The examination is issued as a ten-day design project. In the first meeting, a design problem is explained to the student by the faculty member in charge of the design examination. In about ten days, the student defends the solution orally with appropriate visual aids and written material before the design area faculty of the School of Mechanical Engineering. The ten-day period does not imply that the student is expected to devote that much full time to the project. Rather it is recognized that creative and diagnostic efforts inherent to engineering design need contemplative time, opportunities for inspiration and gestation retreats, as well as analytical problem solving.

Some of the areas of design proficiency the faculty will be probing for are:

- Command of the engineering sciences encountered in undergraduate design courses
- Problem solving strategies
- Ability to identify critical engineering characteristics of a design
- Strategies for numerical or experimental evaluation of the critical details
- Ability to acquire information and data in a field outside one’s academic experience but pertinent to the design project at hand
- Effectiveness in communicating your ideas, concepts, strategies, etc.
- Any personal characteristics and experiences which, superimposed onto your academic background, enhance your potential for advanced engineering design

Questions regarding interpretation and conduct of the examination can be addressed to the faculty member in charge of the exam during the ten-day preparation period. The preparation for the examination shall be entirely the student’s own work.

Twenty minutes is allotted for the presentation with an additional ten minutes for questions. One copy of the presentation and the notebook containing calculations, drawings, etc., should be made available at presentation.