

Feb 2023

**Subject: Important Notes and Curriculum Changes in the 2023-2024 UG Calendar**

Dear Student,

Each academic year, all students enrolled in our **Aerospace Engineering** program are sent a letter advising them of curriculum changes that have occurred since their entry into the program. As such, the present letter is to advise you of changes to your program that will appear in the 2023 – 2024 Undergraduate Calendar.

It is important to read this entire letter, as these changes may affect your selection of courses or potentially your graduation. Students must meet the requirements of their program according to the calendar of their graduating year.

This letter, as well as past ones, can be found on the following website: [Course sequences for Aerospace Engineering \(BEng\) \(concordia.ca\)](https://www.concordia.ca/academics/undergraduate/calendar/current/section-71-gina-cody-school-of-engineering-and-computer-science/section-71-55-aerospace-engineering/aerospace-engineering.html)

Should you have any questions regarding this letter and any of the curriculum changes therein, please do not hesitate to contact your Program Assistant, Ms. Sabrina Poirier:

- By email at [sabrina.poirier@concordia.ca](mailto:sabrina.poirier@concordia.ca)
- By phone at 514-848-2424 extension 3133; or
- In-person in room EV 4.144

Please be reminded that you can always consult your program requirements and course descriptions by referring to the following website:

<https://www.concordia.ca/academics/undergraduate/calendar/current/section-71-gina-cody-school-of-engineering-and-computer-science/section-71-55-aerospace-engineering/aerospace-engineering.html>

**Please read the following pages carefully.**

**VERY IMPORTANT:**

1. **Starting Summer 2023, the Summer terms will be 6 weeks long instead of the previous 6 ½ weeks. The Fall and Winter academic terms will be 12 weeks long instead of the previous 13 weeks. It is important to check the undergraduate academic dates:**  
<https://www.concordia.ca/students/undergraduate/undergraduate-academic-dates.html>
2. Students must have completed all 200-level courses required for their program before they can register for any 400-level course.
3. All 200-level courses within the program, taken after September 1, 2012, which are prerequisites for other courses, must be completed with a C- grade or better. A 200-level course in which a student obtained a D+ grade or lower must be repeated before attempting any course for which this 200-level course is a prerequisite.
4. Any courses that you are required to repeat due to conditional standing or readmission conditions must be completed with a grade of C- or better prior to graduation. This requirement will **NOT** be waived.
5. Students are required to graduate having met the substantial equivalent of the curriculum in force in the winter term prior to their degree conferral.
6. Students may now submit a request to write a supplemental exam, pending on meeting the requirements highlighted in section 71.10.3 of the 2023-2024 Calendar. Meeting the conditions does not guarantee the approval of the request.
7. In order to graduate, students must:
  - i. Satisfy all their program requirements;
  - ii. Be in acceptable standing in their last annual assessment; and
  - iii. Have a minimum final graduation GPA of 2.00.

The academic standings of potential graduates who have attempted less than 12 credits since their last assessment are determined on the basis that these credits constitute an extension of the last assessment period.

8. Graduation does NOT occur automatically and you must apply for graduation. The application form can be found at: <https://www.concordia.ca/students/your-sis/apply-to-graduate.html>.

The deadlines to apply for graduation are:

- January 15<sup>th</sup> for Spring Convocation; or
  - July 15<sup>th</sup> for Fall Convocation.
9. MATH 202 is no longer required for students in the Extended Credit (ECP) or Mature Entry (MEP) programs.

## Changes to the Aerospace Engineering Program

### 1. Changes to the Engineering Core (27cr)

No changes have been made to the Engineering Core.

### 2. Changes to the Aerospace Engineering Core (38.25)

- the Aerospace Engineering core amounts to 38.25 credits instead of the previous 36.25 credits because of the following reason:
  - AERO 490 Capstone Aerospace Engineering Design Project is now a 6-credit course instead of the previous 4 credits.

### 3. Changes to the Aerospace Engineering Option Core for Options A, B and C

#### Option A – Aerodynamics and propulsion (50.25)

- No changes were made to the Option A – Aerodynamics and Propulsion core

#### Option B – Aerospace Structures & Materials (54.75)

- Students must take 54.75 compulsory credits from Option B – Aerospace Structures and Materials Core instead of the previous 54.25 credits because of the following reason:
  - The course AERO 431 (Principles of Aeroelasticity) now has a lab component added to it, which makes AERO 431 equivalent to 3.5 credits instead of the previous 3 credits.
- AERO 431 Principles of Aeroelasticity (3.5cr) now has the following prerequisites, which must be completed previously: ENGR 361 and MECH 375.
- MECH 411 Instrumentation and Measurements (3.5cr) is now called MECH 373 Instrumentation and Measurements (3.5cr).

#### Option C – Avionics and Aerospace (46.5cr)

- Students must take 46.5 compulsory credits from Option C – Avionics and Aerospace Core instead of the previous 42 credits because of the following reasons:
  - The course ELEC 481 Linear Systems (3.5cr) is now added to the Option C – Avionics and Aerospace core and is a prerequisite to AERO 483 Integration of Avionics Systems.
  - SOEN 341 Software Process and Practices is now a 4-credit course instead of the previous 3 credits.
- AERO 483 Integration of Avionics Systems (3cr) now has the following prerequisites, which must be completed previously: AERO 482 and ELEC 481.

#### 4. Changes to the Aerospace Engineering Option Electives

There are changes to the following Aerospace Engineering Option Electives:

##### **Option A – Aerodynamics and Propulsion (4.5cr)**

- Students must take 4.5 credits minimum from Option A – Aerodynamics and Propulsion Electives instead of the previous 6.5 credits. This is due to an increase in the Aerospace Engineering Core credits (38.25).
- AERO 431 Principles of Aeroelasticity is now a 3.5 credits course instead of the previous 3 credits. The course consists of a lecture and a laboratory component.
- AERO 431 Principles of Aeroelasticity (3.5cr) now has the following prerequisites which must be completed previously: ENGR 361 and MECH 375.
- MECH 411 Instrumentation and Measurements (3.5cr) is now called MECH 373 Instrumentation and Measurements (3.5cr).
- MECH 368 Electronics for Mechanical Engineers (3.5cr) now has the following prerequisites, which must be completed previously: PHYS 205 and MIAE 215.

##### **Option B – Aerospace Structures & Materials (0cr)**

- Students in Option B – Aerospace Structures and Materials are no longer required to take technical elective credits to fulfill their program requirements. This is due to an increase in the Aerospace Engineering Core credits (38.25) and an increase in the Option B Core credits (54.75).

##### **Option C – Avionics and Aerospace (8.25cr)**

- Students must take a minimum of 8.25 credits from the Option C – Avionics and Aerospace Systems Electives instead of the previous 14.75 credits. This is due to an increase in the Aerospace Engineering Core credits (38.25) and an increase in the Option C Core credits (46.5).
- COEN 413 Hardware Functional Verification is now a 3.5 credit course instead of the previous 3 credits.
- ELEC 351 Electromagnetic Waves and Guiding is now a 3.5 credit course instead of the previous 3 credits.
- ELEC 442 (3cr) is now titled Advanced Signal Processing instead of Digital Signal Processing.
- ELEC 481 Linear Systems (3.5cr) is removed from the Option C – Avionics and Aerospace Systems Electives.
- SOEN 342 Software Requirements and Deployment is now a 4-credit course instead of the previous 3 credits.
- SOEN 343 Software Architecture and Design is now a 4-credit course instead of the previous 3 credits.