

# WHAT IS PHYSICS?

In the Department of Physics, we study space, time, matter and energy, from subatomic particles to the galaxies, through theory and practical experimentation. Our courses and academic programs not only give students a strong foundation in the logic and philosophy of physics, but they also provide them with opportunities for high-level scientific exploration, theory and hands-on experiences.

# **RELATED CAREER TITLES**

## **BASIC RESEARCH**

Industrial and Private	National Laboratories	Technical Schools	Universities
Laboratories			

#### ENGINEERING

Biomedical	Civil	Electrical	Instrumentation
Chemical	Computer	Environmental	Mechanical

### CONSULTING

Industry Government	Military
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#### MEDICINE

Diagnostic	Medical Physician	Nuclear Medicine	Radiation Protection
Instrumentation			
Magnetic Resonance			
Imaging			

#### EDUCATION

Colleges	High School	Technical Schools	Universities
Elementary Schools	Middle Schools		

#### INDUSTRY

Aerospace	Consumer Products	Food	Metallurgical
Agriculture	Electrical	Fuel	Semiconductors
Chemical	Energy	Laser Technology	Textile & Clothing
Computers	Engineering	Materials	Transportation
Construction			

## **COMPUTER SCIENCE**

Artificial Intelligence	Data Processing	Modeling	Programming
Computer Games	Graphics/Software Design	Peripherals	

## COMMUNICATIONS

Image Analysis	Photography	Television	Video Recording
Laser Technology	Telecommunications		

#### PUBLISHING

Journals Software Technical Books	
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# RELATED CAREER TITLES (CONTINUED)

## ENVIRONMENTAL SCIENCE

Conservation	Noise Control	Pollution Control	Radiation Protection
Environmental			
Monitoring			

### **NON-TECHNICAL**

Accounting	Business	Marketing	Science Communication
Administration	Journalism	Museums	Sports
Art	Law		

## SPACE AND EARTH SCIENCES

Astronomy	Energy & Resources	Geophysics	Space Technology
Atmospheric Sciences	Geology	Ocean Sciences	

# **TRANSFERABLE SKILLS**

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Computer programming skills	Gather/analyze data	Perform calculations
Define research problems	Identify/classify materials	Prepare technical reports
Design equipment	Inform, explain, instruct	Quantitative problem solving
Develop & write research proposals	Logical thinking	Review scientific literature
Develop research models	Maintain records	See relationships among factors
Draw meaningful conclusions	Mathematical modeling	Summarize research findings
Establish experimental designs	Measure distances/relationships	Use instruments
Establish hypotheses	Mechanics	Utilize math formulas
Evaluate ideas	Observe data	

Attainment and demonstration of <u>NACE Career Readiness Competencies</u> help prepare for a successful transition into the workplace.

# **CONTACT FOR ADDITIONAL INFORMATION**

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# **RELATED CAREER EXPLORATION LINKS**

FHSU Career Services: <u>https://www.fhsu.edu/career/</u> Occupational Outlook Handbook: <u>http://www.bls.gov/ooh/</u>

