology 3120 and Physiology 3140A.

1.0 course: Physiology and Pharmacology 3000E (see Notes).

1.0 course from: Anatomy and Cell Biology 2200A/B, Anatomy and Cell Biology 3200A/B, Anatomy and Cell Biology 3309, Biology 2471A/B, Biology 2601A/B, Biology 3338A/B, Biology 3592A/B, Biology 3595A/B, Chemistry 2223B, Medical Biophysics 3501A, Medical Biophysics 3503G, Medical Biophysics 3505F, Medical Biophysics 3507G, Microbiology and Immunology 2500A/B, Microbiology and Immunology 3100A, Microbiology and Immunology 3300B, Pathology 3500, Pharmacology 3620, the former Anatomy and Cell Biology 3319.

1.5 courses: Physiology and Pharmacology 4980E (Seminar and Research Project = 1.5 courses) or the former Physiology 4980E.

2.0 additional courses in Physiology, **Physiology and Pharmacology**, at the 4000-level.

Notes:

1. A minimum average of 75% in the Fall/Winter of the most recent academic year is included in the prerequisite for Physiology and Pharmacology 3000E. The former Physiology 3130Z may be used in place of Physiology and Pharmacology 3000E. The module will consist of 9.5 courses if the former Physiology 3130Z is included in the module.
2. For the specific courses that must be completed before Year 4, see the Weighted Average Chart (MODULES OFFERED IN THE BMSc PROGRAM).
3. Students may not complete both an Honours Specialization in Physiology and a Major in Pharmacology since these two modules contain too many common courses.

Effective September 1, 2021, the following change(s) be made: Module Revision.

HONOURS SPECIALIZATION IN PHYSIOLOGY AND PHARMACOLOGY

Module

10.0 courses:

0.5 course: Biochemistry 2280A.

1.5 courses: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B.

0.5 course: Chemistry 2213A/B.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.

1.5 courses: Physiology 3120 and Physiology 3140A.

1.0 courses: Pharmacology 3620.

1.0 course: Physiology and Pharmacology 3000E (or the former Pharmacology 3580Z

and the former Physiology 3130Z). (see Notes)

1.5 courses from: Physiology and Pharmacology 4980E or the former Pharmacology 4980E (Seminar and Research Project = 1.5 courses).

1.0 additional course in Pharmacology, **Physiology and Pharmacology**, at the 4000-level.

1.0 additional course in Physiology, **Physiology and Pharmacology**, at the 4000-level.

Notes:

1. A minimum average of 75% in the Fall/Winter of the most recent academic year is included in the prerequisite for Physiology and Pharmacology 3000E.
2. For the specific courses that must be completed before Year 4, see the Weighted Average Chart (MODULES OFFERED IN THE BSc PROGRAM).

Effective September 1, 2021, the following change(s) be made: Module Revision.

MAJOR IN PHARMACOLOGY

Module

6.0 courses:

0.5 course: Biochemistry 2280A.

1.0 course: Biology 2382A/B, Biology 2581A/B.

0.5 course: Chemistry 2213A/B.

1.0 course: Physiology 3120.

1.0 course: Pharmacology 3620.

1.0 course: Physiology and Pharmacology 3000E (see notes).

1.0 courses in Pharmacology, **Physiology and Pharmacology**, at the 4000-level.

Notes:

1. A minimum average of 75% in the Fall/Winter of the most recent academic year is included in the prerequisite for Physiology and Pharmacology 3000E. Students requesting registration in Years 3 and 4 of the Major in Pharmacology who have not yet successfully completed either the former Pharmacology 3580Z or Physiology and Pharmacology 3000E must satisfy both the Admission Requirements for the module and the prerequisites for Physiology and Pharmacology 3000E to be allowed to register in the module.
2. With the introduction of Physiology and Pharmacology 3000E as a modular course in both the Major in Pharmacology and the Major in Physiology, students requiring this full-credit laboratory course may no longer complete both of these Major modules.
3. BSc and BSc students completing the Major in Pharmacology in addition to another module must adhere to the Common Course Policy if the same courses at the 2000- to 4000-level appear in more than one of the modules (see faculty websites for details).

Effective September 1, 2021, the following change(s) be made: Module Revision.

MAJOR IN PHYSIOLOGY

Module

6.0 courses:

0.5 course: Biochemistry 2280A.

0.5 course: Chemistry 2213A/B.

1.0 course from: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.

1.5 courses: Physiology 3120 and Physiology 3140A.

1.0 course: Physiology and Pharmacology 3000E (see Notes).

1.0 course: in Physiology, **Physiology and Pharmacology**, at the 4000-level.

Notes:

1. A minimum average of 75% in the Fall/Winter of the most recent academic year is included in the prerequisite for Physiology and Pharmacology 3000E. Students requesting registration in Years 3 and 4 of the Major in Physiology who have not yet successfully completed either the former Physiology 3130Z or Physiology and Pharmacology 3000E must satisfy both the Admission Requirements for the module and the prerequisites for Physiology and Pharmacology 3000E to be allowed to register in the module.
2. With the introduction of Physiology and Pharmacology 3000E as a modular course in both the Major in Pharmacology and the Major in Physiology, students requiring this full-credit laboratory course may no longer complete both of these Major modules.
3. Students completing a Major in Physiology do not need to complete any rotations in Physiology and Pharmacology 3000E that required a background in Pharmacology.
4. BSc and BMSc students completing the Major in Physiology in addition to another module must adhere to the Common Course Policy if the same courses at the 2000- to 4000-level appear in more than one of the modules (see faculty websites for details).

Effective September 1, 2021, the following change(s) be made: Module Revision.

MINOR IN PHARMACOLOGY

Module

4.0 courses:

0.5 course: Biochemistry 2280A.

0.5 course: Chemistry 2213A/B.

0.5 course: Biology 2382A/B.

1.0 course: Physiology 2130 or Physiology 3120.

1.0 course: Pharmacology 3620.

0.5 course: in Pharmacology, **Physiology and Pharmacology**, at the 4000-level.

Notes for the Module:

Check the prerequisites for the 4000-level Pharmacology courses in the UNDERGRADUATE COURSE INFORMATION section.

Faculty of Social Science

ANTHROPOLOGY

Effective September 1, 2021, the following change(s) be made: Module Revision.

HONOURS SPECIALIZATION IN ANTHROPOLOGY

Module

9.0 courses:

1.0 course from: Anthropology/**Indigenous Studies** 2211F/G, Anthropology/**Indigenous Studies** 2212F/G, Anthropology/**Indigenous Studies** 2216F/G, Anthropology 2219F/G, Anthropology 2230F/G, Anthropology/**Indigenous Studies** 2233F/G, Anthropology/**Indigenous Studies** 2234F/G, Indigenous Studies 2218F/G, the former Anthropology 2217F/G, the former Anthropology 2218F/G, the former First Nations Studies 2217F/G, the former First Nations Studies 2218F/G, of which at least 0.5 must be from Anthropology/**Indigenous Studies** 2211F/G through Anthropology 2219F/G, Indigenous Studies 2218F/G, the former Anthropology 2217F/G, the former Anthropology 2218F/G, the former First Nations Studies 2217F/G, or the former First Nations Studies 2218F/G.

2.5 courses: Anthropology 2222F/G, Anthropology 2245F/G, Anthropology 3350F, Anthropology 3351G, Anthropology 4401F/G, the former Anthropology 4400E.

1.0 course from: Anthropology 2226A/B and Anthropology 2229F/G OR Linguistics

2247A/B and Linguistics 2248A/B (or the former Anthropology 2247A/B and the former Anthropology 2248A/B).

4.5 additional courses in Anthropology at the 2100 level or above. Students may substitute a maximum of 1.0 course, not previously taken, from: Anthropology/Indigenous Studies 2211F/G, Anthropology/Indigenous Studies 2212F/G, Anthropology/Indigenous Studies 2216F/G, Anthropology 2219F/G, Anthropology 2230F/G, Anthropology/Indigenous Studies 2233F/G, Anthropology/Indigenous Studies 2234F/G, Indigenous Studies 2218F/G, the former Anthropology 2217F/G, the former Anthropology 2218F/G, the former First Nations Studies 2217F/G, the former First Nations Studies 2218F/G.

Note: Some courses are offered only in alternate years. Students are advised to consult the Department when planning their module. (See list of the courses by subfield).

*Students interested in Linguistic Anthropology should take Linguistics 2247A/B and Linguistics 2248A/B. All other students should take Anthropology 2226A/B and Anthropology 2229F/G.

Effective September 1, 2021, the following change(s) be made: Module Revision.

MAJOR IN ANTHROPOLOGY

Module

6.0 courses:

0.5 course from: Anthropology/Indigenous Studies 2211F/G, Anthropology/Indigenous Studies 2212F/G, Anthropology/Indigenous Studies 2216F/G, Anthropology 2219F/G, Indigenous Studies 2218F/G, the former Anthropology 2217F/G, the former Anthropology 2218F/G, the former First Nations Studies 2217F/G, the former First Nations Studies 2218F/G.

0.5 course from: Anthropology 2230F/G, Anthropology/Indigenous Studies 2233F/G, Anthropology/Indigenous Studies 2234F/G.

1.5 courses from: Anthropology 2222F/G, Anthropology 2226A/B, Anthropology 2229F/G, Anthropology 2245F/G.

1.0 course from: Anthropology 3237A/B, Anthropology 3305F/G, Anthropology 3307A, Anthropology 3308F/G, Anthropology 3309F/G, Anthropology 3310A/B, Anthropology 3311F/G, Anthropology 3312F/G, Anthropology 3313A/B, Anthropology 3331F/G, Anthropology 3332F/G, Anthropology 3334F/G, Anthropology 3336F/G, Anthropology 3338F/G, Anthropology 3339F/G, Anthropology 3340A/B, Anthropology 3341F/G, Anthropology 3343A/B or Indigenous Studies 3306A/B, Anthropology 3350F, Anthropology 3351G, Anthropology 3355F/G, the former Anthropology 3333F/G, the former Anthropology 3335F/G, the former Anthropology 3337F/G.

2.5 courses in Anthropology at the 2100 level or above.

Effective September 1, 2021, the following change(s) be made: Module Revision.

MAJOR IN ARCHAEOLOGY AND BIOLOGICAL ANTHROPOLOGY

Module

6.0 courses:

1.0 course: Anthropology 2226A/B, Anthropology 2229F/G.

0.5 course from: Anthropology 2222F/G, Anthropology 2245F/G.

0.5 course from: Anthropology 2230F/G, Anthropology/Indigenous Studies 2233F/G, Anthropology/Indigenous Studies 2234F/G.

0.5 course: Anthropology 3350F.

0.5 course from: Anthropology 3308F/G, Anthropology 3311F/G.

2.0 courses from: Anthropology 2235A/B, Anthropology 2236A/B, Anthropology 2237A/B, Anthropology 2238A/B, Anthropology 2239A/B, Anthropology 2261F/G, Anthropology

2263A/B, Anthropology 2264F/G, Anthropology 2265F/G, Anthropology 2267A/B, Anthropology 3307A, Anthropology 3308F/G, Anthropology 3309F/G, Anthropology 3310A/B, Anthropology 3311F/G, Anthropology 3312F/G, Anthropology 3313A/B, Anthropology 3320, Anthropology 3322, Anthropology 3324A/B, Anthropology 3334F/G, Anthropology 3336F/G, Anthropology 3338F/G, Anthropology 3340A/B, Anthropology 3341F/G, Anthropology 3351G, Anthropology 4401F/G, Anthropology 4407F/G, Anthropology 4408F/G, Anthropology 4422F/G, Anthropology 4424F/G, Anthropology 4429F/G, Anthropology 4470A/B, the former Anthropology 2269F/G, the former Anthropology 3369F/G, the former Anthropology 4400E, the former Anthropology 4420A/B. Students may substitute a maximum of 0.5 course, not previously taken, from: Anthropology 2230F/G, Anthropology/Indigenous Studies 2233F/G, Anthropology/Indigenous Studies 2234F/G.

1.0 course from any subfield in Anthropology at the 2100 level or above.

Anthropology 4401F/G is strongly recommended for fourth-year students planning graduate work in anthropology.

Note: Some courses are offered only in alternate years. Students are advised to consult the Department when planning their module. (See list of the courses by subfield.)

Effective September 1, 2021, the following change(s) be made: Module Revision.

MAJOR IN LINGUISTIC ANTHROPOLOGY

Module

6.0 courses:

2.0 courses from: Anthropology 2222F/G, Anthropology 2245F/G, Linguistics 2247A/B, Linguistics 2248A/B.

0.5 course from: Anthropology 2226A/B, Anthropology 2229F/G.

0.5 course from: Anthropology/Indigenous Studies 2211F/G, Anthropology/Indigenous Studies 2212F/G, Anthropology/Indigenous Studies 2216F/G, Anthropology 2219F/G, Indigenous Studies 2218F/G, the former Anthropology 2217F/G, the former Anthropology 2218F/G, the former First Nations Studies 2217F/G, the former First Nations Studies 2218F/G.

0.5 course: Anthropology 3350F.

2.5 courses from: Anthropology 2246F/G, Anthropology 2249F/G, Anthropology 2250F/G, Anthropology 2251F/G, Anthropology 2252F/G, Anthropology/Indigenous Studies 2253A/B, Anthropology 3237A/B, Anthropology 3243F/G, Anthropology 3339F/G, Anthropology 3343A/B or Indigenous Studies 3306A/B, Anthropology 3351G, Anthropology 4401F/G, the former Anthropology 4400E, Anthropology 4412F/G, the former Anthropology 2243F/G, the former Anthropology 3306F/G, the former Anthropology 3335F/G, the former Anthropology 3337F/G.

Anthropology 4401F/G is strongly recommended for fourth-year students planning graduate work in anthropology.

Note: Some courses are offered only in alternate years. Students are advised to consult the Department when planning their module. (See list of the courses by subfield.)

Effective September 1, 2021, the following change(s) be made: Module Revision.

MAJOR IN SOCIOCULTURAL ANTHROPOLOGY

Module

6.0 courses:

1.0 course: Anthropology 2222F/G, Anthropology 2245F/G.

0.5 course: Anthropology 2226A/B, Anthropology 2229F/G.

0.5 course from: Anthropology/Indigenous Studies 2211F/G, Anthropology/Indigenous Studies 2212F/G, Anthropology/Indigenous Studies 2216F/G, Anthropology 2219F/G, Indigenous Studies 2218F/G, the former Anthropology 2217F/G, the former Anthropology 2218F/G, the former First Nations Studies 2217F/G, the former First Nations Studies 2218F/G.

1.0 course: Anthropology 3350F, Anthropology 3351G.

2.0 courses from: Anthropology 2201F/G, Anthropology 2203F/G, Anthropology 2255E, Anthropology 2260F/G, Anthropology 2262F/G, Anthropology 2272F/G, Anthropology 2275A/B, Anthropology 2276F/G, Anthropology 2277F/G, Anthropology 2278F/G, Anthropology 2280F/G, Anthropology 2281F/G, Anthropology 2282F/G, Anthropology 2283F/G, Anthropology 2284F/G, Anthropology 2285F/G, Anthropology 2290F/G, Anthropology 3305F/G, Anthropology 3321, Anthropology 3322, Anthropology 3323A/B, Anthropology 3331F/G, Anthropology 3332F/G, Anthropology 3355F/G, Anthropology 3389F/G, Anthropology 4401F/G, Anthropology 4470A/B, the former Anthropology 2223F/G, the former Anthropology 2224F/G, the former Anthropology 2269F/G, the former Anthropology 2289F/G, the former Anthropology 3303, the former Anthropology 3333F/G, the former Anthropology 3369F/G, the former Anthropology 4400E.

Students may substitute a maximum of 0.5 course, not previously taken, from: Anthropology/Indigenous Studies 2211F/G, Anthropology/Indigenous Studies 2212F/G, Anthropology/Indigenous Studies 2216F/G, Anthropology 2219F/G, Indigenous Studies 2218F/G, the former Anthropology 2217F/G, the former Anthropology 2218F/G, the former First Nations Studies 2217F/G, the former First Nations Studies 2218F/G.

1.0 course from any subfield in Anthropology at the 2200 level or above.

Anthropology 4401F/G is strongly recommended for fourth-year students planning graduate work in anthropology.

Note: Some courses are offered only in alternate years. Students are advised to consult the Department when planning their module. (See list of the courses by subfield.)

Effective September 1, 2021, the following change(s) be made: Module Revision.

SPECIALIZATION IN ANTHROPOLOGY

Module

9.0 courses:

1.0 course from: Anthropology/Indigenous Studies 2211F/G, Anthropology/Indigenous Studies 2212F/G, Anthropology/Indigenous Studies 2216F/G, Anthropology 2219F/G, Anthropology 2230F/G, Anthropology/Indigenous Studies 2233F/G, Anthropology/Indigenous Studies 2234F/G, Indigenous Studies 2218F/G, the former Anthropology 2217F/G, the former Anthropology 2218F/G, the former First Nations Studies 2217F/G, First Nations Studies 2218F/G, of which at least 0.5 must be from Anthropology/Indigenous Studies 2211F/G through Anthropology 2219F/G, Indigenous Studies 2218F/G, the former Anthropology 2217F/G, the former Anthropology 2218F/G, the former First Nations Studies 2217F/G, or the former First Nations Studies 2218F/G.

2.5 courses: Anthropology 2222F/G, Anthropology 2245F/G, Anthropology 3350F, Anthropology 3351G, Anthropology 4401F/G, the former Anthropology 4400E.

1.0 course from: Anthropology 2226A/B and Anthropology 2229F/G OR Linguistics 2247A/B and Linguistics 2248A/B (OR the former Anthropology 2247A/B and the former Anthropology 2248A/B).

4.5 additional courses in Anthropology numbered 2100 or above. Students may substitute a maximum of 1.0 course, not previously taken, from: Anthropology/Indigenous Studies 2211F/G, Anthropology/Indigenous Studies 2212F/G, Anthropology/Indigenous Studies 2216F/G, Anthropology 2219F/G, Anthropology 2230F/G, Anthropology 2233F/G, Anthropology 2234F/G, Indigenous Studies 2218F/G, the former Anthropology 2217F/G, the former Anthropology 2218F/G, the former First Nations Studies 2217F/G, the former First Nations Studies 2218F/G.

Note: Some courses are offered only in alternate years. Students are advised to consult the Department when planning their module. (See list of the courses by subfield.)

*Students interested in Linguistics Anthropology should take Linguistics 2247A/B and Linguistics 2248A/B. All other students should take Anthropology 2226A/B and Anthropology 2229F/G.

Effective September 1, 2021, the following change(s) be made: Module Revision.

MINOR IN REFUGEE AND MIGRANT STUDIES

Module

4.0 courses:

1.5 courses from: Anthropology 2282F/G, Anthropology 2283F/G, Anthropology 3305F/G, Anthropology 3389F/G, Centre for Global Studies 3512F/G, the former Anthropology 2289F/G.

1.5 courses from: Anthropology 2203F/G, Anthropology 2211F/G, Anthropology 2212F/G, Anthropology 2216F/G, Anthropology 2219F/G, Anthropology 2281F/G, Indigenous Studies 2211F/G, Indigenous Studies 2212F/G, Indigenous Studies 2216F/G, Indigenous Studies 2218F/G.

1.0 course from: Anthropology 2250F/G, Anthropology 2255E, Anthropology 2277F/G, Geography 2142A/B, Geography 3441F/G, History 2703F/G, History 3807E, Political Science 3388E, Sociology 2143E, the former Geography 3442F/G, the former History 2703F/G.

Inter-Faculty Departments and Programs

GENDER, SEXUALITY, AND WOMEN'S STUDIES

Effective September 1, 2021, the following change(s) be made: Module Revision.

MAJOR IN SEXUALITY STUDIES

Module

6.0 courses:

1.0 course: GSWS 2273E.

0.5 course from: GSWS 3173F/G, GSWS 3163F/G.

1.0 course from: GSWS 2263F/G, GSWS 2274F/G, GSWS 2275F/G and GSWS 3133F/G.

3.5 courses from: Classical Studies 3300F/G, History 2181A/B, History 2185, History 2817F/G, Philosophy 2077F/G, Psychology 2075, GSWS 2160A/B, GSWS 2163A/B, GSWS 2203F/G, GSWS 2205F/G, GSWS 2223F/G, GSWS 2233F/G, GSWS 2243F/G, GSWS 2253E, GSWS 2263F/G, GSWS 2274F/G, GSWS 2275F/G, GSWS 2283F/G, GSWS 2817F/G, GSWS 3133F/G, GSWS 3153F/G, GSWS 3163F/G, GSWS 3305F/G, GSWS 3333F/G, GSWS 3343F/G, GSWS 3345F/G, GSWS 3356F/G, GSWS 3363F/G, GSWS 3373F/G, GSWS 4463F/G, the former English 3886F/G, the former English 3887E, the former Film Studies 2255E, the former History 2185, the former Visual Arts History 2286F/G, the former Visual Arts History 2287F/G.

The module must include at least 1.0 course at the 3000 level or above, and no more than 1.0 courses in Gender, Sexuality, and Women's Studies at the 2000-2199 level. At least 4.0 of the 6.0 courses must be Gender, Sexuality, and Women's Studies courses.

A student may apply to the Department of Gender, Sexuality, and Women's Studies for approval to substitute 1.0 course not listed above, provided the course is relevant to the Sexuality Studies Major.

Effective September 1, 2021, the following change(s) be made: Module Revision.

MINOR IN SEXUALITY STUDIES

Module

4.0 courses:

1.0 course: GSWS 2273E.

3.0 courses: Classical Studies 3300F/G, History 2181A/B, History 2185, Philosophy 2077F/G, Psychology 2075, Visual Arts History 2287F/G, GSWS 2160A/B, GSWS 2163A/B, GSWS 2203F/G, GSWS 2205F/G, GSWS 2223F/G, GSWS 2233F/G, GSWS 2243F/G, GSWS 2253E, GSWS 2263F/G, GSWS 2273E, GSWS 2274F/G, GSWS 2275F/G, GSWS 2817F/G, GSWS 2283F/G, GSWS 3133F/G, GSWS 3153F/G, GSWS 3163F/G, GSWS 3173F/G, GSWS 3305F/G, GSWS 3333F/G, GSWS 3343F/G, GSWS 3345F/G, GSWS 3356F/G, GSWS 3363F/G, GSWS 3373F/G, GSWS 4463F/G, the former Film Studies 2255E, the former History 2185, the former Visual Arts History 2286F/G, the former Visual Arts History 2287F/G.

At least 2.0 of the courses must be at the 2200-level or above.

A student may apply to the Department of Gender, Sexuality, and Women's Studies for approval to substitute 1.0 course not listed above, provided the course is relevant to the Minor in Sexuality Studies.

Brescia University College

SCHOOL OF HUMANITIES

Effective September 1, 2021, the following change(s) be made: Admission Requirement Revision.

MAJOR IN POWER IN HISTORY AND POLITICS

Admission Requirements

Completion of first year requirements, including 1.0 course from History 1201E, History 1401E, History 1404E, History 1601E, History 1801E, or the former History 1805E, with a minimum mark of 60%, or Political Science 1020E, or Political Science 1021F/G and Political Science 1022F/G, with a minimum mark of 60%. A course at the 1000 level in both History and Political Science is recommended to satisfy prerequisites for the module's core courses.