

## Admission to the Bachelor of Medical Sciences (BMSc) Program

**Policy Category:** Registration, Progression, Graduation

**Subject:** Admission to the Bachelor of Medical Sciences (BMSc)

Program

Subsections: Bachelor of Medical Sciences (BMSc) Program;

Modules Offered in the BMSc Program;

Weighted Average Chart

**Approving Authority:** Senate

Responsible Committee: Senate Committee on Academic Policy

Related Procedures: \*

Officer(s) Responsible

for Procedures: \*

Related Policies: Medical Sciences First Entry

**Effective Date:** September 1, 2025

**Supersedes:** September 1, 2024; September 1, 2023,

September 1, 2022; September 1, 2021

### **BACHELOR OF MEDICAL SCIENCES (BMSc) PROGRAM**

The Bachelor of Medical Sciences (BMSc) Program, offered jointly by the Faculty of Science and the Schulich School of Medicine & Dentistry, offers four-year undergraduate degrees for students interested in studying the basic medical sciences. The Honours Specialization, Specialization, and Double Major modules that lead to graduation with BMSc degrees are collectively referred to as the BMSc Program.

Admission to the BMSc Program does not guarantee admission to a particular Honours Specialization module as each of these modules has a limited capacity.

Admission to the BMSc Program occurs in Year 3, usually after the successful completion of Medical Sciences 1 and 2 (see the policy on *Medical Sciences First* 

*Entry*). When applying for admission to the BMSc Program in Year 3, students also apply for admission to the various modules offered in the BMSc Program. Students must be admitted to the BMSc Program in Year 3 to be eligible to progress to the BMSc Program in Year 4.

Although admission to the BMSc Program in Year 3 is assured for students in Medical Sciences 2 who satisfy certain conditions, it is anticipated that space will be available for additional students. These students will comprise the "competitive pool".

Assured Admission to Year 3 BMSc for Students in Medical Sciences 2: For assured admission, the following conditions must be satisfied by the end of the Fall/Winter of Medical Sciences 2:

- A full load of 5.0 courses must be successfully completed (i.e., no failures) during the Fall/Winter of Medical Sciences 2 (September-April);
- Any course(s) taken during the summer sessions either before or after Medical Sciences 2 must be successfully completed (i.e., no failures);
- All courses listed in the Admission Requirements for the module to which the student applies must be completed by the end of the Fall/Winter of Medical Sciences 2. See the BMSc website for more information about admission to BMSc Double Majors;
- The specified minimum mark must be achieved in the first attempt at each course listed in the Admission Requirements for the module to which the student applies;
- A minimum average of 80% must be achieved on the 2000-level courses listed in the Admission Requirements for the module to which the student applies. If 3.5 or more 2000-level courses are listed in the Admission Requirements, a minimum average of 80% is required on the best 3.0 of these 2000-level courses.

Students in Medical Sciences 2 who satisfy the conditions for assured admission receive priority placement in Honours Specialization modules in Year 3 BMSc. The capacity of each Honours Specialization module is limited in Years 3 and 4 due to the maximum capacity in laboratory and capstone courses. See *Modules Offered in the BMSc Program* (below) for details about admission to Honours Specialization modules, as well as to Specialization modules and Double Majors, in Years 3 and 4, and the BMSc website for additional information.

### Admission to Year 3 BMSc for Students in the Competitive Pool:

For admission from the competitive pool, the following conditions must be satisfied prior to the beginning (September) of Year 3:

Although a full load of 5.0 courses is not required in Year 2, students must be eligible to register in Year 3 (e.g., must successfully complete at least 8.0 courses);

- All courses taken during the Fall/Winter of Year 2 and during the summer after Year 2 must be successfully completed (i.e., no failures);
- A minimum mark of 60% must be achieved in each 1000-level half course listed in the Admission Requirements for the module to which the student applies (repeats of these 1000-level courses are permitted);
- All courses listed in the Admission Requirements for the module(s) to which
  the student applies must be completed prior to the beginning (September) of
  Year 3. See the BMSc website for more information about admission to BMSc
  Double Majors;
- A minimum average of 75% must be achieved on the 2000-level courses listed in the Admission Requirements for the module to which the student applies. If, however, the Admission Requirements list 3.5 or more 2000-level courses, a minimum average of 75% is required on the best 3.0 of these 2000-level courses. Note that an average greater than 75% may be required for admission, depending on the number of applicants from the competitive pool and the number of spaces remaining in Year 3 of the BMSc Program.
- The specified minimum mark must be achieved in each of the 2000-level courses listed in the Admission Requirements for the module(s) to which the student applies. Students may repeat a maximum of one of these 2000-level half courses and, if one of these 2000-level half courses is repeated, the average on both attempts in the course must be at least 60% and will be used in calculating the minimum average.

Students admitted to Year 3 BMSc from the competitive pool are registered in their modules after students in Medical Sciences 2 who satisfied the conditions for assured admission. The capacity of each Honours Specialization module is limited in Years 3 and 4 due to the maximum capacity in laboratory and capstone courses. See *Modules Offered in the BMSc Program* (below) for details about admission to Honours Specialization modules, as well as Specialization modules and Double Majors, in Years 3 and 4, and the BMSc website for more information.

#### MODULES OFFERED IN THE BMSc PROGRAM

The Honours Specialization, Specialization, and Double Major modules that lead to graduation with BMSc degrees are collectively referred to as the BMSc Program.

### **Honours Specialization Modules:**

Admission to the BMSc Program does not guarantee admission to a particular Honours Specialization module as each of these modules has a limited capacity.

#### Year 3:

Once admitted to Year 3 of the BMSc Program, admission to each Honours Specialization module requires completion of ALL of the courses listed in the Admission Requirements for the Honours Specialization module to which the student applies and is based on the average obtained on ALL the 2000-level courses listed in the Admission Requirements. If the Admission Requirements list 3.5 or more 2000-level courses, admission is based on the average obtained on the best 3.0 of these 2000-level courses. A minimum mark of 60% must be achieved in any additional modular course(s) completed.

Students satisfying the conditions for assured admission to Year 3 of the BMSc Program from Medical Sciences First Entry (Medical Sciences 2) will receive priority placement in the Honours Specialization modules in Year 3. Once these students have been adjudicated into the Honours Specialization modules, students admitted to Year 3 of the BMSc Program from the competitive pool will be adjudicated into the remaining spaces in the Honours Specialization modules.

#### Year 4:

The following provisions for admission to an Honours Specialization in Year 4 apply only to students registered in Years 3 and 4 of an Honours Specialization module in 2024-25 or earlier.

**Note:** For students registered in Year 3 of an Honours Specialization module in 2025-26 and onward:

Progression to Year 4 of each Honours Specialization in the BMSc program will be dependent on completion of the progression requirements as identified on the module page in the Academic Calendar.

Permission may be granted to BMSc students for admission to a particular Honours Specialization module in Year 4 if space is available and the minimum Admission and Progression Requirements are met.

Admission to an Honours Specialization module in Year 4 requires a minimum Weighted Average of 75% and completion of ALL of the courses indicated in the Weighted Average Chart below. Admission is not guaranteed as each of these modules has a limited capacity. Any student in Year 3 BMSc with the appropriate courses can apply for admission to Year 4 of any Honours Specialization module.

## **WEIGHTED AVERAGE CHART**

Honours Specializatio n Module	Modular courses responsible for 1/3 of the Weighted Average	Modular courses responsible for 2/3 of the Weighted Average
Biochemistry	3.5 courses: Biochemistry 2280A; Biology 2581A/B; Biology 2244A/B or Statistical Sciences 2244A/B; Chemistry 2213A/B or Chemistry 2273A; Chemistry 2223B or Chemistry 2283G; 1.0 course from Biology 2382A/B, Biology 2290F/G, Chemistry 2211A/B, Chemistry 2214A/B, Chemistry 2374A, Chemistry 2384B.	2.0 courses: Biochemistry 3380G, Biochemistry 3381A, Biochemistry 3382A and Biochemistry 3390B.
Biochemistry and Cancer Biology	3.5 courses (or 4.0 courses if the former Medical Biophysics 2582B was taken): Biochemistry 2280A; Biology 2382A/B and Biology 2581A/B; Chemistry 2213A/B or Chemistry 2273A; Chemistry 2223B or Chemistry 2283G; Biology 2244A/B or Statistical Sciences 2244A/B; Microbiology and Immunology 2500A/B, the former Medical Biophysics 2582B.	4.0 courses (or 3.5 courses if the former Medical Biophysics 2582B was taken): Biochemistry 3381A; Pharmacology 3620; Anatomy and Cell Biology 3309 or Pathology 3500; one of Biochemistry 3382A, Chemistry 3393A/B or Microbiology and Immunology 3300B; one of Biochemistry 3380G, Physiology and Pharmacology 3000E; and Medical Biophysics 3518B if the former Medical Biophysics 2582B was not completed. Note: If Physiology and Pharmacology 3000E is selected instead of one of the laboratory half courses, then a total of 8.0 courses will be used toward the Weighted Average.
Biochemistry and Cell Biology	3.5 courses: Biochemistry 2280A; Biology 2581A/B, Biology 2382A/B and Biology 2290F/G; Biology 2244A/B or Statistical Sciences 2244A/B; Chemistry 2213A/B or	4.0 courses: Biochemistry 3380G, Biochemistry 3381A and Biochemistry 3382A; Biology 3316A/B or Physiology 3140A; one of Anatomy and Cell Biology

	Chemistry 2273A; Chemistry 2223B or Chemistry 2283G.	3700F/G, Biochemistry 3390B or Biology 3326F/G; Anatomy and Cell Biology 3309; Anatomy and Cell Biology 3329A/B.
Biochemistry and Pathology of Human Disease	3.5 courses: Biochemistry 2280A; Biology 2382A/B; Biology 2581A/B; Biology 2244A/B or Statistical Sciences 2244A/B; Chemistry 2213A/B or Chemistry 2273A; Chemistry 2223B or Chemistry 2283G; 0.5 course from Biochemistry 3390B, Biology 2290F/G, Chemistry 2211A/B, Chemistry 2214A/B, Chemistry 2374A, Chemistry 2384B, Microbiology and Immunology 2500A/B.	2.5 courses: Biochemistry 3381A, Biochemistry 3382A, Biochemistry 3380G; Pathology 3500.
Biochemistry of Infection and Immunity	3.5 courses: Biochemistry 2280A; Biology 2581A/B, Biology 2382A/B and Biology 2290F/G; Biology 2244A/B or Statistical Sciences 2244A/B; Chemistry 2213A/B or Chemistry 2273A; Chemistry 2223B or Chemistry 2283G.	3.5 courses:  Biochemistry 3380G or Microbiology and Immunology 3610F; Biochemistry 3381A and Biochemistry 3382A; one of Anatomy and Cell Biology 3700F/G or Biochemistry 3390B; Microbiology and Immunology 2500A/B, Microbiology and Immunology 3400A or the former Microbiology and Immunology 3100A, Microbiology and Immunology 3300B.
Chemical Biology	4.5 courses: Biochemistry 2280A; Biology 2581A/B; Chemistry 2271A, Chemistry 2272F, Chemistry 2273A, Chemistry 2281G, Chemistry 2283G, Chemistry 2374A and Chemistry 2384B	3.0 courses: Biochemistry 3380G, Biochemistry 3381A, Biochemistry 3382A, Biochemistry 3390B; 1.0 course from Chemistry 3371F, Chemistry 3372F/G, Chemistry 3373F or Chemistry 3374A/B.

Computational Biochemistry	3.0 courses: Biochemistry 2280A; Biology 2581A/B; Chemistry 2213A/B or Chemistry 2273A; Chemistry 2223B or Chemistry 2283G; Biology 2244A/B or Statistical Sciences 2244A/B; Computer Science 1027A/B.	3.0 courses: Biochemistry 3381A and Biochemistry 3382A, Biochemistry 3383F/G, Biochemistry 3390B; Computer Science 2210A/B and Computer Science 2211A/B.
Epidemiology and Biostatistics	3.5 courses:  Biochemistry 2280A; Biology 2581A/B, Biology 2382A/B and Biology 2290F/G; Chemistry 2213A/B; Biology 2244A/B or Statistical Sciences 2244A/B; Epidemiology 2200A/B.	2.0 courses: Biostatistics 3100A and Biostatistics 3110B; Epidemiology 3200A and Epidemiology 3210B.
IMS (Interdisciplina ry Medical Sciences)	3.0 courses: Biochemistry 2280A; Biology 2581A/B, Biology 2382A/B and Biology 2290F/G; Chemistry 2213A/B or Chemistry 2273A; Biology 2244A/B or Statistical Sciences 2244A/B.	3.0 courses: 2.0 courses from Group 1; 1.0 course from Groups 1-3, which must include 0.5-1.0 course from Group 3.
Medical Bioinformatics	3.5 courses: Biochemistry 2280A; Biology 2382A/B; Biology 2581A/B; one of Data Science 2000A/B or Statistical Sciences 2857A/B; one of Biology 2244A/B, Statistical Sciences 2244A/B or Statistical Sciences 2858A/B; Computer Science 2121A/B; Mathematics 1229A/B or Mathematics 1600A/B.	3.0 courses: Computer Science 3120A/B or 3121A/B; Medical Bioinformatics 3100A/B; Pathology 3500; Physiology 3120.
Medical Biophysics (Medical Sciences Concentration)	3.0 courses: Biochemistry 2280A; Chemistry 2213A/B; Physics 2101A/B and Physics 2102A/B, or Physiology 2130 or Physiology 3120 or Physiology and Pharmacology 2000; Biology 2244A/B or Statistical Sciences 2244A/B; 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.

Medical Biophysics (Clinical Physics Concentration)	2.5 courses: Calculus 2302A/B or Calculus 2502A/B; Calculus 2303A/B or Calculus 2503A/B; Physics 2101A/B, Physics 2102A/B and Physics 2110A/B.	3.0 courses: Medical Biophysics 3330F/G, Medical Biophysics 3501A, Medical Biophysics 3503G, Medical Biophysics 3505F, Medical Biophysics 3507G, Medical Biophysics 3970Z
Medical Biophysics and Biochemistry	3.0 courses (or 3.5 courses if the former Medical Biophysics 2582B was taken): Biochemistry 2280A; Biology 2581A/B; Biology 2244A/B or Statistical Sciences 2244A/B; Chemistry 2213A/B or Chemistry 2273A; Chemistry 2223B or Chemistry 2283G; Computer Science 2035A/B; the former Medical Biophysics 2582B.	3.0 courses (or 2.5 courses if the former Medical Biophysics 2582B was taken): Biochemistry 3381A and Biochemistry 3382A; Biochemistry 3380G or Medical Biophysics 3970Z; Medical Biophysics 3501A and Medical Biophysics 3507G; and Medical Biophysics 3518B if the former Medical Biophysics 2582B was not taken.
Medical Cell Biology	3.5 courses: Biochemistry 2280A; Biology 2581A/B, Biology 2382A/B and Biology 2290F/G; Biology 2244A/B or Statistical Sciences 2244A/B; Chemistry 2213A/B or Chemistry 2273A; Chemistry 2223B or Chemistry 2283G.	3.5 courses: Anatomy and Cell Biology 3309; Anatomy and Cell Biology 3329A/B; Biochemistry 3381A and Biochemistry 3382A; Biology 3316A/B or Physiology 3140A; Biochemistry 3380G or Biology 3326F/G.
Medical Health Informatics – admission discontinued	3.5 courses: Biochemistry 2280A; 1.0 course from Biology 2290F/G, Biology 2382A/B, Biology 2581A/B; Chemistry 2213A/B; Biology 2244A/B or Statistical Sciences 2244A/B; Computer Science 2120A/B and Computer Science 2121A/B.	3.0 courses: Computer Science 3120A/B and Computer Science 3121A/B; Pathology 3500 or the former Pathology 3240A and the former Pathology 3245B; Physiology 3120.
Microbiology and Immunology	3.5 courses: Biochemistry 2280A; Biology 2581A/B, Biology 2382A/B and Biology 2290F/G; Chemistry 2213A/B and Chemistry 2223B; Biology 2244A/B or Statistical	3.0 or 3.5 courses: Biochemistry 3381A; Microbiology and Immunology 2500A/B, (Microbiology and Immunology 3200B and Microbiology and Immunology 3400A, or the

	Sciences 2244A/B.	former Microbiology and Immunology 3100A), Microbiology and Immunology 3300B, Microbiology and Immunology 3610F and Microbiology and Immunology 3620G.
Microbiology and Immunology with Pathology	3.5 courses: Biochemistry 2280A; Biology 2581A/B, Biology 2382A/B and Biology 2290F/G; Chemistry 2213A/B and Chemistry 2223B; Biology 2244A/B or Statistical Sciences 2244A/B.	4.0 courses: Biochemistry 3381A; Microbiology and Immunology 2500A/B, (Microbiology and Immunology 3400A or the former Microbiology and Immunology 3100A), Microbiology and Immunology 3300B, Microbiology and Immunology 3610F, Microbiology and Immunology 3620G; Pathology 3500.
One Health	3.0 courses: Biochemistry 2280A; Biology 2382A/B, Biology 2483A/B; Chemistry 2213A/B, Chemistry 2210A/B; Biology 2244A/B or Statistical Sciences 2244A/B.	4.0 courses: Environmental Science 3300F/G; One Health 3300A/B; One Health 3600A/B; Pathology 3500; 1.0 course 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; and the former Anatomy and Cell Biology 3319; and 0.5 course from Geography 3431A/B, Geography 3432A/B, Geography 3445F/G, Sociology 3308F/G.
Pathology	2.5 courses: Biochemistry 2280A; Biology 2382A/B; Biology 2290F/G or Biology 2581A/B; Chemistry 2213A/B; Biology 2244A/B or Statistical Sciences 2244A/B.	4.0 courses: 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; Pathology 3500;

		Pharmacology 3620; Physiology 3120.
Pharmacology	3.0 courses: Biochemistry 2280A; Biology 2581A/B, Biology 2382A/B and Biology 2290F/G; Chemistry 2213A/B; Biology 2244A/B or Statistical Sciences 2244A/B.	3.5 courses: Pharmacology 3620; Physiology 3120 and Physiology 3140A; Physiology and Pharmacology 3000E.
Physiology	3.0 courses: Biochemistry 2280A; Biology 2581A/B, Biology 2382A/B and Biology 2290F/G; Chemistry 2213A/B; Biology 2244A/B or Statistical Sciences 2244A/B.	2.5 courses: Physiology 3120 and Physiology 3140A; Physiology and Pharmacology 3000E.
Physiology and Pharmacology	3.0 courses: Biochemistry 2280A; Biology 2581A/B, Biology 2382A/B and Biology 2290F/G; Chemistry 2213A/B; Biology 2244A/B or Statistical Sciences 2244A/B.	3.5 courses: Pharmacology 3620; Physiology 3120 and Physiology 3140A; Physiology and Pharmacology 3000E.

### Notes:

- 1. Some courses in the Weighted Average Chart include a mark/average requirement in their prerequisite(s). See UNDERGRADUATE COURSE INFORMATION.
- 2. Information about the maximum capacity of each Honours Specialization module and the minimum Weighted Average required for admission to each Honours Specialization module will be made available on the BMSc website: <a href="https://www.schulich.uwo.ca/bmsc">www.schulich.uwo.ca/bmsc</a>

### **Double Majors:**

The Major in One Health can be completed only in combination with another Major (Double Majors) in an Honours Bachelor Degree.

Admission to the following Major modules will be restricted to students admitted to Year 3 BMSc (Honours) degree with Double Majors in 2027-28 and onward: Biochemistry, Interdisciplinary Medical Sciences, Medical Cell Biology, Microbiology and Immunology, Pathology, Pharmacology, and Physiology.

#### Year 3:

Students admitted to Year 3 of the BMSc are eligible to register in Double Major modules provided they have completed all of the 2000-level courses listed in the Admission Requirements for both Major modules and have the prerequisites to register in the 3000-level courses required in the module (some 3000-level courses include mark/average requirements in their prerequisites). A minimum mark of 60% must be achieved in any additional modular course(s) completed. For more information about completing the 2000-level Admission Requirements for each Major + Major combination available in the BMSc Program, see the BMSc website.

### Year 4:

Progression to Year 4 of any Double Major combination in the BMSc program will be dependent on completion of the progression requirements as identified on each Major module page in the Academic Calendar.

BMSc students are eligible to register in Double Major modules in Year 4 if the minimum Admission and Progression Requirements are met as stated on each Major module page in the Academic Calendar.

### Specialization in Interdisciplinary Medical Sciences (IMS):

Students admitted to Year 3 of the BMSc Program are eligible to register in the Specialization in Interdisciplinary Medical Sciences (IMS) provided they have completed all of the 2000-level courses listed in the Admission Requirements for the Specialization module. A minimum mark of 60% must be achieved in any additional modular course(s) completed.

Last Reviewed: April 25, 2025