Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (M.S.) Syllabus Structure for Fourth Year Engineering (Semester – VIII) (Mechanical Engineering) (w.e.f. 2021 – 22)AICTE

	_		8	(	) (		- 2g	eer <sub>6</sub> ) (	.1. 2021 22	,	
			Teaching	Sahama			Ev	aluation Sc	heme		
			reaching	Scheme		Theo	ry	Practical			
Name of the Course	Group	Theory Hrs / week	Tutorial Hrs / week	Practical Hrs / week	Total	ISE	ESE	ICA	ESE	Total	Credits
Refrigeration & Air Conditioning	D	3	-	, <del></del>	3	40	60			100	3
Professional Elective Course – V	E	3			3	40	60			100	3
Professional Elective Course - VI	E	3			3	40	60			100	3
Open Elective Course - IV	F	3			3	40	60	-	-	100	3
Refrigeration & Air Conditioning Lab	D			2	2			25	25 (OR)	50	1
Finite Element Analysis & Simulation Lab	D	2		2	4		1	25	25 (PR)	50	3
Project	G	-		6	6			50	50 (OR)	100	3
		14		10	24	160	240	100	100	600	19

ISE: Internal Sessional Examination

**ESE: End Semester Examination** 

ICA: Internal Continuous Assessment

Professional Elective Course – V	Professional Elective Course – VI	Open Elective Course - IV
1) Robotics	Total Quality Management	1) Entrepreneurship, Innovations &
2) 3D printing	2) Automobile Engineering	Startups
3) Renewable Energy Sources & Technology	Computational Fluid Dynamics	2) Industrial & System Engineering
4) Design of Transmission System	4) Gas Dynamics & Jet Propulsion	3) Internet of Things
29 B W		4) Artificial Intelligence

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Syllabus for Fourth Year Engineering (Mechanical Engineering) w.e.f.  $2021-22\,$  AICTE

## Syllabus Structure for Third Year Engineering (Semester – V) (Civil)

i a di			Teaching Scheme					uation So	heme		
Name of the Course	Group							Practical/Ora			Credits
	2190	Theory Hrs/week	Tutorial Hrs / week	Practical Hrs / week	Total	ISE ESE	ICA	ESE	Total	Credits	
PCC CE301: Mechanics of Materials	D	3			3	10		-			
PCC CE302: Hydraulic Engineering	D	3				40	60	-	-	100	3
PCC CE304: Geotechnical Engineering		-	-	: -	3	40	60	-	-	100	3
PEC Professional Elective Course – I		3	-	- 7	3	40	60	-	-	100	3
	Е	3	-,	-	3	40	60			100	
OEC Open Elective Course – I	F	3	-	_	3	40	60				3
PCC CE302: Hydraulic Engineering LAB	D	_				40	60	-	•	100	3
PCC CE304. Geotechnical Engineering	2 1		-	. 2	2	-	-	25	25 OR	50	1
LAB	D	• +	-	2	2	1	-	25	25		
PCC CE203. Disaster preparedness & Planning Management (LAB)	D		1221	_			-	-23	OR	50	1
Minor Project Stage I	_	10.38* 11.11		2	2	•	-	25	25 OR	50	1
	G		100	6	6	-	THE STATE OF	50		50	3
MC III Constitution of India	-,		-	-	-	-	_			-	
		15	0 .	12	27	200	300	125	75	700	0

Open Elective Course I
Air Pollution Control Technology
Geographical information system
Project management techniques



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## Syllabus Structure for Third Year Engineering (Semester – VI) (Civil)

Nemandat			Teaching	Scheme							
Name of the Course	. Group	Theory T					eory	Pra	ctical/Oral		$\dashv$
PCC CE202 Ct		Theory Hrs / week	Tutorial Hrs / week	Practical Hrs /' week	Total	ISE	ESE	ICA	ESE	Total	Credits
PCC CE303 Structural Engineering	D	3	· -	-	3	40	60		<del>                                     </del>		+
PCC CE306: Environmental Engineering	D	3	-			40	60			100	3
PCC CE307 Transportation Engineering			· -		3	40	60	-		100	3
	D	3	-	-	3	40	60	-		100	3
PEC Professional Elective course II	Е	, 3			3	40	60		-		
OEC Open Elective Course II	F	3	7				- 60		-	100	3
PCC CE 303 Structural Engineering Lab			-		3	40	60	-	-	100	3
	D	-	-	2	2		-	25	25 OR	50	
PCC CE 306 Environmental Engineering Lab	D	-		2	2						1
PCC CE 307 Transportation Engineering Lab	D						-	25	25 OR	50	1
Minor Project			-	2	2			25		25	1
	G		/ 1 <del>1</del>	6	6	-	- 2	50	25 OR	75	
nternship	н			_	_	7_			-55011	/3	3
		15					-	- À	- 1	- "	- #
				12 '	27			A 96	75	700	21

Professional Floating C	
Professional Elective Course II	Open Elective Course II
Building construction practice	Intelligent to
	Intelligent transportation system
Railway Engineering	
, and and and	Smart city planning
Construction Equipments and A	
Construction Equipments and Automation	Numerical methods of analysis
/	analysis



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Syllabus Structure for Fourth Year Engineering (CIVIL) (Semester – VII)

			Tonahir				E	valuatio	on Schen	ne .	_
Name of the Course	Grou	:	Teaching	Scheme		Th	Theory F		tica /Ora	3	
PCC CE305 Hydrology &	р	Theor y Hrs / week	Tutori al Hrs / week	Practi cal Hrs / week	Tot all	≬S E	ES E	ICA	ESE	Tot	Credit
Water Resources Engineering	D	3	-	-6	3	40	60	-		100	3
PEC Professional Elective Course III	E	3	-	-	3	40	60	-	-	100	3
PEC Professional Elective Course IV	E	3	-	-	3	40	60	-	-	100	3
OEC Open Elective Course	F	3	· -		3	40	60	-	-	100	
PCC CE305 Hydrology & Water Resources Engineering LAB	D			2	2	-	-	25	25 OR	50	1
PCC CE308: Construction Engineering & Management (LAB)	, D	1	- - -	2.	3	-	-	25	25 OR	50	2
PROJ Major Project Stage I	G	-	-	12	12	-	-	50	50	100	6
MC IV Essence of India Tradition	onal	-	-	-	-	-	-	-	OR -	-	0
		13	7	16	29	16 0	24	100	100	600	21

Professional Elective Course III	Professional Elective Course IV	Open Elective Course III
Remote Sensing	Prestressed Concrete	Solid and Hazardous Waste
Port and Harbor Engineering	-	Management
Watershed	Rural Sanitation	Geology for engineers
Management	Advanced Water Treatment Technology	Environmental Impact Assessment
Advanced steel steel	Hydraulic Modeling	The state of the s
Advanced steel structural analysis and design	Geosynthetic engineering	

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Syllabus for Final Year Engineering (Civil) wef 2020 - 21

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Syllabus Structure for Fourth Year Engineering (CIVIL) (Semester – VII)

				Liigine	-ing (	CIVI	r) (36	meste	r – VII)		
		١.	Tooshin - (				Ev	aluatio	n Scheme		
Name of the Course	Grou		Teaching S	cheme		Th	Theory Prac		ical/Ora	1	
	р	Theor y Hrs / week	Tutori al Hrs / week	Practi cal . Hrs / week	Tot al	IS E	ES E	ICA	ESE	Tot al	Credits
PCC CE305 Hydrology & Water Resources Engineering	D	3	-	-	3	40	60	-	-	100	3
PEC Professional Elective Course III	· E	: 3	-		3	40	60	-	-	100	3
PEC Professional Elective Course IV	E	3	-	_	3	40	60		-	100	
OEC Open Elective Course	F	3		-	3	40	60				3
PCC CE305 Hydrology & Water Resources Engineering LAB	D	- 1		2	2	-	-	25	25 OR	50	1
PCC CE308: Construction Engineering & Management (LAB)	D	1	-	2	3	-	-	25	25 OR	50	2
PROJ Major Project Stage I	G	-	-	12	12	-	-	50	50 OR	100	6
MC IV Essence of India Tradition	onal		7-	-	-		-	-	- OK	-	0
		13	-	16	29	16 0	24	100	100	600	21

Professional Elective Course III	Professional Elective Course IV	Open Elective Course III
Remote Sensing	Prestressed Concrete	Solid and Hazardous Waste Management
Port and Harbor Engineering	Rural Sanitation	Geology for engineers
Watershed Management	Advanced Water Treatment Technology	Environmental Impact Assessment
Advanced steel structural analysis and design	Hydraulic Modeling Geosynthetic	-
	engineering	

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Syllabus for Final Year Engineering (Civil) wef 2020 - 21

## Syllabus Structure for Final Year Engineering (Semester - VII) (Electrical) (w.e.f. 2020 - 21)

					1945 - I		Evalu	ation Scl	neme		v
		Teaching Scheme				The	Theory		Practical		
Name of the Course	Group	Theory Hrs / week	Tutorial Hrs / week	Practical Hrs / week	Total	ISE	ESE	ICA	ESE	Total	Credits
Electrical Drives	D	3	-	-	3	40	60	-	-	100	3
Professional Elective Course -III	Е	3		-	3	40	60	-	-	100	3
Professional Elective Course -IV	Е	3	-	•	. 3	40	60	-	-	100	3
Open Elective Course - III	F	3	-	-	3	40	60	-	-	100	3
Electrical Drives Lab	D	-	-	2	2		-	25	25(PR)	50	1
MATLAB and its applications	D	1	-	2	3	-	-	25	25(OR)	50	2
Project (Stage -I)	G	-	•	12	12	-	-	50	50(OR)	100	6
Essence of Indian Traditional Knowledge	Н	•	*** -		-	-			-	-	
		13		16	29	160	240	100	100	600	21

ISE: Internal Sessional Examination

ESE: End Semester Examination

ICA: Internal Continuous Assessment

Professional Elective Course - III			Professional Elective Course – IV	Open Elective Course - III			
1	Electrical Energy Conservation and Auditing	1	Power System Dynamics and Control	1	VLSI_Design and Technology		
2	Electrical Machines Modelling and Analysis		Power Electronics and Distributed Generation	2	Artificial Intelligence		
3	Power Generation and Economics	3	Industrial Electrical Systems	3	Virtual Reality		
4	Digital Control System	4	Power System Design Practice	4	Bio-Medical Instrumentation		

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## Syllabus Structure for Final Year Engineering (Semester - VIII) (Electrical) (w.e.f. 2020 - 21)

Name of the Course	Group	Teaching Scheme			Evaluation Scheme						
		the state of the s				Theory		Practical		$\Box$	1
		Theory Hrs / week	Tutorial Hrs / week	Practical Hrs / week	Total	ISE	ESE	ICA	ESE	Total	Credits
Power System Protection	D	3	-	1.	3	40	60			100	1
Professional Elective Course - V	Е	3	-	-	3	40	60		<u> </u>		3
Professional Elective Course -VI	Е	3		-	2					100	3
Open Elective Course - IV	F	3			3	40	60		ļ <u>-</u>	100	. 3
	_	<u>J</u>	•	-	3	40	60	-	-	100	3
Power System Protection Lab	D	-	-	2	2	-		25	25(PR)	50	
High Voltage Laboratory	D	2	-	2	4			25	25(OR)		
Project	G			-	-				, , ,	50	3
221	<del></del>			6	0	-	-	50	50(OR)	100	3
7.57 1 1/25/26 1	_	14	0	10	24	160	240	100	100	600	19

ISE: Internal Sessional Examination

ESE: End Semester Examination

ICA: Internal Continuous Assessment

Professional Elective Course - V			rofessional Elective Course - VI		Open Elective Course - IV
1	Flexible AC Transmission System & Power Quality		Electric and Hybrid Vehicles	_	Digital Signal Processing
2	Power Converter Applications	2	Advanced Electric Drives	2	Embedded System
	HVDC Transmission Systems	3	EHVAC Transmission Systems	3	Robotics
4	Power System Restructuring		Illumination Engineering	4	Cyber Security



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