B.S. EDUCATION: SCIENCE (CHEMISTRY)

This Bachelor of Science in Education degree enables you to teach Middle School/Junior High or High School students. Course requirements for this program are valid at IUB as reflected in the School of Education Bulletin. A 4 year college plan requires completion of 15-16 credits each semester. A 2.5 GPA overall is required for retention and graduation. A total of 120 credits are required for graduation.

I. IUB & SCHOOL OF EDUCATION
GENERAL EDUCATION REQUIREMENTS
http://gened.iub.edu/courses/genedcourses.html
(Careful selection & completion of courses with a "C" or higher grade may allow double counting within General Education, Professional Education &/or Content Field.)

- Oral Expression (Select one)
  - (Grade of C or higher required)
    - CMCL-C 122 Interpersonal Communication (S&H) 3
    - COLL-P 155 Public Oral Communication 3
    - EDUC-G 203 Comm. for Youth Serving Professionals (S&H) 3

- English Composition (EC) (Select one)
  - (Grade of C or higher required)
    - CMLT-C 110 Writing the World 3
    - ENG-W 131 Elementary Composition OR 3
    - ENG-W 131EX Elementary Composition-Exempt 3
    - ENG-W 170 Intro to Argumentative Writing (Topic: Projects in Reading & Writing) 3

- Intensive Writing Course (IW) (Select one)
  - 3 credits
    - EDUC-H 205 Intro to Educational Thought (P: English Comp) (S&H) 3
    - EDUC-H 340 Education & American Culture (P: English Comp & Soph. Standing) 3

II. ADMISSION REQUIREMENTS
(Competitive enrollment. Meeting minimum requirements does not guarantee admission.)

1. Students must satisfy the Academic Skills Assessment requirement for admission to the TEP by using any of the following options:
   - Qualifying scores on CASA (taken after Sept. 1, 2013)
     - Reading 220, Math 220, Writing 220
   - Qualifying scores on PRAXIS I (if taken before Sept. 1, 2013)
     - Reading 176, Writing 172, Math 175
   - PRAXIS I combined score of at least 527 (if taken before Sept. 1, 2013)
     - Sum of Reading + Writing + Math scores = 527
   - SAT combined score of at least 1100
     - Sum of EN + MA + RE + SR scores divided by 4 = 24
   - ACT composite score of at least 24
     - Sum of MA + VE = 1100
   - ACT composite score of at least 24
     - Sum of EN + MA + RE + SR scores divided by 4 = 24
   - 2.5 GPA overall.

2. 21 credits and a 2.5 GPA in the content field with at least 15 credits completed and 6 credits in progress. Grade of C or higher is required in each content field course.

3. Completion of or enrollment in prerequisites: Grade of C or higher is required in each EDUC course.

4. Completion or enrollment in prerequisites: Grade of C or higher is required in each EDUC course.

Courses
- EDUC-M 300 Teaching in a Pluralistic Society (D) 3
- EDUC-P 312 Learning Theory into Practice AND 3
- EDUC-P 313 Adolescents in a Learning Community 3
- EDUC-W 200 Using Computers in Education (IF) 3

5. Apply by October 1 for Spring Semester Block I courses.

6. Submit TEP Application Online:

https://info.educ.indiana.edu/teachered/

III. MATHEMATICAL MODELING (MM) (Select one)
- 3-4 credits
  - MATH-M/S/V 118 Finite Mathematics 3
  - MATH-D 116 Intro to Finite Mathematics I AND 2
  - MATH-D 117 Intro to Finite Mathematics II (Note: D116 must have a grade of C- or higher & D117 must have a passing grade to fulfill the MM requirement) 2
  - MATH-J 113 Intro to Calculus with Applications 3
  - MATH-M 119 Brief Survey of Calculus I (Recommended) 3
  - MATH-M 211 Calculus I (Recommended) 4
  - MATH-M 213 Accelerated Calculus 4

- Arts & Humanities (A&H) 6 credits
  - Complete at least 2 courses for a total of at least 6 credits.

- Social & Historical Studies (S&H) 6 credits
  - Complete at least 2 courses for a total of at least 6 credits.

- Natural & Mathematical Sciences (N&M)
  - (Complete ONE of the following options.) 5+ credits
    - Option I: Complete at least 2 courses for a total of at least 5 credits. At least 1 of these courses must be a Natural Science (* ) course.
      - ____________________________________________
    - Option II: Complete a 5 credit science course.
      - ____________________________________________
    - Option III: International Experience (IE): Complete an approved study abroad program or internship of at least 6 credits & at least 6 weeks abroad in duration.
      - ____________________________________________

- World Languages (WL)/World Cultures (WC)
  - (Complete ONE of the following options.) 6 credits
    - Option I: Language Study (WL): Complete the study of an approved single language through the second semester of the second-year level of college-level coursework.
      - ____________________________________________
    - Option II: World Culture (WC): Complete at least 2 courses for a total of at least 6 credits.
      - ____________________________________________
    - Option III: International Experience (IE): Complete an approved study abroad program or internship of at least 6 credits & at least 6 weeks abroad in duration.
      - ____________________________________________
additional semester(s) between the completion of Block II and  
EDUC  
EDUC  
EDUC  
EDUC  
Enriching Educational Experiences (EEE)  12 credits  
EDUC-M 480  Student Teaching: Secondary  
II. PROFESSIONAL EDUCATION  48 credits/2.5 GPA  
C or higher grade is required in each course listed below.)  
Prerequisite Education Courses  12 credits  
These courses must be taken before admission to the TEP.  
EDUC-M 300  Teaching in a Pluralistic Society (P: Soph. Standing)  
EDUC-P 312  Learning Theory into Practice (P: Soph. Standing)  
EDUC-P 313  Adolescents in a Learning Community (P: Soph. Standing)  
EDUC-W 200  Using Computers in Education (IF)  
Required Non-Authorized Course  6 credits  
EDUC-A 308  Legal & Ethical Issues for Teachers (P: Soph. Standing)  
EDUC-H 205  Intro to Educational Thought (P: English Comp) (S&H) (IW) OR  
EDUC-H 340  Education & American Culture (P: English Comp & Soph. Standing) (IW)  
Teacher Education Program  30 credits  
EDUC-K 306  Teaching Students with Special Needs: Secondary Classrooms  
Chemistry Major  30 credits  
CHEM-C 127  Principles of Chem & Biochem I Lab OR  
CHEM-S 117  Principles of Chem & Biochem I-Honors  
CHEM-C/S 341  Organic Chem I Lectures (P: C117/127 or S117)  
CHEM-C/S 342  Organic Chem II Lectures (P: C/S341) (R: C343 Concurrently)  
CHEM-C/S 343  Organic Chem I Lab (P: C341) (P/C: C342)  
CHEM-C 360  Intro to Physical Chem (P: C117/127 or S117; N330 strongly recommended, MATH-M119, PHYS-P201 or equiv.) OR  
CHEM-C 361  Physical Chem of Bulk Matter (P: C117/127 or S117, MATH-M212, PHYS-P202 or P222) OR  
CHEM-C 362  Physical Chem of Molecules (P: C117-127 or S117, N330 strongly recommended, MATH-M212, PHYS-P202 or P222)  
Complete 14 credits from the following:  
CHEM-N 330  Intermediate Inorganic Chem (P: C/S342 & R340) (P: C/S343) OR  
CHEM-C/S 118  Principles of Chem & Biochem II (P: C117/127 or S117) OR  
CHEM-A 314  Biol. & Environ. Chemical Analysis (P: C/S341 or R340 & MATH-M119 or M211) OR  
CHEM-C 317  Equilibria and Electrochem (P/C: C/S341 & MATH-M211 or M213) OR  
CHEM-C 318  Spectrochem and Separations (P/C: C/S 341 and MATH-M211 or M213)  
CHEM-A 315  Chemical Measurements Lab (P: C317 & C318 or A314 or A318)  
CHEM-A 316  Bioanalytical Chem Lab (P: C317 & C318 or P: C/A314)  
CHEM-C/S 344  Organic Chem II Lab (P: C/S342 & C/S343)  
CHEM-C 364  Intro to Basic Measurements (P: C/S361) OR  
CHEM-P 364  Basic Measurements-Physical Chem (P: C/S361) AND  
CHEM-P 464  Advanced Measurements-Physical Chem (P: P/F364, P/C: C362)  
CHEM-C 430  Inorganic Chem (P: C/S318 or N/S330 & C/S342) (P: C362)  
CHEM-C 432  Spectroscopic Methods in Inorganic Chem (P: C360 or C361 & C430)  
CHEM-C 437  Inorganic Chem Lab (P: C/S343 & C430)  
CHEM-C 443  Organic Spectroscopy (P: C342 & C362)  
CHEM-C 460  Nuclear Chem (P/C: C360 & C/S361)  
CHEM-C 481  Physical Biochem (P: C/S361 & C484)  
CHEM-C 483  Biological Chem (P: C/S342 or R340) OR  
CHEM-C 484  Biomolecules and Catabolism (P: C/S342)  
CHEM-C 485  Biosynthesis and Physiology (P: C484)  
IV. ELECTIVES (To total 120 credits)