



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

Academic Year  
**2012 - 2013**

Environmental Studies  
**Biodiversity Specialist**

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.

**Biodiversity Specialist**

**Certificate of Achievement**

In the Biodiversity Specialist Certificate of Achievement program students learn technician-level scientific and ecological principles of Biodiversity Stewardship, Conservation Biology and the Natural Sciences. These include genetic, species and ecological diversity and related trends in local and global biodiversity loss.

*Student Learning Outcomes - upon completion, students will be able to:*

- utilize scientific and ecological principles to evaluate genetic, species, and ecosystem biodiversity, and causes of biodiversity loss, and ways to conserve biodiversity.

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

ES 95	Introduction to Environmental Careers	1
ESCI 1	Environmental Science	4
ESCI 1L	Environmental Science Lab	1
ESCI 19	Environmental Biology	5
ESCI 20	Introduction to Biodiversity	5
ESCI 21	Biodiversity 2	5
ESCI 30	Conservation Biology	5
	Total Units Required . . . . .	26

**Biodiversity Specialist**

**Certificate of Achievement-Advanced**

In the Biodiversity Specialist Certificate of Achievement-Advanced program students learn technician-level scientific and ecological principles of Biodiversity Stewardship, Conservation Biology and the Natural Sciences. These include genetic, species and ecological diversity and related trends in local and global biodiversity loss. Students apply these scientific including ecological concepts and field techniques to collaborative, community-based case studies in an effort to preserve, protect and restore biodiversity.

*Student Learning Outcomes - upon completion, students will be able to:*

- utilize scientific and ecological principles to evaluate genetic, species, and ecosystem biodiversity, and causes of biodiversity loss, and ways to conserve biodiversity.
- apply the above concepts and techniques to local and statewide biodiversity case studies to develop strategies in creating and implementing community-based, collaborative efforts to preserve, protect, and restore native species, ecosystems and the landscape.

1. Meet the requirements for this certificate level.
2. Complete the Certificate of Achievement course requirements. 26
3. Complete the following.

ES 1	Introduction to Environmental Studies	4
ES 80	California Field Studies	1
ES 85A	California Native Plants and Animals	2
ES 91X	Environmental Education and Nature-Based Learning	2
GEO 1	Physical Geography	4
	Complete one (1) course from the following:	5
CHEM 1A	General Chemistry (5)	
CHEM 10	Introduction to Chemistry (5)	
CHEM 30A	Introduction to General, Organic and Biochemistry I (5)	
CHEM 50	Preparatory Course for General Chemistry (5)	
	Total Units Required . . . . .	44

**Biodiversity Specialist**

**A.A. Degree**

In the Biodiversity Specialist AA degree program students learn technician-level scientific and ecological principles of Biodiversity Stewardship, Conservation Biology and the Natural Sciences. These include genetic, species and ecological diversity and related trends in local and global biodiversity loss. Students apply these scientific including ecological concepts and field techniques to collaborative, community-based case studies and communicate the value and skills required to preserve, protect and restore biodiversity.

*Student Learning Outcomes - upon completion, students will be able to:*

- utilize scientific and ecological principles to evaluate genetic, species, and ecosystem biodiversity, and causes of biodiversity loss, and ways to conserve biodiversity.
- apply the above concepts and techniques to local and statewide biodiversity case studies to develop strategies in creating and implementing community-based, collaborative efforts to preserve, protect, and restore native species, ecosystems and the landscape.
- demonstrate the ability to communicate the relationship between values, skills, environmental education, and environmental careers in order to play a role in furthering a more sustainable and biologically diverse world.

1.	Meet the AA/AS degree requirements.	
2.	Complete the course requirements listed for the Certificate of Achievement and the Certificate of Achievement-Advanced.	44
3.	Complete the following.	
ESCI 50	Introduction to Wildlife Corridor Technician: Connectivity	4
	<i>Complete a minimum of four (4) units from the following:</i>	4
ES 2	Humans, the Environment and Sustainability (4)	
ES 3	Imagery of the Environment (4)	
ES 6	Introduction to Environmental Law (4)	
ES 55	Ten Steps to Effective Learning in Environmental Studies (1)	
ES 65	Environmental Stewardship (1)	
ES 66	Environmental Leadership (1)	
ES 67	Environmental Team-Building (1)	
ES 68	Community-Based Coalitions and Stakeholders (1)	
ES 85B	Cheeseman Environ. Study Area Interpretive Training (2)	
ES 86	Global Field Studies (4)	
ES 90	Environmental Research & Field Methods (4)	
ES 91Z	Environmental Education and Nature-Based Learning (4)	
ESCI 52	Wildlife Corridor Technician: Animal Tracking Techniques (4)	
ESCI 55	Wildlife Corridor Technician: Corridor Design (3)	
MET 10	Weather and Climate Processes (5)	
MET 10L	Meteorology Laboratory (1)	
PHYS 2A	General Introductory Physics (5)	
PHYS 4A	Physics for Scientists and Engineers (6)	
PHYS 50	Preparatory Physics (4)	
Major	Biodiversity Specialist	52 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
	<i>Total Units Required . . . . . 90 units</i>	