Jabalpur Engineering College, Jabalpur
(Declared Autonomous by MP Govt., Affiliated to RGPV, Bhopal)
(AICTE Model Curriculum Based Scheme)
Bachelor of Technology (B.Tech.) IV Semester (Civil Engineering)

w.e.f. July 2023

S.No.	Subject Code	Category Code	Subject Name	Maximum Marks Allotted					Total Marks	Contact Hours Per Week			Total Credits
				Theory			Practical						
				End. Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem.	Lab Work		L	T	P	
1	CE41	PCC	Concrete Technology	70	20	10	-	-	100	3	1	-	4
2	CE42	PCC	Transportation Engineering	70	20	10	30	20	150	3	-	2	4
3	CE43	PCC	Geotechnical Engineering-I	70	20	10	30	20	150	3	-	2	4
4	CE44	PCC	Fluid Mechanics	70	20	10	30	20	150	3	-	2	4
5	CE45	PCC	Advance Surveying	70	20	10	-	-	100	3	1	-	4
6	CE46	ESC	Software Lab - II	-	-	-	30	20	50	-	-	4	2
			Total	**350**	**100**	**50**	**120**	**80**	**700**	**15**	**2**	**10**	**22**
7	CE47	DLC	Self-Learning Presentation (SWAYAM/NPTEL/MOOC)	-	-	-	-	-	-	-	-	-	8
8	CE48	MC	NSS/NCC/Swatchhata Abhiyan/Rural Outreach	Qualifier									
Additional Course for Honours or Minor Specialization				Permitted to opt for maximum 8 credits against additional MOOC courses in subject code CE47 for the award of Honours (Minor Specialization).									

Note: MOOC/NPTEL subjects shall be taken with permission of HOD/Coordinator.

1 hour lecture (L) = 1 credit	1 hour Tutorial (T) = 1 credit	2 hour Practical (P) = 1 credit

PCC: Professional Core Course, ESC: Engineering Science Course, DLC: Distance Learning Course, MC: Mandatory Course

DEAN
Academic
JEC, Jabalpur (M.P.)

Jabalpur Engineering College, Jabalpur
(Declared Autonomous by MP Govt., Affiliated to RGPV, Bhopal)
(AICTE Model Curriculum Based Scheme)
Bachelor of Technology (B.Tech.) IV Semester (Mechancial Engineering)

w.e.f. July 2023

S.No.	Subject Code	Category Code	Subject Name	Maximum Marks Allotted					Total Marks	Contact Hours Per Week			Total Credits
				Theory			Practical						
				End. Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem.	Lab Work		L	T	P	
1	ME41	PCC	Energy Conversion Systems	70	20	10	-	-	100	3	1	-	4
2	ME42	PCC	Fluid Mechanics	70	20	10	30	20	150	3	-	2	4
3	ME43	PCC	Machine Drawing & CAD	70	20	10	30	20	150	3	-	2	4
4	ME44	PCC	Kinematics of Machines	70	20	10	30	20	150	3	-	2	4
5	ME45	PCC	Machine Design-I	70	20	10	-	-	100	3	1	-	4
6	ME46	ESC	Software Lab (Python)	-	-	-	30	20	50	-	-	4	2
			Total	**350**	**100**	**50**	**120**	**80**	**700**	**15**	**2**	**10**	**22**
7	ME47	DLC	Self-Learning Presentation (SWAYAM/NPTEL/MOOC)	-	-	-	-	-	-	-	-	-	8
8	ME48	MC	NSS/NCC/Swatchhata Abhiyan/Rural Outreach	Qualifier									
Additional Course for Honours or Minor Specialization				Permitted to opt for maximum 8 credits against additional MOOC courses in subject code ME47 for the award of Honours (Minor Specialization).									

Note: MOOC/NPTEL subjects shall be taken with permission of HOD/Coordinator.

1 hour lecture (L) = 1 credit	1 hour Tutorial (T) = 1 credit	2 hour Practical (P) = 1 credit

PCC: Professional Core Course, ESC: Engineering Science Course, DLC: Distance Learning Course, MC: Mandatory Course

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Jabalpur Engineering College, Jabalpur
(Declared Autonomous by MP Govt., Affiliated to RGPV, Bhopal)
(AICTE Model Curriculum Based Scheme)
Bachelor of Technology (B.Tech.) IV Semester (Electrical Engineering)

w.e.f. July 2023

S.No.	Subject Code	Category Code	Subject Name	Maximum Marks Allotted					Total Marks	Contact Hours Per Week			Total Credits
				Theory			Practical						
				End. Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem.	Lab Work		L	T	P	
1	EE41	PCC	Electrical Engineering Materials	70	20	10	-	-	100	3	1	-	4
2	EE42	PCC	Electrical Machine-I	70	20	10	30	20	150	3	-	2	4
3	EE43	PCC	Power System-I	70	20	10	30	20	150	3	-	2	4
4	EE44	PCC	Electrical & Electronics Instruments	70	20	10	30	20	150	3	-	2	4
5	EE45	PCC	Electromagnetic Field Theory	70	20	10	-	-	100	3	1	-	4
6	EE46	ESC	Drawing & Design of Electrical Machine Lab	-	-	-	30	20	50	-	-	4	2
			Total	**350**	**100**	**50**	**120**	**80**	**700**	**15**	**2**	**10**	**22**
7	EE47	DLC	Self-Learning Presentation (SWAYAM/NPTEL/MOOC)	-	-	-	-	-	-	-	-	-	8
8	EE48	MC	NSS/NCC/Swatchhata Abhiyan/Rural Outreach	Qualifier									
Additional Course for Honours or Minor Specialization				Permitted to opt for maximum 8 credits against additional MOOC courses in subject code EE47 for the award of Honours (Minor Specialization).									

Note: MOOC/NPTEL subjects shall be taken with permission of HOD/Coordinator.

1 hour lecture (L) = 1 credit	1 hour Tutorial (T) = 1 credit	2 hour Practical (P) = 1 credit

PCC: Professional Core Course, ESC: Engineering Science Course, DLC: Distance Learning Course, MC: Mandatory Course

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JEC, Jabalpur (M.P.)

Jabalpur Engineering College, Jabalpur
(Declared Autonomous by MP Govt., Affiliated to RGPV, Bhopal)
(AICTE Model Curriculum Based Scheme)
Bachelor of Technology (B.Tech.) IV Semester (Electronics & Tele Communication Engineering)

w.e.f. July 2023

S.No.	Subject Code	Category Code	Subject Name	Maximum Marks Allotted					Total Marks	Contact Hours Per Week			Total Credits
				Theory			Practical						
				End. Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem.	Lab Work		L	T	P	
1	EC41	PCC	Electromagnetic Theory	70	20	10	-	-	100	3	1	-	4
2	EC42	PCC	Analog Integrated Circuits	70	20	10	30	20	150	3	-	2	4
3	EC43	PCC	Digital Circuits & Systems	70	20	10	30	20	150	3	-	2	4
4	EC44	PCC	Analog Communication	70	20	10	30	20	150	3	-	2	4
5	EC45	PCC	Communication N/W & Transmission Lines	70	20	10	-	-	100	3	1	-	4
6	EC46	ESC	Software Lab	-	-	-	30	20	50	-	-	4	2
			Total	350	100	50	120	80	700	15	2	10	22
7	EC47	DLC	Self-Learning Presentation (SWAYAM/NPTEL/MOOC)	-	-	-	-	-	-	-	-	-	8
8	EC48	MC	NSS/NCC/Swatchhata Abhiyan/Rural Outreach	Qualifier									
Additional Course for Honours or Minor Specialization				Permitted to opt for maximum 8 credits against additional MOOC courses in subject code EC47 for the award of Honours (Minor Specialization).									

Note: MOOC/NPTEL subjects shall be taken with permission of HOD/Coordinator.

1 hour lecture (L) = 1 credit	1 hour Tutorial (T) = 1 credit	2 hour Practical (P) = 1 credit

PCC: Professional Core Course, ESC: Engineering Science Course, DLC: Distance Learning Course, MC: Mandatory Course

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Jabalpur Engineering College, Jabalpur
(Declared Autonomous by MP Govt., Affiliated to RGPV, Bhopal)
(AICTE Model Curriculum Based Scheme)
Bachelor of Technology (B.Tech.) IV Semester (Computer Science & Engineering)
w.e.f. July 2023

S.No.	Subject Code	Category Code	Subject Name	Maximum Marks Allotted					Total Marks	Contact Hours Per Week			Total Credits
				Theory			Practical						
				End. Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem.	Lab Work		L	T	P	
1	MA41	BSC	Discrete Structure	70	20	10	-	-	100	3	1	-	4
2	CS42	PCC	Database Management Systems	70	20	10	30	20	150	3	-	2	4
3	CS43	PCC	AI & Machine Learning	70	20	10	30	20	150	3	-	2	4
4	CS44	PCC	Design and Analysis of Algorithms	70	20	10	30	20	150	3	-	2	4
5	CS45	PCC	Computer Organization and Architecture	70	20	10	-	-	100	3	1	-	4
6	CS46	ESC	Software Lab-II (Java)	-	-	-	30	20	50	-	-	4	2
			Total	350	100	50	120	80	700	15	2	10	22
7	CS47	DLC	Self-Learning Presentation (SWAYAM/NPTEL/MOOC)	-	-	-	-	-	-	-	-	-	8
8	CS48	MC	NSS/NCC/Swatchhata Abhiyan/Rural Outreach	Qualifier									
Additional Course for Honours or Minor Specialization				Permitted to opt for maximum 8 credits against additional MOOC courses in subject code CS47 for the award of Honours (Minor Specialization).									

Note: MOOC/NPTEL subjects shall be taken with permission of HOD/Coordinator.

1 hour lecture (L) = 1 credit	1 hour Tutorial (T) = 1 credit	2 hour Practical (P) = 1 credit

BSC: Basice Science Course, PCC: Professional Core Course, ESC: Engineering Science Course, DLC: Distance Learning Course, MC: Mandatory Course

Jabalpur Engineering College, Jabalpur
(Declared Autonomous by MP Govt., Affiliated to RGPV, Bhopal)
(AICTE Model Curriculum Based Scheme)
Bachelor of Technology (B.Tech.) IV Semester (Information Technology)

w.e.f. July 2023

S.No.	Subject Code	Category Code	Subject Name	Maximum Marks Allotted					Total Marks	Contact Hours Per Week			Total Credits
				Theory			Practical			L	T	P	
				End. Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem.	Lab Work					
1	MA41	BSC	Discrete Structure	70	20	10	-	-	100	3	1	-	4
2	IT42	PCC	Analysis and Design of Algorithm	70	20	10	30	20	150	3	-	2	4
3	IT43	PCC	Computer Architecture	70	20	10	30	20	150	3	-	2	4
4	IT44	PCC	Principles of Communication	70	20	10	30	20	150	3	-	2	4
5	IT45	PCC	System Analysis and Software Engineering	70	20	10	-	-	100	3	1	-	4
6	IT46	ESC	Software Lab-II	-	-	-	30	20	50	-	-	4	2
			Total	350	100	50	120	80	700	15	2	10	22
7	IT47	DLC	Self-Learning Presentation (SWAYAM/NPTEL/MOOC)	-	-	-	-	-	-	-	-	-	8
8	IT48	MC	NSS/NCC/Swatchhata Abhiyan/Rural Outreach	Qualifier									
Additional Course for Honours or Minor Specialization				Permitted to opt for maximum 8 credits against additional MOOC courses in subject code IT47 for the award of Honours (Minor Specialization).									

Note: MOOC/NPTEL subjects shall be taken with permission of HOD/Coordinator.

1 hour lecture (L) = 1 credit	1 hour Tutorial (T) = 1 credit	2 hour Practical (P) = 1 credit

BSC: Basice Science Course, PCC: Professional Core Course, ESC: Engineering Science Course, DLC: Distance Learning Course, MC: Mandatory Course

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JEC, Jabalpur (M.P.)

Jabalpur Engineering College, Jabalpur
(Declared Autonomous by MP Govt., Affiliated to RGPV, Bhopal)
(AICTE Model Curriculum Based Scheme)
Bachelor of Technology (B.Tech.) IV Semester (Industrial & Production Engineering)
w.e.f. July 2023

S.No.	Subject Code	Category Code	Subject Name	Maximum Marks Allotted					Total Marks	Contact Hours Per Week			Total Credits
				Theory			Practical			L	T	P	
				End. Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem.	Lab Work					
1	BT52	HSMC	Engineering Economics and Management	70	20	10	-	-	100	3	1	-	4
2	IP42	PCC	Production Process	70	20	10	30	20	150	3	-	2	4
3	IP43	PCC	Theory of Machines & Mechanisms	70	20	10	30	20	150	3	-	2	4
4	IP44	PCC	Material Science & Metallurgy	70	20	10	30	20	150	3	-	2	4
5	IP45	PCC	Machine Design	70	20	10	-	-	100	3	1	-	4
6	IP46	ESC	Software Lab-II	-	-	-	30	20	50	-	-	4	2
			Total	350	100	50	120	80	700	15	2	10	22
7	IP47	DLC	Self-Learning Presentation (SWAYAM/NPTEL/MOOC)	-	-	-	-	-	-	-	-	-	8
8	IP48	MC	NSS/NCC/Swatchhata Abhiyan/Rural Outreach	Qualifier									
Additional Course for Honours or Minor Specialization				Permitted to opt for maximum 8 credits against additional MOOC courses in subject code IP47 for the award of Honours (Minor Specialization).									

Note: MOOC/NPTEL subjects shall be taken with permission of HOD/Coordinator.

1 hour lecture (L) = 1 credit	1 hour Tutorial (T) = 1 credit	2 hour Practical (P) = 1 credit

HSMC: Humanities and Social Sciences including Management Course, PCC: Professional Core Course, ESC: Engineering Science Course, DLC: Distance Learning Course, MC: Mandatory Course

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JEC, Jabalpur (M.P.)

Jabalpur Engineering College, Jabalpur
(Declared Autonomous by MP Govt., Affiliated to RGPV, Bhopal)
(AICTE Model Curriculum Based Scheme)
Bachelor of Technology (B.Tech.) IV Semester (Artificial Intelligence & Data Science)

w.e.f. July 2023

S.No.	Subject Code	Category Code	Subject Name	Maximum Marks Allotted					Total Marks	Contact Hours Per Week			Total Credits
				Theory			Practical						
				End. Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem.	Lab Work		L	T	P	
1	MA41	BSC	Discrete Structure	70	20	10	-	-	100	3	1	-	4
2	AI42	PCC	Introduction to AI & ML	70	20	10	30	20	150	3	-	2	4
3	AI43	PCC	Data Base Management System	70	20	10	30	20	150	3	-	2	4
4	AI44	PCC	Operating System	70	20	10	30	20	150	3	-	2	4
5	AI45	PCC	Microprocessor & Microcontroller	70	20	10	-	-	100	3	1	-	4
6	AI46	ESC	Software Lab-II (R Programming)	-	-	-	30	20	50	-	-	4	2
			Total	350	100	50	120	80	700	15	2	10	22
7	AI47	DLC	Self-Learning Presentation (SWAYAM/NPTEL/MOOC)	-	-	-	-	-	-	-	-	-	8
8	AI48	MC	NSS/NCC/Swatchhata Abhiyan/Rural Outreach	Qualifier									
Additional Course for Honours or Minor Specialization				Permitted to opt for maximum 8 credits against additional MOOC courses in subject code AI47 for the award of Honours (Minor Specialization).									

Note: MOOC/NPTEL subjects shall be taken with permission of HOD/Coordinator.

1 hour lecture (L) = 1 credit	1 hour Tutorial (T) = 1 credit	2 hour Practical (P) = 1 credit

BSC: Basice Science Course, PCC: Professional Core Course, ESC: Engineering Science Course, DLC: Distance Learning Course, MC: Mandatory Course

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Academic
JEC, Jabalpur (M.P.)

Jabalpur Engineering College, Jabalpur
(Declared Autonomous by MP Govt., Affiliated to RGPV, Bhopal)
(AICTE Model Curriculum Based Scheme)
Bachelor of Technology (B.Tech.) IV Semester (Mechatronics Engineering)

w.e.f. July 2023

S.No.	Subject Code	Category Code	Subject Name	Maximum Marks Allotted					Total Marks	Contact Hours Per Week			Total Credits
				Theory			Practical						
				End. Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem.	Lab Work		L	T	P	
1	MT41	PCC	Manufacturing Process	70	20	10	-	-	100	3	1	-	4
2	MT42	PCC	Electronic Devices & Circuits	70	20	10	30	20	150	3	-	2	4
3	MT43	PCC	Theory of Machines	70	20	10	30	20	150	3	-	2	4
4	MT44	PCC	Microprocessor & Embedded Systems	70	20	10	30	20	150	3	-	2	4
5	MT45	PCC	Linear Control Theory	70	20	10	-	-	100	3	1	-	4
6	MT46	ESC	CAD & Kinematics Simulation Lab	-	-	-	30	20	50	-	-	4	2
			Total	350	100	50	120	80	700	15	2	10	22
7	MT47	DLC	Self-Learning Presentation (SWAYAM/NPTEL/MOOC)	-	-	-	-	-	-	-	-	-	8
8	MT48	MC	NSS/NCC/Swatchhata Abhiyan/Rural Outreach	Qualifier									
Additional Course for Honours or Minor Specialization				Permitted to opt for maximum 8 credits against additional MOOC courses in subject code MT47 for the award of Honours (Minor Specialization).									

Note: MOOC/NPTEL subjects shall be taken with permission of HOD/Coordinator.

1 hour lecture (L) = 1 credit	1 hour Tutorial (T) = 1 credit	2 hour Practical (P) = 1 credit

PCC: Professional Core Course, ESC: Engineering Science Course, DLC: Distance Learning Course, MC: Mandatory Course

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Academic
JEC, Jabalpur (M.P.)