

National Registry of Radiation Protection Technologists

The National Registry of Radiation Protection Technologists (NRRPT) evolved from the need for improved training programs and certification of radiation protection technicians. Under guidance from the American Board of Health Physics, a committee of industry technologists studied a feasibility of a registration and recommended to the board that the technologist's registration program be implemented.

Since its inception, the NRRPT has registered more than 5,000 technologists throughout the country from many industry facilities and each year more and more interest is expressed. Due to this interest, training programs and preparation materials are being continuously upgraded to accommodate candidates, and as a result, the level of competence is being raised nationwide within the industry.

The increased presence of Radiation Protection Technologists in the Health Physics community is adding to the credibility of competent radiation protection, which is in demand by both regulatory agencies and the general public.

URL: <http://www.nrrpt.org>

National Registry of Radiation Protection Technologists

ACE Number: NRRPT-0001

Credit Type: Exam

Version 3

Exam Title: National Registry of Radiation Protection Technologists

Location: National Registry of Radiation Protection Technologists

Length: 150 multiple choice questions

Version Dates: 08/01/2014 - 07/31/2017

Description: This multiple-choice exam covers the areas of radiation protection knowledge of accelerators; university health physics programs, medical health physics, power reactors, government radiological facilities, radioactive waste disposal, transportation of radioactive material, fundamentals, and regulatory requirements.

Skills Measured: The skills measured include surveys and inspection (6.7 percent); emergency preparedness (4.7 percent); evaluating internal and external exposure controls (8 percent); prescribed dosimetry and radiation equipment (6 percent); contamination control (5.3 percent); radioactive material control and transportation (5.3 percent); guides and regulations (7.3 percent); procedures and programs (ALARA) (6.7 percent); analytical methods (7.3 percent); instrument calibration and maintenance (4.7 percent); personnel dosimetry (6 percent); equipment operations (7.3 percent); sources of radiation (5.3 percent); biological effects (4 percent); mathematics (3.3 percent); chemistry (2.7 percent); physics (4.7 percent); and units and terminology (4.7 percent).

Credit Recommendation: In the upper-division baccalaureate degree category, 6 semester hours in fundamentals of radiological science; 2 in fundamentals of radiological sciences laboratory; 6 in applied health physics; 2 in applied health physics laboratory; and 8 in applied health physics internship or practicum. This course is recommended for a total of 24 semester hours in the upper-division baccalaureate degree category. (8/14).

Version 2

Exam Title: National Registry of Radiation Protection Technologists

Location: National Registry of Radiation Protection Technologists

Length: Independent study/Examination

Version Dates: 06/28/2010 - 07/31/2014

Description: Independent study/Examination. To promote technical competence in the radiation protection field at the operational level by establishing a standard of excellence for radiation protection technologists. This certification promotes competency in radiation protection practices and various standards and regulations. Upon successfully passing a proctored, 150-question, closed book examination, personnel will be able to evaluate radiological hazards in a variety of situations; apply regulations; understand the functioning of and operation of radiation survey and monitoring equipment; and utilize methods to minimize personal radiation exposure.

An applicant who is eligible to sit for the NRRPT national examination must be a high school graduate and have a minimum of five years of relevant, documented experience, operational abilities and/or training as verified by the NRRPT Board of Directors.

- Skills Measured:** Applied Radiation Protection (50%) consisting of surveys and inspections; emergency preparedness; evaluating internal and external exposures and controls; prescribed dosimetry and radiation equipment; contamination control; radioactive material control and transportation; guides and regulations; and procedures and Programs (ALARA).
Detection and Measurements (25%) consisting of analytical methods; instrument calibration and maintenance; personnel dosimetry; and equipment operations.
Fundamentals (25%) consisting of sources of radiation; biological effects; mathematics; chemistry; physics; units and terminology.
- Technical Adequacy:** The NRRPT exam is technically sound. Cutoff scores are determined using a modified Angoff procedure and follow appropriate standards. Exam items demonstrate appropriate reliability, and sound procedures exist for the removal of low-performing items. Exam items are drawn from a secure test bank developed by subject matter experts in consultation with Board members. All exams are administered by a qualified proctor in a secure testing location. Sufficient time is given for test-takers to complete all items.
- Credit Recommendation:** In the upper-division baccalaureate degree category, 6 semester hours in introduction to radiological science; 8 semester hours in radiation detection and measurement; 8 semester hours in radiation protection and control; and 8 semester hours in applied health physics internship (6/10).

Version 1

- Exam Title:** National Registry of Radiation Protection Technologists
- Location:** National Registry of Radiation Protection Technologists
- Length:** Independent study
- Version Dates:** 11/01/1978 - 06/27/2010
- Description:** Independent study. The student will be able to: demonstrate an established standard of excellence for the radiation protection technologists; demonstrate competency of radiation protection practices to assure compliance with various standards and regulations. Specifically; evaluate radiological hazards in a variety of situations; safely ship (transport) radioactive material; conduct data reduction and calculations; apply regulations; understand functions of and operate radiation survey and monitoring equipment; know methods of protecting people from radiation exposure; understand the origin, characteristics, and interactions of various types of radiation; and recognize and respond to radiological emergencies.
- Credit Recommendation:** In the upper-division baccalaureate degree category, 6 semester hours in introduction to radiological science; 8 semester hours in radiation detection and measurement; 8 semester hours in radiation protection and control; and 8 semester hours in applied health physics internship (3/06).

