

Welcome to the

Chemistry Education Major

in the College of Computational, Mathematical, and Physical Sciences

College Advisement Center

Website: <https://science.byu.edu/advisement>
Email: cmsadvising@byu.edu
Phone: 801-422-2674
Office: N-181 ESC

Chemistry and Biochemistry Department

Website: chem.byu.edu
Phone: 801-422-6268
Office: C-100 BNSN

Department Advisement – Valerie Maker*

Email: valerie.maker@byu.edu
Phone: 801-422-6269
Office: C-104 BNSN

Education Advisement Center

Website: education.byu.edu
Email: eac.frontdesk@byu.edu
Phone: 801-422-3426
Office: 175 MCKB

Faculty Advisors – Adam Bennion & Duane Merrell

Email: adam_bennion@byu.edu
Phone: 801-422-3095
Office: N-319 ESC
Email: duane_merrell@byu.edu
Phone: 801-422-2255
Office: N-143 ESC



Educator: Apply to the program at educator.byu.edu. If you have any technical issues, contact the EPP Help Center at 801-422-1190, <https://epp.byu.edu/>. You should plan to have the application completely done by the time you finish the PHY S 276 class.

Clubs

YChem: Wally Paxton, C303 BNSN, wally.paxton@byu.edu; 801-422-4917

Women in Chemistry: Pam Van Ry, C209 BNSN, pvanry@byu.edu, 801-422-1540

Cougs v Cancer: Cristy Welsh, MCDB 261, cancer_research@byu.edu, 801-422-3913

*Please visit Valerie Maker in the Chemistry and Biochemistry Department (C104 BNSN) as soon as possible if you have not already done so.

Learning outcomes can be found here: <https://learningoutcomes.byu.edu/Courses/program-courses/692828/Chemistry+Education+BS+/1322>

Things to Know

Resources for Graduation Planning

- Flow Charts and Major Academic Plans (MAPs) can be found here: <https://science.byu.edu/advisement/explore-majors-and-minors>.
- Academic advisors in N-181 ESC will help you understand course sequencing and help you plan classes to efficiently fill requirements. They can also help you with study skills and initial career exploration as well as connecting you with correct resources.
- Plan and register from your plan on MyMAP. Your academic advisor can help you understand how to best utilize this resource.
- Evaluate your current program. Periodically major programs are updated. An academic advisor would be happy to review the differences between the programs with you to help you determine what would be best for you.
- Consider meeting with a faculty advisor in your department. Contact info is found on the first page of this packet.

Tutoring Resources and Research

- Volunteer peer tutors are available through Y Serve if you need help with a class. Also, if you excel in a subject, consider serving your fellow students by becoming a tutor. Find out more here: <https://tutoring.byu.edu/>.
- Many departments provide TA Tutorial Labs and research opportunities. Check your department for details:
 - Chemistry and Biochemistry: C-104 BNSN, 801-422-6261, <https://chem.byu.edu/department/faculty/>
 - Computer Science: 3361 TMCB, 801-422-3027, cs-office@byu.edu
 - Geological Sciences: S-389 ESC, 801-422-3918, geology@byu.edu
 - Mathematics: 275 TMCB, 801-422-2061, office@mathematics.byu.edu
 - Mathematics Education: A180 ESC, 801-422-1735, office@mathed.byu.edu
 - Physics and Astronomy: N-283 ESC, 801-422-4361, physics_office@byu.edu
 - Statistics: 2152 WVB, 801-422-4505, statsec@stat.byu.edu

Prepare Early for a Career

- Check out Careers & Experiential Learning in 1134 WSC and at careers.byu.edu.
- Consider doing an internship.
 - Attend the STEM and Career Fairs held in fall and winter semesters.
 - Talk to your department about internship opportunities.
 - Use LinkedIn and Handshake (see flyer in this packet) to connect with alumni and apply for jobs/internships. BYU Connect is another great resource for networking (connect.byu.edu).
 - Talk with the college Career Director who can help you search for internships as well as assist you with many other career related strategies (see first page of this packet).
- Consider taking StDev 317 (Career Strategies) your junior year.
- Consider taking either Chem 502, CS 502, Geol 502, Math 502, PHSCS 502, or STAT 502 (1-credit Networking Class). Class is held for 1 hour each week.

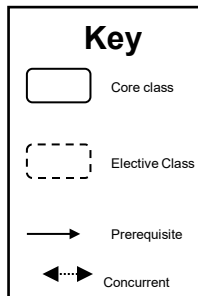
Chemistry Education BS

Requirements / Prerequisites

2025-2026 Academic Year

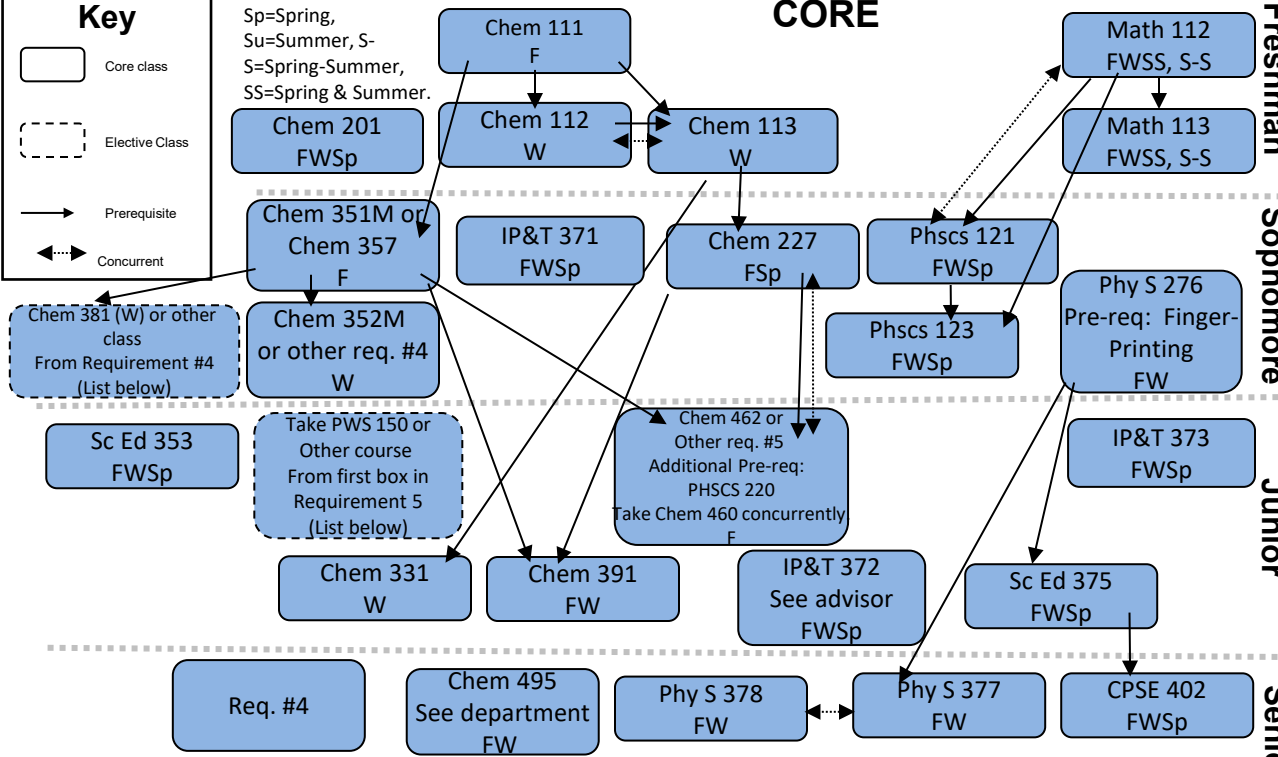
Major (82.5 Hours)

- Admission into the major or minor requires the following: **1)** 2.7 minimum high school/college GPA (be in the average of 3.0 for cohort), **2)** fingerprint background check, **3)** a cohort average ACT score of 21.25 (17 minimum) in reading, average cohort score of 21.25 (17 minimum) in math, and an average cohort writing score of 6.60 (5 minimum or completion of first-year writing requirement) **or** a SAT average cohort reading score of 543.33 (435 minimum), average cohort math score of 532.5 (426 minimum), and an average cohort essay score of 5.30 (4 minimum or completion of first-year writing requirement). Anyone who has not taken the correct ACT or SAT tests will need to take the Praxis Core tests and receive a 165 (132 minimum) for writing, 162.14 (130 minimum) for math, and 168.06 (134 minimum) for reading.
- Grades below C in professional education courses or content courses will not be accepted. Teacher candidates must have minimum of a cumulative 2.7 GPA.
- Complete the following: Chem 111, Chem 112, Chem 113, Chem 201, Chem 227, Chem 331, Chem 391, Chem 495.
- Complete one of the following: Chem 351M or Chem 357.
- Complete the following: Math 112, Math 113, Phscs 121, Phscs 123.
- Complete nine hours from the following: Chem 352M, Chem 354, Chem 381, Chem 384, Chem 397R, Chem 460, Chem 462, Chem 463, Chem 464, Chem 465, Chem 468, Chem 498R, Chem, 514, HONRS 499R.
- Complete 6 hours from the following electives: One of Biol 100, Biol 130, Cell 120, or PWS 150. Complete Geol 101 or Geol 111. Math 213 and Math 215, Math 290, Math 302, Math 314, Math 334, Phil 423R, Phscs 127, Phscs 137, Phscs 220, Phscs 222, Phscs 225, Phscs 240.
- Complete the Professional Education Component: CPSE 402, IP&T 371, IP&T 372 (see advisor), IP&T 373, Phy S 276, Phy S 377, Phy S 378, Sc Ed 353, Sc Ed 375. Note: FBI clearance is required for Phy S 276.
- Complete 12 hours from the following: Phy S 476 or Phys 496.



F=Fall, W=Winter, Sp=Spring, Su=Summer, S-S=Spring-Summer, SS=Spring & Summer.

CORE



*Enrolling in CHEM 497R and 498R gives students an opportunity to be mentored in a faculty's research lab and receive class credit. Enrollment in 497R can be repeated for several successive semesters, usually followed by 498R. Permission is required from the faculty member. Contact the department office for specific details.

Requirement 4
Complete 9.0 hours of the following Electives

Requirement 5
Complete 6.0 hours of the following Electives

CHEM 352M Pre-Req: Chem 351(M) W	Chem 397R Pre-req: Chem 111, Chem 112, & Chem 113 When taught: Contact Dept	Chem 463 Pre-req: Chem 462 & PHSCS 220 W	CHEM 468 Chem 481 or Chem 381 & PHSCS 220 W	Biol 100, Biol 130, CELL 120, or PWS 150 FWSS (depending on class)	Math 302 Pre-req: Math 113 FW	Phil 423R Pre-Req: Phy S 100 & Phil 300 See Department	PHSCS 222 PHSCS 121, 123, 220 FW	Any Req. #4 course Not used in Req. #4
CHEM 354 Pre-req: Chem 201 and Chem 351 (M) or 357 Take for 1 or 2 credits FWSp	CHEM 460 Pre-req: Math 113 & 213 Take with 462 F	CHEM 464 Chem 462, Chem 201 & chem 227 W	Chem 498R* Pre-Req: Consent & Chem 201 FWSS	Geol 101 (FW) or Geol 111 (F)	Math 314 Pre-Req: Math 113 FWSS	PHSCS 127 FWSp	PHSCS 225 Pre-Req: PHSCS 220 Or concurrent FW	With approval, Certain other courses In physics, geology, mathematics, and biology may be taken to satisfy the elective requirements.
CHEM 381 Pre-Req: Chem 351 (M) W	CHEM 462 Chem 351(M), PHSCS 220, Concurrent with Chem 227 F	CHEM 465 Chem 462, 463, 467 or 468 or concurrent W	CHEM 514 Chem 462 or 468 F	Math 213 & 215 Pre-req: Math 112 FWSS	Math 334 Pre-Req: Math 113 & Math 213 EWSS	PHSCS 137 Pre-Req: Phy S 100 F	PHSCS 240 Phscs 123 & 225 FW	
CHEM 384 Pre-req: Chem 201 & Chem 227 See Department			Honrs 499R FWSS	Math 290 Pre-req: Math 112 Or concurrent EWSp		PHSCS 220 Math 113 & PHSCS 121 FWSp		

Please Note: When Taught is subject to change.

Guide only—please consult MyMAP for full requirements.

Updated 07/1/2025



BYU's own job board. Employers who want to hire BYU graduates or offer internships to current students post job openings to this website and students apply. Just like LinkedIn, employers can view student profiles and students can network as they apply for jobs and internships



Login to handshake.byu.edu >>> **BYU Net ID**

*you do not need to create an account, just sign in with your BYU information

HOW TO MAKE THE MOST OUT OF HANDSHAKE:

1. COMPLETE YOUR PROFILE

- Upload your resume and it will auto-fill in your profile
- Completed profiles tailor your Handshake experience
- Information from your transcript is already uploaded
- Fill in the Summary/Bio section
- Fill in your past jobs and experiences, including all the bullet points you use on your resume
- Add a professional headshot and background photo

Remember: every word in your profile will be searchable by students and employers

4. EXPLORE FELLOW STUDENTS

- “Students” tab
- Search for fellow BYU students to view their profiles and job positions.

5. ATTEND EVENTS

- The “Events” tab will be your key to attending info sessions, interviews, and Career Fairs
- The “Calendar” tab under “Events” will show you what events are coming soon
- Make sure to save events you are interested in or RSVP so you do not forget to attend
- Spread the word to your friends on social media

6. DOWNLOAD HANDSHAKE APP

- Search: “Handshake” not “Handshake Career Services”
- Input your BYU e-mail address: netID@byu.edu (it will forward emails to the e-mail you have on file with BYU)
- Handshake will send you a link via e-mail to enable your account in the app
- Navigate the app to perform all the functions of the website that have been previously mentioned

7. VISIT THE CAREER STUDIO

- Freshen up your resume, cover letter, or LinkedIn
- Receive networking help
- Practice interviewing with a mock interview
- Meet with a full-time Career Director in your field

8. GET A JOB, RING THE BELL

- Once you're hired, stop by the Career Studio to ring our Victory Bell and get a picture for the Victory Board



employers are
5X MORE LIKELY
to view a profile that has
at least one job/skill/organization

2. APPLY FOR JOBS

- Search for job titles, employers, or skills
- Apply for interesting jobs that meet your skill set

3. RESEARCH COMPANIES

- Under the “Jobs” Tab there is an “Employers” Tab
- Search for keywords or locations to find companies that are the right fit for you
- Plan to attend their info sessions on BYU Campus, connect with them at Career Fairs, or set up informational interviews to learn more

Remember: when looking at companies or jobs, Handshake will tell you what other BYU students have worked there. Use this resource to network and discover more information!