

MATH 252 Calculus with Analytic Geometry III 4

Total Units = 35

Associate of Science Degree: Physics

Courses Required for the Major:		Units
PHYS 195	Mechanics	5
PHYS 196	Electricity & Magnetism	5
PHYS 197	Waves, Optics, & Modern Physics	5

Plus 20 units selected from the following:

CHEM 200	General Chemistry I – Lecture	3
CHEM 200L	General Chemistry I – Lab	2
CHEM 201	General Chemistry II – Lecture	3
CHEM 201L	General Chemistry II – Lab	2
MATH 141	Precalculus	5
MATH 150	Calculus with Analytic Geometry I	5
MATH 151	Calculus with Analytic Geometry II	4
MATH 252	Calculus with Analytic Geometry III	4

Total Units = 35

For graduation requirements see **Requirements for the Associate Degree** on page 110.

Electives (Mesa College) as needed to meet minimum of 60 units required for the degree.

Recommended Electives: Astronomy 101, 109, 111, 290; Biology 107; Chemistry 100, 100L, 130, 130L, 152, 152L, 160, 161, 200, 200L, 201, 201L, 231, 231L, 233, 233L, 251, 255, 290, 296; Communication Studies 103; Computer and Information Sciences 150; Economics 120; Engineering 115, 151, 200, 210, 250, 260, 270; Geography 101, 101L, 102, 290; Geology 290, 296; Mathematics 96, 104, 118, 119, 141, 150, 151; Physical Sciences 100, 101, 290, 296; Physics 100, 125, 126, 195, 196, 197, 290.

Associate in Science in Physics for Transfer Degree:

The Associate in Science in Physics for Transfer Degree is intended for students who plan to complete a bachelor's degree in Physics or a related major in the California State University (CSU) system. It is accepted by some but not all CSU campuses. Students who complete this degree and transfer to a participating CSU campus will be required to complete no more than 60 units after transfer to earn a bachelor's degree. It may not be appropriate preparation for students transferring to a CSU campus that does not accept the degree.

Program Learning Outcomes:

Students who complete the Physics for Transfer Program will be able to:

- Utilize proper physics concepts and the relations among them to analyze problems qualitatively and quantitatively.
- Critically apply the principle of conservation of energy in the study of motions.
- Compose laboratory reports that describe the theory and experimental procedures, record and analyze data, and present conclusions and discussions.
- Write solutions to physics problems that identify the assumptions and input.

Students will be assessed through a combination of performance evaluations, written assignments, and written tests and quizzes.

Note: Students who plan to complete this degree should consult a counselor and visit www.assist.org for additional information about participating CSU campuses as well as university admission, degree and transfer requirements.

Award Notes:

Students are required to complete a maximum of 60 CSU transferable units with a minimum overall grade point average of 2.0.

Major: A minimum of 18 units with grade of "C" or "P" or better.

General Education: In addition to the courses required in the major, students must complete one of the following general education options:

- The California State University General Education Breadth pattern
- The Intersegmental General Education Transfer Curriculum pattern

Note: Completion of the California State University American Institutions graduation requirement is strongly recommended prior to transfer.

Courses Required for the Major:		Units
PHYS 195	Mechanics	5
PHYS 196	Electricity and Magnetism	5
PHYS 197	Waves, Optics and Modern Physics	5
MATH 150	Calculus with Analytic Geometry I	5
MATH 151	Calculus with Analytic Geometry II	4
MATH 252	Calculus with Analytic Geometry III	4

Total Units = 28

Recommended Electives: Chemistry 200, 200L, 201, 201L.

Electives as needed to meet maximum of 60 units required for the degree.

Transfer Information

Students planning to transfer to a four-year college or university should complete courses required for the university major and the general education pattern required by that transfer institution. See catalog TRANSFER INFORMATION section. Additional courses may be required to meet university lower-division requirements. **Course requirements at the transfer institution are subject to change and may be verified by a counselor or by consulting the current university catalog. Many Baccalaureate in Arts degrees require third semester competency in a foreign language. Consult the current catalog of the transfer institution and consult with a counselor.**

Political Science

<u>Award Type</u>	<u>Units</u>
Associate of Arts Degree:	
Political Science	18*

* and courses to meet graduation requirements, general education and electives as needed to meet the minimum of 60 units required for the degree.

Associate in Arts for Transfer Degree:	
Political Science	18

Description

Political science is the study of human behavior as it relates to political situations. It involves the examination of institutions, processes, people, ideas and policies. The study of political science develops critical thinking, cultural literacy, and other skills important for an active and informed citizenry.

The primary objectives of the Political Science program are to meet the American Institutions and general education requirements for associate and baccalaureate degrees.

Program Emphasis

The primary focus is on offering relevant courses that lead to well-developed critical thinking skills, contribute to the development of active, informed

citizenry, and that fulfill General Education requirements (AA and transfer level), or lower division preparation for Political Science major requirements at four year institutions.

Career Options

Most careers in political science require education beyond the associate degree and some require a graduate degree. This is not a comprehensive list but some of the most common career options with political science preparation include: public administrator, budget analyst, city planner, diplomatic corps member, elected official, legislative aide, journalist, lawyer, lobbyist, political scientist, public opinion surveyor, teacher and writer.

Program Learning Outcomes

Students who complete the Political Science Program will be able to:

- Think critically in reading, writing, and/or speaking about topics in Political Science, thereby identifying problems, theses, arguments, evidence and conclusions.
- Write or speak about topics in Political Science, thereby addressing problems, formulating theses, making arguments, analyzing and weighing evidence, and deriving conclusions.
- Demonstrate an ability to understand one's role in society, take responsibility for one's own actions, and make ethical decisions in complex situations.
- Articulate similarities and contrasts among cultures, times, and environments, demonstrating an understanding of cultural pluralism.

Students will be assessed through a combination of performance evaluations, written assignments, and written tests and quizzes.

Associate of Arts Degree: Political Science

<u>Courses Required for the Major:</u>	<u>Units</u>
POLI 102 Introduction to American Government	3

Select 15 units (5 courses) from the following:

POLI 101 Introduction to Political Science	3
POLI 103 Comparative Politics	3
POLI 121 American Political Development	3
POLI 123 Gender and Politics	3