Department of Civil Engineering.

ourse outcome manning with PO's and PSO's

	ar se outcome mapping with 1 0	
Course Title:	ENGINEERING PHYSICS	
Programme:	B.Tech	
Academic Year	2019-20	
Year/Semester:	1/1	
Regulation:	R19	
Subject Code:	BS1108	
Name of the Faculty:	M.V.S.PRASAD	

LCOURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Identify forces and moments in mechanical systems using scalar and vector techniques, extend Newton's second law for inertial and non-inertial frame of reference, explain simple harmonic motion and damped harmonic motions	Understanding, Apply
CO 2	Explain how sound is propagated in buildings, analyze acoustic properties of typically used materials in buildings, recognize sound level disruptors and their use in architectural acoustics, Use of ultrasonics in flaw detection using NDT technique	Understanding, Apply, Analyzing.
CO 3	Understand the elasticity and plasticity concepts, Study different types of moduli and their relation, Analyze the concepts of shearing force and moment of inertia	Understanding, Apply, Analyzing.
CO 4	Understand the basic concepts of LASER light Sources, Study Different types of laser systems, Identify different types of sensors and their working principles	Understanding, Apply.
CO 5	Explain the concept of dielectric constant and polarization in dielectric materials, summarize various types of polarization of dielectrics, interpret Lorentz field and ClaussiusMosotti relation in dielectrics, classify the magnetic materials based on susceptibility and their temperature dependence. Explain the applications of dielectric and magnetic materials, Apply the concept of magnetism to magnetic devices.	Understanding, Applying

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	-	2	1	-	-	-	-		-	2	2	1	1
CO2	3	2	2	2	-	-		-	-	-	-	2	1	1	1
CO3	3	2	-		1		-	-	-	-	-	2	1	. 1	1
CO4	3	2	+	2		-		-	-	-	-	2	2	1	1
CO5	3	2	2	-	-	+	-	-	-	-	-	2	2	1	1
Cour	3	2	2	2			-	-	-		-	2	1.6	1	1

Faculty Signature

Department of Civil Engineering.
Course outcome mapping with PO's and PSO's

Course Title:	account mapping with 10 s and
	MATHEMATICS -II
Programme:	B.Tech
Academic Year	2019-2020
Year/Semester:	1/1
Regulation:	R19
Subject Code:	BS1102
Name of the Faculty:	G.HEMALATHA

I.COURSE OUTCOMES (COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
	Develop the use of matrix algebra techniques	Understand
CO2	Solve system of linear algebraic equations	Apply
CO3	Evaluate approximating the route of polynomial and transcendental equations	Evaluate
CO4	Apply flewions forward and backward interpolation	The second secon
CO 5	Apply different algorithms for approximating the solutions of anti-	Apply
co 3	differential equations	Apply

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	DCOS	Poor
COI	3	-	-	-	-	-	2	2	2			.012	1301	PSO2	PSO3
CO2	2		2	2					_				2	3	2
		-	2	2	-	-		-	-	-	-	-	3	2	1
CO3	2	2	-	-		-	2	-	- 1	-		-	2	2	-
CO4	2	-	2		-	-	3		_					2	1
CO5	2	_									-	-	3	2	2
Cour	-	_	-	-	-	-		-	3	3	-	-	3	2	2
se	2.2	2	2	2	-	-	2.3	2	2.5	3	-	-	2.6	2.2	1.6

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Department of CivilEngineering.

	Course outcome mapping with 10 3 and
Course Title:	Engineering Drawing
Programme:	B.Tech
Academic Year	2019-2020
Year/Semester:	1-1
Regulation:	R19
Subject Code:	ES1103
Name of the Faculty:	P.MADHURI

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	To introduce the students to use drawing instruments and to draw polygons, Engg. Curves.	Apply
CO 2	To introduce the students to use orthographic projections, projections of points & simple lines. To make the students draw the projections of the lines inclined to both the planes.	Apply
CO3	The objective is to make the students draw the projections of the plane inclined to both the planes.	Apply
CO4	The objective is to make the students draw the projections of the various types of solids in different positions inclined to one of the planes.	Apply
CO 5	The objective is to represent the object in 3D view through isometric views. The student will be able to represent and convert the isometric view to orthographic view and vice versa.	Analyze

II. CO-PO/PSO MATRIX:

200																	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3		
COI	2	2	3	-	-	-	-	-		-	-	2	2	2	1		
CO2	3	2	2	-	-	-	-	-	-	-	-	2	3	2	1		
CO3	2	2	3	-	-	T	-	-	-	-	-	2	2	2	1		
CO4	3	2	2	-	-	-	-	-	-	-	-	2	3	2	1		
CO5	3	2	2	-	-		-	-	-	14	\ -	2	3	2	1		
Course	2.6	2	2.4	15	-	-	-		-	-		2	2.6	2	1		

Faculty Signature

Department of Civil Engineering Sree Vahini Institute of Science & Technology Firuvuru - 521235, Krishna Dt. A.P.

Department of Civil Engineering.

Course Title:	Course outcome mapping with PO's and PSO's
Programme:	ENIGINEERING MECHANICS
Acada i a	B.Tech
Academic Year	2019-2020
Year/Semester:	I-I
Regulation:	R19
Subject Code:	
Name of the F	ES1204
Name of the Faculty	V:D-R.NAGENDRABABU/Y SOMBABU

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S. No.	Course Outcomes	Blooms Taxonomy level
CO1	The students are to be exposed to the concepts of force and friction, direction and its application.	Apply
CO 2	The students are to be exposed to application of free body diagrams. Solution to problems using graphical methods and law of triangle of forces.	Apply
CO 3	The students are to be exposed to concepts of center of gravity.	Apply
CO 4	moment of inertia including transfer methods and their applications	Analyse
CO 5	The students are to be exposed to motion in straight line and in curvilinear paths, its velocity and acceleration computation and methods of representing plane motion.	Analyse

II. CO-PO/PSO MATRIX:

PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSOI	PSO2	DCO2
2	2	-	2	-	-	_	-	-	-	_				PSO3
3	3	-	-	-	-	-	-	-	-	_			3	1
2	2	2-	2	-	-	-	-	-	-	_			_	1
3	3	-	-	-	-	-	-	-	-	_	3		2	1
2	2	-	2	-	-	-	-	-	_	_	2			1
2.4	2.4	-	2	-	-	-	-	-	_	_	2.6	2.6	2.2	1
	2 3 2 3 2	2 2 3 3 2 2 3 3 2 2	2 2 - 3 3 - 2 2 - 3 3 - 2 2 -	2 2 - 2 3 3 2 2 - 2 3 3 2 2 - 2	2 2 - 2 - 3 3 - - - 2 2 - 2 - 3 3 - - - 2 2 - 2 -	2 2 - 2 - - 3 3 - - - - 2 2 - 2 - - 3 3 - - - - 2 2 - 2 - -	2 2 - 2 - - - 3 3 - - - - 2 2 - 2 - - 3 3 - - - - 2 2 - 2 - -	2 2 - 2 - - - - 3 3 - - - - - 2 2 - 2 - - - 3 3 - - - - - 2 2 - 2 - - -	2 2 - 2	2 2 - 2	2 2 - 2	2 2 - 2 - - - - - - 2 3 3 - - - - - - - - - 2 2 - 2 - - - - - - - 3 3 3 - - - - - - - - - 3 2 2 - 2 - - - - - - - 2 2.4 2.4 - 2 -	2 2 - 2 - - - - - - - - 2 2 3 3 - - - - - - - - 2 2 3 3 - - - - - - - - 3 3 2 2 - 2 - <td>2 2 2 - 2 -</td>	2 2 2 - 2 -

Faculty Signature

Department of Civil Engineering Sree Yahini Institute of Science & Technology Firuvuru - 521235, Krishna Dt. A.P.

Department of Civil Engineering.
Course outcome mapping with PO's and PSO's

Course Title:	MATHEMATICS-1	
Programme:	B.Tech	
Academic Year	2019-20	
Year/Semester:	1/1	
Regulation:	R19	
Subject Code:	BS1101	
	D.SaiPratap[

I.COURSE OUTCOMES (COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level			
CO1	Utilize mean value theorems to real life problems	Apply			
CO 2	Solve the differential equations of first order related to various engineering fields	Apply			
CO 3	Solve the differential equations second and higher order related to various engineering fields	Apply			
CO 4	Calculate total derivative, Jacobian and familiarize with functions of several variables which is useful in optimization	Apply			
CO 5	Apply double integration techniques in evaluating areas bounded by region	Apply			

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	3	2	2	-	-	-	-	-	2	2	2	2	2
CO2	3	3	3	2	1	-	~	-		-	1	2	1	2	1
CO3	3	3	3	2	2	-	-	-	-	-	1	2	1	2	1
CO4	2	3	3	2	2	-	~	-	-	-	2	2	2	2	2
CO5	2	3	3	2	1	2	-	-	-	-	2	2	2	2	-
Cours	2.6	3	3	2	1.6	-	-		-	-	1.6	2	1.6	2	1.6

Department of Civil Engineering.

Course Title:	ENGLISH
Programme:	B.Tech
Academic Year	2019-20
Year/Semester:	1/1
Regulation:	R19
Subject Code:	HS1109
Name of the Faculty:	V.BABURAO

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Vowels, Consonants, Pronunciation Phonetic transcription	Apply
CO 2	Past tense marker, Word stress	Apply
CO 3	Rhythm and Intonation	Apply
CO 4	Contrastive stress	Apply
CO 5	Word stress, stress in compound words	Remember

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	-	-	-	-	-	-	3	3	2	-	-	-	3	2	3
CO2	-	-	-	-	-	-	3	3	2	-	-	-	3	2	3
CO3	-	-	-	-	-	-	3	3	2	-	-	-	3	2	3
CO4	-	-	-	-	-	-	3	3	2	-	-	-	3	2	3
CO5		-	×	-	-	-	3	3	2	-	-	-	3	2	3
Course	-	-	-	-	1=0	-	3	3	2	-	-	-	3	2	3



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Department of Civil Engineering.

Course Title:	ENGLISH LAB
Programme:	B.Tech
Academic Year	2019-20
Year/Semester:	1/1
Regulation:	R19
Subject Code:	HS1109
Name of the Faculty:	V.BABURAO

I.COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Vowels , Consonants, Pronunciation Phonetic transcription	Apply
CO 2	Past tense marker, Word stress	Apply
CO 3	Rhythm and Intonation	Apply
CO 4	Contrastive stress	Apply
CO 5	Word stress, stress in compound words	Remember

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	-	-	-	-		-	3	3	2	-	-	-	1	2	1
CO2		-	-	-	-	-	3	3	2	-	-	14	1	2	1
CO3	-	-	-	-	-	-	3	3	2	-	-	-	1	2	1
CO4	-	-	-	+	-	-	3	3	2	-		-	1	2	1
CO5	-	-	-	-		-	. 3	3	2	-	-	-	1	2	1
Course	-	-	-	-	-	-	3	3	2		-		1	2	- 1

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Head of the Dear To Sain See Vanta Institute of Science & Technology

Department of Civil Engineering.

Course outcome mappi	ng with PO's and PSO's
Course Title:	ENGINEERING PHYSICS LAB
Programme:	B.Tech
Academic Year	2019-20
Year/Semester:	1/1
Regulation:	R19
Subject Code:	BS1109
Name of the Faculty:	V.L.HARIKA

I. COURSE OUTCOMES(COs): Upon completion of the course students will

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Develop analytical/experimental skills and impart prerequisite hands on experience for engineering laboratories	Apply
CO 2	Understand the need for precise measurement practices for data recording	Understand
CO 3	Understand the principle, concept, working and applications of relevant technologies and comparison of results with theoretical calculations	Understand
CO 4	Analyze the techniques and skills associated with modern scientific tools such as lasers and fiber optics	Analyze
CO 5	Develop basic communication skills through working in groups in performing the laboratory experiments and by interpreting the results	Analyze

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	-	-	-	3	-	-	1	2	-	-	1	1	1	1
CO2	3	-	-	-	3	-	-	1	2	-	- 1/2.	1	1	1	1
CO3	3	-	-	-	3	-	-	1	2	-	-	1	1	1	1
CO4	3	-	-	-	3	-	-	1	2	-	-	1	1	1	1
CO5	3	-	-	-	3	-	-	1	2	-	-	1	1	1	1
Cour	3	-	-	-	3	-	-	1	2	-	,	1	1	1	1

Faculty Signature

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Department of Civil Engineering
Course outcome mapping with PO's and PSO's

Course Title:	ENGLISH	
Programme:	B.Tech	
Academic Year	2019-20	
Year/Semester:	1/11	
Regulation:	R19	
Subject Code:	HS1201	
Name of the Faculty:	Y.PULLA REDDY	

I. COURSE OUTCOMES(COs):

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	To facilitate effective listening skills for better comprehension of academic lectures	Apply
CO 2	Focus on appropriate reading strategies for comprehension of various academic texts	Apply
CO 3	Help improve speaking skills through participation in activities such as role plays, discussion and structured talks	Apply
CO 4	Impart effective strategies for good writing and demonstrate the same in summarizing.	Apply
CO 5	Provide knowledge of grammatical structures and vocabulary and encourage their appropriate use in speech	Remember

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	-	-	7	-	-	15	3	3	2	T	-	-	2	3	2
CO2	100	-	A Total	-	1	W+ 1	3	3	2	7	-	-	3	2	-
СОЗ		-	-10	T.	1	H-	3	3	2	-	150	-	2	2	-
CO4	1	-	7	10-	-	1	3	3	2	-	-	-	3	2	1
CO5	-	-	-	-	11-11	-	3	3	2	-	-	-	3	3	2
Course	-	-	-/	-	N/E	-	3	3	2	-	-	-	2.6	2.4	2

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ru-521 235-Krishna D.

Department Of civil engineering

Course outcome monning with PO's and PSO's

-	ourse outcome mapping with PO's and 150's
Course Title:	ENGLISH
Programme:	B.Tech
Academic Year	2019-20
Year/Semester:	1/11
Regulation:	R19
Subject Code:	HS1203
Name of the Faculty:	V J MOSES/Y.PULLA REDDY

COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Vowels , Consonants, Pronunciation Phonetic transcription	Apply
CO 2	Past tense marker, Word stress	Apply
CO 3	Rhythm and Intonation	Apply
CO 4	Contrastive stress	Apply
CO 5	Word stress, stress in compound words	Remember

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	-	-	-	-	-	-	3	3	2	-	-	-	2	2	3
CO2	-	1-	-	-	-	1,=2	3	3	2	-		-	1	2	-
CO3	-	-	-	-	-	-	3	3	2	-	-	-	2	1	2
CO4	-	-	-	-	-	-	3	3	2	-		-	2	1	2
CO5	-	-	-	-	-	-	3	3	2	-	-	-	1	2	2
Course	-	-	-	-	-	-	3	3	2	-	-	-	1.5	1.6	2.2

Faculty Signature

Science & Technology
ru-521 235-Krishne

SREE VAHINI INSTITUTE OF SCINCE & TECHONOLOGY::TIRUVURU Department of Civil Engineering

Course outcome mapping with PO's and PSO's

Course Title:	MATHEMATICS - III (BS1203)
Programme:	B.Tech
Academic Year	2019-20
Year/Semester:	1/11
Regulation:	R19
Subject Code:	BS1203
Name of the Faculty:	D.SAIPRATAP

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Under stand the physical meaning of different operators such as gradient, curl and divergence	Apply
CO 2	Evaluate the work done against a field, circulation and flux using vector calculus	Apply
CO 3	Apply the Laplace transform for solving differential equations	Apply
CO 4	Find or compute the Fourier series of periodic signals	Apply
CO 5	Evaluate methods for partial differential equations that model physical processes	Analyze

II. CO-PO/PSO MATRIX:

	-				CAZE.										
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	-	2	-	-	-	-	-	-	-	-	2	2	2
CO2	-	3	-	3	-	-0	-	-	-	-		2	3	2	3
CO3	2	3	3	-	-	-	-	-	-	-	-	-	2	3	-
CO4	3	2	-	2	-	-		-	-	-	-	2	3	2	2
CO5	3	-	3	2	-	-	-	•	-	-	-	2	2	3	2
Course	2.7	2.5	3	2.2	-	-	-	-	-	-	-	2	2.4	2.4	2.2
			*				-								

Faculty Signature

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SREE VAHINI INSTITUTE OF SCINCE & TECHONOLOGY::TIRUVURU Department of Civil Engineering

Course outcome mapping with PO's and PSO's

Course Title:	ENGINEERING / APPLIED CHEMISTRY LABORATORY
Programme:	B.Tech
Academic Year	2019-2020
Year/Semester:	1/11
Regulation:	R19
Subject Code:	HS1102
Name of the Faculty:	N.V.Narasimha Rao

COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Introduction to Chemistry laboratory – Molarity, Normality, Primary, secondary standard solutions, Volumetric titrations, Quantitative analysis, Qualitative analysis, etc.	Understand
CO 2	The experiments introduce volumetric analysis; redox titrations with different indicators; EDTA titrations; then they are exposed to a few instrumental methods of chemical analysis.	Analyse
CO3	Thus at the end of the lab course, the student is exposed to different methods of chemical analysis and use of some commonly employed instruments.	understand
CO4	They thus acquire some experimental skills. Standardized solutions using titrations, conductivity meter, PH METER	Apply

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	-	2		-	-	-	-	-	-	3	2	3	2
CO2	-	3	3	-	-	3	2	-	-	-	-	3	3	2	-
CO3	2	3	-	-	-	-	2	-	-		-	3	2	2	-
CO4	2	-	-	3	-	-	-	-	#2	-	-	2	3	2	-
Course	2.3	2.7	3	2.5	-	3	2	-	-	-		2.8	2.5	2.3	2

Faculty Signature

SREE VAHINI INSTITUTE OF SCINCE & TECHONOLOGY::TIRUVURU Department of Civil Engineering

Course outcome mapping with PO's and PSO's

	mapping with to
Course Title:	Programming for Problem Solving using C
Programme:	B.Tech
Academic Year	2019-20
Year/Semester:	I/II
Regulation:	R19
Subject Code:	ES1201
Name of the Faculty:	B.SIVA KANAKA RAJU

I. COURSE OUTCOMES(COs):

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Formulate algorithm/flowchart for given arithmetic and logical problem	Understand
CO 2	Translate algorithm/flowchart into C program using correct syntax and execute it	Illustrate
CO 3	Write programs using Analyze the different operators, Selection & Making Decisions Statements and Loops Concepts with Programming Examples.	Analyze
CO 4	Understand the concept of Array, Strings and Enumerated, Structure, and Union to solve different problems	Understand
CO 5	Analyze the concepts of Pointers, memory allocation Functions with programming Applications.	Analyze
CO 6	To decompose a problem into functions and to develop modular reusable code and apply File I/O operations	Apply

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	3	1	-	-	-	-	-	-	-	-	2	2	2
CO2	3	2	2	1	-	-	-	-	-	-	-	-	3	2	3
CO3	2	2	3	1		-	-	-	-	-	-	-	2	2	-
CO4	3	2	2	1	-	-	-	-	-	-	-	-	3	2	2
CO5	3	2	3	1	-	-	-	-		-		-	3	2	2
CO6	2	2	2	1	-	-	-	-	-	-	-	-	2	2	2.2
Course	2.6	2	2.5	1	-	-	-	-	-	-	-	-	2.5	2	2

Faculty Signature

Department of Civil Engineering Sree Yahini Institute of Science & Vectoralogy Firuvuru - 521235, Krishna Dt. A.P.

Department Of Civil Engineering

	Course outcome mapping with PO's and PSO's	
Course Title:	WORKSHOP PRACTICE LAB	
Programme:	B.Tech	
Academic Year	2019-2020	
Year/Semester:	I-II	
Regulation:	R19	
Subject Code:	ES1219	
Name of the Faculty:		

COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonom level		
CO1	Carpentry 1. T-Lap Joint 2. Cross Lap Joint 3. Dovetail Joint 4. Mortise and Tenon Joint	Apply		
CO 2	2. Fitting 1. Vee Fit 2. Square Fit 3. Half Round Fit 4. Dovetail Fit	Apply		
CO3	3. Black Smithy 1. Round rod to Square 2. S-Hook 3. Round Rod to Flat Ring 4. Round Rod to Square headed bolt	Apply		
CO4	4. House Wiring 1. Parallel / Series Connection of three bulbs 2. Stair Case wiring 3. Florescent Lamp Fitting 4. Measurement of Earth Resistance	Apply		
CO5	5. Tin Smithy 1. Taper Tray 2. Square Box without lid 3. Open Scoop 4. Funnel 6.IT Workshop 1. Assembly & Disassembly of Computer	analyze		
CO6	6.IT Workshop 1.Assembly& Disassembly of Computer	analyze		

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2	2	2	-	2	-	-	-	-	-	-	3	2	3	2
CO2	2	-	3	-	2	-	-	-	-	-		3	3	2	1
CO3	3	-	3	-	2	-	, - ;	-	-		-	3	2	2	2
CO4	3	-	2	-	3	-	-	-	-	-	-	3	3	2	2
CO5	2	-	2	-	2		-	-	-	-	-	2	2	2	1
CO6	2	2	2	-	2	-	-	-	-	-	-	2	2	2	-
Course	2.3	2	2.3	-	2.2	-	-	-	-	-	-	2.7	2.3	2.2	1.6
		Loax	00												

Paraculty Signature

Department of Civil Engineering
Stee Vahini Institute of Science & Vechnology
Tiruvuru - 5217 Pishina Diagram

SREE VAHINI INSTITUTE OF SCIENCE &TECHNOLOGY::TIRUVURU Department of Civil Engineering

Course outcome mapping with PO's and PSO's

Course Title:	Programming C. D. C. Lah
Programme:	Programming for Problem Solving using C Lab B.Tech
Academic Year	2019-20
Year/Semester:	1/11
Regulation:	R19
Subject Code:	ES1202
Name of the Faculty:	B.SIVA KANAKA RAJU

I. COURSE OUTCOMES(COs):

S.No.	Course Outcomes	Blooms Taxonomy level				
CO1	Develop C programs for simple applications making use of basic constructs	Develop				
CO 2	Apply the concept of conditionals and loops in C programs.	Apply				
CO 3	Develop the C programs with arrays and strings.	Develop				
CO 4	Apply the concept of functions, recursion in C programs	Apply				
CO 5	Analyze the concept of pointers, and structures in C	Analyze				
CO 6	Examine the use of sequential and random access file processing.	Apply				

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	DCO1	Pages	
COI	3	3	3	2	-			-			. 011	1012	PSO1	PSO2	PSO3
COI								-	- 1	-	-	-	1	-	2
CO2	3	2	2	1	-	-	-								
CO2										-	-		2	2	3
CO3	3	3	3	2	-		-	-							
										-	-	-	1	2	-
CO4	3	2	2	1	_	-	-								
									-	-	-	-	2	1	2
CO5	3	3	3	2	-		_								_
								-	-	-		-	2	1	2
CO6	3	2	2	1	-	-		-						- 1	2
000							- 1	-	-	-	-	-	1	2	2
Course	3	2.5	2.5	1.5	_	-								2	2
Course				1.0			-	-	-	-		-	1.5	1.6	2.2

Faculty Signature

Department of Civil Engineering Sree Vahini Institute of Science & Yechnology Firuvuru - 521235, Krishna Dt. A.P

Department of Civil Engineering

Course Title:	COMPUTER AIDED ENGINEERING DRAWING.
Programme:	B.Tech
Academic Year	2019-2020
Year/Semester:	1-11
Regulation: Subject Code:	R19
Name of the Faculty:	V.RAMACHANDRARAO

I. COURSE OUTCOMES(COs): Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level			
CO1	The knowledge of projections of solids is essential in 3D modeling and animation. The student will be able to draw projections of solids. The objective is to enhance the skills they already acquired in their earlier course in drawing of projection	Apply			
CO 2	Student gets exposed on working of sheet metal with help of development of surfaces.	Create			
CO3	Student understands how to know the hidden details of machine components with the help of sections and interpenetrations of solids.	Apply			
CO4	Student shall exposed to modeling commands for generating 2D and 3D objects using computer aided drafting tools which are useful to create machine elements for computer aided analysis	analyze			
CO5	COMPUTER AIDED SOLID MODELING: Isometric projections, orthographic projections of isometric projections, Modeling of simple solids, Modeling of Machines & Machine Parts	analyze			

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2	2	2	-	2	-	-	-	-	1-	-	3	2	3	2
CO2	2	-	3	-	2	-	-	-	-	-	-	3	3	2	-
CO3	3	-]	3	-	2	-	-	-	-	-	-	3	2	2	-
CO4	3	-	2	-	3	-	-	-	-		-	3	3	2	-
CO5	3	2	3	-	3	-	* (-)	-	-	-	-	3	3	3	2
Course	2.6	2	2.6		2.4		-	-	-	-	-	3	2.6	2.4	2

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Faculty Signature

Department of Civil Engineering Sree Vahini Institute of Science & Technology Firuyuru - 521235, Krishna Dt. A.P

Department of Civil Engineering.

Course outcome mapping with PO's and PSO's

	mapping with 10
Course Title:	Strength of Materials-I
Programme:	B.Tech
Academic Year	2019-20
Year/Semester:	11/1
Regulation:	R16
Subject Code:	R1621013
Name of the Faculty:	Mr. V SURESH

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Discuss the basic materials behavior under the influence of different external loading conditions and the support conditions	Understand
CO 2	Recommended to draw the diagrams indicating the variation of the key performance features like bending moment and shear forces	Evaluate
CO 3	Demonstrate bending concepts and calculation of section modulus	Apply
CO 4	Classify the assess stresses across section of the thin and thick cylinders to arrive at optimum sections to withstand the internal pressure using Lame's equation.	Analyzing

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3										3	3	2	1
CO2	3	3	3	2								3	3	2	1
CO3	3	3	2	1								3	3	2	1
CO4	3	3	2									2	2	2	1
Cours e	3	3	2.3	1.5								2.75	2.75	2	1

Faculty Signature

Department of Civil Engineering Sree Vahini Institute of Science & Technology Firuvuru - 521235, Krishna Dt. A.P

Department of Civil Engineering.

Course outcome mapping with PO's and PSO's

BUILDING MATERIALS AND CONSTRUCTION
B. Tech
2019-20
II/I
R16
R1621014
Mr. D. RAMBABU

II. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Identify the different building materials and their importance in building construction	Remember
CO 2	Differentiate brick masonry, stone masonry construction and use of lime and cement in various constructions	Understand
CO 3	Discuss the importance of building components and finishing.	Understand
CO 4	Explain the classification of aggregates, sieve analysis and moisture content usually required in building construction.	Understand

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3					2	2					3	2		3
CO2	3					2	2					3	3		2
CO3	3					2	2					3	3		2
CO4	3	2		1								3		3	2
Cour	3	2		1		2	2					3	2.67	3	2.25

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Faculty Signature

Department of Civil Engineering Sree Vahini institute of Science & Technology Firuvuru - 521235, Krishna Dt. A.P.

Department of Civil Engineering.
Course outcome mapping with PO's and PSO's

	mapping with	
Course Title:	PROBABILITY AND STATISTICS	
Programme:	B.Tech	
Academic Year	2019-20	
Year/Semester:	II/I	
Regulation:	R16	
Subject Code:	R1621011	
Name of the Faculty:	Mr. M POTHU RAJU	

LCOURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level			
CO1	Examine, analyze, and compare various Probability distributions for both discrete and continuous random variables.	Analyze			
CO 2	Describe and compute confidence intervals for the mean of a population	Understand			
СОЗ	Describe and compute confidence intervals for the proportion and the variance of a population and test the hypothesis concerning mean, proportion and variance and perform ANOVA test	Understand			
CO4	Determine a curve to the numerical data	Apply			

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	2	1							1	1	2	2	1
CO2	2	3	2	1	2						1	2	1	1	1
CO3	3	3	3	3	3						3	2	3	3	1
CO4	2	3	2	2	3						3	2	1	2	1
Cour	2.5	3	2.25	1.75	2.67						2	1.75	1.75	2	1

Faculty Signature

Department of Civil Engineering Sree Vahini Institute of Science & Science y Firmword - 521235, Krishna Dt. & P

Department of Civil Engineering.

Course outcome mapping with PO's and PSO's

	mapping with	
Course Title:	Basic Electrical & Electronics Engineering	
Programme:	B.Tech	
Academic Year	2019-20	
Year/Semester:	II/I	
Regulation:	R16	
Subject Code:	R1621012	
Name of the Faculty:	Mrs. K RAMYA	

COURSE OUTCOMES(COs): Upon completion of the course, stud

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Determine number of powerful engineering circuit analysis techniques such as KCL, KVL source transformation and several methods of simplifying networks.	Apply
CO 2	Summarize and explain the principal of operation and performance of D.C machine.	Understand
CO3	Recognize and explain the principle of operation and performance of transformer	Understand
CO4	Explain the construction, working principle and performance of synchronous Generator	Understand
CO 5	Design biasing circuits for transistors.	Create
CO 6	Explain concept of amplifier	Understand

II. CO-PO/PSO MATRIX:

3					200	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
1										2	2	2	1
2										2	3	2	1
2										2	2	2	1
2										2	3		1
2										2			1
2										2			1
2.2													1
	2 2 2 2	2 2 2	2 2 2	2 2 2	2 2 2	2 2 2 2	2	2	2	2	2 2 2 2 2 2 2 2 2 2 2 2 2	2 2 2 2 2 3 2 2 3 2 2 2 2 2 2 2	2 2 2 2 2 2 2 2 2

Faculty Signature

Department of Civil Engineering Sree Vahini Institute of Science & Technology Tiruvuru - 521235, Krishna Dt. A.P.

Department of Civil Engineering.

Course outcome mapping with PO's and PSO's

Course Title:	STRENGTH OF MATERIALS LAB	-
Programme:	B. Tech	-
Academic Year	2019-20	
Year/Semester:	II/I	-
Regulation:	R16	_
Subject Code:	R1621018	
Name of the Faculty:	Mr. Y. SOMBABU	

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Apply the linear laws of elasticity as related to stress and strain	Apply
CO 2	calculate deflection of different sections at different loading conditions	Apply
CO 3	Differentiate between properties of a material	Understand
CO 4	Analyze the bending stress on different type of sections	Analyze

II. CO-PO/PSO MATRIX:

	PO1	PO2	РО3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	1	1		2							2	2	2	1
CO2	3	2	1	1	1							2	3	3	1
CO3	2			2								2	2	1	2
CO4	3	2	1	1	1							2	2	2	1
Course	2.8	1.7	1	1.3	1.3							2	2.3	2	1.3

Faculty Signature

Department of Civil Engineering Sree Vahini Institute of Science & Technology Liruvuru - 521235, Krishna Dt. A.P.

Department of Civil Engineering.
Course outcome mapping with PO's and PSO's

Course Title:	FLUID MECHANICS
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	11/1
Regulation:	R16
Subject Code:	R1621016
Name of the Faculty:	Mr. M. TULASI SAI

I. COURSE OUTCOMES(COs):
Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Describe the various properties of fluids and their influence on fluid motion and analyses a variety of problems in fluid statics and dynamics.	Understanding
CO 2	Calculate the forces that act on submerged planes and curves.	Applying
CO 3	Identify and analyse various types of fluid flows.	Remember
CO 4	Determine the integral forms of the three fundamental laws of fluid mechanics to turbulent and laminar flow through pipes and ducts in order to predict relevant pressures, velocities and forces.	Applying
CO 5	Draw simple hydraulic and energy gradient lines.	Evaluate
CO 6	Examine the quantities of fluid flowing in pipes, tanks and channels.	Apply

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2		1	1							2	2		
CO2	3	2		1								1	2	3	
CO3	3	2								1		2	2	2	1
CO4	3	2		1								1	2	2	1
CO5	3	2	2									1	2	2	
CO6	3	2	1	1								1	2	2	1
Course	3	2	1.5	1	1							1.3	2	2.2	1

Department of Civil Engineering Sree Vahini Institute of Science & Technology Tiruvuru - 521235, Krishna Dt. A.P.

Department of Civil Engineering.

Course outcome mapping with PO's and PSO's

Course Title:	SURVEYING	
Programme:		
Academic Year	B.Tech 2019-20	
Year/Semester:	II/I	
Regulation:	R16	
Subject Code:	R1621015	
Name of the Faculty:	Mr. K. VINOD KUMAR	

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Demonstrate the basic surveying skills	Applying
CO 2	Discuss use various surveying instruments	Understand
CO 3	Describe perform different methods of surveying	Remember
CO 4	Measure thecompute various data required for various methods of surveying	Evaluate
CO 5	Sketch integrates the knowledge and produce topographical map.	Apply

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2				2							2	2	3	1
CO2	3				3				2			2	3	3	2
CO3	3	2	2	2	3			1	2			2	3	3	1
CO4	3	2	2	2				1	2			2	2	3	1
CO5	3			1	2	2		1	2			2	3	3	2
Course	2.8	2	2	1.6	2.5	2		1	2			2	2.6	3	1.4

Faculty Signature

Department of Civil Engineering Sree Vahini Institute of Science & Vachnelegy Firuvuru - 521235, Krishna Dt. A.P

SREE VAHINI INSTITUTE OF SCIENCE & TECHNOLOGY::TIRUVURU Department of Civil Engineering.

Course outcome mapping with PO's and PSO's

	pping mini
Course Title:	SURVEYING FIELD WORK-I
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	II/I
Regulation:	R16
Subject Code:	R1621017
Name of the Faculty:	Mr. K. Vinod Kumar

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Explain the use of different surveying instruments	Understand
CO 2	Differentiatevarious conventional survey equipment like chain, compass, auto level and plane table	Understand
со з	Calculation of areas, drawing plans and contour maps using different measuring equipment at field level	Apply

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
COI	2									()		2	2	3	1
CO2	3	1			3			1	3	2		3	2	3	1
CO3	3	3	2	2	2	1		1				2	3	3	1
Course	2.7	2	2	2	2.5	1		1	3	2		2.3	2.3	3	1

Faculty Signature

Department of Civil Engineering Sree Vahini Institute of Science & Yechneles Firuvuru - 521235, Krishna Dt. A.P

Department of Civil Engineering

Course Title:	BUILDING PLANNING AND DRAWING
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	II/II
Regulation:	R16
Subject Code:	R1622011
Name of the Faculty:	Mr. MD SAMEER KHAN

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Explain plan various buildings as per the building by-laws	Understand
CO 2	differentiate the relation between the plan, elevation and cross section and identify the form and functions among the buildings	Understand
CO 3	Examine the skills of drawing building elements and plan the buildings as per requirements	Apply

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	-		77								3	2	2
CO2	3	2		1	2	-			1			1	3	2	2
СОЗ	3	2		1	2				1		-	1	3	2	2
Course	3	2		1	2				1		1	1	3	2	2

Faculty Signature

Department of Civil Engineering Sree Vahini Institute of Science & Technology Firuvuru - 521235, Krishna Dt. A.P

SREE VAHINI INSTITUTE OF SCINCE & TECHONOLOGY::TIRUVURU Department of Civil Engineering

	Course outcome mapping with PO's and PSO's
Course Title:	HYDRAULICS AND HYDRAULIC MACHINERY
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	II/II
Regulation:	R16
Subject Code:	R1622013
Name of the Faculty:	Mr. V SURESH

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Solve uniform and non-uniform open channel flow problems.	Apply
CO 2	Apply the principals of dimensional analysis and similitude in hydraulic model testing	Apply
CO 3	Describe the working principles of various hydraulic machineries and pumps.	Understand

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3		3							2		2	2	1
CO2	3	2		2							2		2	2	2
CO3	3	2	2	2							2		2	2	1
Course	3	2.3	2	2.3			***	1880			2		2	2	1.3

Faculty Signature

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Department of Civil Engineering

Sree Vahini Institute of Science & Technology

Firuvuru - 521235, Krishna Dt. A.P.

SREE VAHINI INSTITUTE OF SCIENCE &TECHNOLOGY::TIRUVURU DEPARTMENT OF CIVIL ENGINEERING

Course outcome mapping with PO's and PSO's

Course Title:	TRANSPORTATION ENGINEERING – I
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	II/II
Regulation:	R16
Subject Code:	R1622016
Name of the Faculty:	Mr. A ASHOK KUMAR

I. COURSE OUTCOMES (COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Explain Plan highway network for a given area.	Understand
CO 2	Determine Highway alignment and design highway geometrics	Apply
CO 3	Design Intersections and prepare traffic management plans	Create
CO 4	Identify the suitability of pavement materials and design flexible and rigid pavements	Remember
CO 5	Discuss the Construct and maintain highways	Understand

II. CO-PO/PSO MATRIX:

	PO1	PO2	РО3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3			2	2		2		2	1	1	1	2	2	1
CO2	3	3	2	3					2			2	2	2	1
CO3	3	2	2	3					2			2	2	2	1
CO4	3	2	2	3								2	2	2	2
CO5	3	2	2	3	2		1		2			2	2	2	2
Course	3	2.3	2	2.8	2		1.5		2	1	1	1.8	2	2	1.4

Faculty Signature

Department of Civil Engineering Sree Vahini Institute of Science & Technology Firuvuru - 521235, Krishna Dt. A.P

SREE VAHINI INSTITUTE OF SCIENCE &TECHNOLOGY::TIRUVURU DEPARTMENT OF CIVIL ENGINEERING

Course outcome mapping with PO's and PSO's

Course Title:	CONCRETE TECHNOLOGY
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	II/II
Regulation:	R16
Subject Code:	R1622014
Name of the Faculty:	Mr. M TULASI SAI

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	explain the basic concepts of concrete	Understand
CO 2	State the importance of quality of concrete.	Remember
CO 3	Explain the basic ingredients of concrete and their role in the production of concrete and its behavior in the field	Understand
CO 4	Analyze the fresh concrete properties and the hardened concrete properties	Analyze
CO 5	Classify the ingredients of concrete through lab test results. Design the concrete mix by BIS method.	Analyze
CO 6	Explain the basic concepts of special concrete and their production and applications. understand the behavior of concrete in various environments	Understand

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	-				nco1	PSO2	PSO3
COI	3	2	3	2			.07	108	PO9	PO10	PO11	PO12	PSO1	1302	1303
			3	3			2		1		1	3	3	1	1
CO2	3	2	3	3			2		1		1	3	3	2	1
СОЗ	3	2	3	3		_	2				1	3	2	3	1
CO4	3	1	2	1	3			1		1		1	3	2	1
CO5	3	2	3	2								2	1	3	1
CO6	2	2	2	2		1	3					2	2	1	3
Course	2.8	1.8	2.7	2.3	3	1	2.3	1	1	1	1	2.3	2.3	2	1.

Faculty Signature

Department of Civil Engineering Sree Vahini Institute of Science & Technology Firuvuru - 521235, Krishna Dt. A.P.

DEPARTMENT OF CIVIL ENGINEERING

Course outcome mapping with PO's and PSO's

Course Title:	FLUID MECHANICS AND HYDRAULIC MACHINERY LAB
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	II/II
Regulation:	R16
Subject Code:	R1622017
Name of the Faculty:	Mr. M. TULASI SAI

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
COI	Measure the oretical discharge in pipes, Venturi meter, orifice meter and notches	Evaluate
CO 2	Demonstrateandconductexperimenttofindcharacteristiccurvesofvariouspumps	Apply
CO 3	Demonstrateandconductexperimenttofindcharacteristiccurvesofvariousturbines	Apply

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	POII	PO12	PSOI	Beer	
COI	3	2	2									1012	rsui	PSO2	PSO3
-											2	2	3	3	1
CO2	3	2	2				-		***	***	2	2	3	3	2
CO3	3	2	2								2				-
Course	3	2	2			-	-			-	-	2.	.5	3	
Course										-	2	2	3	3	2

Department of Civil Engineering free Vahini Institute of Science & Yechnelegy Firuvuru - 521236, Krishne Dt. A.P. Facility Signature

SREE VAHINI INSTITUTE OF SCIENCE &TECHNOLOGY::TIRUVURU DEPARTMENT OF CIVIL ENGINEERING

Course outcome mapping with PO's and PSO's

Course Title:	STRUCTURAL ANALYSIS - I								
Programme:	B. Tech								
Academic Year	2019-20								
Year/Semester:	11/11								
Regulation:	R16								
Subject Code:	R1622015								
Name of the Faculty:	Mr. Y. SOMBABU								
J.	THE COMMENTS OF THE COMMENTS O								

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Analysis trusses, frames and arches	Analyze
CO 2	Analyses structures for moving loads	Analyze
CO 3	Classify conversant with classical methods of analysis.	Analyze

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	-	3				3			2		3	3	
CO2	3	3	-	3	-	-		3			2		3	3	2
CO3	3	3		3				3		-	2		3	3	2
Course	3	3		3				3			2		3	3	2

Faculty Signature

Department of Civil Engineering Sree Vahini Institute of Science & Technology Firuwuru - 521236, Krishna Dt. A.P

SREE VAHINI INSTITUTE OF SCIENCE &TECHNOLOGY::TIRUVURU DEPARTMENT OF CIVIL ENGINEERING

Course outcome mapping with PO's and PSO's

Course Title:	SURVEY FIELD WORK- II
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	II/II
Regulation:	R16
Subject Code:	R1622018
Name of the Faculty:	

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Explain the different aspects of traverse with the help of theodolite.	Understand
CO 2	Analyze the method of triangulation.	Analyze
CO 3	Evaluate the different types of curves and methods to set them out.	Evaluate
CO 4	Discuss the different modern techniques using surveying instruments such as total station.	Understand

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	2	3		2	1	1	3	3	3	3	3	3	2
CO2	3	3	3	2	2	2	1		2	2	:	2	3	3	2
CO3	3	3		3	-	1	1	2	3		1	2	3	3	2
CO4	3		3	3	3	2	1	1	3	2	3		3	3	2
Course	3	3	2.6	2.7	2.5	1.7	1	1.3	2.7	2.33	2.33	2.33	3	3	2

Faculty Signature

Department of Civil Engineering Sree Vahini Institute of Science & Technology Firuvuru - 521235, Krishna Dt. A.P.

SREE VAHINI INSTITUTE OF SCINCE & TECHONOLOGY::TIRUVURU Department of Civil Engineering

C	Course outcome mapping with PO's and PSO's
THE RICE	STRENGTH OF MATERIALS- II
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	II/II
Regulation:	R16
Subject Code:	R1622012
Name of the Faculty:	Mr. D RAMBABU

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Explain the basic concepts of Principal stresses developed in a member when it is subjected to stresses along different axes and design the sections	Understand
CO 2	Explain the assess stresses in different engineering applications like shafts, springs, columns and struts subjected to different loading conditions	Understand
CO 3	Determine the assess forces in different types of trusses used in construction	Apply

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	Dear
CO1	3	2	2	2								2	3	3	PSO:
CO2	3	2	2	3								2	3	3	2
CO3	3	3	2	3								2	3	3	2
Course	3	2.3	2	2.7								2	3	3	2

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Department of Civil Engineering Sree Vahini Institute of Science & Vechnology Firuvuru - 521235, Krishna Dt. A.P

SREE VAHINI INSTITUTE OF SCIENCE &TECHNOLOGY::TIRUVURU Department of Civil Engineering.

Course outcome mapping with PO's and PSO's

Course Title:	DESIGN AND DRAWING OF REINFORCED CONCRETE STRUCTURES
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	III/I
Regulation:	R16
Subject Code:	R1631014
Name of the Faculty:	M.ARADHANA RAO

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Solve the Work on different types of design philosophies	Apply
CO 2	Explain analysis and design of flexural members anddetailing	Understand
CO 3	Design structures subjected to shear, bond and torsion	Create
CO 4	Design different type of compression members andfootings	Create

II. CO-PO/PSO MATRIX:

PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
3	3	3	3					1			2	3	3	3
3	3	3	3				W/22	1			2	3	3	3
3	3	3	3					1	22		2	3	3	2
3	3	3	3					1			2	3	2	3
3	3	3	3					1			2	3	3	3
	3 3 3 3	3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	3 3 3 3 10 1	3 3 3 3 10 1	3 3 3 3 100	3 3 3 3 10 100 1	3 3 <td>3 3</td>	3 3

Faculty Signature

Department of Civil Engineering
Stee Vahini Institute of Science & Vaccinology
Firuvuru - 521235, Krishna Dt. A.P.

Department of Civil Engineering. Course outcome mapping with PO's and PSO's

Course Title:	TRANSPORTATION ENGINEERING – II
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	III/I
Regulation:	R16
Subject Code:	R1631015
Name of the Faculty:	Mr. MD SAMEER KHAN

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Design geometrics in a railway track.	Create
CO 2	Design airport geometrics and airfield pavements.	Create
CO 3	Explanation about Plan, construct and maintain Docks and Harbors	Understand

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	3	3							2		3	3	3
CO2 3	3	3	3	3							2		3	3	3
CO3	3	2	3	3							2		3	3	3
Course	3	2.7	3	3							2		3	3	3

Paculty Signature

Department of Civil Engineering
Sree Vahini institute of Science & Technology
Firuvuru - 521235, Krishna Dt. A.P.

SREE VAHINI INSTITUTE OF SCIENCE &TECHNOLOGY::TIRUVURU Department of Civil Engineering.

Course outcome mapping with PO's and PSO's

Course Title:	TRANSPORTATION ENGINEERING LAB
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	ШЛ
Regulation:	R16
Subject Code:	R1631018
Name of the Faculty:	

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level		
CO1	Identify to test aggregates and judge the suitability of materials for the road construction	Remember		
CO 2	Identify to test the given bitumen samples and judge their suitability for the road construction	Remember		
CO 3	Identify to obtain the optimum bitumen content for the mixdesign	Remember		
CO 4	Identify to determine the traffic volume, speed and parkingcharacteristics	Remember		

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2		3	2		2		2			1	2	2	1
CO2	3	2		3	2		2		2			1	2	2	1
CO3	3	3	3	3			2		1			2	3	2	1
CO4	3	2	2	3	2		3		2			2	3	2	1
Course	3	2.2	2.5	3	2		2.2		1.7			1.5	2.5	2	1

Faculty Signature

Department of Civil Engineering Sree Vahini Institute of Science & Technology Firuvuru - 521235, Krishna Dt. A.P

SREE VAHINI INSTITUTE OF SCIENCE &TECHNOLOGY::TIRUVURU Department of Civil Engineering.

Course outcome manning with PO's and PSO's

Course Title:	ENGINEERING GEOLOGY LAB
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	III/I
Regulation:	R16
Subject Code:	R1631017
Name of the Faculty:	

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Identify Mega-scopic minerals &their properties.	Remember
CO 2	Identify Mega-scopic rocks & their properties.	Remember
CO 3	Identify the site parameters such as contour, slope & aspect for topography.	Remember
CO 4	Identify the occurrence of materials using the strike &dip problems.	Remember

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3				2		3				1			1502	1503
CO2	3				2		-				1	2	2	2	2
					2		3				1	2	2	2	2
CO3	3	2	1	2	3		3		/		1	2	2	2	
CO4	3	1	2	3	3		3					-	- 4	2	2
Comme					,		3				1	2	2	2	2
Course	3	1.5	1.5	2.5	2.5		3				1	2	2		

Faculty Signature

SREE VAHINI INSTITUTE OF SCIENCE & TECHNOLOGY::TIRUVURU Department of Civil Engineering.

Course outcome mapping with PO's and PSO's

Course Title:	ENGINEERING GEOLOGY	
Programme:	B. Tech	
Academic Year	2019-20	
Year/Semester:	III/I	
Regulation:	R16	
Subject Code:	R1631012	
Name of the Faculty:	Mrs. D NAGA PAVANI	

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Identifyandclassifyrockusingbasicgeologicclassificationsystems	Remember
CO 2	Explain the geologicconceptsandapproaches.	Understand
CO 3	Test the geological material and ground to check the suitability of civil engineering projectconstruction.	Analyze
CO 4	Analyze the project site for mega/mini civil engineering projects. Site selection for mega engineering projects like Dams, Tunnels, disposal sitesetc.	Analyze

II. CO-PO/PSO MATRIX:

	PO1 I	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
		102		10.			2				2		3	3	3
CO 1	3						2				2		3	3	3
CO 2	3			2			2				2		3	3	3
CO3	3						2				2	2	3	3	3
Co 4	3			3			2				2	1	2	3	3
Course	3			2.5			2				2	2	3	3	

Faculty Signature

SREE VAHINI INSTITUTE OF SCIENCE & TECHNOLOGY::TIRUVURU

Department of Civil Engineering.

Course outcome mapping with PO's and PSO's

Course Title:	MANAGEMENT SCIENCE
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	III/I
Regulation:	R16
Subject Code:	R1631011
Name of the Faculty:	Mr. G. NARENDRABABU

III. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Explain the management science approach to identification, analysis, decision, and implementation of problem solving.	Apply
CO 2	Identify, categorize and discuss management problems that can be analyzed by linear programming. Explain the importance of forecasting in organizations.	Apply
CO 3	Construct models for a variety of PERT/CPM. Describe the EOQ model and its variations or expansions.	Analyze
CO 4	illustrate the decision tree method of analysis for decision making under risk and under certainty and expected value	Apply
CO 5	Demonstrate the transportation method to solve problems manually and with the northwest corner method. Solve case problems using computer software.	Understand

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1		2	3	-	3								2	2	2
CO2	3		2									2	3	2	3
CO3	2		3									2	2	2	2
CO4	3	3			3					**		2	3	2	3
CO5	3	3			3							2	3	2	3
Course	2.8	2.7	2.7		3							2	2.6	2	2.6

Faculty Signature

SREE VAHINI INSTITUTE OF SCIENCE &TECHNOLOGY::TIRUVURU Department of Civil Engineering.

Course outcome mapping with PO's and PSO's

CONCRETE TECHNOLOGY LAB
B. Tech
2019-20
ШЛ
R16
R1631016
Mr. D RAMBABU

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Determine the consistency and fineness ofcement.	Apply
CO 2	Determine the setting times ofcement.	Apply
CO 3	Determine the specific gravity and soundness ofcement.	Apply
CO 4	Determine the compressive strength ofcement.	Apply
CO 5	Determine the workability of cement concrete by compaction factor, slump and Vee-Bee tests	Apply
CO 6	Determine the specific gravity of coarse aggregate and fine aggregate by Sieve analysis.	Apply
CO 7	Determine the flakiness and elongation index of aggregates.	Apply
CO 8	Determine the bulking ofsand.	Apply
CO 9	Explain the non-destructive testing procedures onconcrete	Understand

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
COI	3	2	2	3	2		2		2			2	3	3	2
CO2	3	2	2	3	2		2		2			2	3	3	2
CO3	3	2	2	3	2		2		2			2	3	3	2
CO4	3	2	2	3	2		2		2			2	3	3	2
CO5	3	2	2	3	2		2		2			2	3	3	2
CO6	3	2	2	3	2		2		2			2	3	3	2
CO7	3	2	2	3	2		2		2			2	3	3	2
CO8	3	2	2	3	2		2		2			2	3	3	2
CO9	3	2	2	3	2		2		2			2	3	3	2
Course	3	2	2	3	2		2		2			2	3	3	2

Faculty Signature

SREE VAHINI INSTITUTE OF SCIENCE &TECHNOLOGY::TIRUVURU Department of Civil Engineering.

Course outcome mapping with PO's and PSO's

Course Title:	STRUCTURAL ANALYSIS – II
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	ШЛ
Regulation:	R16
Subject Code:	R1631013
Name of the Faculty:	Mr. Y. SOMBABU

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Analysissuspensionbridgesandarches	Analyze
CO 2	Classify the conversantwithclassicalmethodsofanalysis.	Analyze
CO 3	Analyzestructuresbyfiniteelementmethod	Analyze
CO 4	Analyze structures using Moment Distribution, Kani's Method and Matrixmethods	Analyze

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	DCO1	Poor	
CO1	3	3		3			2	2				1012	PSO1	PSO2	PSO3
CD1	2							2			2	2	3	2	
CO2	3	3		3			2	2			2	2	2	2	_
CO3	3	3		3			2	2					3	2	2
CO4	3	2						2			2	2	3	2	2
CO4	3	3		3			2	2			2	2	2		
Course	3	3		3		7400	2	•				2	3	2	2
							2	2			2	2	3	2	2

Faculty Signature

SREE VAHINI INSTITUTE OF SCIENCE &TECHNOLOGY::TIRUVURU Department of Civil Engineering.

Course outcome mapping with PO's and PSO's

Course Title:	DESIGN AND DRAWING OF STEEL STRUCTURES
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	111/11
Regulation:	R16
Subject Code:	R1632011
Name of the Faculty:	Mr. A ASHOK KUMAR

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Determine the Work with relevant IS codes	Apply
CO 2	Analyze thedesignofstructuralsteel members subjectedtocompressive, tensileandbendingforces, aspercurrent code.	Analyze
CO 3	Identifytodesignstructuralsystemssuchasrooftrussesandgantrygirders.	Remember
CO 4	Calculate designandanalyzebeamsandconnections	Apply
CO 5	Classify the drawings pertaining to different components of steelstructures	Analyze

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	Poor	
CO1	3	3	3	3		2	2	2				1012		PSO2	PSO3
CO2	3	3	3	3		2	2	2					3	3	2
CO3	3	3	3	3		2		2					3	3	2
CO4	3	2	3				2	2					3	3	2
	3	3	3	3		2	2	2					3	3	2
CO5	3	3	3	3		2	2	2					3	3	2
Course	3	3	3	3		2	2	2							
													3	3	2

Facult Signature

SREE VAHINI INSTITUTE OF SCIENCE & TECHNOLOGY::TIRUVURU DEPARTMENT OF CIVIL ENGINEERING

Course outcome mapping with PO's and PSO's

Course Title:	GEOTECHNICAL ENGINEERING – I
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	111/11
Regulation:	R16
Subject Code:	R1632012
Name of the Faculty:	Mr. V SURESH
COURSE OUTCOM	

I.

S.No.	Course Outcomes	Blooms Taxonomy leve
CO1	Identify the definition of the various parameters related to soil mechanics and establish their inter-relationships.	Remember
CO 2	Describe the methods of determination of the various index properties of the soils and classify the soils.	Understand
CO 3	Differentiate know the importance of the different engineering properties of the soil such as compaction, permeability, consolidation and shear strength and determine them in the laboratory.	Understand
204	Use to apply the above concepts in day-to-day civil engineering practice.	Apply

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	Beog	-
COI	3	2	2	3			2		1			2	2	PSO2	PSO.
-	1 3	2	1 2	3			2					4	-		2
CO2			2	3			2		1			2	2	2	2
CO3	3	3	3	3			2		1		77	3	2	2	2
CO4	3	3	3	3			2					3	3	3	2
Course	3	2.5	2.5	3			2		1			2.5	2.3	2.3	2

Faculty Signature

Department of Civil Engineering Srns Yahini Institute of Science & Va hacies? Tiruvuru - 521236, Krishna DL All

SREE VAHINI INSTITUTE OF SCIENCE & TECHNOLOGY::TIRUVURU DEPARTMENT OF CIVIL ENGINEERING

Course outcome mapping with PO's and PSO's

ENVIRONMENTAL ENGINEERING – I							
B. Tech							
2019-20							
111/11							
R16							
R1632013							
Mrs. D NAGA PAVANI							

I. COURSE OUTCOMES(COs):

S.No.	Course Outcomes	Blooms Taxonomy level			
CO1	Explain Plan and design the water and distribution networks and sewerage systems	Understand			
CO 2	Identify the water source and select proper intake structure	Remember			
CO 3	Discuss the Characterization of water	Understand			
CO 4	Select the appropriate appurtenances in the water supply	Analyze			
CO 5	Selection of suitable treatment flow for raw water treatments	Analyze			

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	3	2		2	3				2		3	2	2
CO2	3	2	3	3		2	3				2		3	2	2
CO3	3			3			3					2	2	2	2
CO4	3	()		2		2	3				2	2	2	2	2
CO5	3		3		3		3				2	2	2	2	2
Course	3	2	3	2.5	3	2	3				2	2	2.4	2	2

Faculty Signature

SREE VAHINI INSTITUTE OF SCIENCE & TECHNOLOGY::TIRUVURU DEPARTMENT OF CIVIL ENGINEERING

Course outcome mapping with PO's and PSO's

WATER RESOURCES ENGINEERING-I
B. Tech
2019-20
III/II
R16
R1632014
Ms. D HARITHA

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Describe the theories and principles governing the hydrologic processes,	Understand
CO 2	Identify to quantify major hydrologic components and apply key concepts to several practical areas of engineering hydrology and related design aspects	Remember
CO 3	Examine Intensity-Duration-Frequency and Depth-Area Duration curves to design hydraulic structures.	Apply
CO 4	Describe develop design storms and carry out frequency analysis	Remember
CO 5	Determine storage capacity and life of reservoirs.	Apply
CO 6	Summarize unit hydrograph and synthetic hydrograph	Understand
CO 7	Determine the estimate flood magnitude and carry out flood routing.	Apply
CO 8	Determine aquifer parameters and yield of wells.	Apply
CO 9	Determine model hydrologic processes	Apply

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	POII	PO12	PSO1	PSO2	PSO
CO1	3	2	2	2		-	1	**	1			2	2	2	2
CO2	3	2	2	2			1		1			1	2	2	2
CO3	3	3	3	3		-	1					2	2	2	2
CO4	3	2	3	2			1		2			2	2	2	2
CO5	3	2	2	3			1		2			2	2	2	2
CO6	2	2	2	3								2	2	2	2
CO7	3	2	2	3					2			2	2	2	2
CO8	2	2	2	3			1					2	2	2	2
CO9	3	2	2	3			1		2			2	2	2	2
Course	2.8	2.1	2.2	2.7		-	1.0		1.7			1.9	2.0	2.0	2.0

Faculty Signature

SREE VAHINI INSTITUTE OF SCIENCE & TECHNOLOGY::TIRUVURU DEPARTMENT OF CIVIL ENGINEERING

Course outcome mapping with PO's and PSO's

Course Title:	ENVIRONMENTAL ENGINEERING LAB
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	111/11
Regulation:	R16
Subject Code:	R1632017
Name of the Faculty:	

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Estimation some important characteristics of water and wastewater in thelaboratory	Evaluate
CO 2	Express to draw some conclusion and decide whether the water is potable ornot.	Understand
CO 3	Describe whether the water body is polluted or not with reference to the state parameters in the list of experiments	Understand
CO 4	Estimation of the strength of the sewage in terms of BOD and COD	Evaluate

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2			2			3					2	2	2	2
CO2	2		2	2			3					2	2	2	2
CO3	2	:	2	2			3		2			2	2	2	2
CO4	2				2		3					2	2	2	2
Course	2		2	2	2		3		2			2	2	2	2

Faculty Signature

SREE VAHINI INSTITUTE OF SCIENCE &TECHNOLOGY::TIRUVURU DEPARTMENT OF CIVIL ENGINEERING

Course outcome mapping with PO's and PSO's

Course Title:	COMPUTER AIDED ENGINEERING LABORATORY
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	111/11
Regulation:	R16
Subject Code:	R1632018
Name of the Faculty:	

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Explain the paper -space environment thoroughly	Understand
CO 2	Develop the components using 2D and 3D wire frame models through various editing commands.	Create
CO 3	Generate assembly of various components of compound solids.	Create

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	3				2		1			2	2	2	2
CO2	3	2	3	3	3				1			2	2	3	2
CO3	3	2	3	3			1					2	2	2	2
Course	3	2	3	3	3		2		1			2	3	3	2

Faculty Signature

SREE VAHINI INSTITUTE OF SCIENCE &TECHNOLOGY::TIRUVURU DEPARTMENT OF CIVIL ENGINEERING

Course outcome mapping with PO's and PSO's

Course Title:	WASTE WATER MANAGEMENT	16.
Programme:	B. Tech	
Academic Year	2019-20	-
Year/Semester:	III/II	
Regulation:	R16	_
Subject Code:	R163201D	
Name of the Faculty:	Mr. D.RAMBABU	

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Explain treatment methods for any industrial wastewater.	Understand
CO 2	Discuss the manufacturing process of various industries.	Understand
CO 3	Describe the need of common effluent treatment plant for the industrial area in their vicinity	Understand

II. CO-PO/PSO MATRIX:

	POI	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3		3	3	2	2	3	2	2			2	3	2	2
CO2	3		3	3	2	2	3	2	2			2	3	2	2
СОЗ	3	2		3	2	2	3	2	2			2	3	2	2
Course	3	2	3	3	3	2	3	2	2			2	3	2	2

Faculty Signature

SREE VAHINI INSTITUTE OF SCIENCE &TECHNOLOGY::TIRUVURU DEPARTMENT OF CIVIL ENGINEERING

Course outcome mapping with PO's and PSO's

Course Title:	GEOTECHNICAL ENGINEERING LAB
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	III/II
Regulation:	R16
Subject Code:	R1632016
Name of the Faculty:	Mr. Y SOMBABU

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Determine the Index properties of the soils likewater content, specific gravity and Atterberg limits	Apply
CO 2	Identify the engineeringpropertieslikefielddensity, shearstrength, permeability, compaction and consolidation	Remember
CO 3	Test the soil to assess it stability to with stand the load	Analyze

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3			3		3			3	***			3	3	2
CO2	3			3		3		**	3	***			3	3	2
CO3	3			3	***	3			3				3	3	2
Course	3			3		3			3		**	***	3	3	2

Faculty Signature

Sree Vahini Institute of Science & Technology Tiruvuru - 521235, Krishna Dt. A.P

SREE VAHINI INSTITUTE OF SCIENCE & TECHNOLOGY::TIRUVURU

Department of Civil Engineering. Course outcome mapping with PO's and PSO's

Course Title:	GROUND IMPROVEMENT TECHNIQUES
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	ID/I
Regulation:	R16
Subject Code:	R1641011
Name of the Faculty:	Mr. K VINOD KUMAR

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Explain the various methods of ground improvement and their suitability to different field situations.	Understand
CO 2	Determine to design a reinforced earth embankment and check its stability.	Apply
CO 3	Define the various functions of Geo-synthetics and their applications in Civil Engineering practice.	Remember
CO 4	Explain the concepts and applications of grouting.	Understand

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	2	1	1	1	1	1	1			2	3	3	2
CO2	3	2	2	1		1	1	1	1			2	3	3	2
CO3	3	2	2			1	1					2	3	3	2
CO4	3	2	2	1	2						-	2	3	3	2
Course	3	2	2	1	1.5	1	1	1	1				3	-	
			-	-	1.0	1	1	1	1			2	3	3	2

Faculty Signature

SREE VAHINI INSTITUTE OF SCIENCE &TECHNOLOGY::TIRUVURU Department of Civil Engineering.

Course outcome mapping with PO's and PSO's

Course Title:	ADVANCED STRUCTURAL ENGINEERING
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	IV/I
Regulation:	R16
Subject Code:	R164101
Name of the Faculty:	Mr. M. TULASI SAI

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Design raft foundations and different types of RCC retainingwalls	Create
CO 2	Examine the analysis and design of different types of RCC watertanks	Apply
CO 3	Solve the problems design of RCC Bunkers, Silos andChimneys	Apply
CO 4	Explain the various types of transmission towers and loading on them.	Understand

II. CO-PO/PSO MATRIX:

PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
3	2	2	1	1	1	1		2			2	3	2	2
3	2	2	1	1	1	1		2			2	3	2	2
3	2	2	1	1	1	1		2			2	3	2	2
3	2	2	1							144	2	3	2	2
3	2	2	1	1	1	1		2			2	3	2	2
	3 3 3	3 2 3 2 3 2 3 2	3 2 2 3 2 2 3 2 2 3 2 2 3 2 2	3 2 2 1 3 2 2 1 3 2 2 1 3 2 2 1 3 2 2 1	3 2 2 1 1 3 2 2 1 1 3 2 2 1 1 3 2 2 1 1 3 2 2 1	3 2 2 1 1 1 3 2 2 1 1 1 3 2 2 1 1 1 3 2 2 1 1 1 3 2 2 1	3 2 2 1 1 1 1 3 2 2 1 1 1 1 3 2 2 1 1 1 1 3 2 2 1 1 1 1 3 2 2 1	3 2 2 1 <td>3 2 2 1<td>3 2 2 1<td>3 2 2 1<td>3 2 2 1<td>3 2 2 1<td>3 2 2 1</td></td></td></td></td></td>	3 2 2 1 <td>3 2 2 1<td>3 2 2 1<td>3 2 2 1<td>3 2 2 1<td>3 2 2 1</td></td></td></td></td>	3 2 2 1 <td>3 2 2 1<td>3 2 2 1<td>3 2 2 1<td>3 2 2 1</td></td></td></td>	3 2 2 1 <td>3 2 2 1<td>3 2 2 1<td>3 2 2 1</td></td></td>	3 2 2 1 <td>3 2 2 1<td>3 2 2 1</td></td>	3 2 2 1 <td>3 2 2 1</td>	3 2 2 1

Faculty Signature

SREE VAHINI INSTITUTE OF SCIENCE & TECHNOLOGY::TIRUVURU Department of Civil Engineering.

Course outcome mapping with PO's and PSO's

Course Title:	GIS & CAD LAB
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	IV/I
Regulation:	R16
Subject Code:	R1641017
Name of the Faculty:	Mr. M. TULASI SAI

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Use to work comfortably on GISsoftware	Apply
CO 2	Digitize and create thematic map and extract important features	Analyze
CO 3	Develop digital elevationmodel	Create
CO 4	use structural analysis software to analyze and design 2D and 3Dframes	Apply
CO 5	Design and analyze retaining wall and simple towers using CAD software.	Crate

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3		2	3	3		3		2	2		2	3	2	1
CO2	3		2	3	3		3		2	2		2	3	2	1
CO3	3		2	3	3		3		2	2		2	3	2	2
CO4	3	2	2	3	3		3		2	2		2	3	2	2
CO 5	3	2	2	3	3		3		2	2		2	3	2	2
Cours e	3	2	2	3	3		3		2	2		2	3	2	1.6

Faculty Signature

SREE VAHINI INSTITUTE OF SCIENCE & TECHNOLOGY::TIRUVURU Department of Civil Engineering.

Course outcome mapping with PO's and PSO's

Course Title:	IRRIGATION DESIGN AND DRAWING
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	IV/I
Regulation:	R16
Subject Code:	R1641018
Name of the Faculty:	Mr. V SURESH

COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Design the various irrigation structures.	Create

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	3	3				2	2	2		2	3	3	2
Course	3	3	3	3				2	2	2		2	3	3	2

Faculty Signature

SREE VAHINI INSTITUTE OF SCIENCE & TECHNOLOGY::TIRUVURU Department of Civil Engineering.

Course outcome mapping with PO's and PSO's

Course Title:	GEOTECHNICAL ENGINEERING – II
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	IV/I
Regulation:	R16
Subject Code:	R1641013
Name of the Faculty:	Mr. M. ARADHANA RAO

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Explain the various types of shallow foundations and decide on their location based on soil characteristics.	Understand
CO 2	Classify to compute the magnitude of foundation settlement to decide the size of the foundation.	Analyze
СОЗ	Express to use the field test data and arrive at the bearing capacity.	Understand
CO 4	Define the design Piles based on the principles of bearing capacity.	Remember

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	2	1		1	1					2	3	3	2
CO2	3	2	2	1			(44)					2	3	3	2
CO3	3	2	2	1	2	1		1	1			2	3	3	2
CO4	3	2	2	1	1							1	3	3	2
Course	3	2	2	1	2	1	1	1	1			2	3	3	2

Faculty Signature

SREE VAHINI INSTITUTE OF SCIENCE & TECHNOLOGY::TIRUVURU Department of Civil Engineering.

Course outcome mapping with PO's and PSO's

Course Title:	ENVIRONMENTAL ENGINEERING -II
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	IV/I
Regulation:	R16
Subject Code:	R1641011
Name of the Faculty:	Mr. A. ASHOK KUMAR

IV. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Explain the Plan and design the seweragesystems	Understand
CO 2	Select the appropriate appurtenances in the seweragesystems	Analyze
CO 3	Analyze sewage and suggest and design suitable treatment system for sewagetreatment	Analyze
CO 4	Identify the critical point of pollution in a river for a specific amount of pollutant disposal into theriver	Remember
Co 5	Tell a suitable disposal method with respect to effluentstandards.	Remember

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	2	1		1	3				1.77	2	3	2	2
CO2	3				2	1	2					2	3	2	2
CO3	3	2	2	1		2	2					2	3	2	2
CO4	3	1				2	2				777	2	3	2	2
CO5	2	2	2	1		1	1					2	3	2	2
Course	2.8	1.7	2	1	2	1.4	2					2	3	2	2

Faculty Signature

SREE VAHINI INSTITUTE OF SCIENCE & TECHNOLOGY:: TIRUVURU

Department Of Civil Engineering

Course outcome mapping with PO's and PSO's

Course Title:	REMOTE SEXUAL SERVICES WITH PO'S and PSO'S
Programme:	REMOTE SENSING AND GIS APPLICATIONS B. Tech
Academic Year	2019-20
Year/Semester:	IV/I
Regulation:	R16
Subject Code:	Pleason
Name of the Faculty:	Mr. MD SAMEER KHAN

COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms
CO1	be familiar with ground, air and satellite-based sensor platforms.	Taxonomy level
CO 2	interpret the aerial photographs and satellite imageries	Understand
CO 3	create and input spatial data for GIS application	Remember
CO 4	apply RS and GIS concepts in water resources engineering	Create
005	applications of various satellite data	Apply
		Understand

II. CO-PO/PSO MATRIX:

	_	. 01	1 30 1	VIAIR	UX:										
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO	PO	PO	PO	PO	Posts			
CO1	3			1	2	1	1	8	9	10	11	PO12	PSO1	PSO2	PSO3
CO2	3			2	2	1	1	1	1			2	3	2	2
CO3	3	1	1		2	1	1	1				2	3	2	2
CO4	3	2	2	1	2	1	1	i				2	3	2	2
CO5	3	1	1	2	1	2	1	1				2	3	2	2
Course	3	2	2	1		1	1	1				2	3	2	2
1	Faculty	Sign	atura	i	1		1	1	-	-		2	3	2	2

Faculty Signature Source What

SREE VAHINI INSTITUTE OF SCIENCE & TECHNOLOGY::TIRUVURU Department of Civil Engineering.

Course outcome mapping with PO's and PSO's

Course Title:	WATER RESOURCES ENGINEERING-II
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	IV/I
Regulation:	R16
Subject Code:	R1641012
Name of the Faculty:	Mr. P MOHAN RAO

I. COURSE OUTCOMES(COs):
Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Estimate irrigation waterrequirements	Evaluate
CO 2	Design irrigation canals and canalnetwork	Create
CO 3	Explain Plan an irrigationsystem	Understand
CO 4	Design irrigation canalstructures	Create
CO 5	Explain the Plan and design diversion headworks	Understand
CO 6	Analyze stability of gravity and earthdams	Analyze
CO 7	Design ogee spillways and energy dissipationworks	Create

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	2			2	2					2	3	2	
CO2	2	2	2	1		1	1		1			1	3	2	2
CO3	3	2	2			1	1	1	2			2	3	2	
CO4	3	2	2	1	1	1	1	1	2			2	3	2	
CO5	3	2	2	1	-	1	1	1	2			2	3	2	2
CO6	3	2	2	1		1	1	1	2			1	3	2	2
CO7	3	2	2	1		1	1	1	1			1	3	2	
Course	2.9	2	2	1		1.1	1.1	1	1.7			1.6	3	2	2

SREE VAHINI INSTITUTE OF SCIENCE &TECHNOLOGY::TIRUVURU

DEPARTMENT OF CIVIL ENGINEERING

Course outcome mapping with PO's and PSO's

Course Title:	PROJECT WORK
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	IV/II
Regulation:	R16
Subject Code:	R1642016
Name of the Faculty:	Mr. Y SOMBABU

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No	Course Outcomes	Blooms Taxonomy level
COI	Apply all levels of Engineering knowledge in solving the Engineeringproblems.	Apply
CO 2	Discuss Work together with team spirit.	Understand
CO 3	Use Civil Engineering software at leastone.	Apply
CO 4	Develop Document theprojects	Create

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	3	3						/		2	3	3	2
CO2	3				2	2			3			2	3	2	2
CO3	3	-	· ·		3						2	2	3	2	2
CO4	3								2				2	2	
Course	3	3	3	3	2.5	2	-	-	2.5		2	2	2.8	2.3	2

Faculty Signature

SREE VAHINI INSTITUTE OF SCIENCE & TECHNOLOGY::TIRUVURU DEPARTMENT OF CIVIL ENGINEERING

Course outcome mapping with PO's and PSO's

CONSTRUCTION TECHNOLOGY AND MANAGEMENT
B. Tech
2019-20
IV/II
R16
R1642012
Mr. M.TULASI SAI

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Explain the plan construction projects, schedule the activities using network diagrams,	Understand
CO 2	Determine the cost of the project, control the cost of the project by creating cash flows and budge ting and to use the project information as decision making tool	Apply
CO 3	Discussaboutdifferentmethodsofplanning	Remember
CO 4	Demonstrate the project management and constructiontechniques	Apply

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
COI	3			-		3	2	2		2		3	3	2	
CO2	3	**				3	2	2		2		3	3	2	2
CO3	3					3	2	2		2		3	3	2	2
CO4	3					3	2	2		2		3	3	2	-
Course	3					3	2	2		2		3	3	2	2

Faculty Signature.

SREE VAHINI INSTITUTE OF SCIENCE &TECHNOLOGY::TIRUVURU DEPARTMENT OF CIVIL ENGINEERING

Course outcome mapping with PO's and PSO's

Course Title:	PRESTRESSED CONCRETE
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	IV/II
Regulation:	R16
Subject Code:	R1642013
Name of the Faculty:	Ms. D HARITHA

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level		
CO1	Explain the different methods ofprestressing	Understand		
CO 2	Estimate effective prestress including the short and long termlosses	Evaluate		
со з	Analyze and design prestressed concrete beams under flexure andshear	Analyze		
CO 4	Summarize the relevant IS Codal provisions for prestressedconcrete	Understand		

II. CO-PO/PSO MATRIX:

	POI	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	2	2			70		2			2	3	2	
CO2	3	2	2	3					2			2	3	2	2
CO3	3	3	3	3					2			2	3	2	2
CO4	3	2	2	2	-				2			2	3	2	2
Course	3	2.3	2.3	2.5			-		2		***	2	3	2	2

Faculty Signature

SREE VAHINI INSTITUTE OF SCIENCE & TECHNOLOGY::TIRUVURU DEPARTMENT OF CIVIL ENGINEERING

Course outcome mapping with PO's and PSO's

ESTIMATION SPECIFICATION & CONTRACTS
B. Tech
2019-20
IV/II
R16
R1642011
Mr. MD SAMEER KHAN

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO 2	Determine the quantities of different components of buildings. Estimate to find the cost of various building components.	Apply
CO 3	Evaluate to finalizing the value of structures	Evaluate
	S and tallet of structures	Evaluate

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	200							
COI	3					100	107	PO8	PO9	PO10	PO11	PO12	PSO1	Doos	
			77		3	3	2	77	2		2			PSO2	PSO3
CO2	3		2	**	3	3	2		2		2	2	3	2	
COA	2						-	-	2		2	2	3	2	
CO3	3		2		3	3	2		2					4	2
Course	3		2						4		2	2	3	2	2
- Jul sc			-		3	3	2		2		-				- 4
											2	2	3	2	2

Fauny Signature

Department of Civil Engineers

Sree Vahini Institute of Science 8

SREE VAHINI INSTITUTE OF SCIENCE &TECHNOLOGY::TIRUVURU DEPARTMENT OF CIVIL ENGINEERING

Course outcome mapping with PO's and PSO's

Course Title:	SOLID AND HAZARDOUS WASTE MANAGEMENT
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	IV/II
Regulation:	R16
Subject Code:	R164201C
Name of the Faculty:	Mrs. D NAGA PAVANI

I. COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Design the collection systems of solid waste of at own	Create
CO 2	Design treatment of municipal solid waste and landfill	Crate
CO 3	Define the criteria for selection of landfill	Remember
CO 4	Determine Characterize the solid waste and design a composting facility	Analyze
CO 5	state the Method of treatment and disposal of Hazardous wastes	Remember

II. CO-PO/PSO MATRIX:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3				3	2	3		2		2	2	3	2	2
CO2	3	1:			3	2	3		2		2	2	3	2	2
CO3	3				3	2	3		2	-	2	2	3	2	2
CO4	3				3	2	3		2		2	2	3	2	2
CO5	3				3	2	3		2		2	2	3	2	2
Course	3				3	2	3		2	/	2	2	3	2	2

Faculty Signature