



# Environmental Resource Management and Pollution Prevention

21250 Stevens Creek Blvd.  
Cupertino, CA 95014  
408-864-5678  
www.deanza.edu

Biological, Health, Environmental  
Sciences Division/ES Dept.  
Kirsch Center Room 218  
408-864-8628, 8773

Counseling Center  
Student and Community  
Services Bldg. 2nd Fl.  
408-864-5400

Career Services Info.  
Student and Community  
Services Bldg. 2nd Fl.  
408-864-5400

Please visit the Counseling Center to apply for certificates and degrees, and for academic planning assistance.

### Certificate of Achievement Level Requirements

A minimum "C" grade in each major course.

Note: A maximum of six (6) quarter units may be transferred from other academic institutions.

### Certificate of Achievement-Advanced Level Requirements

1. A minimum "C" grade in each major course.
2. Demonstrated proficiency in English and mathematics as evidenced by eligibility for EWRT 1A or ESL 5 and eligibility for MATH 114.  
Note: A maximum of 18 quarter units may be transferred from other academic institutions.

### A.A./A.S. Degree Requirements

1. Completion of all General Education (GE) requirements (31-42 quarter units) for the A.A./A.S. degree. GE units must be completed with a minimum 2.0 GPA ("C" average).
2. Completion of all major requirements. Each major course must be completed with a minimum "C" grade. Major courses can also be used to satisfy GE requirements (except for Liberal Arts degrees).  
Note: A maximum of 22 quarter units from other academic institutions may be applied toward the major.
3. Completion of a minimum of 90 degree-applicable quarter units (GE and major units included). All De Anza courses must be completed with a minimum 2.0 GPA ("C" average).  
All De Anza courses combined with courses transferred from other academic institutions must be completed with a minimum 2.0 GPA ("C" average).  
Note: A minimum of 24 quarter units must be earned at De Anza College.

Major courses for certificates and degrees must be completed with a letter grade unless a particular course is only offered on a pass/no-pass basis.

## Environmental Resource Management and Pollution Prevention

### Certificate of Achievement

In this career-oriented program, students are trained in the interrelated fields of environmental resource management (sustainable multiple-use management of our fundamental environmental resources - air, water, land, food and extracted materials) and pollution prevention. The training received is multidisciplinary, covering the areas of law/regulation, public health, economics, and science and technology, and includes coursework covering a variety of practical management tools that employers look for. Upon completion, students are prepared for employment as entry-level environmental management/pollution prevention specialists in a wide range of positions and settings, including working for business/industry, government, and non-profit organizations. This certificate is the first step in a career ladder whereby students can optionally choose to continue on to then complete a Certificate of Achievement-Advanced and finally an A.A. degree.

Student Learning Outcomes - upon completion, students will be able to:  
• identify fundamental environmental management/pollution prevention issues and apply sustainable solutions.

1. Meet the requirements for this certificate level.
2. Complete the following.

ES 2	Humans, the Environment and Sustainability	4
ES 6	Introduction to Environmental Law	4
ES 50	Introduction to Environmental Resource Management and Pollution Prevention	2
ES 56	Introduction to Environmental Health	4
ES 61A	Environmental Resource Management and Pollution Prevention: Air, Water, and Land	3
ES 64	AB 32 (CA Global Warming Solutions Act of 2006)	1
ES 95	Introduction to Environmental Careers	1
	Complete two (2) courses from the following:	4
ES 62A	Environmental Management Tools: Environmental Management Systems (EMS) and Environmental Performance Metrics (2)	
ES 62B	Environmental Management Tools: Environmental Impact Reports (EIRs) (2)	
ES 62C	Environmental Management Tools: Environmental Site Assessments (ESAs) (2)	
ES 62D	Environmental Management Tools: Industrial Ecology and Sustainable Design Principles (2)	
	Total Units Required . . . . .	23

## Environmental Resource Management and Pollution Prevention

### Certificate of Achievement-Advanced

In this career-oriented program, students are trained in the interrelated fields of environmental resource management (sustainable multiple-use management of our fundamental environmental resources - air, water, land, food and extracted materials) and pollution prevention. The training received is multidisciplinary, covering the areas of law/regulation, public health, economics, and science and technology, and includes coursework covering a variety of practical management tools that employers look for. Upon completion, students are prepared for employment as environmental management/pollution prevention specialists in a wide range of positions and settings, including working for business/industry, government, and non-profit organizations. This certificate is the middle step in a career ladder with the first step being a Certificate of Achievement and the last (optional) step being an A.A. degree.

*Student Learning Outcomes - upon completion, students will be able to:*  
 • identify both fundamental and advanced environmental management/pollution prevention issues and apply sustainable solutions.

1. Meet the requirements for this certificate level.
2. Complete the Certificate of Achievement course requirements. 23
3. Complete the following.

ES 61B	Environmental Resource Management and Pollution Prevention: Energy, Chemicals, and Waste	3
--------	------------------------------------------------------------------------------------------	---

*Complete the two (2) courses from the following not taken in completing the Certificate of Achievement:* 4

ES 62A	Environmental Management Tools: Environmental Management Systems (EMS) and Environmental Performance Metrics (2)	
ES 62B	Environmental Management Tools: Environmental Impact Reports (EIRs) (2)	
ES 62C	Environmental Management Tools: Environmental Site Assessments (ESAs) (2)	
ES 62D	Environmental Management Tools: Industrial Ecology and Sustainable Design Principles (2)	

*Complete a minimum of three (3) courses from the following:* 3

ES 58	Introduction to Green Building (1)	
ES 63	Agenda 21: Blueprint for Sustainability (1)	
ES 65	Environmental Stewardship (1)	
ES 66	Environmental Leadership (1)	
ES 67	Environmental Team-Building (1)	
ES 68	Community-Based Coalitions & Stakeholders (1)	
ES 70	Intro. to Energy Management Technology (1)	
ES 79	Renewable and Alternative Energy Systems (1)	
Total Units Required . . . . .		33

**Environmental Resource Management and Pollution Prevention**

**A.A. Degree**

In this career-oriented program, students are trained in the interrelated fields of environmental resource management (sustainable multiple-use management of our fundamental environmental resources - air, water, land, food and extracted materials) and pollution prevention. The training received is multidisciplinary, covering the areas of law/regulation, public health, economics, and science and technology, and includes coursework covering a variety of practical management tools that employers look for. Upon completion, students are prepared for either employment as environmental management/pollution prevention specialists (in a wide range of positions and settings, including working for business/industry, government, and non-profit organizations) or for transfer to four-year degree programs in Environmental Studies or related majors. This degree is the last step in a career ladder with the first step being a Certificate of Achievement and the second being a Certificate of Achievement-Advanced.

*Student Learning Outcomes - upon completion, students will be able to:*  
 • identify both fundamental and advanced environmental management/pollution prevention issues and apply sustainable solutions.

• understand and appreciate the broader context of their work in terms of achieving a sustainable society.

1. Meet the AA/AS degree requirements.
2. Complete the course requirements listed for the Certificate of Achievement and the Certificate of Achievement-Advanced. 33
3. Complete the following.

*Complete the five (5) courses from the following not taken in completing the Certificate of Achievement-Advanced:* 5

ES 58	Introduction to Green Building (1)	
ES 63	Agenda 21: Blueprint for Sustainability (1)	
ES 65	Environmental Stewardship (1)	
ES 66	Environmental Leadership (1)	
ES 67	Environmental Team-Building (1)	
ES 68	Community-Based Coalitions & Stakeholders (1)	
ES 70	Intro. to Energy Management Technology (1)	
ES 79	Renewable and Alternative Energy Systems (1)	

*Complete a minimum of 14 units from the following:* 14

ES 1	Introduction to Environmental Studies (4)	
ES 55	Ten Steps to Effective Learning in Environmental Studies (1)	
ES 80	California Field Studies (1)	
ES 85A	California Native Plants and Animals (2)	
ES 90	Environmental Research and Field Methods (4)	
ES 91X	Environmental Education and Nature-Based Learning (2)	
ES 95B	Environmental Studies Internship (2)	
ESCI 1	Environmental Science (4)	
ESCI 1L	Environmental Science Lab (1)	
ESCI 19	Environmental Biology (5)	
ESCI 20	Introduction to Biodiversity (5)	
ESCI 50	Introduction to Wildlife Corridor Technician: Connectivity (4)	
ESCI 61	Intro. to Photovoltaic (PV) Technology (3)	
ESCI 63	Photovoltaic (PV) Technology Field Project (2)	

Major	Environmental Resource Management and Pollution Prevention	52 units
GE	General Education (31-42 units)	
Electives	Elective courses required when major units plus GE units total is less than 90	
Total Units Required . . . . .		90 units