Exam Review Packet

Preamble

We, students, faculty, and alumni of the Departments of Civil and Environmental Engineering at various colleges and universities, believing that a mark of distinction should be placed on the undergraduate who has upheld the honor of the department by high scholastic ability, and believing that a society with the broad principles of scholarship, character, practicality, and sociability would be an incentive to greater achievements in the civil engineering profession, do adopt this constitution as a guiding instrument for this organization.

Our Purpose

Dedicated to the purpose of maintaining and promoting the status of civil engineering as an ideal profession, Chi-Epsilon was organized to recognize the characteristics of the individual civil engineer deemed to be fundamental to the successful pursuit of an engineering career, and to aid in the development of those characteristics in the civil engineering student. Engineering, the application of scientific principles to the practical needs of society, is assuming a constantly increasing responsibility for the well-being of all people, and thus calling for competence of the highest order. This responsibility can be discharged only by a professional group whose members are possessed of a good basic technical ability, intelligence, moral integrity, and effective social poise in their relationship with the larger community of which they are part. To contribute to the improvement of the profession, Chi Epsilon fosters the development and exercise of sound traits of character and technical ability among civil engineers, and its members, by precept and example, toward an ever higher standard of professional service.

History of XE

In the spring of 1922 two groups of civil engineering students at the University of Illinois, one calling itself Chi Epsilon, and the other calling itself Chi Delta Chi, independently of each other, took steps to petition the faculty for permission to establish an honorary civil engineering fraternity. As soon as the existence of the two groups became known to each other, plans were immediately propagated to merge the two groups. Dean M. S. Ketchum, Professor Ira O. Baker, and Professor C. C. Williams, later all chapter honor members, gave moral support to the idea of a departmental honorary fraternity and on May 20, 1922, the Council of the University granted permission to the petitioning group of 25 charter members to found the CHI EPSILON FRATERNITY. Upon the shoulders of the charter officers R. A. Black, president, Wm. A. Gurtler, vice president, and H. T. Larsen, secretary-treasurer, rested the burden and trials during the organization period, and it was due to the care and foresight used by these officers in the formulation of the early plans for initial organization and expansion that Chi Epsilon has been able to progress steadily.

As soon as the plans for the local organization had been perfected, steps were taken to expand into a national fraternity by banding together with groups at various other universities. For the furtherance of these plans a committee composed of William A. Gurtler, chairman, M. W. Burns, and H. T. Larsen was appointed. An active expansion policy was decided upon and letters were written to presidents of large engineering schools inviting petitions to Chi Epsilon. Meanwhile, the petition to the State of Illinois to incorporate as a national honorary civil engineering fraternity was granted and a certificate of incorporation was issued on February 13, 1923.
Many encouraging replies were received from various universities, but it was not until March 29, 1923 upon the installation of the Armour Chapter at the Armour Institute of Technology, that Chi Epsilon became truly a national fraternity. April 28, 1923, saw the national organization increase to three chapters upon the installation of the Minnesota Chapter at the University of Minnesota. The work of the Committee on Expansion became very complex and required the assumption of authority for the fulfillment of its plans. With the assumption of authority the committee finally became the Temporary Supreme Council of the National Fraternity and in order that it be a representative body P. L. Bergquist of the Minnesota Chapter, and H.W. Munday, of the Armour Chapter, were elected to it. As a result of the active expansion campaign, petitions were received from the Universities of Southern California and Comet, and the chapters installed on January 5, 1924, and January 10, 1925, respectively. The First Conclave was held at the Armour Chapter in Chicago July 4, 1924, at which twelve members representing four chapters were present. Drastic changes were made in the constitution and general government, most noteworthy being the establishment of an endowment fund for conclave expenses. Members of the First Supreme Council were elected by the conclave, who in turn elected the following officers: Wm. A. Gurtler, Grand President; P. L. Bergquist, Grand Vice President; C. W. Carlson, Grand Secretary-Treasurer; H. W. Munday, Editor of The Transit; F. M. Hines, member; and M. G. Burkey, member. Due to the temporary slowing up of the work on the national expansion, a special meeting of the Supreme Council was called in Chicago in February 1924. Present at this meeting were members Gurtler, Carlson, Munday, and Burkey. An extensive campaign was planned with hopes that the number of chapters might be increased within the year, after which time a more conservative policy was to be enacted.

The membership had grown to 190 by February 1925. The petition of the University of Wisconsin group resulted in the installation of the sixth chapter on February 14, 1925, at Madison, Wisconsin. The seventh chapter was installed shortly thereafter at the University of California on May 10, 1925.

In its 80 year history three men have served Chi Epsilon as its Secretary-Treasurer for 58 of those years: Ray S. wen (1928-52), John A. Focht (1958-1972), and Dexter C. Jameson, Jr. (1972-92). One of Chi Epsilon’s founding members, Harold T. Larsen, had a long–term and profound effect on the society. He served two terms as National Secretary-Treasurer in the early years, was a member of the Supreme Council in his late years, and was named Councillor Emeritus in 1958 and remained as such until his death in 1971. The Harold T. Larsen Award was established by the Conclave in 1976 to honor those members who have given “Outstanding Service to Chi Epsilon.”

In the first 35 years of its history Chi Epsilon had established 49 chapters. Since then the society has grown at a steady rate of 20 chapters per decade. Eight chapters have now become inactive (Colorado-Denver, Columbia, Detroit, Norwich, Notre Dame, NYU, SMU, and Yale).

The 22nd National Conclave was held at the University of Illinois, April 6-8, 1972. It was very appropriate for Chi Epsilon to return to the Illinois campus to observe the fiftieth anniversary of its founding. Fifty-eight of the then 78 active chapters had one or more delegates in attendance at this notable conclave. The membership of Chi Epsilon had grown to 28,500 by April 1972. The 25th National Conclave voted to change the name of our organization from Chi Epsilon Fraternity to Chi Epsilon. A total of 40,000 members had been initiated since the founding. Most of the Conclaves (29 of 34) were held in the northeast geographical quadrant of the country, but in 1992, on the 70th anniversary of its founding, Chi Epsilon held its 32nd Conclave on the campus of the largest chapter, Texas A&M, and then its 33rd Conclave moved further west to Arizona State. In the past 20 years, membership has grown at an average rate of 4,000 per biennium and, as of 1996, the total society membership exceeded 80,000, including 53 National Honor Members and 1600 Chapter Honor Members. Prior to 1956 the Supreme Council had seven members consisting of the President, Vice President, Secretary-Treasurer, Editor, and three at-large Councillors. In 1956 the Conclave (held at Purdue University) changed Bylaws to create seven districts: Western, Midwestern, Southwestern, Southeastern, North Central, Mid-Atlantic, and New England. One Councillor was elected for each district. As the member chapters increased and were distributed throughout the country geographically, the society adopted an eleven district format, but since 1982 has used a ten district organization. The ten Councillors are elected by district caucuses at the Conclaves.
**Our Motto**

Chi Epsilon retains as its motto the Greek letters Chi Delta Chi, which formed the name of the junior honor society founded in 1922 at the University of Illinois and which is one of the roots of Chi Epsilon. Chi Delta Chi - These three letters symbolize our English motto: **Conception**, **Design**, and **Construction**. These are the three phases of every creative project. **Conception** is inventive; it perceives the opportunity to do something and recognizes the means of accomplishment. Fitting that means of accomplishment to the specific case and planning a definite method of work is **Design**. **Construction** is the actual building. It makes a reality of the idea of conception and the plan of design. **Conception** requires imagination and intelligence. **Design** requires education and practical experience. **Construction** requires energy, determination, and perseverance. In these functions, your adherence to the principles of Chi Epsilon will serve you well.

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**Chi Epsilon Key**

The official emblem of Chi Epsilon is a key that represents the full front view of an engineer's transit. The jewel represents the objective of the transit, the hole is the eye piece, the notches on the sides are leveling screws, and the stem represents the tripod.

- **Letter Background**: Black
- **Letters "XE"**: Gold, outlined in Black
- **Key Background**: White
- **Key Sides**: White
- **Key Backside**: Leave Blank