In this video, we will be going over the different types of chemistry majors offered at the University of Illinois at Urbana-Champaign and their specific degree requirements.
The Chemistry major is divided up into three major areas and two sub areas of study. The Chemistry Sciences & Letters degree is a Bachelor of Science in Liberal Arts and Sciences (BSLAS), and it is what most students in Chemistry major in. Students can also elect to complete a Chemistry Sciences & Letters degree with a Secondary Education Minor, which is the typical way to get your credentials to teach high school chemistry.

The Bachelor of Science in Specialized Chemistry is our American Chemical Society Certified degree. It also contains an Environmental Chemistry concentration option. A secondary education minor is possible but may extend the time needed to finish your degree.

The Computer Science + Chemistry major is covered in a separate video.
Chemistry Sciences and Letters is our most popular chemistry major. It allows the most flexibility to pursue other interests or other majors while still getting a solid background in chemistry. For this reason, it is the preferred chemistry major for pre-health students but is also a solid choice for students wanting to go into industry. Employers do not know the difference between Specialized Chemistry or Chemistry Sciences and Letters, and both are Bachelor of Science degrees. Chemistry Sciences and Letters students can pursue research positions or attend graduate school.
The Chemistry Sciences and Letters major requires 30 credit hours of chemistry to complete the degree and 12 credit hours must be advanced 300 or 400 level courses. Typically, students will start with the General Chemistry course sequence of CHEM 102 through CHEM 105.

10 hours of algebra-based physics is required but not usually completed in the first year, and math is required through Calculus III.
The typical first semester in Chemistry Sciences and Letters includes CHEM 102 & 103, which is General Chemistry and the accompanying lab, the math course you test into, RHET 105 (or other composition 1 course) and a general education course as well as LAS 101 and CHEM 150 first year experience courses. Your first-year schedule will vary depending on your placement scores, any AP or IB credit you may have, and your educational objectives that you will discuss with your advisor during new student registration.
The Specialized Chemistry major is certified by the American Chemical Society (ACS). Specialized Chemistry involves higher level chemistry courses and significantly more labs. It is a great option for those wanting to pursue a PhD in Chemistry.

Due to the rigor of the classes and the number of requirements, Specialized Chemistry majors may have more difficulty in completing pre-health prerequisites and obtaining a competitive GPA for admission to professional health schools.
Specialized Chemistry requires 47 credit hours of chemistry, 31 of which must be advanced hours.

Specialized Chemistry students take the more rigorous accelerated chemistry, CHEM 202 through CHEM 205. Depending on the student’s placement scores and recommendations from their advisor, students can take CHEM 102-105 with CHEM 222 and 223 in place of the accelerated sequence of CHEM 202-205. Students in Specialized Chemistry who begin in CHEM 102 and 103 will not be behind in completing their degree requirements.

Specialized Chemistry involves more Math, including calculus 1, 2, and 3, as well as differential equations and a linear algebra or matrix theory course. Calculus-based physics is required and is typically started in the spring of your first year.
The rest of the schedule typically consists of the math course you test into, RHET 105 (or composition I), and a general education course, as well as LAS 101 and CHEM 150 first-year experience courses.

Your first-year schedule will vary depending on your placement scores, any AP or IB credit you may have, and your educational objectives that you will discuss with your advisor during New Student Registration.
Chemistry Sciences & Letters is flexible and allows students to pursue a double major or minor. It is also the preferred major for pre-health students and requires calculus 1, 2, and 3 and algebra-based physics. Specialized chemistry is the best option for students interested in attending graduate school to pursue a PhD and has more rigorous chemistry, physics, and math courses. It also has the option of a concentration in environmental chemistry.

Both chemistry degrees are Bachelor of Science degrees and have the option for a secondary education minor. Both are good choices for industry, research, or graduate school.
Be sure to speak with your advisor during new student registration about any questions you may have and to find out more about the differences between Chemistry Sciences and Letters and Specialized Chemistry to determine which is best for you.