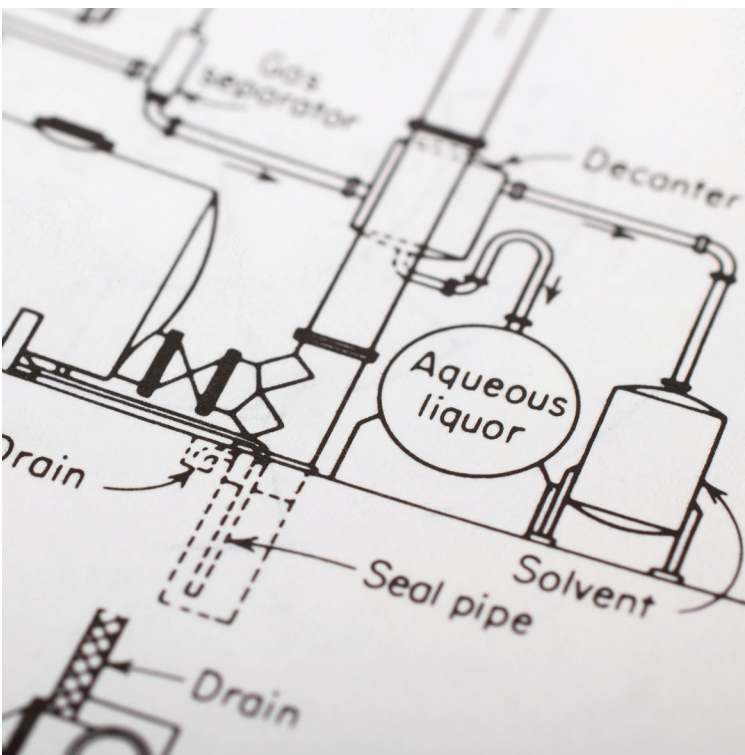


The FUNDAMENTALS OF ENGINEERING EXAM for Nuclear Engineers

Start your Journey to become a Nuclear Professional Engineer (P.E.)



Become a Licensed Nuclear Professional Engineer (P.E.)

The Nuclear Professional Engineer (P.E.) licensure establishes you as one who is dedicated to solving problems with integrity, with creativity, and ethically. It demonstrates your proficiency, professionalism, and responsibility to public health and safety. It sets you apart even when licensure is not required for your position.

Your path to obtaining this valuable credential begins with successfully passing the **FUNDAMENTALS OF ENGINEERING EXAM**.

Step 1: Take the FE EXAM

What is the FUNDAMENTALS OF ENGINEERING (FE) EXAM?

- A broad knowledge type of exam that covers many of the topics required for an engineering degree
- Designed for recent graduates and students close to earning an undergraduate engineering degree from an EAC/ABET-accredited program, usually taken during the senior year of college
- Approximately 50,000 examinees annually, 70% students
- Offered in seven disciplines; most often selected by nuclear engineers: FE Mechanical or FE Other Disciplines
- A computer-based exam administered year-round at NCEES-approved Pearson VUE Test Centers
 - Six hours
 - Closed book (onscreen, searchable reference book provided with the exam)
 - 110 multiple-choice questions

Who develops and administers the FE EXAM?

National Council of Examiners for Engineering and Surveying – NCEES

- Coalition of member licensing boards from all 50 states and 5 U.S. jurisdictions
- Developed “Model Law” based on best practices
- Promotes uniform requirements for licensure

FE EXAM Pass Rates

- Among first-time examinees who attended EAC/ABET-accredited engineering programs and took the FE exam within 12 months of graduation
 - Pass rates ranged from 67% to 79% depending upon exam discipline
 - 85% pass rate for students in a nuclear program
 - Note: FE Other Disciplines had the highest pass rate!
 - Among those in a **nuclear program, 90% passed** the “Other Disciplines” exam
 - Pass rates decrease with time since being enrolled in college:
 - **Still enrolled: 75%**
 - Within 2 years of Graduation: 52%
 - Within 3-5 years of Graduation: 40%

Step 1

Step 2: Take the PE EXAM

What is Professional Licensure?

- Authority granted by a state to practice a particular profession that affects public safety, health, and welfare
- Recognized professions: Engineering, Medicine, Law, Accounting, and Nursing
- Professions subject to licensure share common elements:
 - Code of ethics
 - Rules for professional conduct
 - Minimum standards of professional competency
 - Strong desire to be worthy of the public's trust
 - Continuing professional competency
 - Protect public interests by enforcing standards and imposing disciplinary action when necessary

Why become a licensed Professional Engineer (P.E.) in Nuclear?

Licensed nuclear engineers:

- Command higher salaries
- Experience faster career advancement
- Are qualified to work independently as consultants or business owners
- Demonstrate a level of proficiency, education, and experience

The P.E. license is required to:

- Offer engineering services to the public
- Perform consulting services for pay
- Sign/seal engineering plans and documents
- Use the title Professional Engineer/Engineer
- Act as a qualified expert witness (depending on jurisdiction)
- And, may be required to teach engineering design courses

Pathway to P.E. Licensure

- Pass the FUNDAMENTALS OF ENGINEERING (FE) EXAM
- Earn a four-year degree in engineering from an ABET-accredited engineering program
- Gain acceptable work experience (typically a minimum of four years); in most cases, this must be completed under the supervision of a P.E.
- Pass the PRINCIPLES AND PRACTICE OF ENGINEERING (PE) EXAM administered by NCEES
- Apply for and maintain your P.E. license as required by your state licensing board (satisfy applicable continuing education requirements)

Become a Licensed Nuclear Professional Engineer (P.E.)

For more information visit: ncees.org/engineering/fe

- Printed exam reference book available from NCEES for \$14, or download PDF for free
- Specifications for FE exams available as PDFs
- Registration process
- Fees

Tips to prepare for the FE Exam

- Review specifications for the version of the exam you are taking
- Focus review on areas where you believe you can answer the most questions correctly
- Familiarize yourself with the exam reference book before taking the exam
- Get plenty of rest and eat healthy meals leading up to exam day
- Bring required personal identification required for exam entry

Amp Up Your Career



ans.org/pe/fe



ncees.org/engineering/fe

