PHYSICAL SCIENCE

PROGRAM DESCRIPTION:
Physical Science is the study of the natural sciences encompassing non-living systems although aspects of living systems are also studied. Scientific issues are presented and discussed in the physical science courses enabling a deeper understanding of societal issues that require thoughtful decisions and interaction. Physical Science courses enrich the general education program and fundamentally support further education to prepare for scientific, technological, and engineering careers. The selection of courses will assist in the selection of an upper-division science major. For non-transfer students, this area of emphasis will assist in the preparation for employment at the level of technician.

HOW DO I KNOW THIS MAJOR IS FOR ME?
- You enjoy conducting research and analyzing results
- You like to study the physical sciences
- You like to monitor product quality to ensure compliance with standards and specifications
- You pay close attention to details and have strong critical thinking and analytical skills
- You enjoy preparing and operating testing equipment
- You enjoy collecting and analyzing samples
- You have strong written communication and organization skills
- You enjoy creating charts, presentations, and reports to describe test results

WHAT CAN I DO WITH THIS ASSOCIATE DEGREE?
- Agricultural Technician
- Chemical Technician
- Food Science Technician
- Nuclear Technician
- Research Technician
- Laboratory Technician
- Technical Consulting Services
- Pharmaceutical and Medicine Manufacturing
- Scientific Research and Development Services

WHERE CAN I WORK?
This pathway provides you with a choice of various work environments including:
- Aerospace Companies
- Biotechnology Companies
- Beaches, Forests, State/Federal Parks
- Schools, Colleges and Universities
- Manufacturing
- Federal/State Government
- Technical Consulting Services
- Pharmaceutical and Medicine Manufacturing
- Scientific Research and Development Services

WHAT IS THE POTENTIAL WAGE OUTLOOK?
This Associate Degree may lead to a position as a Research Technician, which according to O*NetOnline, the median salary in 2016 in California was $38,740 annually.

The job and wage outlook will vary based on the position selected with this major. To review current salary information and job outlook for other occupational titles, visit www.onetonline.org.

WHAT CAN DO IN THE FUTURE WITH MORE EDUCATION?
The positions below require at least a bachelor’s degree in a Physical or Biological Science. According to the EDD/LMID Occupational Employment Statistics Survey, 2017 the median wage in California for Natural Science Managers was $141,053 annually or $67.81 per hour. For more information, visit www.labormarketinfo.edd.ca.gov/OccGuides.
- Agricultural Engineers
- Agricultural Research Directors
- Animal Scientists
- Astronomers
- Atmospheric and Space Scientists
- Biochemists and Biophysicists
- Biological Technician
- Chemists
- Clinical Research Coordinators
- Conservation Scientists and Forsters
- Environmental Scientists and Specialists
- Food Scientist
- Forensic Science Technicians
- Geoscientists/Geophysical Data Technicians
- Hydrologists
- Laboratory Managers
- Materials Scientists
- Medical/Clinical Laboratory Technologists
- Medical Scientists
- Meteorologist
- Natural Resources Managers
- Natural Sciences Managers
- Physicists
- Research and Development Directors
- Materials Scientists
- Research Science Managers
- Secondary School Teachers
- Social Science Research Assistants
- Water Resource Specialists
- Zoologists and Wildlife Biologists

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 and www.bls.gov.
A.) General Education
Choose Chaffey College’s General Education, California State University General Education (CSUGE), or Intersegmental General Education Transfer Curriculum (IGETC) for the general education pattern related to your goal. Students who intend to transfer should complete the CSUGE or IGETC sheet. Consult with a counselor to determine which general education pattern is the best choice for the college/university you plan to attend.

B.) Area of Emphasis
Eighteen units selected from at least three of the listed subject areas. No more than eight units from any single subject area may be counted toward the major. A minimum of two courses with an associated laboratory in addition to the laboratory required for the general education requirements in the Natural Science category. A minimum of MATH 31 is required.

C.) Electives
Elective units may be necessary to reach the total of 60 overall units required for the Associate Degree. If you are planning to transfer, elective units must be transferable to CSU and/or UC.

MAJOR AND COURSE REQUIREMENTS:

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

Major Requirements for the Associate in Science Degree:
Transfer (CSUGE)—S351A or (IGETC)—S351B
Non-transfer (Chaffey GE)—S352

Area of Emphasis: NOTE: Courses included in the area of emphasis cannot be used to fulfill General Education requirements.

ASTRON 26, 35
CHEM 24A, 24B, 70, 75A, 75B
COMPSCI 1, 4
ESC 1, 1L, 5, 5L
ENGIN 11, 26, 30, 50, 60, 71
GEOG 4, 5
GEOL 1, 2
MATH 31, 61, 65A, 65B, 75, 81, 85
PHYS 20A or 30A, 20B or 30B, 44, 45, 46, 47

STAT 10

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Student Name: ____________________________
ID#: ____________________________
Date: ____________________________
Counselor: ____________________________

COUNSELOR NOTES:

$46 per unit for CA Residents

In addition to completion of the MAJOR, there are other requirements for the degree, refer to the Chaffey College Graduation Requirement Sheet or see a counselor in the Counseling Center. All courses required for a certificate must be completed with a minimum grade of C.