Applied Physics, BA

Student Learning Outcomes

Upon completion of the Applied Physics BA program, students will be able to:

1. Demonstrate knowledge of the factual and theoretical basis of physics including Newton's Laws of motion, conservation laws, E&M and Quantum Mechanics.
2. Demonstrate understanding of scientific inquiry and explain how scientific knowledge is discovered and validated.
3. Apply quantitative reasoning to describe or explain phenomena in the natural world.
4. Demonstrate knowledge of mathematical tools and their applications to understanding physics systems.
5. Communicate scientific information based on original research or literature review.
6. Demonstrate preparedness to enter the work force or Graduate School.

Applied Physics, BS

Student Learning Outcomes

Upon completion of the Applied Physics BS program, students will be able to:

1. Demonstrate knowledge of the factual and theoretical basis of physics including Newton's Laws of motion, conservation laws, E&M and Quantum Mechanics.
2. Demonstrate understanding of scientific inquiry and explain how scientific knowledge is discovered and validated.
3. Apply quantitative reasoning to describe or explain phenomena in the natural world.
4. Demonstrate knowledge of mathematical tools and their applications to understanding physics systems.
5. Communicate scientific information based on original research or literature review.
6. Demonstrate preparedness to enter the work force or Graduate School.

Applied Physics BS (NJCU) and Civil Engineering BS (NJIT), Dual Degree (3+2) Program, BA

Student Learning Outcomes

Upon completion of the Applied Physics BS (NJCU) and Civil Engineering BS (NJIT), Dual Degree (3+2) program, students will be able to:

1. Demonstrate knowledge of the factual and theoretical basis of physics including Newton's Laws of motion, conservation laws, E&M and Quantum Mechanics.
2. Demonstrate understanding of scientific inquiry and explain how scientific knowledge is discovered and validated.
3. Apply quantitative reasoning to describe or explain phenomena in the natural world.
4. Demonstrate knowledge of mathematical tools and their applications to understanding physics systems.
5. Communicate scientific information based on original research or literature review.
6. Demonstrate preparedness to enter the work force or Graduate School.

Applied Physics BS (NJCU) and Electrical Engineering BS (NJIT), Dual Degree (3+2) Program, BA

Student Learning Outcomes

Upon completion of the Applied Physics BS (NJCU) and Electrical Engineering BS (NJIT), Dual Degree (3+2) program, students will be able to:

1. Demonstrate knowledge of the factual and theoretical basis of physics including Newton's Laws of motion, conservation laws, E&M and Quantum Mechanics.
2. Demonstrate understanding of scientific inquiry and explain how scientific knowledge is discovered and validated.
3. Apply quantitative reasoning to describe or explain phenomena in the natural world.
4. Demonstrate knowledge of mathematical tools and their applications to understanding physics systems.
5. Communicate scientific information based on original research or literature review.
6. Demonstrate preparedness to enter the work force or Graduate School.

Applied Physics BS (NJCU) and Mechanical Engineering BS (NJIT), Dual Degree (3+2) Program, BA

Student Learning Outcomes

Upon completion of the Applied Physics BS (NJCU) and Mechanical Engineering BS (NJIT), Dual Degree (3+2) program, students will be able to:

1. Demonstrate knowledge of the factual and theoretical basis of physics including Newton's Laws of motion, conservation laws, E&M and Quantum Mechanics.
2. Demonstrate understanding of scientific inquiry and explain how scientific knowledge is discovered and validated.
3. Apply quantitative reasoning to describe or explain phenomena in the natural world.
4. Demonstrate knowledge of mathematical tools and their applications to understanding physics systems.
5. Communicate scientific information based on original research or literature review.
6. Demonstrate preparedness to enter the work force or Graduate School.