

# UNIVERSITY OF CALIFORNIA TRANSFER PATHWAY: PHYSICS

**PROGRAM DESCRIPTION:**

The University of California (UC) Transfer Pathway for Physics degree curriculum provides students a basis for understanding the physical concepts and skills required for attainment of upper division status as a Physics major at a four-year college or university. The students that earns this degree has completed lower division preparation for a Physics major at a UC and should be able to graduate with a Bachelor's degree within two years attending at full time status after transfer. After earning this degree and transferring to a UC, students will be expected to complete two more courses in IGETC Area 3 and two more courses in IGETC Area 4 to fulfill UC general education requirements. Successful completion of the UC Transfer Pathway Physics degree with a minimum GPA of 3.5 guarantees the student admission into the University of California system (but does not guarantee acceptance to a particular campus) to pursue a baccalaureate degree in Physics. Students will still be competitive at several UC campuses with a GPA below the 3.5 threshold, and all students who complete the degree are encouraged to apply to the UC.

**CAREER AT A GLANCE:**

### HOW DO I KNOW IF THIS MAJOR IS FOR ME?

- You enjoy conducting research and analyzing results
- You like to study, test, and discover properties of matter and energy
- You are interested in learning about the properties of the natural world, including gravity, space, and sub-atomic particles
- You enjoy science and mathematics
- You pay close attention to details and have strong critical thinking and analytical skills
- You enjoy preparing and operating testing equipment
- You enjoy planning and conducting scientific experiments
- You have strong written communication and organization skills
- You enjoy creating charts, presentations, and reports to describe test results

*Use Focus2Career on your MyChaffey portal to learn more about careers and majors that fit you best.*

### WHERE CAN I WORK?

Aerospace Companies	Federal/State Government
Architectural & Engineering Services	Colleges & Universities
Military	Pharmaceutical Companies
Secondary Schools	Medical Facilities
Laboratories	Technical Consulting Services
Research and Development	

*For more information visit: [www.labormarketinfo.edd.ca.gov/OccGuides](http://www.labormarketinfo.edd.ca.gov/OccGuides)*

### HOW DO I GET STARTED?

- Start taking introductory physics and math courses
- Apply for entry level positions in reception, data entry, or customer service with employers where you would like to promote
- Job shadow and conduct informational interviews with professionals in positions you are interested in pursuing
- Include research projects on your resume
- Volunteer in schools or other research labs
- Attend university campus tours and visit the Transfer Center to decide where you want to transfer

### WHAT CAN I DO WITH THIS ASSOCIATE DEGREE?

<i>Position Title</i>	<i>CA Median Salary</i>
Nuclear Monitoring Technician	\$91,010
Research Technician	\$43,370
Lab Technician	\$43,370

### WHAT CAN I DO WITH HIGHER EDUCATION AND ADDITIONAL TRAINING?

<i>Position Title</i>	<i>CA Median Salary</i>
Astronomer	\$90,050
Astrophysicist	\$90,050
Space Scientist	\$95,570
Biophysicist	\$94,570
Clinical Research Coordinator	\$138,190
Environmental Engineer	\$102,110
Materials Scientist	\$94,970
Meteorologist	\$95,570
Natural Science Manager	\$138,190
Physicist	\$112,950
Physics Teacher	\$87,340
Nanosystems Engineer	\$107,150
Nuclear Engineer	\$132,880
High School Teacher	\$77,980

*For more information about careers, education and training requirements, salary data, and job outlooks visit [www.onetonline.org](http://www.onetonline.org)*

For additional information about career pathways and to find out if this major is a good fit for you visit the Career Center located in MACC 203. Career information was collected from [www.onetonline.org](http://www.onetonline.org) and [www.bls.gov](http://www.bls.gov).

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**MAJOR AND COURSE REQUIREMENTS:**

To obtain the UC Transfer Pathway Chemistry degree, students must complete the following:

- 46 units of major preparation requirements.
- 16-20 units of IGETC general education requirements.

**LEGEND:** G=Grade    IP=In Progress    N=Need    **Bold:** Prerequisites    Plain Text: No Prerequisites

**Major Requirements for the University of California Transfer Pathway Associate in Science Degree (S357)**

		Grade	IP	Need	Units
<b>CHEM 24A</b>	<b>General Chemistry I</b>				<b>5</b>
<b>CHEM 24B</b>	<b>General Chemistry II</b>				<b>5</b>
<b>MATH 65A</b>	<b>Calculus I</b>				<b>4</b>
<b>MATH 65B</b>	<b>Calculus II</b>				<b>4</b>
<b>MATH 75</b>	<b>Calculus III</b>				<b>5</b>
<b>MATH 81</b>	<b>Linear Algebra</b>				<b>4</b>
<b>MATH 85</b>	<b>Differential Equations</b>				<b>4</b>
<b>PHYS 45</b>	<b>Physics for Scientists and Engineers I</b>				<b>5</b>
<b>PHYS 46</b>	<b>Physics for Scientists and Engineers II</b>				<b>5</b>
<b>PHYS 47</b>	<b>Physics for Scientists and Engineers III</b>				<b>5</b>

Student Name: \_\_\_\_\_

ID#: \_\_\_\_\_

Date: \_\_\_\_\_

Counselor: \_\_\_\_\_

**COUNSELOR NOTES:**


\$46 per unit for CA Residents

**General Education IGETC Area 1: English Composition Requirements (6 units)**

		Grade	IP	Need	Units
<b>ENGL 1A</b>	<b>Composition</b>				<b>3</b>
<b>ENGL 1B</b>	<b>Advanced Composition and Critical Thinking</b>				<b>3</b>

**Additional General Education Requirements (10-14 units)**

		Grade	IP	Need	Units
<b>IGETC Area 3</b>	<b>Arts and Humanities</b>				<b>3</b>
<b>IGETC Area 4</b>	<b>Social and Behavioral Sciences</b>				<b>3</b>
<b>IGETC Area 5B</b>	<b>Biological Sciences</b>				<b>4</b>
<b>IGETC Area 6</b>	<b>Language Other Than English</b>				<b>0-4</b>

**Total units for the major 62-66**