2/23/2023	DATE	Technology	DIVISION
☑	REQUIRED COURSE	☐	NEW COURSE
☐	ELECTIVE COURSE	☑	REVISION

Lake Land College

Course Information Form

COURSE NUMBER:	CET-082		TITLE: *(30 Characters Max)*		Civil Drafting						
SEM CR HRS:	3	Lecture:	1	Lab:	4					ECH:	5
Course Level:	☐ Gen Ed / IAI ☐ Baccalaureate /Non-IAI	☑ Career/Technical ☐ Dev Ed/ Not in Degree Audit		Clinical Practicum:	0	SOE/ Internship:	0			SOE ECH:	PER CONTRACT
COURSE PCS #	12 15.1304		IAI Code				Contact Hours (Minutes Per Week)				
Repeatable (Y/N):	N	Pass/Fail (Y/N):	N	Variable Credit (Y/N):	N	Min:		Max:		16 Wks 250	8 wks 500
Prerequisites:	CAD-056 CAD I										
Catalog Description: (40 Word Limit)	Focuses on developing the competence in drafting detailed drawings and the basics of Microstation with special emphasis on interpreting field data to produce highway construction drawings and survey drawings.										

List the Major Course Segments (Units)	Contact Lecture Hours	Contact Lab Hours	Clinical Practicum	Non-Clinical Internship/ SOE
Contour Map	2	8		
Five Bridge Types	2	4		
Use of a Planimeter and Earthwork Calculations	2	8		
Borrow Pit Calculations	2	8		
Plat	2	8		
Blue Print Reading	1	10		
Highway Drawing from Field Notes	2	6		
Production Drawing of a Box Culvert	2	8		
TOTAL	15	60	0	0

EVALUATION

QUIZZES	☐	EXAMS	☐	ORAL PRES	☐	PAPERS	☐
LAB WORK	☑	PROJECTS	☑	COMP FINAL	☑	OTHER	☐

COURSE MATERIALS

TITLE:	*Harnessing MIcrostation V8*	
AUTHOR:	Krishnan/Taylor	
PUBLISHER:	Tompson/Delmar	
VOLUME/EDITION/URL:	5th Edition	
COPYRIGHT DATE:	2007	

MAJOR COURSE SEGMENT	HOURS	LEARNING OUTCOMES
		The student will be able to:
Contour Map	10.00	Illustrate a contour map from a grid of elevations. Interpret elevations for cross sections from a contour map.
Five Bridge Types	6.00	Identify and draw different bridge types of truss bridges using CAD.
Use of a Planimeter and Earthwork Calculations	10.00	Illustrate cross sections in a superelevation transition and assess earthwork quantities with a planimeter.
Borrow Pit Calculations	10.00	Mathematically summarize earth quantities from existing and final cross sections.
Plat	10.00	Illustrate a subdivision plat and prepare a property description.
Blue Print Reading	11.00	Examine blue prints of civil related construction projects.
Highway Drawing from Field Notes	8.00	Tabulate quantities for civil construction projects
Production Drawing of a Box Culvert	10.00	Compose plan, elevation and detailed drawings of a box culvert.

	75.00	

COURSE OUTCOMES*	At the successful completion of this course, students will be able to:
	• Demonstrate earthwork quantity computations.
	• Interpolate contours on a contour map.
	• Identify details of civil engineering construction plans.
	• Demonstrate computer aided drafting fundamentals using Microstation.

** Course Outcomes will be used in the Assessment Software for Outcomes Assessment. Limit to 3 - 5.*