



Chemistry, B.S. *major*

Forensic Science Emphasis

A total of 120 semester credits are needed for the **Chemistry, Forensic Science emphasis B.S.** degree and include the following:

- 40 upper division credits (level 3000/4000)
- 78 required major core credits
- Completion of Core Curriculum credits (Minnesota Transfer Curriculum [MnTC] Goal Areas 1-10) - required for all baccalaureate degrees
- Completion of BSU Focus and Nisidotaading Course Requirements

Dual Degrees

Students wishing to complete two degrees concurrently, (example: Bachelor of Science and Bachelor of Arts) must complete a minimum of an additional 30 credits above the required 120 credits.

Multiple Credentials

Any additional major, minor or certificate in a degree must have at least 6 credits of course work not used to meet the requirements of another major, minor or certificate in the degree.

Required Credits: 78

Required GPA: 2.25

I REQUIRED COURSES

Select 1 of the following courses:

- CHEM 1111 General Chemistry I (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)

Complete the following courses:

- CHEM 2212 Principles of Chemistry II (4 credits)
- CHEM 3100 Journal Club (1 credit)
- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- CHEM 3372 Organic Chemistry Laboratory II (1 credit)
- CHEM 3507 Analytical Chemistry (3 credits)
- CHEM 3570 Analytical Chemistry Laboratory (1 credit)
- CHEM 4510 Instrumental Methods of Analysis (3 credits)
- CHEM 4571 Instrumental Analysis Laboratory I (1 credit)
- CHEM 4572 Instrumental Analysis Laboratory II (1 credit)
- MATH 2471 Calculus I (5 credits)
- PHYS 1101 General Physics I (4 credits)
or PHYS 2101 University Physics I (4 credits)

II REQUIRED EMPHASIS

Complete the following courses:

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 2360 Genetics (4 credits)
- CHEM 2210 Forensic Science (3 credits)
- CHEM 2270 Forensic Science Laboratory (1 credit)
- CHEM 4411 Biochemistry I (3 credits)
- CHEM 4471 Biochemistry Laboratory I (1 credit)
- CHEM 4412 Biochemistry II (3 credits)
- CHEM 4472 Biochemistry Laboratory II (1 credit)
- CJST 1120 Criminal Justice and Society (3 credits)
- CJST 3359 Criminal Investigation (3 credits)
- CSCI 1310 Computational Problem Solving & Society (3 credits)
- CSCI 2750 Introduction to Data Analysis (3 credits)

- STAT 2610 Applied Statistics (4 credits)
or PSYC 3401 Basic Statistics for Research (4 credits)

Complete two of the following course electives:

- BIOL 3074 Molecular Techniques (2 credits)
- BIOL 3075 Cellular Techniques (2 credits)
- BIOL 3380 Molecular Genetics (3 credits)
- BIOL 3590 Cell Biology (3 credits)
- CHEM 3140 Chemical Toxicology (3 credits)
- CHEM 4476 Techniques in Biotechnology and Biochemistry (2 credits)
- CSCI 2321 Computer Science I (4 credits)
- CJST 3355 Drugs and Criminal Justice (3 credits)
- CJST 3358 Criminal Law (3 credits)
- CJST 3360 Criminal Procedure and Evidence (3 credits)
- JUST 3377 Forensic Victimology (3 credits)

Select 1 of the following courses:

- CHEM 3811 Intermediate Inorganic Chemistry (3 credits)
- CHEM 4711 Physical Chemistry I (3 credits)