

# **ADVANCED MATERIALS** NANOTECHNOLOGY -ASSOCIATE IN SCIENCE **DEGREE, CERTIFICATE OF ACHIEVEMENT**

Top Code:

#### 0999.00

The Advanced Materials - Nanotechnology Certificate of Achievement is designed for CTE and workforce training/development. This certificate is designed to prepare students to work in entry-level jobs in various nanotechnology settings with an emphasis on providing the skills necessary for employment in a nanotechnology division at technology corporations or research laboratories. Through the certificate's curriculum, students will acquire and build skills in selecting advanced materials for nanotechnology applications, materials and device characterization (quality control), proper documentation, data analysis and presentation, and good lab/manufacturing health and safety practices.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

### **Program Outcomes**

- · Develop understanding of technology used in Nanotechnology industry.
- · Develop the laboratory and industry skills needed for the nanotechnology technical workforce.
- · Develop necessary communication in writing and presenting for the nanotechnology technical workforce.

## **Requirements for the Certificate of Achievement**

Code	Title	Units
CHEM 022	INTRODUCTORY CHEMISTRY	4
CHEM 240	FUNDAMENTALS OF NANOTECHNOLOGY	4
CHEM 241	APPLICATIONS OF NANOTECHNOLOGY	4
CHEM 242	ENVIRONMENTAL, HEALTH, & SAFETY OF NANOTECHNOLOGY	2
Work Experience/Internship - Requirement of 4 earned units		4
BUS 070A	WORK EXPERIENCE/INTERNSHIP (PAID)	
or BUS 070BWORK EXPERIENCE/INTERNSHIP (UNPAID)		
Total Units		18

Visit the Program Mapper (https://pasadena-city.programmapper.ws/ academics/interest-clusters/7e85bdcc-be06-405f-9845-b8b63e49f8c6/ programs/779c54d6-5096-db45-f9da-ea62901203dc/) for a suggested sequence of courses.

# **General Education Requirements for the Associate in Science Degree**

- · General Information (https://curriculum.pasadena.edu/academicprograms-leading-degree-certificate/)
- · PCC Local Gen Ed (https://curriculum.pasadena.edu/academicprograms-leading-degree-certificate/#pcclocaltext)
- CSU Breadth (https://curriculum.pasadena.edu/academic-programsleading-degree-certificate/#csubreadthtext)
- · IGETC (https://curriculum.pasadena.edu/academic-programsleading-degree-certificate/#igetctext)