



PHYSICS | TN TRANSFER PATHWAY

You can make a starting salary of \$46-58K/year in Tennessee with an advanced degree in Physics.

(Occupational Outlook Handbook)

PHYSICS

Physics is crucial to understanding the world around us, the world inside us, and the world beyond us. It is the most basic and fundamental science.

Physics challenges our imaginations with concepts like relativity and string theory, and it leads to great discoveries, like computers and lasers, that lead to technologies which change our lives—from healing joints, to curing cancer, to developing sustainable energy solutions.

Learn the laws of motion, energy, machines and the universe. From quarks to super clusters, we will help you gain the knowledge to pursue a STEM-related career. The goal of physics is to understand how things work from first principles.

Physicists are problem solvers. Their analytical skills make physicists versatile and adaptable so they work in interesting places.

Our course of study will improve your communication, writing, research and critical-thinking skills. Studying physics strengthens quantitative reasoning and problem-solving skills that are valuable in areas beyond physics.

The University Parallel degree with an emphasis in Physics prepares you for transfer to a university and is a Tennessee Transfer Pathways. Tennessee Transfer Pathways (TTPs) enable you to complete your degree at Motlow and then transfer to any Tennessee public university, and several Tennessee private universities, to complete your bachelor's degree.

Physics is among the top five highest-paying S.T.E.M. occupations as of May 2019.

Physics Career Opportunities:

• Aerospace Engineer: \$116k/year

• Physicist: \$122k/year

• Computer Research Scientist: \$122k/year

Astronomer: \$115k/year
 Nuclear Engineer: \$113k/year
 (Occupational Outlook Handbook)

Top 5 STEM Occupations:

Physician Assistant: \$112k/year
Software Developer: \$107k/year
Nurse Practitioner: \$110k/year

• Medical and Health Services Manager: \$100k/year

Statistician: \$91k/year
 (Occupational Outlook Handbook)

Practical Experience

- Hands-on labs
- In-depth research
- Problem solving
- Illustrations of principles and laws
- Laws of rotational motion and simple machines
- Technical measurements, forces, vectors, equilibrium, velocity and acceleration, work, energy, and power

- Electricity and magnetism
- Light and optics
- Temperature, heat transfer, heat gas laws and thermodynamic applications
- Electrostatics, direct current, alternating current, sound, light, and nuclear physics







