# COLLEGE OF ENGINEERING (AUTONOMOUS),

Gokul Shirgaon, Kolhapur



#### **Curriculum Structure**

For

B.Tech. Civil Engineering

**Under Graduate Programme** 



	Teach	ning an	d Evaluation sch	eme	for	Sec	ond	Year Sem	ester	– III	
	m nt	de				hing eme		Evalu	ation Sc	heme	е
Sr.	ulu	රි	_		SCII	CIIIC			Ŋ	/Iarks	<b>5</b>
No	Curriculum Component	Course Code	Course		Т	P	Credit	Compone nt	Max		n for ssing
								ISE-I	10		
1	BS	UCVL	Engineering	3	1	0	4	ISE-II	10		40
1	DS	0301	Mathematics III	3	1	U		MSE	30	30	
								ESE	50	20	
								ISE-I	10		
2	2 ES U	UCVL	Solid Mechanics	3	0	0	3	ISE-II	10		40
4	ES	0302	Sofid Mechanics	3		U	3	MSE	30	30 40	
								ESE	50 20		
								ISE-I	10		
2	3 ES	UCVL	Engineering	3	1	0	4	ISE-II	10	40	
3	ES	0303	Hydraulics	3	1	U	4	MSE	30		40
								ESE	50	20	40 40 40 40 40 40 40 40 40 40 40 40 40 4
								ISE-I	10		
4	PC	UCVL	Engineering	3	0	0	3	ISE-II	10		40
7	rc	0304	Surveying	3		U	3	MSE	30		
								ESE	50	20	
								ISE-I	10		
5	PC	UCVL 0305	Building Sciences &	3	0	0	3	ISE-II	10		40
3	rc		Services	3			3	MSE	30		
								ESE	50	20	
6	ES	UCVL	Solid Mechanics	0	0	2	1	ISE	25		10
0	153	0331	Lab	O	U	4	1	ESE OE	25		10
7	ES	UCVL	Engineering	0	0	2	1	ISE	25		10
	153	0332	Hydraulics Lab	O	U	4	1	ESE POE	50		20
8	PC	UCVL	Engineering	0	0	4	2	ISE	25		10
0	rc	0333	Surveying					ESE POE	50		20
9	PC	UCVL 0334	Building Sciences & Services Lab	0	0	2	1	ISE	50		20
10		UCVL 0361	Environmental Studies (Audit Course)	2	0	0	0	ESE	100	40	
			Total	17	2	10	22	Total Co	ntact H	rs	29



	Teach	ning an	d Evaluation sch	eme	for	Sec	ond	Year Sem	ester	– IV	-	
	ım					hing eme		Evalu	ation Sc	hem	e	
Sr.	ulu	Course Code	Course				<b>t</b>		I.	/Iarks	3	
No	Curriculum Component Course Course		Course	L	Т	P	Credit	Compone nt	Max		_	
								ISE-I	10			
1	PC UCVL		Structural Analysis	3	1	0	4	ISE-II	10		40	
1	rc	0401	Structural Allarysis	3	1		_	MSE	30			
								ESE	50	20		
								ISE-I	10			
2	O DO UCVL		Concrete	3	0	0	3	ISE-II	10		40	
4	2 PC 0402	0402	Technology	3	U		3	MSE	30			
								ESE	50	20		
								ISE-I	10			
2	3 PC	UCVL	Environment	3	0	0	3	ISE-II	10		40	
3		0403	Engineering -I	3	U		3	MSE	30		40	
								ESE	50	20	40 40 40 40 40 10 10 10 20 10 10 10 10 10 10 10 10 10 10 10 10 10	
								ISE-I	10		40	
4	1 DO UCV	UCVL	Advance Surveying	3	0	0	3	ISE-II	10			
4	PC	0404		J	U		3	MSE	30			
								ESE	50	20		
		UCVL 0405				0		ISE-I	10			
5	PC		Hydrology & Water Resources	3	1		1	ISE-II	10		40	
3	PC		Engineering	3	1		4	MSE	30			
			2.18.11001.118					ESE	50	20		
6	PC	UCVL	Concrete	0	0	2	1	ISE	25		10	
0	PC	0431	Technology Lab	U	U	4	1	ESE OE	25		10	
7	PC	UCVL	Environment	0	0	2	1	ISE	50		20	
'	PC	0432	Engineering -I Lab	0	U	4	1	ESE POE	50		20	
8	DC.	UCVL	Computer Aided	0	0	4	2	ISE	25		10	
Ö	PC	0433	Drawing LAB	0	U	4	2	ESE POE	50		20	
9	PC	UCVL 0434	Advance Surveying 0 0 2 1 ISE		ISE	25		10				
10		UCVL 0461	Building Planning and Design (Audit Course)	3	0	0	0	ESE	100	100 40		
			Total	18	2	10	22	Total Co	ntact H	rs	30	



	Tead	ching a	nd Evaluation sc	hem	e fo	r <b>Th</b>	ird	Year Sem	ester -	- <b>V</b>		
	ım					hing eme		Evalu	ation Sc	heme	e	
Sr.	one	Course Code	Course				<b>t</b>		Ŋ	/Iarks	;	
No	Curriculum Component	ာ် လိ	Course	L	Т	P	Credit	Compone nt	Max		n for ssing	
								ISE-I	10			
1	PC	UCVL	Design of Steel	3	1	0	4	ISE-II	10		40	
1	rc	0501 Structure MSE 30	30		40							
								ESE	50	20		
								ISE-I	10			
2	PC UCVL		Theory of	3	1	0	4	ISE-II	10		40	
4		0502	Structure		30							
								ESE	50	20		
								ISE-I	10			
3	3 PC	UCVL	Geotechnical	3	0	0	3	ISE-II	10		40	
	10	0503	Engineering-I					MSE	30			
								ESE	50	20		
			Innication 9					ISE-I	10			
4	4 PC	UCVL	Irrigation & Hydraulic	3	0	0	3	ISE-II	10		40	
·	10	0504	Structures					MSE	30		.0	
								ESE	50	20		
							0 3	ISE-I	10		40	
5	PC	UCVL 0505	Environmental	3	0	0		ISE-II	10			
	10		Engineering-II		U			MSE	30			
								ESE	50	20		
6	PC	UCVL	Geotechnical	0	0	2	1	ISE	25		10	
	10	0531	Engineering-1 Lab					ESE POE	50		20	
_	- 0	UCVL	Irrigation &					ISE	25		10	
7	PC	0532	Hydraulic Structures Lab	0	0	2	1	ESE OE	25		10	
8	PC	UCVL 0534	Environmental Engineering-2 Lab	0	0	2	1	ISE	50		20	
	IICVI		Mini Project					ISE	25		10	
9	PW	0541	(Practical Case Studies)*	0	0	4	2	ESE OE	50	2	20	
10		UCVL 0561	Engineering Geology (Audit Course)	2	0	0	0	ESE	100			
			Total	17	2	10	22	Total Co	ntact H	lrs	29	



	Teac	hing a	nd Evaluation scl	neme	e for	Th	ird Y	ear Seme	ester -	· <b>VI</b>			
	in t					hing eme		Evalu	ation Sc	Name			
Sr.	culu	ırse de	Course				t		Ŋ	/Iarks	<b>S</b>		
No	Curriculum Component	Course	Course	L	Т	P	Credit	Compone nt	Max		_		
								ISE-I	10				
1	PC UCVI		Design of Concrete	4	1	0	5	ISE-II	10		40		
1	PC	0601		Structure-I MSE	MSE	30		40					
								ESE	50	20			
								ISE-I	10				
2	PC UCVI		Transportation	3	0	0	3	ISE-II	10		40		
4		U602 Engineering-1	MSE	30		10							
								ESE	50	20			
								ISE-I	10	0			
3	PC	UCVL	Geotechnical	3	0	0	3	ISE-II	10		40		
J		0603	engineering-II	3			3	MSE	30		40		
								ESE	50	20			
								ISE-I	10		40		
1	4 PE	UCVL 06**	Professional Elective 1*	3		0	3	ISE-II	10				
4				3	0	0		MSE	30				
								ESE	50	20			
		UOEL 06**								ISE-I	10		
5	OF		Onen Elective 1	3	0	0	3	ISE-II	10		40		
3	OE		Open Elective -1	3	U		3	MSE	30				
								ESE	50	20			
	DG	UCVL	Steel Structure		_			ISE	25		10		
6	PC	0631	Design Lab	0	0	4	2	ESE OE	50		20		
		UCVL	Transportation					ISE	25		10		
7	PC	0632	Engineering- I Lab	0	0	2	1	ESE OE					
								ISE					
8	PC	UCVL 0633	Geotechnical engineering-II Lab	0	0	2	1						
			cligiliceling il Lab					ESE OE	25		10		
9	PW	UCVL 0641	Seminar	0	0	2	1	ISE	50	0 20			
10		UCVL 0661	Industrial Management & Economics (Audit Course)	2	0	0	0	ESE	100	40			
			Total	18	1	10	22	Total Co	ntact H	Irs	29		



	Teac	hing a	nd Evaluation sch	neme	e for	Fin	al Y	ear Seme	ster –	VII		
	ım					hing eme		Evalu	ation Sc	Marks		
Sr.	culu	Course	Course				יַּד	_	Marks			
No	Curriculum Component	ලි රි	334135	L	LT		Credit	Compone nt	Max			
								ISE-I	10			
1	PC	UCVL	Quantity Survey	3	1	0	4	ISE-II	10		40	
1		0701	and Valuation		1			MSE	30		40	
								ESE	50	20		
								ISE-I	10			
2	2 PC	UCVL	Construction Project &	3	1	0	4	ISE-II	10		40	
24	10	0702	Management		1			MSE				
								ESE	50	20		
		Structural	Ct					ISE-I	10		40	
2	3 PC	UCVL	Dynamics and	3	0	0	3	ISE-II	10			
3		0703	Earthquake	3			3	MSE	30			
			Engineering					ESE	50	20		
								ISE-I	10			
4	OE	UOEL 07**	Open Elective -2	3	0	0	3	ISE-II	10		40	
4	OE							MSE	30			
								ESE	50	20		
5	PC	UCVL	Quantity Survey	0	0	4	2	ISE	50		20	
3	rc	0731	and Valuation lab			+	4	ESE OE	50		20	
6	PC	UCVL	Construction Project &	0	0	2	1	ISE	25		10	
O	PC	0732	Management Lab	U	U	4	1	ESE OE	50		20	
7	PC	UCVL	Concrete Structure Design	0	0	4	2	ISE	25		10	
		0733	Lab					ESE OE	50		20	
8	PW	UCVL 0751	Project Phase-I	0	0	2	1	ISE	100	100 40		
9		UCVL 0761	Transportation Engineering- II (Audit Course)	3	0	0		ESE	100	40		
			Total	15	2	12	20	Total Co	ntact H	Irs	29	

### COLLEGE OF ENGINEERING (AUTONOMOUS), KOLHAPUR



	Teaching and Evaluation scheme for <b>Final Year Semester - VIII</b>										
	alum nent Code					hing eme		Evalu	ation Sc	hem	е
Sr.	ulu		Course				t		N	/Iarks	5
No	Curriculum Component	Course	Course	L	T	P	Credit	Compone nt	Max	Min for Passing	
								ISE-I	10		
1	1 PE	UCVL	Professional	3	0	0	3	ISE-II	10		40
1		08**	Elective 2*	3	U	U	3	MSE	30		40
								ESE	50	20	
								ISE-I	10		40
2	PE	UCVL	Professional	3	0	0	3	ISE-II	10		
4	115	08**	Elective 3*				3	MSE	30		40
								ESE	50	20	
								ISE-1	75		30
6	PW	UCVL Internship & 0 0 12 6 ISE-2	ISE-2	75	;	30					
		3331	110,00011100011					ESE OE	150		60
			Total	6	0	12	12	Total Co	ntact H	irs	18

#### **Special Note:**

- 1. The students have to undergo internship at field (Site Work, Office Work, Research etc.) after Semester VII
- 2. The duration of internship shall be minimum of 6 weeks to maximum of 8 weeks
- 3. The assessment of internship shall be done during Semester VII (In Project Phase II, ISE-I). for assessment of internship, students are required to present their work and submit the report.

### Load Calculation for Project Phase-I and Phase-II (As Per AICTE Guidelines):

- 1. Phase-I: Minimum load is 1 Hr./Week for one group of Four to Five Students.
- 2. Phase-II: Minimum load is 2 Hrs./Week for one group of Four to Five Students.

### COLLEGE OF ENGINEERING (AUTONOMOUS), KOLHAPUR



#### LIST OF OPEN ELECTIVES

### Offered By CIVIL ENGINEERING DEPARTMENT

#### OPEN ELECTIVE-1 (Third Year Semester – VI)

Sr. No.	Curriculum Component	Course Code	Course Names						
1	OE	UOEL0606	Buildings and Occupants						
2	OE	UOEL0607	UOEL0607 Non-Destructive Testing						
3	OE	UOEL0608	Environmental Impact Assessment						
	OPEN ELECTIVE-2 (Final Year Semester – VII)								
1	OE	UOEL0706	Remote Sensing and GIS, GPS						
2	OE	UOEL0707	Watershed Management						

# COLLEGE OF ENGINEERING (AUTONOMOUS), KOLHAPUR



#### LIST OF PROFESSIONAL ELECTIVES

Sr No	Course Code	Professional Elective 1 (Third Year Semester – VI)
1	UCVL0621	Water Power Engineering
2	UCVL0622	Transportation And Smart City Planning
3	UCVL0623	GIS And Geo-Informatics
4	UCVL0624	Legal Aspects In Construction Engineering
5	UCVL0625	Advanced Waste Water Management
6	UCVL0626	Advanced Construction Practices
7	UCVL0627	Human Resource Development

Sr No	Course Code	Professional Elective 2 (Final Year Semester – VIII)
1	UCVL0821	Structural Design And Drawing Of Foundation And Retaining Wall
2	UCVL0822	Adv. Structural Design
3	UCVL0823	Design Of Bridges
4	UCVL0824	Structural Health Monitoring And Retrofitting
5	UCVL0825	Advanced Traffic Analysis And Design
6	UCVL0826	GEODESY, Remote Sensing & GNSS
7	UCVL0827	Advanced Design of Concrete Structures



Sr No	Course Code	Professional Elective 3 (Final Year Semester – VIII)				
1	UCVL0871	Design And Drawing Of Marine Structure				
2	UCVL0872	Advanced Structural Analysis				
3	UCVL0873	Introduction of Finite Elements Methods				
4	UCVL0874	Soil Conservation and Watershed Management				
5	UCVL0875	Disaster Management				
6	UCVL0876	Adv. Hydrology				
7	UCVL0877	Environmental Geo-technology				
8	UCVL0878	Industrial Waste Treatment				