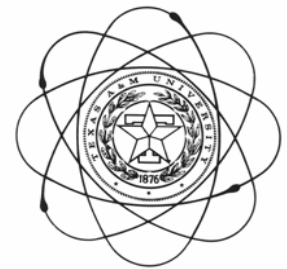


Health Physics at Texas A&M University

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Objectives

- Provide a brief overview of the university and the college
- Discuss briefly the department and history of the program
- Focus on the faculty and program in health physics

Texas A&M University

- Established in 1876 as a land-grant institution
- Originally an all male, military school
- Current enrollment ~46,000 students
- Campus area ~5,200 acres in College Station, TX
- Also became a sea-grant and a space-grant university

College & Department

- College of Engineering ~ 9,600 students
- Eleven departments in the College
- Department of Nuclear Engineering (1962) ~ 320 students
- Offers BS, MS, and PhD degrees in nuclear engineering and health physics
- About 20 full-time faculty – 5 faculty in health physics

Enrollments

- Entering freshmen in the fall 2007 - 16 students
- Currently enrolled in the undergraduate program – 30 students
- M.S. candidates – 18 students
- Ph.D. candidates – 13 students

Degree Programs

- Radiological Health Engineering (1981)
 - Fully accredited by ABET in 1986-87
 - Requires 124 credits
- Master of Science in Health Physics (1986)
 - Requires 32 credits
 - Thesis is required
- Doctor of Philosophy
 - Requires 64 credits, qualifying and preliminary written examinations and a dissertation

Radiological Health Engineering

- Strong fundamental engineering foundation
- Some common courses with nuclear engineers
- Courses in general chemistry, organic chemistry, biology, anatomy & physiology, ground water movement and atmospheric transport
- Includes senior design course

Master of Science Program

- Radiation physics (2 semesters)
- Radiation detection & measurements
- Recommendations & regulations
- Radiobiology
- Internal dose techniques
- Electives and directed studies
- Research

Ph.D. Program

- Course work based on areas of interest and proposed research of student
 - Microdosimetry
 - Radiation carcinogenesis
 - Advanced radiation biology
 - Aerosol physics
 - Radioactive waste disposal
 - Mathematics, statistics, science and engineering courses

Faculty

- **L. A. Braby**, radiation physics & dosimetry, space radiation
- **J. R. Ford**, radiation biology, radiation effects & carcinogenesis
- **W. H. Marlow**, aerosol physics & transport
- **J. W. Poston, Sr.**, external & internal dosimetry
- **W. D. Reece**, radiation dosimetry, reactor operations & radionuclide production

Summary

- Health physics program is part of the largest NE program in the US
- Evolved over a period of time beginning in the early 1980's
- Undergraduate program is growing slowly
- Graduate program strengths are based on quality of the faculty and the research program