

#### WHAT IS PHYSICS?

Physics is a field within the natural sciences that studies the structure of matter and energy, and their interactions in the physical world as well as space. It is a study of how the universe behaves through learning about and applying scientific laws and theories to natural processes. The natural processes often observed in the study of physics includes heat, light, radiation, sound, electricity, magnetism, and more.

#### INTERESTS

(THINGS YOU LIKE TO DO)

- Conducting experiments
- Analyzing data
- Developing theories
- Making observation
- Learning about how things work/function
- Interests in other sciences such as astronomy
- Interest in mathematics

### **SKILLS**

(THINGS YOU WILL LEARN & USE)

- Interpret scientific data
- Analytical thinking
- Detail orientated
- Problem solving
- Time management
- Math and reasoning skills
- Critical thinking
- Use of computers to measure data
- Knowledge of natural laws of science

#### LAVC DEGREES & CERTIFICATES OFFERED

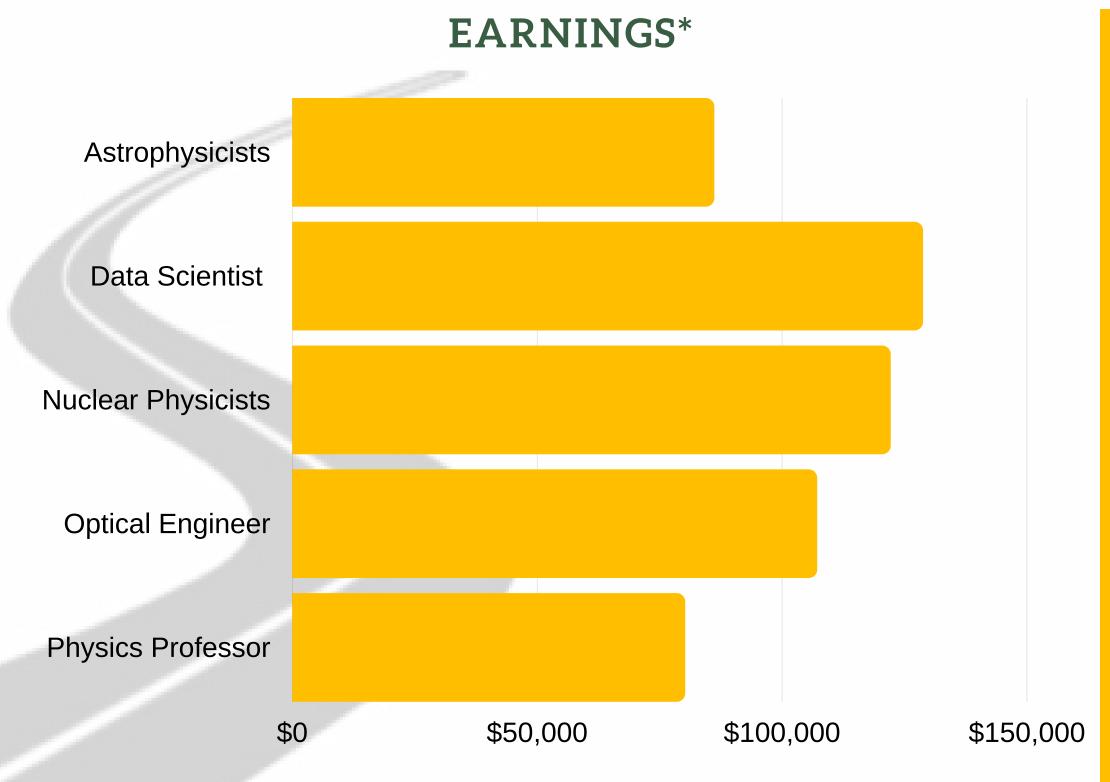
The Physic major is housed under the Chemistry/Physics Department at Los Angeles Valley College. Students will learn about the major topics in classical physics—mechanics, electricity and magnetism, thermodynamics and wave theory. They will also be introduced to topics in modern physics -- quantum theory, atomic structure and relativity theory. LAVC offers the following degrees:

- Associate of Arts for Transfer (AS-T) in Physics
- Associate of Science (AS) in Physics

#### TRANSFER RELATED MAJORS

- Chico State: Professional Physics, Physics
- Humboldt State: Physics Astronomy, Physics
- **CSU Channel Islands:** Applied Physics Physical Science, Technology
- **CSU Los Angeles:** Physics Astrophysics, Biophysics, Physics
- **CSU Northridge:** Physics Astrophysics, Geophysics, Biophysics
- **CSU Dominguez Hills:** Physics Physical Science, Electrical Engineering, Physics
- Cal Poly Pomona: Physics Biophysics, Integrated Science
- San Diego State: Physics Chemical Physics, Modern Optics, Physics
- UC Berkeley: Physics, Geophysics, and Astrophysics
- UC Los Angeles: Physics, Biophysics, and Astrophysics
- UC Irvine: Physics and Applied Physics
- **UC San Diego:** Physics, Astrophysics, Biophysics, Computational Physics, and Material Physics

# PHYSICS MAJOR GUIDE SHEET



\*Earnings can vary by occupation and experience. The following are median wages as of 2018 in California based on CaliforniaCareerZone.org

#### FOR MORE INFORMATION:

www.lavc.edu/transfer

https://www.lavc.edu/chemistry/Degrees/AS-T-in-

Physics.aspx

www.lavc.edu/transfer/majors/default.html

www.assist.org

www.eureka.org

www.cacareerzone.org

www.onetonline.org

http://degrees.calstate.edu/

https://admission.universityofcalifornia.edu/counselors/files

/undergraduate\_majors\_list.pdf

## RELATED OCCUPATIONS

- Applications engineer
- Astrophysicist
- Nuclear physicist
- Physicist
- Data scientist
- Material scientist
- Optical engineer
- Professor
- Aerospace engineer
- Accelerator operator
- Energy policy analyst
- Seismologist

## POTENTIAL EMPLOYERS

- NASA
- Government agencies
- Observatories
- Research labs
- Power plants
- Manufacturing companies
- Military branches
- Private businesses
- Colleges/universities

This general information is provided by the LAVC Career/Transfer Center. For specific information about majors and careers please make an appointment to see a counselor either online, in person at the Counseling Department (Student Services Annex) or by phone at (818) 947-2474.