

INFORMATION FOR CURRENT AND PROSPECTIVE BS/MS STUDENTS IN THE DEPARTMENT OF CHEMISTRY  
AND BIOCHEMISTRY

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There are circumstances where earning a Master's degree in Chemistry/Biochemistry rather than a Ph.D. is in the students' best interest. Student considering this option should meet with a faculty advisor and discuss their options, including the BS/MS program described throughout this document. For example, a Master's degree can be a tremendous advantage over a bachelor's degree in both career opportunities and in building a strong application for subsequent professional programs such as medical school without the time commitment required to earn a Ph.D. The BS/MS program provides an opportunity for USU students to earn credits and engage in thesis research that counts toward their research-based Master's degree in Chemistry or Biochemistry while also earning an undergraduate degree. Combining these degrees will likely reduce the time required to earn a Master's degree following graduation with a BS. As an example, a Master's program student entering our graduate program can expect to take 2-3 years (on average) to complete the credits and research required to earn a Master's degree. In contrast, a productive student in the BS/MS program could potentially reduce the time to their Master's degree to 1-2 years following completion of their BS requirements.

**Program advantages:**

- Students in the program are eligible to take graduate coursework as an undergraduate and by filing a "split form", these credits will be counted toward their graduate program requirements, not their undergraduate degree.
- As an undergraduate, the student will engage in research in one of the labs within the Department of Chemistry and Biochemistry and their research efforts will be continued in this lab following completion of their BS. The body of work, including research publications, spanning their undergraduate and graduate efforts within the program will be utilized to produce the thesis required for graduation with a Plan A research Master's degree.
- Upon admission to the program, the student will form a supervisory committee consisting of three faculty members (just as all Master's students in the Department of Chemistry and Biochemistry do). This committee will serve to advise the student concerning their academics and research. Details of the committee makeup and dates for committee formation and annual meetings are further described in the "INFORMATION FOR GRADUATE STUDENTS" documents for Chemistry and Biochemistry.
- The student will be expected to fully participate in the Chem7800 (graduate seminar) course each semester that it is offered, whether they take the course for credit or not.

**Program application:**

- To be considered for the BS/MS program, an applicant must:
  - Identify a USU chemistry and biochemistry faculty member who agrees to mentor them and allow the applicant to work in their research lab. This "assignment" must be approved by the Department Head.
  - Complete all of the application materials required for application to the Chemistry and Biochemistry graduate program and submit them to the department graduate program

coordinator. The items required at the time of approval of this document include a statement of purpose, a CV, three letters of recommendation (at least two from USU Chemistry and Biochemistry faculty and one of those from the faculty member who has agreed to mentor you in their research lab), and transcripts and degree certifications from all institutions attended.

- Have at least two semesters remaining prior to completing their BS, during which time they will dedicate a significant amount of time/effort to research in their assigned research lab. The specific amount of time required in the lab is largely determined between the student and the mentor, however, if the student's supervisory committee does not feel that the student is committing ample time/effort or is not making reasonable progress on their research project, the student may not be permitted to remain in the program.
- To be considered for transition from the undergraduate to graduate portion of the program, students will submit all required graduate application materials to the graduate school during the semester that they will be awarded their bachelor's degree. During this semester, the student must additionally hold a meeting with their supervisory committee to present their academic and research progress to date as well as an outline proposing the direction of their research project from this point through graduation with their Master's degree. A committee letter summarizing this meeting and formally recommending whether or not the student should remain in the BS/MS program and officially transition to "graduate student status" will be included in the student's application materials. After reviewing the application materials and the recommendation of the student's supervisory committee, the graduate recruitment committee will make a recommendation to the Department Head concerning the applicant's acceptance into the graduate program. The Department Head will make the final decision regarding the applicant's admission to the graduate program.
- Once a student is accepted into the MS portion of the program, the supervisory committee will continue to mentor the student and evaluate their progress. As with all Master's students in the Department, if the student is not making adequate progress in their research, the committee can request that the student switch to a Plan B or C Master's degree program or that they leave the program altogether.

#### **Some important details:**

- The graduate school allows a current USU undergraduate student to file for up to nine "split form" credits. These credits cannot be counted toward the student's undergraduate degree in any way, but are instead utilized as credits toward the graduate degree requirements. The full list of graduate degree credit requirements is available per division in the "INFORMATION FOR GRADUATE STUDENTS" documents for Chemistry and Biochemistry.
- For a split form to be approved by the Graduate school, a student must:
  - Submit a split form application to the School of Graduate Studies.
  - Have applied for undergraduate graduation.
  - Be within 30 credits of completing the bachelor's degree
  - Be taking at least one required undergraduate class in each semester during which courses are being split.
  - Have a cumulative undergraduate GPA of at least 3.0.

- The timeline for earning a graduate degree in Chemistry/Biochemistry is highly dependent on the student's progress in research and it is important to understand that a specific date for graduation cannot be accurately predicted at the start of a program.
- It will be the student's responsibility to work directly with the financial aid office to determine if their financial aid (if applicable) covers the cost of split credits utilized toward a graduate degree while working to complete their BS.
- Once a student in the BS/MS program completes their undergraduate degree and receives the endorsement from the Department Head to transition to the graduate program, they will be eligible for the financial benefits available to all graduate students in the Department. This includes employment as a TA and/or RA, an annual stipend, a tuition waiver covering the cost of remaining graduate credits required to earn a Master's degree in Chemistry/Biochemistry, and eligibility for subsidized health insurance.