

AAWRE Oral Examination

An oral interview was requested by the AAWRE admissions committee to determine whether the candidate has sufficient experience and expertise to be accepted as a Diplomate in Water Resources Engineering. Information is given below regarding the Oral Interview Process, AAWRE Admission Committee Evaluation Criteria, AAWRE certification requirements and AAWRE Fundamental Principals and Canons

Oral Interview Process

The candidate is to give a 30 minute presentation that should cover his professional work experience, with example projects as appropriate. Through this presentation, the candidate should demonstrate that they have achieved mastery in one of the Water Resources Engineering (WRE) Body of Knowledge (BOK) elements given below. The candidate should be specific about which BOK elements they believe they have mastered. The candidate can provide hand out materials only (5 copies), to supplement their application. No computer projector, slide, or overhead presentations are allowed. (Although for example, a handout of powerpoint slides is acceptable).

Following this presentation, the candidate will be given a scenario or a number of scenarios to assess their professional judgment. These scenarios will not be provided to the candidate before the interview. The responses will be used to evaluate the candidates understanding of water resources engineering and approaches to solving problems.

Admissions Committee Evaluation Criteria

In evaluating the above requirements, the AAWRE board has decided to use the AAWRE Body of Knowledge (BOK) elements and levels to evaluate whether a candidate has progressed to an acceptable level of professional competence and can be considered as an expert in one or more aspects of Water Resources Engineering.

For AAWRE, mastery is defined as professional achievement as reflected in education, experience, and that demonstrates a high level of skill with respect to technology, management, public policy, or leadership for water resources engineering projects. AAWRE encourages certification for applicants in their area of specialization, as well as, participation and/or leadership in professional societies, board of registration, and national review panels, etc. AAWRE has added a new level of Mastery for the following outcomes and add the following rubric to the Water Resources Engineering BOK utilized by AAWRE. Candidates are expected to demonstrate mastery in one or more of these areas.

Body of Knowledge Mastery

- 12: Specialized area related to Water Resources Engineering. Professional Engineer, through a combination of education, experience, and corresponding accomplishments, has demonstrated a high level of skill in a specialized area of Water Resources Engineering. AAWRE encourages certification in areas of water resources engineering specialization.
- 13: Project management, construction, and asset management. Professional Engineer, through education, experience, and corresponding accomplishments, has demonstrated a high level of skill in the management of complex water resources engineering projects and/or programs.

- 14: Business, public policy and public administration. Professional Engineer, through education, experience, and corresponding accomplishments, has demonstrated a high level of skill in the evaluation of business plans, public policy recommendations, and a system of public administration in support of water resources projects and/or programs.
- 15: Leadership principles and attitudes. Professional Engineer, through education, experience, and accomplishments, has demonstrated a high level of skill in providing leadership with respect to complex water resources projects and/or programs. AAWRE encourages participation and/or leadership in professional societies, board of registration, and national review panels, etc.

Requirements for Certification as a Diplomate in AAWRE:

1. The applicant shall be of good moral character and of high ethical standing in the profession.
2. The applicant shall be actively engaged in the professional practice of water resources engineering.
3. The applicant shall possess a valid license to practice professional engineering issued by a State, Territory, Possession, or District of the United States or an equivalent license or certificate issued by a foreign country, providing that said valid license or certificate of registration from a foreign country shall be evaluated by the Board of Trustees on a case-by-case basis to assure that the license or certificate meets the standards set by the Board of Trustees.
4. The applicant shall have been awarded a baccalaureate degree in engineering from a college of engineering program accredited by the Accreditation Board for Engineering and Technology, Inc., or its equivalent, and have successfully completed approximately 30 semester credits of acceptable graduate-level, or upper-level undergraduate courses in water resources engineering acceptable to the Board of Trustees.
5. In lieu of a baccalaureate degree and approximately 30 semester credits, the applicant shall have been awarded either a master of science, master of engineering, or doctoral degree in water resources engineering from one or more educational institutions of recognized standing, or its equivalent.
6. The applicant shall possess a minimum of ten years of professional experience in water resources engineering work. Such work experience shall be in one or more of the specialty areas established by the Board of Trustees. Further, such work shall include active participation in responsible planning, design, analysis, operation, management, regulation, research, or teaching. In the case of teaching, the work experience shall be at an educational institution of recognized standing, or its equivalent.
7. The applicant has agreed in writing to adhere to the AAWRE Code of Ethics.

AAWRE Fundamental Principles

Engineers uphold and advance the integrity, honor and dignity of the engineering profession by:

1. using their knowledge and skill for the enhancement of human welfare and the environment;
2. being honest and impartial and serving with fidelity the public, their employers and clients;
3. striving to increase the competence and prestige of the engineering profession; and
4. supporting the professional and technical societies of their disciplines.

AAWRE Fundamental Canons

1. Engineers shall hold paramount the safety, health and welfare of the public and shall strive to comply with the principles of sustainable development in the performance of their professional duties.
2. Engineers shall perform services only in areas of their competence.
3. Engineers shall issue public statements only in an objective and truthful manner.
4. Engineers shall act in professional matters for each employer or client as faithful agents or trustees, and shall avoid conflicts of interest.
5. Engineers shall build their professional reputation on the merit of their services and shall not compete unfairly with others.
6. Engineers shall act in such a manner as to uphold and enhance the honor, integrity, and dignity of the engineering profession and shall act with zero tolerance for bribery, fraud, and corruption.
7. Engineers shall continue their professional development throughout their careers, and shall provide opportunities for the professional development of those engineers under their supervision.