This academic plan includes major coursework and recommended general education requirements for transfer. *Transfer requirements vary based on institution*. Please see a counselor to develop your personal educational plan and determine appropriate work/life/school balance.

## AS-T PHYSICS

### Pathways for Transfer

(UCGE) NAS719 / (IGETC) NAS720

### Required Courses (24 semester units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY-4A, Mechanics</td>
<td>4</td>
</tr>
<tr>
<td>PHY-4B, Electricity and Magnetism</td>
<td>4</td>
</tr>
<tr>
<td>PHY-4C, Heat, Light and Waves</td>
<td>4</td>
</tr>
<tr>
<td>MAT-1A, Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MAT-1B, Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MAT-1C, Calculus III</td>
<td>4</td>
</tr>
</tbody>
</table>

### First Term To-Do List

- Submit official high school transcripts and AP/IB/CLEP exam scores
- Visit Engagement Center (ST 108)
- Meet with a counselor to personalize your EduNav plan and determine if you have already met the IGETC foreign language requirement through high school coursework
- Register for ILA-800 each term to receive FREE tutoring

### Second Term To-Do List

- Visit the Career Center (2nd floor of CSS)
- Meet with a Mustang Mentor
- Get involved in ASNC or other student organizations
- Look for internship, research or volunteer opportunities in your field(s) of interest

### Third Term To-Do List

- Meet with a counselor to verify your transfer status
- Attend Transfer Fair, transfer workshops and meet with university reps
- Submit transfer applications (ask about UC TAG)
- Complete FAFSA before March 2nd (include all transfer institutions that you applied to)

### Fourth Term To-Do List

- Submit Degree Applications via WebAdvisor
- Complete transfer application updates
- Finish strong and order final transcripts for your transfer institution along with CSUGE or IGETC certification

### Term 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 1A</td>
<td>4</td>
<td>ENG 1A</td>
<td>4</td>
</tr>
<tr>
<td>MAT 1A</td>
<td>4</td>
<td>MAT 1A</td>
<td>4</td>
</tr>
<tr>
<td>MUS 3, GAM 2 or THE 3</td>
<td>3</td>
<td>ARE 35, 36 or GAM 2</td>
<td>3</td>
</tr>
<tr>
<td>CHE 1A</td>
<td>5</td>
<td>PHI 32, 12, 22 or 35</td>
<td>3</td>
</tr>
<tr>
<td>GUI 47</td>
<td>3</td>
<td>GUI 47</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td>19</td>
<td><strong>Total Units</strong></td>
<td>17</td>
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### Term 2

<table>
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<tr>
<th>Course</th>
<th>Units</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHI 11, REA 4 or COM 3</td>
<td>3</td>
<td>ENG 1B</td>
<td>4</td>
</tr>
<tr>
<td>MAT 1B</td>
<td>4</td>
<td>MAT 1B</td>
<td>4</td>
</tr>
<tr>
<td>PHY 4A</td>
<td>4</td>
<td>PHY 4A</td>
<td>4</td>
</tr>
<tr>
<td>COM 9</td>
<td>3</td>
<td>COM 1, 6 or 9</td>
<td>3</td>
</tr>
<tr>
<td>PHI 32, 12, 22 or 35</td>
<td>3</td>
<td><strong>Total Units</strong></td>
<td>17</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td>17</td>
<td><strong>Total Units</strong></td>
<td>15</td>
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### Term 3

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<th>Course</th>
<th>Units</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 1C &amp; 3</td>
<td>7</td>
<td>MAT 1C</td>
<td>4</td>
</tr>
<tr>
<td>PHY 4B</td>
<td>4</td>
<td>PHY 4B</td>
<td>4</td>
</tr>
<tr>
<td>POL 1</td>
<td>3</td>
<td>POL 1</td>
<td>3</td>
</tr>
<tr>
<td>ANT 2 or JOU 7</td>
<td>3</td>
<td>JOU 7, ANT 7 or 1</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td>17</td>
<td><strong>Total Units</strong></td>
<td>14</td>
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### Term 4

<table>
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<tr>
<th>Course</th>
<th>Units</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 4C</td>
<td>4</td>
<td>PHY 4C</td>
<td>4</td>
</tr>
<tr>
<td>MAT 2 (CPP only)</td>
<td>4</td>
<td>BIO 19, 8, 1 or 3</td>
<td>3-4</td>
</tr>
<tr>
<td>ANT 1 or BIO 19, 7 or 8</td>
<td>3-4</td>
<td>GEG 3, 6 or 4</td>
<td>3</td>
</tr>
<tr>
<td>GEG 6 or 3</td>
<td>3</td>
<td>SOC 10</td>
<td>3</td>
</tr>
<tr>
<td>HIS 6, 7, 14, 31 or 34</td>
<td>3</td>
<td>HIS 1 or 2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td>17-18</td>
<td><strong>Total Units</strong></td>
<td>16-17</td>
</tr>
</tbody>
</table>
A PHYSICS degree provide students with a foundation in physics and mathematics for students planning to transfer into a baccalaureate program in physics.

WHERE CAN I WORK?

- Aerospace Industry/NASA
- Architecture Firm
- Biotechnology/Medical Equipment
- Computer Company
- Education
- Electronic Manufacturer
- Engineering Firm
- Federal Government
- Healthcare & Pharmaceutical
- Optical Physics
- Planetary & Observatories
- National Science Foundation
- National Weather Service
- Science Museums

WHAT CAN I DO WITH THIS ASSOCIATE DEGREE?

<table>
<thead>
<tr>
<th>Position Title</th>
<th>CA Annual Openings</th>
<th>CA Median Salary</th>
<th>In Riverside County Wages will Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction &amp; Building Inspectors</td>
<td>1,420</td>
<td>$89,360</td>
<td>1 adult, 3 children</td>
</tr>
<tr>
<td>Manufacturing Engineering Technologist</td>
<td>950</td>
<td>$68,500</td>
<td>1 adult, 2 children</td>
</tr>
<tr>
<td>Medical Equipment Repairer</td>
<td>400</td>
<td>$58,290</td>
<td>1 adult, 2 children</td>
</tr>
<tr>
<td>Nuclear Medicine Technician</td>
<td>110</td>
<td>$115,900</td>
<td>2 adults, 4 children</td>
</tr>
<tr>
<td>Photonics Technicians</td>
<td>950</td>
<td>$68,500</td>
<td>1 adult, 2 children</td>
</tr>
<tr>
<td>Teachers Assistant</td>
<td>17,710</td>
<td>$35,380</td>
<td>1 adult</td>
</tr>
<tr>
<td>Tutor</td>
<td>22,220</td>
<td>$39,250</td>
<td>1 adult</td>
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</table>

WHAT CAN I DO WITH MORE EDUCATION AND TRAINING?

<table>
<thead>
<tr>
<th>Position Title</th>
<th>CA Annual Openings</th>
<th>CA Median Salary</th>
<th>In Riverside County Wages will Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerospace Engineer</td>
<td>760</td>
<td>$123,210</td>
<td></td>
</tr>
<tr>
<td>Astronomer</td>
<td>No data</td>
<td>$161,850</td>
<td>2 adults, 6 children</td>
</tr>
<tr>
<td>Biophysicist</td>
<td>520</td>
<td>$95,310</td>
<td>1 adult, 3 children</td>
</tr>
<tr>
<td>Civil Engineer</td>
<td>3,430</td>
<td>$107,530</td>
<td>2 adults, 3 children</td>
</tr>
<tr>
<td>High School Physics Teacher</td>
<td>8,260</td>
<td>$87,120</td>
<td>1 adult, 3 children</td>
</tr>
<tr>
<td>Physicist</td>
<td>300</td>
<td>$111,820</td>
<td>2 adults, 4 children</td>
</tr>
<tr>
<td>Space Scientist</td>
<td>No data</td>
<td>$123,660</td>
<td>2 adults, 4 children</td>
</tr>
<tr>
<td>Transportation Engineer</td>
<td>3,430</td>
<td>$107,530</td>
<td>2 adults, 3 children</td>
</tr>
<tr>
<td>University/College Professor</td>
<td>1,600</td>
<td>$119,700</td>
<td>2 adults, 4 children</td>
</tr>
</tbody>
</table>

Estimated Cost to Obtain Associate Degree:

60 Units x $46 per unit (CA residents) = $2,760
Books & Supplies = $3,944
Health, ASNC, Parking Fees (x 4 terms) = $360
Total Cost = $7,064

HOW DO I GET STARTED?

⇒ Visit the CAREER CENTER to learn about opportunities in the field and help determining if it is a good fit for your preferred values, strengths, skills, and interests. CSS 2nd floor.
⇒ Attend annual TRANSFER FAIR and TRANSFER CENTER WORKSHOPS to determine which university is the best fit for you as well as application requirements and transfer process.
⇒ Build LABORATORY and RESEARCH SKILLS (experimental design, data interpretation, and PROBLEM SOLVING) through coursework and research with professors.
⇒ Practice using SCIENTIFIC INSTRUMENTS and equipment. COMPUTER SKILLS are critical.
⇒ JOB SHADOW and NETWORK WITH PROFESSIONALS in positions you wish to obtain.
⇒ Participate in campus clubs to gain TEAMWORK and LEADERSHIP SKILLS.
⇒ Practice interpersonal, small group and public speaking COMMUNICATION SKILLS.
⇒ Gain experience through RESEARCH/INTERNSHIP OPPORTUNITIES such as NASA Jet Propulsion Lab in Pasadena.
⇒ Join PROFESSIONAL ASSOCIATION such as the American Geophysical Union, American Institute of Physics, American Meteorological Society or the American Association of Physics Teachers to network and maintain current knowledge of opportunities in the field.

WHAT SKILLS DO I NEED?

⇒ Science — using scientific rules and methods to solve problems.
⇒ Mathematics — using mathematics to solve problems.
⇒ Critical Thinking — using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
⇒ Complex Problem Solving — identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.
⇒ Reading Comprehension — understanding written sentences and paragraphs in work related documents.

PREFERRED WORK STYLES INCLUDE:

⇒ Attention to Detail — being careful about detail and thorough in completing work tasks.
⇒ Analytical Thinking — analyzing information and using logic to address work-related issues and problems.
⇒ Initiative — a willingness to take on responsibilities and challenges.
⇒ Persistence — persistence in the face of obstacles.
⇒ Integrity — being honest and ethical.

For more information about careers, education and training requirements, salary data, and job outlooks visit www.onetonline.org, www.bls.gov or www.labormarketinfo.edd.ca.gov/OccGuides.