

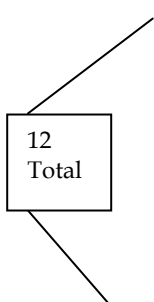
**Arizona State University**  
**Department of Chemistry and Biochemistry**  
**Integrated Bachelors/Master's Program in Biochemistry with**  
**Emphasis on Medicinal Chemistry**

The integrated Bachelors/Master's Program in Biochemistry with emphasis in Medicinal Chemistry is designed for undergraduate students who are currently enrolled in the ASU Biochemistry Bachelor of Science Program with a concentration in Medicinal Chemistry or a related medical science area (i.e. Biology, Pre-Med, Microbiology, etc) who have a strong academic record and want to improve their background in chemistry and biochemistry before continuing in professional programs such as medical school, pharmacy and other health sciences. The integrated program provides the opportunity for students to begin their M.S. Program while completing Bachelor of Science requirements by allowing up to 9 credit hours of graduate-level course work to be taken during the senior year and be applied towards both degrees. All requirements for the Bachelor's degree and the requirements for the non-thesis Master of Science degree in Biochemistry with a Concentration in Medicinal Chemistry must be completed. Students enrolled in this program can complete their M.S. Program within one year after receiving the B.S. degree.

Students applying to the integrated program must:

- Be enrolled in a Chemistry and Biochemistry Program, MCB Program, Biology, Pre-Med or a science related field
- Completed at least 85 semester hours in their current B.S. program
- Have a cumulative undergraduate grade point average of 3.4 or better on a 4.0 grading scale
- Established a Supervisory Committee comprised of a research advisor (selected from a specified list of faculty provided by the Department of Chemistry and Biochemistry) and two additional ASU tenure track faculty members or Researchers from the approved list who will oversee the student's research during the senior year in the B.S. program and continue through the awarding of the M.S. Degree. A co-advisor may be added with approval from the Department of Chemistry and Biochemistry.
- Submit a Program of Study as part of the pre-application process.
- Must have continuous enrollment through the completion of the program
- Meet requirements set by the Graduate College
- A program fee will not be assessed during the 2007-2008 academic year, but may be required in future semesters dependent on program needs.

The Program of Study, to be submitted with this pre-application, must include at least 30 semester hours and include the following:

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- A maximum of nine credit hours of coursework shared between the student's senior year in his/her B.S. degree program and the Non-Thesis Master's degree program. Courses must be 500-level or above and related to the area of medicinal chemistry. One course may be substituted with a 400-level course if it is determined by the faculty advisor to be appropriate. CHM 535 Medicinal Chemistry must be one of these courses. (CHM 435 Medicinal Chemistry may be accepted with approval from the Graduate Programs Committee.) (6-9 credit hours)
  - Additional 500 level approved course(s) must be taken to meet the requirement of twelve total semester hours of coursework. One course can be taken outside the research area but

related to the student's research with the approval by the student's Supervisory Committee and the Graduate Program Committee.(6-3 hours credit hours)

- Two CHM/BCH 501 Department Seminars (Not CHM 501 New Student Seminar) (2 credit hours)
- Two CHM/BCH 591 Off Campus Seminar (2 credit hours)
- Six credit hours of BCH 592 Research (6 credit hours)
- Two credit hours of CHM/BCH 593 Applied Project (2 credit hours)
- Six credit hours in additional course work, 400 level or above, or research hours. (6 hours)

The Integrated Bachelors/Master's Program in Chemistry and Biochemistry with Emphasis in Medicinal Chemistry is a non-thesis Master's and requires an applied project in the area of medical chemistry in which the student is required to prepare and defend a written research paper on an applied project to his/her supervisory committee. This paper must be an original research paper written in publishable format by the student. There are two options.

- a. The research paper on the applied project must be at least 50 pages in length, double-spaced and typed in a 12 point font. The 50 page length can include the abstract, references list, and any tables or figures.
- b. OR, the document can consist of a published, peer-reviewed, first-authored article in a scientific journal. (A conference proceedings paper can NOT be used.) This article should be submitted with a 10-12 page introduction, summary and discussion.
- c. Students who choose this option must show proof of publication or acceptance of the article.

Once admitted to the B.S./M.S. degree biochemistry program, continued enrollment is contingent on the following:

- Students must complete their B.S. degree in Chemistry, Biochemistry or related fields with a minimum GPA of 3.2 within one year of being admitted to the B.S./M.S. degree program.
- Students must achieve a minimum GPA of 3.0 at the completion of the M.S. non- thesis degree requirements.

Students in the integrated degree program will be considered an undergraduate until all B.S. degree requirements have been completed. The Department of Chemistry and Biochemistry will notify the Graduate College when the student has been awarded the B.S. degree and his/her status will be changed to that of a graduate student. Students will not be guaranteed financial support but may be eligible to receive teaching assistantships if positions are available and only after completing B.S. degree requirements.

The student's research advisor and Supervisory Committee will monitor and determine the student's progress in conducting research, literature reviews and successful completion of an agreed upon applied project. Eligibility for the awarding of the M.S. degree in Biochemistry will be reviewed at the beginning of the student's third semester in the B.S./M.S. Degree Program. Students who do not maintain program requirements will need submit a petition to remain in the B.S./M.S. Degree Program to the Graduate Programs Committee for the Department of Chemistry and Biochemistry. The Committee will review the circumstances contributing to the lack of progress and as a result, may request that the Chair of the Department of Chemistry and Biochemistry send a letter to the Graduate College recommending dismissal from the joint program. Students who have not completed the B.S. degree may be transferred back to the undergraduate student status.

Application to the integrated program is initiated by:

- Completing the Pre-Application and Program of Study found on the Department of Chemistry and Biochemistry web site.
- Including a Personal Statement on the application which states your research goals and how they relate to medicinal chemistry
- Requesting three letters of recommendation from the academic/research faculty verifying the applicant's readiness and probable success in completing the program. One of the letters must be from the student's current B.S. degree program advisor. Letters are requested and submitted electronically. Applicants begin the process by completing an on-line form at: <https://chemistry.asu.edu/recommendation/appLogin.asp>. Email addresses are used to track the letters, so applicants must be sure to enter the correct email address for each person listed.
- An unofficial transcript
- A personal interview with the Admissions Committee or a member of the Admissions Committee may be required if additional information is needed to determine eligibility for the admissions to the program

You will receive notification of your admission status by email. If accepted to the program, you will need to complete an on-line application to the Graduate College for the Master's Program in Biochemistry with a Concentration in Medicinal Chemistry. International students must provide proof of English proficiency or be exempt from this requirement by completing a least 90 undergraduate semester credit hours with a cumulative GPA of 3.4 or higher at a regionally accredited institution in the United States. GRE is not required for the Integrated B.S./M.S. Program

There is no application fee for the Pre-Application and the Department of Chemistry pays the fee for the application to the Graduate College for the M.S. Program.

Questions concerning this program can be directed to the Graduate Programs Coordinator, Martha McDowell, in the Physical Sciences Building – Wing D – Room 102 or by sending an email to [Martha.mcdowell@asu.edu](mailto:Martha.mcdowell@asu.edu).