### SINCLAIR COMMUNITY COLLEGE

and

### CENTRAL STATE UNIVERSITY

Graduates of Sinclair Community College who have completed the requirements of the **Associate of Science Degree** (University Parallel) and have completed courses as indicated for the Engineering Science University Parallel program (see Attachment) will receive full credit for the first two years of the **Bachelor of Science in Environmental Engineering** at Central State University.

This agreement will be in effect on the date indicated below and continue for a period of two years, after which time officials from both institutions will make any necessary revisions.

Effective Date: April 9, 2009

Sinclair Community College

Steven L. Johnson, Ph.D.

President

John W. Garland, Esq.

**Central State University** 

President

Helen Grove Ph D

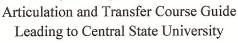
Senior Vice President and Provost

Terrence Glass, Ph.D.

Provost and Vice President for Academic Affairs



## Sinclair Community College to Central State University





Bachelor of Science Degree in Environmental Engineering

Introduction: The information in this guide has been reviewed by officials at the listed institutions and has been verified as transferable and applicable towards the major listed. The student who intends to transfer to Central State University for the degree listed, and who completes an Associate in Science (A.S.) degree in Engineering Science (University Parallel) at Sinclair Community College, should follow these guidelines in addition to meeting with Academic Advisors at Sinclair Community College and Central State University.

Course of Study

	Sinclair Engir	neering Science Degree	Central State ENE Degree				
Qtr. Cr.	Course	Description	Sem. Cr.	Course	Description		
		Mat	hematics				
5	MAT 201	Calculus & Anal. Geom. I	4	MTH 2502	Calculus I		
5	MAT 202	Calculus & Anal. Geom. II	5	MTH 2503	Calculus II		
5	MAT 203	Calculus & Anal. Geom. III	2		5 B		
5	MAT 215	Differential Equations	3	MTH 3110	Differential Equations		
4	MAT 216	Elements of Linear Algebra	3	MFE 1210	Engineering Analysis I		
Total 24			15	8			
		P	hysics				
6	PHY 201	General Physics I	5	PHY 2211	University Physics I		
6	PHY 202	General Physics II	5	PHY 2213	University Physics II		
6	PHY 203	General Physics III			*		
Total 18	3	8	10				
		Ch	emistry				
5	CHE 151	General Chemistry I	4	CHM 1201	Chemistry I		
5	CHE 152	General Chemistry II	4	CHM 1202	Chemistry II		
5	CHE 153	General Chemistry III			2		
Total 15		6	8		Tr.		
		Engineerin	g & Technolog				
3	ETD 128	Print Reading with GD&T	4	INT 1210	Engr. Comp. Graphics		
		Intro Comp-Aided Drafting					
2	ETD 199	Concepts					
5	ETD 211	Engineering Mechanics I	3	MFE 2310	Statics		
5	ETD 212	Engineering Mechanics II	3	MFE 2420	Dynamics		
	_	Topographic Surveying &					
4	CAT 221	Geomatics	3	INT 3650	Surveying		
Total 19	×		13				
Total Credit Hour Parity 103			61				

## General Notes:

- 1. CHE 153 at Sinclair or CHM 1202 at Central State is needed.
- 2. Humanities and Social Science electives should be taken to satisfy the requirements of the A.S. degree. To ensure transferability to Central State University these electives should be selected from the Ohio Transfer Module list.
- 3. It is highly recommended that ENE 2200, MFE 3530 (Strength of Materials) and MFE 3550 (Thermodynamics & Heat Transfer) be taken as consortium credit courses while attending Sinclair Community College through the Southwestern

Ohio Council for Higher Education (SOCHE) Agreement. These courses are required for the environmental engineering degree. If you are unable to take these courses while at Sinclair, contact the chair of the Water Resources Management department at Central State University to modify your plan of study.

- 4. Students who complete the Engineering Science University Parallel Associate of Science degree will be admitted as juniors to Central State having satisfied all required general education courses, with the exception of a course in African American History that must be completed either at Sinclair Community College or Central State University.
- 5. Students 25 or older are exempted from the physical education activity requirement.
- 6. All students must satisfy the English proficiency requirement by testing or passing ENG 3000.

# TRANSFER GUIDE COURSE PLAN FOR THE BACHELOR OF SCIENCE DEGREE IN ENVIRONMENTAL ENGINEERING

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the Core Curriculum and any Special Requirements for the above degree.

	5	FALL SEMESTER		SPRING SEMESTER			
Year	Course Number	Title	Credit Hrs	Year	Course Number	Title	Credit Hrs
Junior	ENE 3305	Fluid Mechanics and Hydraulics	3		BIO 2650	Microbiology	4
	ENE 3309	Water Chemistry	3		ENE 3312	Air Quality Engineering	3
	ENE 2200	Introduction to Environmental Eng.	4	Junior	ENE 3320	Engineering Hydrology	3
	MFE 3530	Strength of Materials	3	ال	ENE 3325	Groundwater Hydraulics	3
	MFE 3550	Thermodynamics & Heat Transfer	3		GEL 2205	Environmental Geology	3
		Total	16			Total	16
	-					-	
Senior	ENE 4415	Water Supply	3		ENE 4405	Applied Hydraulics	3
	ENE 4440	Environmental Prof. Seminar	1		ENE 4430	Wastewater Treatment Systems	3
	ENE xxxx	Environmental Engineering Elect.	3		ENE 4435	Soil and Water Pollution Control	3
	WRM 3308	Water and Environmental Law	3	Senior	ENE 4495	Senior Design Project	2
	ENE xxxx	Environmental Engineering Elect. 2	3	Š	ENE xxxx	Environmental Engineering Elect.	3
	6						
		, = 2	13			2	17
					Total hours needed to obtain a B.S. in Environmental Engineering degree:		140