

NAAC ACCREDITED

Report on PO Attainment

Bachelor of Engineering Batch 2016

Department of Civil Engineering



Report on PO Attainment Bachelor of Engineering Batch 2016 Department of Civil Engineering

Dated: 20/07/2020

Overview

An outcome is a result of learning that reveals what the student should be able to do at the end of a course. Outcome-based curriculum is a performance-based education system which is crucial in determining the type of graduates we want. In this approach, the desired educational outcomes should be clearly specified. Having an unequivocal outcome facilitates the nature of course offered, its content and also the teaching plans. Constructive alignment is a principle used for devising teaching and learning activities and assessment tasks that directly address the course outcomes (COs) intended. The outcome-based approach provides a mechanism to ensure the accountability and quality assurance to an educational programme.

Course mapping shows the educational relationship (Level of Learning achieved) between Course Outcomes and Program Outcomes for a Course. The result strongly indicates whether the students are able to achieve the course learning objectives. The method can be used for any course and is a good way to evaluate a course syllabus.

The below mentioned steps shall address the procedure for assessing the percentage achievement of Program Outcomes.

Program Outcome

The Program Outcomes for the Civil Engineering Program are the following:

- PO-01: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization for the solution of complex engineering problems.
- PO-02: Identify, formulate, research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- PO-03: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for public health and safety, and cultural, societal, and environmental considerations.



- **PO-04:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- **PO-05:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex.
- **PO-06:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- PO-07: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- **PO-08:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- **PO-09:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- PO-010: Communicate effectively on complex engineering activities with the engineering community and with the society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- **PO-011:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- **PO-012:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Course Outcomes mapping with Program Outcomes:

The course outcomes were mapped with the program outcomes of Bachelor of Engineering (Department of Civil Engineering) on the scale of High, Medium and Low. Thereafter, the mapped values were allocated with weights i.e., High: 3; Medium: 2; and Low: 1. The subject wise result was compiled for 1st, 2nd, 3rd, 4th, 5th, 6th, 7th & 8th semester.



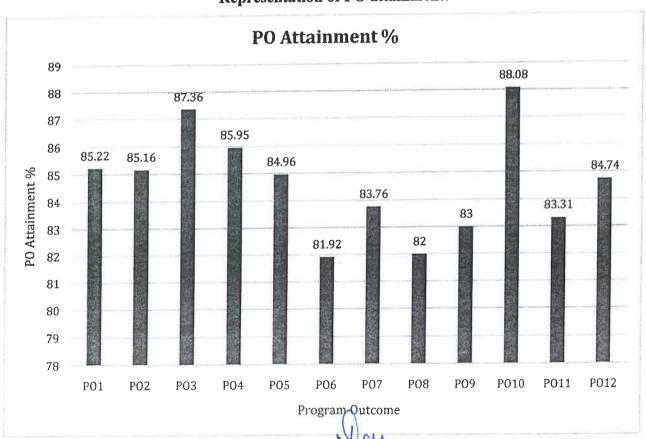
PO Attainment of subjects: B.E. Civil Engineering

Subject	PO1	PO2	POS	P04	PO5	PO6	P07	PO8	P09	PO10	PO11	PO12
HUL 2101	75	75	75				75	75	75	75	-	75
AML5101	76	76	-	76	76	145		76	76	76	/#:	76
PYL5101	70	70			- 35	70		-			12	70
EEL5102	66	67	-		66	-	1	-	-		:48	87
CHL4101	65	65	-	-	65	65			-	1-1		65
GEL4101	75	75		75	-		-	75	75	2.0	-	75
PYP1101	95	95		95	-	95		-	-		-	95
EEP1102	95	95		-			95	-	-		-	95
CHP1101	8.9	89		-	-			-			-	89
AML5102	95	95		95		95	-	-	95	95	-	95
MEW2101	94	94	1 141	94	-	=	2	-	-	-	94	94
PYL5102	85	85	85		87	2				86		
MEL4102	91	91		-	91		91	-	-	92	91	
SP1103	88			88	88	7	F:	88	88		88	88
MEP1102	95	95	95	95	-			-	-	95	- 1	95
ASP3101	95	95	95	95	95	.	-		- 1	95		95
CEL5102	95	95	95	95	95		· ·	-	95	95	95	95
CSP2103	62	62	-	-	62	+	62	62	62	- 1	62	62
CEL3205	88	88		88	-		-	-57	-	IE.	88	88
CEL5201	53	-	-	53	-			53	53	- 1		53
CEP1203	95			95	95		** ***********************************			95	2	95
CEP1207	64	64			64	<u> 5</u> 0	64		-	-	-1	64
EP1215	64	64	-	64	1 - 1		64	1 - 1	- 1	-	- 1	64
EP2209	92	92		92	1 - 1	-	92	1.	-		-	92
EP1211	95	95	-	95	1 - 1	-	-	-	-	-	95	95
EL5203	82			82	82	- 1	-	82	82	-	82	82
EL4207	83	83	83	83	83	- 1	*		-	-	-	83
EL3202	72	-		72	-			72	72	-		72
EP5304	95	95	95	95	95	2		-		95	-	95
EP1212	94	-	94	94		2	-	94	94	94	-	94
EP1206	95	-	1	95	1	-		-	-			95
EP1202	93		-		93				-	93	7-	93
EL3208	84		T	84	-	-	-		-	25	5.65	84
EL4212	74	74				74				-	74	74
EL4206	72	-	-	72		-			-			
EP1303	96	96	96	96				96	96		-	72
LP2501	91	30	30	36		91	91	96	96	-		96
UL3301	85	-	120		+	31	85	1	-	20	<u> </u>	



	EE 00000000000000001	EE 0000000000000000	55.00000000000000000	55.000000000000000001		•	55.0000000000000001	-				55,0000000000000000
HUL2401			33.00000000000000000		96		96	96	96		£	96
CEP1308	96	96			96	96		÷	-	16.1	-	96
CEP1311	96	96				74	2	74	74	74	74	74
CEL4305	74	74		74					86			86
CEL3303	86	86	86		-	-			-		-	97
CET5301	97	14.		97				83	83		83	83
CEL3311	83		83	83	83	-	83		-	65		65
CEL5308	65	65	65	65	65	65	65	65	65	97		97
CLP2502	97	97	97	97	97	-						98
CEP5202	98	98	98	-	-		98	-	-			
CEP1310	98	98	98	98	14	-	-	98	98	- 1	-:	98
CEL5314	83	54	83	83	83		-	83	83	83	83	83
CEL4304	81	81		-	81	-	81	81	81	81		81
CEL3302	88	88		88		-	(*).		255	88		88
CEL3310	81	81	81	81		81	-	15	81		8	81
CFI 3308	91	91	-	91			91		•	91		91
CEP3307	97			97	1.0		(4)	97	97	720	2	97
GTI4301	86		86	18		87	86	86		86	-	86
GTI2401	96	96		96		96	-	96	96	2	2	96
CEP1427	99			99	-	-	99		-	99	-	99
	98	98			98	-	98	98	98			96
CEP1302		89	69	89		-	-			69	:	-
CEL3408	89		89	89	89	-	89	2	2	~		89
CEL3427	89	89				76		74	74	76	74	74
CEL4306	74	-	-	74	3		-	74	- 14	99		-
CET9403	99	99	99	:+:	99	04.00	99	13-2	83.00	88.08	83.31	84.74
POA	85,22	85.16	87.36	85.95	84.96	81.92	83.76	82.00	83,00	90.00	93.31	04.74

Representation of PO attainment:





Analysis -

The depiction shows that the students of Bachelor of Engineering batch 2016 have effectively attained a minimum of 85% in 5 program outcomes and more than 80% in the rest of the 7 program outcomes. The PO attainment percentage reflects on the requirement of reassessing the evaluation strategies and also the reforms are required in the examinations w.r.t designing the question papers to achieve normal distribution of PO attainment.

> REGISTRAR CHITKARA UNIVERSITY BAROTIWALA, DISTT, SOLAN

HIMACHAL PRADESH-174103

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Department of Civil Engineering & Technology
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Department of Civil Engineering



Course Outcome Attainment Report

Programme

B.E. [Civil Engineering]

Batch 2016

Subject

Fluid Mechanics II

Code CEL3202

Semester 4

Subject Assessment: Fluid Mechanics II

#	Tools	Task	Task-Id	Marks	Wt (%)	Weighted Marks (%)	
1	Internal	1	261	40	100	40	
2	External	1	262	60	100	60	

Course Outcome: Fluid Mechanics II

SNo	Course Outcome	Wt(%)
CO1	Ability to develop the open channel flow equations from the basic conservation equations.	50
CO2	Ability to explain the terms of the open channel flow equations and explain the interactions among the terms.	50

CO-PO Map: Fluid Mechanics II

Course Outcome	P01	POZ	P03	PO4	P05	P06	P07	PO8	909	PO10	PO11	PO12
Ability to develop the open channel flow equations from the basic conservation equations.	н		-	-		0.00		700		1010	FUI	7012
Ability to explain the terms of the open channel flow equations and explain the interactions among the terms.	1.5	1		-				W	М	2.5	:	M
			_	6VS		3.0		100		- 34		M

Course Outcome Contribution in Each Question

Tool	Task No.	QNo	Marks	DL	BT Level	Percentage Contribution of Course Oucome
Internal		1	40	Average	Evaluating	CO1 [50],CO2 [50],
External	1	1	60	Average	Creating	CO1 [50], CO2 [50],

CO-Assessment-Marks: Fluid Mechanics II

We would consider 40% weightage for Internal Marks and 60% weightage for external marks for calculating attainment level of Student Course Outcome. In case of either only internal or external components, we would consider 100%.

CO1: Ability to develop the open channel flow equations from the basic conservation equations.

#	RollNo	Internal-1[20]	External-1[30]	Tota! [50]	MO(%)	Scale
1	1611983082	0	0	0	0	
2	1611983001	11.5	19,5	31	62	
3	1611983081	14	4.5	18.5	37	3
4	1611983002	13	16.5	29.5	59	- 1
5	1611983003	14.5	16.5	31	62	2
6	1611980706	10.5	16	26.5	53	3
7	1611983075	13.5	21	34.5	69	2
8	1611983006	12	12.5	24.5	49	3
9	1611983007	7	12.5	19.5	39	2
C	1611983008	12.5	15	27.5		1
1	1611983009	9	9.5	18.5	56	2
2	1611983010	12	13	25	37	1
3	1611983012	10.5	14.5		50	2
4	1611983072	18	20	25	50	2
5	1611983014		14.5	38	76	3
6	1611983015	12.5		26.5	53	2
		.2.0	16.5	29	58	2

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17		10.5	15	25.5	51	2
18	1611983017	9	13	22	44	2
19	1611993080	(1)	0	1	2	1
20	1611983018	10	13	23	46	
21	1611983078	12.5	15	27.5		2
22	1611983020	11	11.5	22.5	56	2
23	1611983021	11.5	14.5		45	2
24	1611983069	19.5		26	52	2
25	1611983022	11.5	28	47.5	95	3
26			22	33,5	67	3
27	1611983074	15	17.5	32.5	65	3
	1611983076	8,5	14	22.5	45	2
28	1611980702	g	10,5	19.5	39	1
29	1611983084	0	0	0	0	1
30	1611983023	11	17	28	57	2
31	1611983025	11.5	11.5	23	46	2
32	1611983026	15.5	18.5	34	69	
33	1611983028	13	19	32		3
34	1611983083	0	0		64	3
35	1611983030	13.5		0	0	-1
36	1611983031	17	20.5	34	68	3
37	1611983032		14.5	31.5	63	3
38	1511983033	7.5	3.5	11	22	1
		9,5	7,5	17	34	1
39	1611983034	16.5	20	36.5	73	3
40	1611983035	15	25.5	40,5	81	3
41	1611983037	14.5	14	28.5	57	2
42	1611983038	6.5	10	16.5	33	***
43	1611963039	14,5	20.5	35		1
44	1611983085	0	0		70	3
45	1611993040	15	24	0	0	1
46	1611983041	13.5		39	78	3
47	1611983071	18	12.5	26	52	2
48	1611983042		27.5	45.5	91	3
49		15.5	8.5	24	48	2
50	1611983043	10	12	22	44	2
- 11	1611980704	18,5	22	40,5	81	3
51	1611983044	14	17	31	62	3
52	1611983045	6.5	14.5	21	42	2
3	1611983046	13	19,5	32.5	65	
4	1611983047	9	7	16		3
5	1611983048	13	14.5		32	1
6	1611983050	12,5	17	27.5	56	2
7	1611983051	10.5		29,5	59	2
8	1611983052	16	12	22.5	45	2
9	1611983070		24.5	40.5	81	3
		13	13.5	26.5	53	2
	1611983054	10	13.5	23.5	47	2
	1611983053	18	21	39	78	3
	1611983055	11.5	20.5	32	64	3
	1611983056	13.5	15,5	29	58	
	1611983058	12	16	28		2
	1611983059	15	21.5		57	2
	1611983073	17.5		36.5	73	3
	1611983060	6	26	43.5	87	3
	1611983061	10	0	6	12	1
	1611983062		4.5	14.5	29	1
		13,5	15	28.5	57	2
	1611983063	12,5	15	27.5	56	2
	1611983064	15,5	20	35,5	71	
	1611983065	14	14.5	28.5		3
	1611983066	17	19.5		57	2
			12.0	36.5	73	3
	1611983067	11.5	14	25.5	51	2

CO Attainment on Scale of 3

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Percentage of Students Scored above 60%

3

CO2: Ability to explain the terms of the open channel flow equations and explain the interactions among the terms.

#	RollNo	Internal-1[20]	External-1[30]	Total [50]	MO(%)	Scale
1	1611983082	0	0	0	0	1
2	1611983001	11,5	19,5	31	62	3
3	1611983081	14	4.5	18.5	37	1
4	1611983002	13	16.5	29.5	59	2
5	1611983003	14,5	16.5	31	62	3
6	1611980706	10.5	16	26.5	53	2
7	1611983075	13,5	21	34.5	69	3
8	1611983006	12	12.5	24.5	49	2
9	1611983007	7	12.5	19,5	39	1
10	1611983008	12.5	15	27.5	56	2
11	1611983009	9	9,5	18,5	37	1
12	1611983010	12	13	25	50	2
						2
13	1611983012	10.5	14.5	25	50	
14	1611983072	18	20	38	76	3
15	1611983014	12	14.5	26.5	53	2
16	1611983015	12,5	16.5	29	58	2
17	1611983016	10.5	15	25,5	51	2
18	1611983017	9	13	22	44	2
19	1611983080	1	0	đ	2	. 1
20	1611983018	10	13	23	46	2
21	1611983078	12,5	15	27.5	56	2
22	1611983020	11	11.5	22,5	45	2
23	1611983021	11.5	14.5	26	52	2
24	1611983069	19.5	28	47.5	95	3
25	1611983022	11.5	22	33.5	67	3
26	1611983074	15	17.5	32.5	65	3
27	1611983076	8.5	14	22.5	45	2
28	1611980702	9	10,5	19.5	39	1
29	1611983084	0	0	0	0	1
30	1611983023	11	17	28	57	2
31	1611983025	11.5	11.5			
32	1611983026			23	46	2
		15.5	18.5	34	68	3
33	1611983028	13	19	32	64	3
34	1611983083	0	0	D	0	1
35	1611983030	13,5	20,5	34	68	3
36	1611963031	17	14.5	31.5	63	3
37	1611983032	7.5	3,5	11	22	1
8	1611983033	9,5	7.5	17	34	1
9	1611983034	16.5	20	36.5	73	3
0	1611983035	15	25.5	40,5	81	3
1	1611983037	14.5	14	28.5	57	2
2	1611983038	6.5	10	16.5	33	1
3	1611983039	14.5	20.5	35	70	3
4	1611983085	0	0	0	0	1
5	1611983040	15	24	39	78	3
;	1611983041	13.5	12.5	26	52	2
	1611983071	18	27.5	45,5	91	3
	1611983042	15.5	8.5	24	48	
	1611983043	10	12			2
	1611980704			22	44	2
		18.5	22	40.5	81	3
	1611983044	14	17	31	62	3
	1611993045	6.5	14.5	21	42	2
	1611983046	13	19.5	32.5	65	3
	1611983047	9	7	16	32	1
	1611983048	13	14.5	27.5	56	2
	1611983050	12,5	(1)17	29.5	59	2

		10.5	12	22.5	45	2
57	1611983051		24.5	40.5	81	3
58	1611983052	16		26,5	53	2
59	1611993070	13	13.5	23.5	47	2
60	1611983054	10	13,5	39	78	3
61	1611983053	18	21	32	64	3
62	1611983055	11.5	20.5		58	2
63	1611983056	13.5	15.5	29	57	
	1611983058	12	16	28		3
64		15	21.5	36.5	73	
65	1611983059	17.5	26	43.5	87	3
66	1611983073	6	0	6	12	1
67	1611983060	10	4.5	14.5	29	1
68	1611983061		15	28.5	57	2
69	1611963062	13.5	15	27.5	56	2
70	1611983063	12.5	.,	35.5	71	3
71	1611983064	15.5	20	28.5	57	2
72	1611983065	14	14.5	36,5	73	3
73	1611983066	17	19.5		51	2
74	1611983067	11.5	14	25.5		3
75	1611983077	15	18	33	66	

CO Attainment on Scale of 3

2.16

Percentage of Students Scored above 60%

36

Attainment on Scale of 3

2.16

Percentage Attainment

72.00

REGISTRAR CHITKARA UNIVERSITY BAROTIWALA, DISTT. SOLAN HIMACHAL PRADESH-174103 Head of Department
Department of Civil Engineering
School of Engineering & Technology
School of Engineering & Technology
Chitkara University. Himachal Pradesh



Chitkara University Programme Outcome Attainment Report (Direct)

CO Attainment - PO Map: B.E. Civil Engineering

Subject	t Course Outcome	Score	PO1	POZ	PO3	PO4	PO5	P06	P07	PO8	PO9	PO10	PO11	PO
HUL 210	1 Acquire the knowledge disaster management.	2.25	2	2		*	*	**	*:		*	12.0	1.7	- 2
HUL 210	 Understand the vulnerability of ecosystem and infrastructure due to a disaster. 	2.25		ě	2		-		-	2	2			
HUL 210	 Acquire the knowledge of disaster management Phases 	2.25		¥	3	*	*	£	**	*	*	1	æ	
HUL 210	Understand the hozard and vulnerability profile of India	2.25		*	3	*2	ŧ	<u>*</u> ?	3	10	*2	8.	*	2
AML5101	Introduce and form matrices to present mathematical solutions in a concise and informative manner. Use matrices to solve the problems of system of linear equations and solve various live problems using matrices.	2.27		3	ţ.	2	3	355	15	Ē.	5			3
AML5101	Find local extreme values of functions of several variables test for saddle points examine the conditions for the existence of absolute extreme values. Solve constraint problems using Lagrange multipliers and solve related application problems.	2.27	3			*	3	(3*)	(#)	276.	2.50		*	3
AML5101	Apply the principles of Integral Calculus to solve a variety of practical problems in Engineering and applied Sciences.	2,27	1	*	88	3	3		7	4	:4	1	321	3
AML5101	Synthesize and apply multivariable vector- valued functions their derivatives and integrals to live problems graphically and analytically.	2.27	a	74.1	34	3	2	¥	*	3	1	*	*	2
PYL5101	After completing this course the students will be able to analyze and solve mathematical problems relating to Gradient Divergence and Curl of scalar and vector field and establish their relationship with propagation of Electromagnetic waves in free space using Maxwells equation.	2.09	3	3		3	9	1	*	*	*	Æ	3	:•
YL5101	The students will be able to differentiate between different types of LASERs and optical fibres their operation advantages and disadvantages and solve related problems and their application in engineering domain.	2.09	2	*	*	5:	ŧ	Đ	51	ė.	*	i.	s	2
YL5101	The students will be able to differentiate between characteristics and properties of vanous magnetic and superconducting materials and establish their applications in engineering disciplines.	2,09	*	2	2:2	0€3	10:5	(9 8 0)	7.58	(e:	(2)		*	•
YL5101	The students will be able to describe the dual nature of waves and particles in context of Quantum Mechanics and to apply the Schrodinger Wave Equation in solving different physical systems and processes.	2.09	320	લ	190	3 9	1865	ia	a	5 \$.).	(\$6)	-	-	(6)
EL5102	Apply knowledge of mathematics science and engineering.	1,99	1	3	3	æ	ē	ñ	•	ē.	2	7 8 3	(5)	20
L5102	Identity formulate and solve engineering problems	1.99	3	3	(0)	ŝ	3	•	ē	š	8	150		3
L5102	Design a system component or process to meet desired needs within realistic constraints such as economic environmental social political ethical health and safety manufacturability and sustainability.	2.03	2	3	Ψ.	¥	ğ	₽	2	9	Ψ.		3,00	3
IL4101	Develop innovative methods to produce soft water for industrial use and polable water at cheaper cost.	1.94	2	*	ž.	ž	×	U.E.I	(<u>*</u>	ž.	5	ह	*	3
L4101	Substitute metals with conducting polymers and also produce cheaper biodegradable polymers to reduce environmental pollution.	1.94	5)	3	100		3	:*:	**	<u>.</u>	582	*	×	•
L4101	Design economically and new methods of synthesis nano materials.	1.94	1	3		1.01	(#J.).	3	7	81	200	*	ŧ.	353
	Apply their knowledge for protection of different metals from corresion,	1.94	3	©	3)	è	įĒ	3	æ			±i.	/bi	3
	Have the knowledge of converting solar energy into most needy electrical energy efficiently and economically to reduce the environmental pollution.	1.94	3	127	. (8	3	3	ē	ŝ	**	055	2

	GEL4	101 Understand the transnational character of environmental problems and ways of addressing them including interactions acro- local to global scales.		25	5	2		•	*	•	÷	×	٠	\$	3	1 -		3
	GEL4	Apply systems concepts and methodologie analyze and understand interactions betwee social and environmental processes.		25	. 6	3		6 3	2		*	242		*	٠			
	GEL41		ies 2.2	25	2)	i,e	15			*		5	2	2	5.	1 -		
	GEL41		2.2 to	5	2	.5				*	*			2	:•:	¥	3	
	PYP110	Students will be able to co-relate practical knowledge with theoretical studies,	2.86	5	3	t	18	32			*	E -		-	ş	8	•	
	PYP110	Students will achieve perfectness in experimental skills.	2.88	3	E .	2		,		20	:t:				×	¥	140	
	PYP110	1 The study of practical applications will bring more confidence and ability to develop and labricate engineering and technical equipments.	2,86	S	20	S	提	72			1				*	-	2	
	EEP110	 Get knowledge of various parts of an electrical machine. 	2.86	ŧ	1	ŭ	8					-			w/	181	2	
	EEP1102	Conduct speed control of different types of DC motors.	2.86			÷	*	2:	2			,		.		3		7
	EEP1102	Elaborate the characteristics of DC servo motor.	2.86	3	ı	3		œ	1 .	- J. 8								1
	EEP1102	Simulate laboratory experiments in the software.	2.86			2	283	29.5		1.		. -			3		2	-
_	EEP1102	Perform tests on motor-generator set.		0.2			-			-								ı
	EEP1102	Find different losses on machines.	2.86	2			3	- E			71					•		1
	CHP1101	Determination of parameters like hardness and chloride content in water.		3			×		-			1 2	1				2	-
	CHP1101	Estimation of rate constant of a reaction from concentration time relationships.	2.66	2	į	2	*	*	*	1	-	-						l
	CHP1101	Determination of physical properties like adsorption surface tension and viscosity.	2.7	1			8	t		+							3	l
	CEL5102	Determine resultants and apply conditions of static equilibrium to plane force systems	2.84			8	3	÷		1	1.00			+		2	3	
	AML5102	To analyze and correlate many real-life problems mathematically and thus find the appropriate solution for them using Fourier series and Transforms Fourier and Laplace transform.	2.84	3	- 1		2005	•	4			•	1			•	2	
	MEW2101	To acquire skills in basic mechanical engineering practice.	2.81	3	2			8	٠	*	*	1	*	1 2		1	2	
	PYL5102	Understand the design selection and processing of materials for a wide range of applications in Industries and elsewhere	2.56	2	2			9	7.0		ž)	*:	**	3		٠		
	MEL4102	Understand the fundamentals of engineering drawing and geometrical objects	2.72	3	¥)		i ii	120	2	150	3:3	361		-	-	2	1.	
	CSP1103	Describe the basics of computer and understand the problem-solving aspect.	2.64	3	(4.)		×	a.				2	2			eć i	2	
	MEP1102	Introduce CAD computer pided drafting software and its utilities in the engineering field.	2.84	3	3		*	3	ä		ĕ		18				3	
	ASP3101	Students will abla to apply material from their discipline to the design of community-based projects.	2.84	3	3		*	3	2	2		1 2					3	
	CEL5102	Identify and quantify all forces associated with a static framework	2.84	2	8		*:	1	¥:		ž.			3				
	,	Using ordinary differential equations student will be able to solve various practical problems in Science and Engineering.	2.84	2	2	32		1		(4) (38				,	6		
	MEW2101	To identify the hand tools and instrument	2.81		2			2										
1	PYL5102 L n b	Independent to the state of the	2,56	2	12			٥	*	*	8	3	3 3	120	3		3 2	
٨	MEL4102 C	Oneloud the tenhain-11-w	2.72	ψ.	3	**		e	6		2	¥	2	75	3		*	
С		emonstrate the algorithm and flow chart for 2 given problem.	1.64	ž.	÷		1	2 8	-3	. .	·	*	720	(e)	25		2	
							13											

REGISTRAR -CHITKARA UNIVERSITY BAROTIWALA, DISTT. SOLAN HIMACHAL PRADESH-174103

MEP110	Perform initial software setting and able to draw 2D entities. Edit the edit the drawings using modify commands skills.	2,84	•	٠		18		74			/0	111 2	ī	3
ASP310		2,84	*		9	-		121	120		14	1	- 20	3
CEL510		2.84	- 4	2	12		3	12	- 14	12	14	2		(#1)
AML510		2.84	4				ie.	1		3			1.02	2
MEW210		2.81	-	-	- 0	2				4	- 4			2
PYL5102	Understand the composition of a material may be controlled by processing.	2.6			*		1			*	*	1	36	€
MEL4102	Develop the ability of drawing a wide range of geometrical figures	2.76	3		5:	*	2	*	=	2	2	1		
CSP1103	Design and develop C program to evaluate simple expressions and logical operations.	2.64	2		- 8		-	ŧ		8	2		3	3
MEP1102	Draw basic isometric drawings using auto CAD will achieve perfectness in experimental.	2.84			2				-		•	2		•
ASP3101	To get awareness of professional ethics and responsibility.	2.84	*		2							2	*	
CEL5102	Understand basic kinematics concepts displacement velocity and acceleration.	2.84	283	382	05	100	185	***	385	385	31			1.00
AML5102	Student will be able to analyze functions of complex variables techniques of complex integrals and compute integrals over complex surfaces.	2.84	3	2	æ0	20		(2)			30	3		(15) 1
MEW2101	To provides the knowledge of job materials in various shops	2.81	3	ia.	13	it	-	iz.		e e			(€	90
CSP1103	Develop & Implement C programming skills with suitable modules to solve the given problem.	2.64	<u>u</u>	3	*	(i)	2	. 3					2	1.51
ASP3101	To enhance team working and leadership skills to facilitate employability.	2.84	8	3	8	8	2	ŝ				~	121	ia
CEL5102	Understand basic dynamics concepts force momentum work and energy.	2.84	2	¥	•	1	3		2	8		•	2	2
MEW2101	To provides the knowledge of core technical subjects for making and working of any type of projects	2.81	2	*	•	*			*		-	72	2	2
CSP1103	Demonstrate the concept of pointer and perform IO operations in files.	2.64	•	•	*	٠	e:	٠		*:			2	
ASP3101	Demonstrate the ability to work in a team based small projects and effectively use.	*	•	. *		æ	85	100	5*0	363	*	*	*	*
CEL5102	Undertake laboratory practical and report results	•	*	æ				3 0	**	250		*	*	
CEL3205	Evaluate various properties of concrete	2.65	3	3	3	-		3.					1	2
CEL5201	Determine resultants and apply conditions of static equilibrium to plane force systems.	1.59	3	34.3	4	•	4	3	3	2	2	-	722	2
CEP1203	Identify name and characterize flow patterns and regimes.	2,86	3	198	18	•	2	•	2	54	12		883	14:
CEP1207	Survey an area under various topographical leature and obstructions.	1.92	3		*	ř	2	*	*	2	9	3.00	4	*
CEP1215	Able to check the quality of building materials	1.91	2	8		3			*		*		*	*
CEP1211	Conduct tension test on Materials like steel etc.	2,86	3	£	2	- 2	•		8	*	- 2	101	1	2
CEP2209	Demonstrate basic concepts of the AutoCAD software to gain employability.	2.7?	*	*	×	1	•	3	8	2.	2	14	-	1
CSP2103	Understanding a functional hierarchical code organization.	1.86	3	1.	•	#3	2	e:	**	ki.	*	3.	2	2
CEL3205	Evaluate various properties of the basic construction materials such as brick stone timber metals	2.65	8.	2	÷	2	187	:*:	700	•	*		*	*
CEL5201	Identify and quantify all forces associated with a static framework.	1.59	983	œ	190	2	*	300	340	100	(a)		8	2
CEP1203	Understand basic units of measurement convert units and appreciate their magnitudes	2,86	2	301	2.	7	á		9	8	*	*		R#2
CEP1207	Prepare the plan or map of the area surveyed,	1,92	9	3		8	12	2.	2	68				
CEP1215	Able to Impart the knowledge about the characteristics sources and defects in various materials used for construction purposes.	1.91	34	9	3	2	9	ù	8	Š	*	150	æ	3
CEP1211	Conduct compression tests on spring wood and concrete	2.86	鼠	2		2	2	•	8	٠	2	F#()	::	



CEP2209	Apply basic skills to develop construction	2.77	×	2	96	:*	28		-		1 .			
	drawing techniques,			2							-	-		- 12
CSP2103	Ability to define and manage data structures based on problem subject domain.	1.86	2	3	*			2	2					
CEL3205	Develop skills to work in field of building materials quality control.	2.65		3		2	- 22			3				2
CEP1203	Utilize basic measurement techniques of fluid mechanics.	2,86	:#:			*	-	*	*		*	1	9	2
CEP1207	Annalise report and where appropriate distribute the survey errors.	1.92	3		8	*	2	8		*	*	98	25	ĕ.
CEP1215		1.91	*	3	5)	5	51	20	1	*	ts.	75		2
CEP1211	Conduct flexural and torsion lest to determine elastic constants	2.86		*:		2	*		7.	150	1.50			2
CEP2209	Ability to manipulate drawings through editing and plotting techniques,	2.77	ê			. 3	19	14	3	720	11.00		\$	
CSP2103	Ability to work with textual Information	1,88	3	-			120	1.0	100	140	10.5	*	2	*
CEL3205	characters and strings. Evaluate the properties of miscellaneous materials such as bitumen paints distempering	2.85	3								90	*	*	•9
CEP1203	materials for structural repairs Discuss the differences among measurement	2.86				2	*			٠.			-	7.41
CEP1207	techniques their relevance and applications. Perform instruments checks to ensure they	1.02	2					•	:	•	=	4.51	100	3
CEP1215	meet the specifications. Able to attain the knowledge of different building materials their classification.	1,91	3	2				100	Ē		3	•	•	2
CEP1211	Determine hardness of metals	2.86	. 3	- 2						3			(3).	17
CEP2209	Understand geometric construction.	2.77	1			*	*	*	3	*		393		i e
CSP2 103	Ability to work with arrays of complex objects.	1.85	2				-	-	- 2	1	1	250		3
CEL3205	Perform various quality control tests for the various civil engineering materials by performing different lab	2.65	2			*	*	4		2	-		2	2
CEP1203	Prove good understanding of concepts and their applications in the laboratory.	2.86		*		2	¥		-2				2	*
CEP1215	Enhances skills in quality control and thus helps in employability.	1.91	÷	-		+:	(e)		2	100	180	4	*	2
CEP2209	Produce template drawings	2.77	2	100	1.00	3	(*)		196) e :			-	2
CSP2103	Understanding a concept of object thinking within the framework of functional model.	1.86	2	3	100	· · ·			1.00	353	352		5	2
CEP1207	To make student ready for industry in field of surveying and thus enhances employability.	1.92	2	3	121	120		2.		•	ž.	•	*	
CEL5203	Solve hydrostatic problems	2.45	3	183	345			126	141	2	2			2
CEL5203	Describe the physical properties of a Ruid	2.45	380	187	3.8	2		:-	9	2	€.	F2	136	2
CEL5203	:Calculate the pressure distribution for incompressible fluids	2.45	2	9.	9	3		4	:	š	5	3.58	0.50	1.70
CEL5203	Calculate the hydrostatic pressure and force on plane and curved surfaces	2.45	12			ä	2	•	2	ě	Ŷ		2	3
CEL5203	Demonstrate the application point of hydrostatic lorces on plane and curved surfaces	2.45	54	¥	s	¥.	2	2		÷	¥	157	2	2
CEL4207	Skill enhanced to carry out preliminary surveying in the field of civil engineering applications such as structural highway angineering and geotechnical engineering.	2,49	\$	ž.	3	ē		5.	ž	¥	25	34	3	3
CEL4207	Plan a survey taking accurate measurements field booking plotting and adjustment of traverse,	2.49	2	•	9)	1				952	7.5%	*		*
CEL4207	Use various conventional instruments involved In surveying with respect to utility and precision.	2.49	ě	2		2	3	2	.00	.90	20	8	5	.98
CEL4207	Plan a survey for applications such as road alignment and height of the building.	P	8	30	3.	٠.	27	œ,	55		is .	5.	12	18
CEL4207	Undertake measurement and plotting in civil engineering	2,49	2	72	12	ä	<u> </u>	18	ž	ā	4	/ .5 1		261
	Ability to develop the open channel flow equations from the basic conservation equations.	2.16	3		*	×	2	2	ş	2	2	*	3	2
	Calculate deformation of statically determinate structures using geometric and energy methods.	2.15	3	*	2	2	\$	2	2	9	*	s i	透	3
	Identify and compute the main mechanical properties of concrete and steel.	2.21	2	2		2	2	2	2	50	7/	ä	1	



CEL320	8 Provide a background in the theory of hydrological processes and their measurement		3			ė		74			E 87	2			
CEP120	 Utilize basic measurement techniques of fluid mechanics. 	2.8	3	- 1		52	2		i+	8	1.0	*	1.00		
CEP120	6 Distinguish between statically determinate and indeterminate structures.	2.84	3	- 14)(#	2		3	3	*	ie.	*1	5#8	3	
CEP121:	 Able to check quality of constituent material of concrete. 	2.83		24		*	.5			3	3	7.5	323	2	
CEP530		2.84	3	3	2	3	8	è		3	8	55.	1 2	3	
CEL3202		2,18	š	8	9	2	7	8	Tr.	. 5	-	52	72	2	
CEL4206	Analyze statically indeterminate beams using classical and conventional methods	2.15	2	3	1 8	2	2	27	¥	Đ.		12	8	2	
CEL4212	ldentify and calculate the design loads and distribution.	2.21	2	2	×	•	*	1.8			*	i.e	*	1.	
CEL3208	Apply science and engineering fundamentals to solve current problems and to anticipate mitigate and prevent future problems in the area of water resources management	2.51	×	#5	*	K:	1.00	1063	, e		. (4)		*	Ť	
CEP1202	Discuss the differences among measurement techniques their relevance and applications.	2.6	2	40	3.00		1	- 30	360	*	3.9.5	*	*	598	
CEP1206		2.84	2	188	:*:	38	æ	(3/	121	31		2	ži	2	
CEP1212	· ·	2,63			3		1			3	3			3	
CEP5304	Students will get an appreciation of the role that their discipline can play in social contexts.	2.84	30	340	3.5		3.4	4			-	•5	200	3	
CEL4206	Develop qualitative diagrams showing the displaced shape bending moments and support reactions for an indeterminate plane frame.	2.15		:00	*	2	<u>1</u> €	*	*	2				38	
CEL4212	Apply the strength method to design R.C. structural members.	2.21	¥				*	1	*	*	٠		2		1
CEL3208	An ability to manipulate hydrological data and undertake widely-used data analysis, a systematic understanding of the nature of	2.51	2			3		=			*	32)	•	*	1
	hydrological stores and fluxes and a critical awareness of the methods used to measure analyze and forecast their variability and the appropriate contexts for their application.														
CEP1202	Prove good understanding of concepts and their applications in the laboratory.	2.8	2	2	ž			4		÷		1		2	
CEP1206	Draw the shearing force and bending moment diagrams.	2.84	÷	¥	-83	2	:22	8%	::::	848	:#S	ş	¥	26	
CEP1212	Able to perform laboratory tests for properties : of fresh and hardened concrete.	2.83	2	*	2	(6)			(9)	:30:	(34)	8		: (EE	
CEP5304	To get awareness of professional ethics and responsibility.	2.84	295	3:2	2	393	:#0	(9)	78	ac	280	2			
CEL4206	support reactions for an indeterminate plane frame	2.15	2	(5)	:#0	2.	121	1.5	35	35 35	8	*:		31	
CEL4212	Analyze and design R.C. beams for flexure and shear.	2.21	3	31		*	3	8	š	3	ė	d	(2)	17	
CEL3208	Can define the key components of a functioning groundwater can determine the main aquifer properties permeability transmissivity and storage Identity geological formations capable of storing and transporting groundwater.	2.51	3	=	•	à	2	ž	Ü	2	÷	8	9	2	
CEP1202	Compare the results of analytical models introduced in lecture to the actual behavior of real fluid flows and draw correct and sustainable conclusions.	2,8	*	*	*	×	2	×	*	83	e	34	*	£	
CEP1206	Calculate the internal forces in cable and arch type structures.	2.84	2	ž		F)			8.8	144	-	2	2	7	
CEP1212	Students will achieve perfectness in experimental skills.	2.83	**	÷		1	æ	(45)	43	S#3	14.5	2	7	ises	
CEP5304	To enhance team working and leadership skills to facilitate employability.	2.84	€	3	**		2	9	E#	(a	14	20	Þ.	æ.	
CEL4206	Develop effective structural analysis skills for bullding design activities.	2.15	2	523	100	1	ie .	ir.	æ	*	×		900	2	
CEL4212	Analyze and design short and stender R.C. columns.	2.21	2	2	ž.	a	8	8	×	*	*	::E		8	
CEL3208	Different methods and importance of rain water harvesting.	No.	è	100	. (7		÷	•	•		(8)	:-	*	

CEP120	12 Understand ethical issues associated with decision making and professional conduct.	2.8	S21		14	12	2	94	64		34	*	:36	560
CEP120		2.84	2		3	.1	*	×	:*	9		•:	250	2
CEP530		(*)		×	8	*	8	5	5.	*	*	825	13	*
CEL5306		1.95	3	3	3	*	ŝ		Ţ.	2	2	12	a	1
CEL3311	Given basic information prepare a horizontal and vertical alignment including super elevatio which complies with AASHTO standards.	2.48 n	3	2	1	¥			2	#		\$	8	Ş
CEL3303	Identify various water demands and select suitable source of water	2,59	2	2	**	120	1.00		188	- 20	1	2	2	2
CEL4305		2.21	1	*:	•	3	- 100	90	190	(€:	6	*	3	*:
CEP1311		2,87	2	-	38	-	3	æ	380	**	*	*	*	i#
CEP1303	Perform common environmental experiments relating to water and westewater quality and know which tests are appropriate for given environmental problems and thus enhances skills of students and make them industry read.	2,89	5003	. 31	30			٠	:=	1	:•	#0	920	2
CEP1308	Have thorough knowledge about the procedures of laboratory tests used for determination of physical index and engineering properties of souls	2.87	3	3	5	~			\$			120		2
CLP2501	Demonstrate Body Language Including facial expressions and voice modulation infonetion via role plays.	2.72	2			2	2	ä	1	- 1	Ř	1	3	
HUL3301	The students will be able to get awareness on human values and professional ethics	2.56	2	3		¥	1.12	121	1	×	-	•		
HUL2401	An ability to analyze a problem and to identify and define the computing requirements appropriate to its solution.	1.64	2		•	-	926	*	88	12:	742	3	¥	2
CET5301	Survey an area under various topographical feature and obstructions.	2.92	3		100	2	30	48	30	200	:22		*	3
CEL5308	Determine response of structures by classical iterative and matrix methods	1.95	167	78:	*	30	*	3	ia .	**	(4)	2	125	
CEL3311	Understand the relationship between the environment and trensportation infrastructure and the importance the environment plays in project development of transportation projects.	2.48	1	l æs	æ	3	ă	5 *	æ	3	(4)	*	**	1 0
CEL3303	Able to determine the population forecast for a city to meet its water requirement.	2.59	31	(e)	3	*	¥	*	*	×	2	949		
CEL4305	To understand the various physical and engineering characteristics of different types of soil	2.21	3	æ	*	*	*	*	*	2	2	•	34	4
CEP1311	Design and validate technological solutions to defined problems and communicate clearly and effectively for the practical application of their work. Identify the grade & properties of bitumen.	2.87	Ĭ	1	51	•:	*	₹ ²	¥	¥.	85	æ	*	*
CEP1303	Statistically analyze and interpret laboratorial results.	2.89	2	8	1 -	2	\pi	-	76A	72.	*	9	ř	1
CEP1308	Have the capability to classify soils based on test results and interpret engineering behavior based on test results	2.87	2	ĸ	2.6		2	(3)	4	(4)	an:	÷		
CLP2501	Team Dynamics via text-based group presentations,	8	*	*	30	3	о .	a i	8	24	12	7	*	91
HUL3301	The students will understand the core values that shape their ethical behavior.	2.56	320.	30	:=	3 ÷	*	*	2	×	*	240	*	-
HUL2401	An ability to design implement and evaluate a computer-based solution to meet a given set of computing requirements in the context of the discipline.	1.64	4		3	9	*	*		*	*	30	3	8
CET5301 CEL5308	Prepare the plan or map of the area surveyed.	2.92	2	*	*	*	4	#	¥	2	20	8		2
	To use the techniques skills and modern engineering methods involved in the analysis of structures,	1.95	ė.	3		t	•	6	es	*	Æ	*	×	8
	Utilize CAD software to prepare a plan profile and x-sections depicting a typical roadway design.	2.48	2	*	5.	*	1983	··		3	2	-	*	2

	CEL330	33 Able to design water and waste water treatment plant by different methods.	•	9			22	1 4		1 12						Ē.
	CEL430		2.2	1 %	- 3	- 3			3	74	- 9	- 6	2	2 1 3	e 34	
	CEP13	11 Design and validate technological solutions to defined problems and communicate clearly a effectively for the practical application of their work. Find out peak hour traffic & peak time for a given location on the road.	nd	7 3	3	b e		2			,		2.5	9 8	. 2	
	CEP130	3 Apply the laboratorial results to problem identification quantification and basic environmental design and technical solutions.	2.89	2		2		٠	*	*	2	2	9): j e	3	
	CEP130	8 Be able to evaluate the permeability and sheet strength of soils	ır 2,87	*	2	3 2	÷			1	,		*	*	*	
	CLP250	1 Leadership Skills via flipped classrooms.	2.72		*				2			12				
	HUL330	 The students will be able to take active part in social political economic and cultural activities with responsibility. 		1			197	1	1/2	2		-	*	,		
	HUL240	An ability to communicate effectively with a range of audiences about technical information	1,84	888	-	- 1	343		343	3				2		
	CET530	Annalise report and where appropriate distribute the survey errors.	2,92	*	:*:	391	2				*		*			
	CEL5308	Utilize the concept of influence lines for deciding the critical forces and sections while designing	1,95	3	31	1	2.	87		2	(≇		*		380	
	CEL3311	Prepare well written design narratives documenting the various parameters and standards used in the design process so another individual could review the work and understand what decisions and assumptions were used and why.	2.48	1	z*	25	2		3	*	8			3	:0:	
	CEL3303	Able to know about the drainage and plumbing system in commercial residential and industrial area		*	*	3:	*5		*1	49		3	:2	2		
	CEL4305	To appreciate the use of modern technology in the field of geotechnical engineering	2,21	*:	3	*:	- di	180	196) e:		41			2	
	GEP1311	Calculate design speed maximum speed & minimum speed limits of a location through spot speed.	2.87	3	3	5.53	358		285	*	:•		*		×	
	CEP1303	Understand and use the water and wastewater sampling procedures and sample preservations.	2.89	1	:2:	: : ::	(8)	æ		×	3	2	*	*	2	Ī
	CEP1308	Be able to evaluate settlement characteristics of soils	2.87	2	2	54	*	:	æ	25	(#	*	*	100	3	1
	CLP2501	Research Aplitude via projects to value the employability.	2.72	1	32	Ø	8	*	2		*	*		*		
	HUL3301	The students will gain thorough knowledge in the field of human rights and this will add to the academic qualification	2.56	2			*	5	*	2	*	٠	300	*	*	
	HUL2401	An ability to make informed judgements in computing practice based on legal and ethical principles.	1.64	-	2	-	2	ž	8	ŧ	*	*	(e		*	
	CET5301	Perform instruments checks to ensure they meet the specifications.	2.92	2	ě	8	A.	(2)		/ El		*5	*			
	CEL5308	To impart knowledge about various methods involved in the analysis of indeterminate structures	1.95	1	¥?	160	120	1	3	(4)	:20	100	*	*:	1	
	CEL3311	:Understand the mathematics behind the development of tables and charts for determining highway design criteria.	2.47	3	:#S	:31	ä	ŭ	×i	2	8	7	*	1	223	
	CEP1311	Draw parking accumulation curve and find out parking duration & turnover of parking lotstretch	2,87	2	72	Q.	ž	ŝ	1		æ	ž	383	24	*	
(CEP1303	Obtain the necessary background for subsequent courses in environmental engineering.	2.89	2	2		8	5		5	2	2	a	9	3	
(EP1308	Be able to evaluate compaction characteristics required for field application	2.87	3	*	*	24			*	2	2	¥	*	*	
c	LP2501	Effective communication with emphasis on capluring the attention of the audience.	2.72	2	¥	25	8		2	190	e:	*	Ħ	*	*:	
	UL2401	An ability to analyze and evaluate systems with respect to maintaining operations in the presence of risks	1.64	2		V\$		1 <u>48</u> 6	•	<u>.</u>	V. S. C.	7.50	*	*2	2	
	ET5301	Surveying practice skills enhanced.	2.92	3	90	2	9	9	35	1.5	进	32	*	3.55	2	
С	EL3311	Familiar with professional and ethical issues related to liability and conduct.	±?	90	*	3	(¥	æ	ž.	4	72	Œ.		*	9	
							470									

CEP13	10 Understand and use the water and wastewate sampling procedures and sample preservations.	2.95	(4	12		\$	3	N	3	3	2	*	2.50	2
CEP52	`	2.95	2	10			*		3	*	*	(#E	82	2
CLP25		2.92	1	3			2		::		*	120	(2)	
CEL33		2.73	2	ā				3	2	2	9	120	-	3
CEL33		2.44	•			3	2	200	2		2	15		•
CEL33		2.64	1	2	8	-	2	D	¥	2	2	- 14	÷*	
CEL430	Ability to analyze and design of simple bolted and welded connections	2.43		2	\$	41	3		*	*	*	3	9	1
CEL531	4 Discuss professional responsibility in light of social context of engineering problems.	2.49	3:	ž	*	2	E		1 2	- 53	*	35	2	*
CEP13	 Obtain the necessary background for subsequent courses in environmental engineering. 	2.95	2	£	*		25			2	2		*	3
CEP520	70 To enhance learn working and leadership skills to facilitate employability.	2.95	2	:::	100		750	870	1	(2)	e e		•	•
CLP250	 Effective communication with emphasis on capturing the attention of the audience to develop employability skills. 	2.92	3	2	*	3						3	2	2
CEL430	6 The students will gain an experience in the implementation of Geolechnical Engineering or engineering concepts which are applied in field Geotechnical Engineering.		1	•	(8)	3	30	-	120		720		3	iù
CEL342	7 Explain basic physical principles of remote sensing	2,67	3	•	3	ĕ	Ē			2	,		100	3
CEL340	B Be able to find the necessary informationlegistationprocedures for an assessment of environmental impact of a Project	2.68	3	3	4	2		9		34		72	2.5	#F
CEP130	2 Have thorough knowledge about the procedures of laboratory tests used for determination of physical index and engineering properties of soils.	2.95	3	3	2		•	9	3	3		:3/:	i4	2
CEP142	7 Interpret hard copy satellite FCC images.	2.97			-	3		-	2	-			-	٠
GTI2401	Students will be able to introduce and form matrices to present mathematical solutions in a concise and informative manner. Use matrices to solve the problems of system of linear equations and solve various live problems using matrices.	2.88	1	9	¥		\$	2	**	×	2	5	a a	-
GT14301	Student will be able to Improve answers during the Aptitude test and develop an all-around personality with a mature outlook.	2.57	3	5	*	Е	(4)	8.2	3	2	350	*	8	3
CEP3307		2.92	3	Œ	385	2	3 7		200	*	**	5.	*	3
CEL4306	The students will get a diverse knowledge of geotechnical engineering practices applied to real life problems of designing of structures.	2.23	3	125	574	181	æ	ı	e e	2	2	ŧ	, te	1
CEL3427	Understand the basic difference between various kinds of satellites and sensors	2.67	2	3	33	1	æ	*	*	æ		ŧ	(8)	2
CEL3408	Be able to conduct an EIA on a proposed project	2.68	1	67	o?			*	•	÷	÷	2	91)#
CEP1302	Have the capability to classify soils based on lest results and interpret engineering behavior based on test results	2.95	2	8	3	Ř	2	Ñ.	000	0.00	(8)	*	æ	3
CEP1427	Understand the effect of different resolutions of satellite image on Identifying terrestrial features.	2,97	9		2	ä	2	22	3	2	2	192	9	**
GTI2401	Students will be able to find local extreme values of functions of several variables test for saddle points examine the conditions for the existence of absolute extreme values. Solve constraint problems using Lagrange multipliers and solve related application problems.	2,88	3	2	š	3	20		ě	Ē	÷	38.		2
GT 4301	Student will be able to enhance their logical thinking verbal reasoning and numerical reasoning.	2.57	1	161	3	*	343	(%)	58).	*	(2)	3	25	3
CEP3307	Students will get an appreciation of the role that their discipline can play in social contexts,	2.92	2	\$3	547		Œ	4	ä	3.	2	20	79	2

CEL430	The students will get a diverse knowledge of geotechnical engineering practices applied to real fife problems of designing of structures.	2.27	-			*		3		a		2	÷	1 (%)
CEL34Z		2.67	÷	2	*	*	3				*	250		
CEL340	8 Be able to conduct an environmental audit on selected companyindustry	a 2.68	1	38	×	1		-		7		883	825	::
CEP130	Be able to evaluate the permeability and shear strength of soils	2,95	55	2	£	8	8			*	E		•	3
CEP142	7 Generate field spectra for various land cover features and draw inferences,	2.97	2	9	-	2	*	2	1	-	2	1 %		2
GTI2401	Students will be able to apply the principles of Integral Calculus to solve a variety of practical problems in Engineering and applied Sciences	2.88	3	*	•	3	*	*	*:	1	2	*	86	×
GTI4301	Students will take part effectively and confidently not only in campus placements programs but also in other exams like CAT GMAT SSC Bank Fo UPSC etc.	2.61	2		8.		ŧ	2		•				
CEP3307	To get awareness of professional ethics and responsibility & develop the skills for employability.	2.92	æ	Œ	760	2	*	**		106	æ	*	8	*:
CEL3427	Explain the principles of thermal and microwave satellites sensors and their nature of the data	2,67	383	3	(#) (1	100	(#)	2			*:	12	2
CEL3408	Be able to develop a waste reduction and minimization plan for a selected companyindustry	2.68	3.5	æ	3		2	a		-	*	3	3*7	*
CEP1302	Be able to evaluate settlement characteristical of soils	2.95	2	2	*	ž.	8						283	3
CEP1427	Extract different features from satellite image.	2.97	3	3	8	2				1 8		1		1.5
GTI2401	Students will be able to interpret statistical inference tasks with the help of probability & distributions and hypothesis testing for means variances and proportions of large as well as small data and employ appropriate regression models in determining statistical relationships.	2.68	2	1	*	1		•		-	*	(a)	8/	2
CEP3307	Demonstrate the ability to work in a team hased small projects and effectively use.	2.02	2	÷		-5			1.55		•		*	8
CEL3427	Apply remote sensing in different thematic studies	2.67	2	ž.	172=	٠		*	9	•	٠	ę.	8	
CEL3408	Be able to develop an EMS for a Project	2.68	3	341	200	2	-		3 .		120	2	2	-5
CEP1302	Be able to evaluate compaction characteristics required for field application	2.95	3	**	200	387			: :	2	2	*	Æ	(4)
CEP1427	Provides effective leaning of industry orientated lechniques related to the subject personality development communication and skills for employability development	5).		950	(4)	13	*	is .	*	4	•	E:	755	
CEP3307	Develop skills to communicate with engineers and the community at large in written an oral form.	2.2	8	.*	3	*	*	8	*	×	*	7 9 1	-	14
CEL3408	Be able to conduct a LCA on a selected process	1,6	8	×		*	8	*	*	*	٠	7.4	14	
CET9403	Capability to acquire and apply fundamental principles of engineering.	2,97	2	2	10		e	÷	*:	*	20		*	
CET9403	To get awareness of professional ethics and responsibility. Become master in ones specialized technology	2.97	2	ħ	2	ŧ		383	*	£	*:	*	٠	*
CET9403	To get awareness of professional ethics and responsibility. Become updated with all the latest changes in technological world.	2.97	1	E	æ	**	*	181	2	:#R	::::		÷	8
CET9403	To get awareness of professional athics and responsibility. Ability to communicate efficiently.	2.97	2	1	3/		12	28	(e	9		-		785
CET9403	To get awareness of professional ethics and responsibility. Knack to be a multi-skilled engineer with good technical knowledge management leadership and entrepreneurship	2,97	ş	ē	<u>:</u>	å	3	*	25	22		36	1391	100

PO Attainment of Subjects; B.E. Civil Engineering

skills.

Subject P	01	PO2	PO3	PO4	PO5	PO6	P07	PO8	PO9	PO10	PO11	PO12
HUL 2101	75	75	75	SE :	1		75	75	75	75		75
ML5101	76	76		76	76		- 8	76	76	76		76
YL5101	70	70		7		70		24	(8)	3556	163	70
EL5102	66	67	8		6.90	100	- 2		-		(2)	57

CHL4101	65	65		*:	65	65	- 0	40	*	*	15	65
		75	2	75	1	1	30	75	75	27.0		75
GEL4101	75		- 3-	95		95		23	- 41	-	-	95
PYP1101	95	95		-	8		95	- 65	8		- 28	95
EEP1102	95	95							-			89
CHP1101	89	89				1.00400		1	95	95		95
AML5102	95	95		95		95					94	94
MEW2101	94	94		94	*	-			**	90		
PYL5102	85	85	85	161	87		- 3	100	*	88	-	
MEL4102	91	91	*	-	91		91	2.00	\$5_ (1800)	92	91	*
CSP1103	88	-	8	86	88	*	· · · · · · · · ·	33	58	97	88	88
MEP1102	95	95	95	95	-		- 25	+	-	95	-	95
ASP3101	95	95	95	95	95	8	55	240	÷:	95	*	95
	95	95	95	95	95	- 8		(3)	95	95	95	95
CEL5102					62		62	62	62		62	62
C\$P2103	62	62				1		-		- 03	88	88
CEL3205	aa	88		88	-	1		53	53		1 -	53
CEL5201	53	9		53	-:-					95		95
CEP1203	95	54	*	95	95			-	-	93	-	
CEP1207	84	64			84	. *	64		3.60		8	64
CEP1215	64	64	2	64	+	8	64	320				64
CEP2209	92	92	*	92	*:		92	-	12			92
CEP1211	95	95		95	- 21			(4)			95	95
CEL5203	82			82	62	*		82	82		82	82
CEL4207	83	83	83	83	83			-	14			83
				72				72	72			72
CEL3202	72			95	95				1.00	95	1	95
CEP5304	95	95	95					94	94	94		94
CEP1212	94		94	94	-	2					i i	95
CEP1206	95			95				000		*		
CEP1202	93		40	- 04	93		*	12		93		93
CEL3208	84	*		84			2	74	-	- 2		84
CEL4212	74	74	€	3	12	74		36	293	*	74	74
CEL4206	72	*	*	72	100		8	12	150	- 5		72
CEP1303	96	96	96	98		4	2	96	95	2		96
CLP2501	91				5.6	91	91			-	*:	(#2)
HUL3301	65	-					85		17.0	-		-
		55 00000000000000	1 55.0000000000000		+		55.000000000000001					55,00000000000000
					96		96	96	96	*	100	96
CEP1308	98	96			-	1				**		96
CEP1311	96	96		*	96	96			35			
CEL4305	74	74	:2:	74	•	74	4	74		: 74	74	74
CEL3303	86	88	86	*		2.00		8	86	*:	. *	88
CET5301	97	*	020	97	(9):		#2	0	35		0.5	97
CEL3311	83		83	83	83	100	63	83	63	450	83	83
CEL5308	65	65	65	85	65	65	65	65	65	65	796	65
	97	97	97	97	97	1911	190	*		97	500	97
CLP2502				-			98	-	3			96
CEP5202	98	96	98				161	98	98	100		98
CEP1310	98	98	98	98								
CEL5314	83	20	83	83	83			63	83	83	83	83
CEL4304	81	31		- ×	81	(*	81	81	81	81	37	81
CEL3302	88	88	25	88		-		-	-	88	-	88
CEL3310	81	81	81	81	5	81	(4)		81			81
CEL3308	91	91		91		56	91	*8	*	91		91
CEP3307	97			97			-	97	97	- 1	12	97
			86			87	86	86	-	86	- 14	86
GTI4301	86					96	1.00	96	96	3/		96
GTI2401	96	96		96	3				30		- E	99
CEP1427	99	5.44		99		- 2	99	-		99		
CEP1302	98	98	2		98		98	98	98	39	*	98
	89	89	89	89	*	*		925	*5	89	3	±1
CEL3408		89	89	89	89	15.	89		2	9	2	89
	89											
CEL3427	89 74	4.	8	74	· 😩	76	Si .	74	74	76	74	74
DEL3408 DEL3427 DEL4306 DET9403			99	74	99	76	90	74	74	76 99	74	74



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Name

(Programme In-charge)

Headied Department
Department of Civil Engineering
Department of Civil Engineering & Technology
School of Engineering & Technology

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