(Declared Autonomous by MP Govt., Affiliated to RGPV, Bhopal)
(AICTE Model Curriculum Based Scheme) with Provision for Internship
Bachelor of Technology (B.Tech.) VII Semester (Artificial Intelligence & Data Science)

w.e.f. July 2024

					Maxim	um Marks Al	lotted		13/19/	Contact Hours Per Week			
CN	Subject	Category	Subject Name		Theory		Practical		Total				Total
S.No.	Code	Code	Subject Name	End. Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem.	Lab Work	Marks	L	T P	P	Credits
1	AI701M	PCC	Big Data Analysis	70	20	10	30	20	150	3	-	2	4
2	AI702M	PCC	Digital Image Processing	70	20	10	30	20	150	3	-	2	4
3	AI703M	PCC	Statistical Data Analysis	70	20	10	30	20	150	3	-	2	4
4	AI704M	PEC	Professional Elective Course-II	70	20	10	-	-	100	3	1	-	4
5	AI705M	OEC	Open Elective Course-III	70	20	10	-	-	100	3	1	-	4
6	AI706M	MC	Industrial Training Evaluation	-	-	-	60	40	100	-		4	2
7	AI707M	DLC	Self-Learning Presentation (SWAYAM/NPTEL/MOOC)	-	-	-		-	-	-	-	-	8
			Total	350	100	50	150	100	750	15	2	10	22
8	AI708M	MC	NSS/NCC/Swachhata Abhiyan/Rural Outreach										
Additio	onal Course	for Honou	rs or Minor Specialization			maximum thecialization).		tional cou	ırses in su	bject code	41707M	I for the a	ward of

Note: 01. Departmental BOS will decide list of three/four elective subjects for each PEC and OEC.

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

03. Industrial training presentation & viva shall take place in VII Sem. which students have already done in VI Sem.

	Professional Elective Course-II									
S.No.	Subject Code	Subject Name								
1	AI704M A	AI-Natural Language Processing								
2	AI704M B	Block Chain Technique								
3	AI704M C	Simulation & Modelling								

	Open Elective Course-III									
S.No.	Subject Code	Subject Name								
1	AI705M A	Cloud Computing								
2	AI705M B	Network Management								
3	AI705M C	Cyber Security								

PEC: Professional Elective Course (Branch Specific), OEC: Open Elective Course (Interdisciplinary), PCC: Professional Core Course, DLC: Distance Learning Course,

MC: Mandatory Course

1 hour lecture (L) = 1 credit

1 hour Tutorial (T) = 1 credit

2 hour Practical (P) = 1 credit

ALL

DEAMabalpur Engineering (M.P.)

(Declared Autonomous by MP Govt., Affiliated to RGPV, Bhopal)
(AICTE Model Curriculum Based Scheme) with Provision for Internship
Bachelor of Technology (B.Tech.) VII Semester (Civil Engineering)

			1. 100		Maxim		w.e	Contact Hours Per Week					
S.No.	Subject	Category	1 Subject Name	Theory			Practical		Total		1776		Total
	Code	Code		End. Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem.	Lab Work	Marks	L	T P	P	Credits
1	CE701M	PCC	Environmental EnggII	70	20	10	30	20	150	3	1.4	2	4
2	CE702M	PCC	Structural Design & Drawing-III (RCC)	70	20	10	30	20	150	3	-	2	4
3	CE703M	PCC	Estimation Costing & Tendering	70	20	10	30	20	150	3	-	2	4
4	CE704M	PEC	Professional Elective Course-II	70	20	10	-	-	100	3	1	-	4
5	CE705M	OEC	Open Elective Course-III	70	20	10	-	-	100	3	1	-	4
6	CE706M	MC	Industrial Training Evaluation	-	-	-	60	40	100	-	- 1	4	2
7	CE707M	DLC	Self-Learning Presentation (SWAYAM/NPTEL/MOOC)	-	-	-	-	-	-	-	-	-	8
100			Total	350	100	50	150	100	750	15	2	10	22
8	CE708M	MC	NSS/NCC/Swachhata Abhiyan/Rural Outreach	Qualifie	er	1 205 1 10			15.00				
dditio	nal Course	for Honou	rs or Minor Specialization			maximum the ecialization).		tional cou	irses in sul	bject code	CE707M	for the a	award of

Note: 01. Departmental BOS will decide list of three/four elective subjects for each PEC and OEC.

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

03. Industrial training presentation & viva shall take place in VII Sem. which students have already done in VI Sem.

Professional Elective Course-II									
S.No.	Subject Code	Subject Name							
1	CE704M A	Advanced Water Resources Engineering							
2	CE704M B	Advanced Foundation Design							
3	CE704M C	Bridge Engineering							

S.No.	Subject Code	Subject Name
1	CE705M A	Project Management
2	CE705M B	Computational Methods in Structural Engineering
3	CE705M C	Environmental Impact Assessment

PEC: Professional Elective Course (Branch Specific), OEC: Open Elective Course (Interdisciplinary), PCC: Professional Core Course, DLC: Distance Learning

Course, MC: Mandatory Course

1 hour lecture (L) = 1 credit

1 hour Tutorial (T) = 1 credit

2 hour Practical (P) = 1 credit

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(Declared Autonomous by MP Govt., Affiliated to RGPV, Bhopal)
(AICTE Model Curriculum Based Scheme) with Provision for Internship
Bachelor of Technology (B.Tech.) VII Semester (Computer Science & Engineering)

w.e.f. July 2024 **Maximum Marks Allotted** Contact Hours Per Week Theory Practical Subject Category Total S.No. Total Subject Name Code Code End. Mid Sem. Quiz/ End Lab Marks L T P Credits Sem. Exam. Assignment Sem. Work CS701M Computer Vision PCC 70 20 10 30 20 150 3 2 4 2 CS702M PCC Compiler Design 70 20 10 30 150 20 3 2 4 3 CS703M PCC Cryptography & Network Security 70 20 10 30 20 150 3 2 4 4 CS704M **PEC** Professional Elective Course-II 70 20 10 100 3 4 5 CS705M OEC Open Elective Course-III 70 20 10 100 3 4 6 CS706M Industrial Training Evaluation MC 60 40 100 4 2 Self-Learning Presentation CS707M DLC (SWAYAM/NPTEL/MOOC) Total 350 100 50 150 100 750 15 2 10 22

Additional Course for Honours or Minor Specialization

Permitted to opt for maximum three additional courses in subject code CS707M for the award of Honours (Minor Specialization).

Oualifier

Note: 01. Departmental BOS will decide list of three/four elective subjects for each PEC and OEC.

NSS/NCC/Swachhata Abhiyan/Rural

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

03. Industrial training presentation & viva shall take place in VII Sem. which students have already done in VI Sem.

46.00	Professional Elective Course-II								
S.No.	Subject Code	Subject Name							
1	CS704M A	Information Retrieval							
2	CS704M B	Natural Language Processing							
3	CS704M C	Data Center Management							

Outreach

Open Elective Course-III									
S.No.	Subject Code	Subject Name							
1	CS705M A	Computational Intelligence							
2	CS705M B	Optimization Techniques							
3	CS705M C	Internet of Things							

PEC: Professional Elective Course (Branch Specific), OEC: Open Elective Course (Interdisciplinary), PCC: Professional Core Course, DLC: Distance Learning

Course, MC: Mandatory Course

CS708M

MC

1 hour lecture (L) = 1 credit

1 hour Tutorial (T) = 1 credit

2 hour Practical (P) = 1 credit

Laun

balpur Engineer (M.P.)

DEAN

Academic

JEC, Jabalpur (M.P.)

(Declared Autonomous by MP Govt., Affiliated to RGPV, Bhopal)

(AICTE Model Curriculum Based Scheme) with Provision for Internship

Bachelor of Technology (B.Tech.) VII Semester (Electronics & Telecommunication Engineering)

					Maxim		e.f. July 2024 Contact Hours Per Week						
S.No.	Subject	Category	Subject Name		Theory	13890	Practical		Total		T		Total
	Code	Code		End. Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem.	Lab Work	Marks	L	T	P	Credits
1	EC701M	PCC	Optical Communication	70	20	10	30	20	150	2	+	-	
2	EC702M	PCC	CMOS VLSI Design	70	20	10	30		150	3	-	2	4
3	EC703M		Antenna Wave Propagation	70	20	10		20	150	3	-	2	4
4	EC704M		Professional Elective Course-II	70	20		30	20	150	3	-	2	4
5	EC705M		Open Elective Course-III	70		10	-	-	100	3	1	-	4
6	EC706M		Industrial Training Evaluation		20	10	-	-	100	3	1	-	4
1 18			Self-Learning Presentation	-	-	-	60	40	100	-	-	4	2
7	EC707M		(SWAYAM/NPTEL/MOOC)	-	-	-	-	-	-	-	-	-	8
10000			Total	350	100	50	150	100	750	15	2	10	22
8	EC708M		NSS/NCC/Swachhata Abhiyan/Rural Outreach	Qualifie	r		150	100	/30	15		10	22
dditio	onal Course	for Honour	s or Minor Specialization	Permitte Honours	ed to opt for (Minor Spe	maximum the	ree addi	tional cou	rses in sub	ject code I	EC707M	for the a	ward of

Note: 01. Departmental BOS will decide list of three/four elective subjects for each PEC and OEC.

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

03. Industrial training presentation & viva shall take place in VII Sem. which students have already done in VI Sem.

	Professional Elective Course-II									
S.No.	Subject Code	Subject Name								
1	EC704M A	Wireless Communication								
2	EC704M B	Information Theory & Coding								
3	EC704M C	RFID								

Open Elective Course-III									
S.No.	Subject Code	Subject Name							
1	EC705M A	Digital Image Processing							
2	EC705M B	Artificial Intelligence							
3	EC705M C	Robotics							

PEC: Professional Elective Course (Branch Specific), OEC: Open Elective Course (Interdisciplinary), PCC: Professional Core Course, DLC: Distance Learning

Course, MC: Mandatory Course

1 hour lecture (L) = 1 credit

1 hour Tutorial (T) = 1 credit

2 hour Practical (P) = 1 credit

Jabalpur Engineering College Jabalpur (M.P.)

Academic JEC, Jabalpur (M.P.)

(Declared Autonomous by MP Govt., Affiliated to RGPV, Bhopal)
(AICTE Model Curriculum Based Scheme) with Provision for Internship
Bachelor of Technology (B.Tech.) VII Semester (Electrical Engineering)

w.e.f. July 2024

					Maxim	um Marks Al			Contact Hours Per Week				
	Subject	Category	10, 50	Theory			Practical		Total				T . I C . I'
S.No.	Code	Code	Subject Name	End. Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem.	Lab Work	Marks	L	Т	P	Total Credits
1	EE701M	PCC	High Voltage Engineering	70	20	10	30	20	150	3	-	2	4
2	EE702M	PCC	Electrical Drives	70	20	10	30	20	150	3	-	2	4
3	EE703M	PCC	Power System Control	70	20	10	30	20	150	3	-	2	4
4	EE704M	PEC	Professional Elective Course-II	70	20	10	-	-	100	3	1	-	4
5	EE705M	OEC	Open Elective Course-III	70	20	10	-	-	100	3	1	-	4
6	EE706M	MC	Industrial Training Evaluation	-	-	-	60	40	100	-	-	4	2
7	EE707M	DLC	Self-Learning Presentation (SWAYAM/NPTEL/MOOC)	-	-	-	-	-	-	-	-	-	8
			Total	350	100	50	150	100	750	15	2	10	22
8	EE708M	MC	NSS/NCC/Swachhata Abhiyan/Rural Outreach	Qualifi		na na h							- 3
Additio	Additional Course for Honours or Minor Specialization				ed to opt fo Specializat		nree add	itional co	urses in su	bject code	EE707	M for the a	award of Honours

Note: 01. Departmental BOS will decide list of three/four elective subjects for each PEC and OEC.

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

03. Industrial training presentation & viva shall take place in VII Sem. which students have already done in VI Sem.

	Professional Elective Course-II									
S.No.	Subject Code	Subject Name								
1	EE704M A	Power System Planning & Reliability								
2	EE704M B	Soft Computing Techniques								
3	EE704M C	Advance Digital Communication								

	Open Elective Course-III										
S.No.	Subject Code	Subject Name									
1	EE705M A	Generalized Theory of Electric Machines									
2	EE705M B	Digital Control System									
3	EE705M C	Advanced Industrial Electronics									
DOC D	6 1 10 0	DIC. Distance Learning Course MC.									

PEC: Professional Elective Course (Branch Specific), OEC: Open Elective Course (Interdisciplinary), PCC: Professional Core Course, DLC: Distance Learning Course, MC:

Mandatory Course

1 hour lecture (L) = 1 credit

1 hour Tutorial (T) = 1 credit

2 hour Practical (P) = 1 credit

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DEAN Academic JEC, Jabalpur (M.P.)

(Declared Autonomous by MP Govt., Affiliated to RGPV, Bhopal)
(AICTE Model Curriculum Based Scheme) with Provision for Internship
Bachelor of Technology (B.Tech.) VII Semester (Industrial & Production Engineering)

w.e.f. July 2024

				Maximum Marks Allotted						Contact Hours Per Week			
0.31	Subject	Category	Subject Name	Theory			Practical		Total	1.7			Total Credits
S.No.	Code	Code		End. Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem.	Lab Work	Marks	L	Т	P	Total Credits
1	IP701M	PCC	Industrial Robotics & Mechatronics	70	20	10	30	20	150	3	-	2	4
2	IP702M	PCC	Industrial Engineering	70	20	10	30	20	150	3	-	2	4
3	IP703M	PCC	Advance Manufacturing Process	70	20	10	30	20	150	3	-	2	4
4	IP704M	PEC	Professional Elective Course-II	70	20	10	-	-	100	3	1	-	4
5	IP705M	OEC	Open Elective Course-III	70	20	10	-	-	100	.3	1	-	4
6	IP706M	MC	Industrial Training Evaluation	-	-	-	60	40	100	-	-	4	2
7	IP707M	DLC	Self-Learning Presentation (SWAYAM/NPTEL/MOOC)	-	-	-	-	-	-	-	-	-	8
			Total	350	100	50	150	100	750	15	2	10	22
8	IP708M	MC	NSS/NCC/Swachhata Abhiyan/Rural Outreach	Qualif									
Additio	nal Course	for Honour	rs or Minor Specialization			or maximum t pecialization		ditional co	ourses in	subject co	de IP70	7M for th	e award of

Note: 01. Departmental BOS will decide list of three/four elective subjects for each PEC and OEC.

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

03. Industrial training presentation & viva shall take place in VII Sem. which students have already done in VI Sem.

Professional Elective Course-II									
S.No.	Subject Code	Subject Name							
1	IP704M A	Vibration & Maintenance Engineering							
2	IP704M B	Project Management							
3	IP704M C	Automobile Engineering							
4	IP704M D	Computer Aided Production Planning							

	Ope	n Elective Course-III
S.No.	Subject Code	Subject Name
1	IP705M A	Material Management & Product Design
2	IP705M B	Manufacturing System Design
3	IP705M C	Product Life Cycle Management
4	IP705M D	Rapid Prototyping

PEC: Professional Elective Course (Branch Specific), OEC: Open Elective Course (Interdisciplinary), PCC: Professional Core Course, DLC: Distance Learning Course,

MC: Mandatory Course

1 hour lecture (L) = 1 credit

1 hour Tutorial (T) = 1 credit

2 hour Practical (P) = 1 credit

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DEAN
Academic
JEC, Jabalpur (M.P.)

(Declared Autonomous by MP Govt., Affiliated to RGPV, Bhopal) (AICTE Model Curriculum Based Scheme) with Provision for Internship Bachelor of Technology (B.Tech.) VII Semester (Information Technology)

	Cubinet	C-t-			Maxim		c.e.f. July 2024 Contact Hours Per Week						
S.No.	Subject Code	Category	Subject Name		Theory		Prac	ctical	Total				Total
		Code	,	End. Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem.	Lab Work	Marks	L	T	P	Credits
1	IT701M	PCC	Cloud Computing	70	20	10	30	20	150	3	+ -	2	4
2	IT702M	PCC	Information Retrieval	70	20	10	30	20	150	3	+ - 1	2	4
3	IT703M	PCC	Machine Learning	70	20	10	30	20	150	.3	+ - 1	2	4
4	IT704M	PEC	Professional Elective Course-II	70	20	10	-	-	100	3	1		4
5	IT705M	OEC	Open Elective Course-III	70	20	10	-	-	100	3	1	_	4
6	IT706M	MC	Industrial Training Evaluation	-	-	-	60	40	100	-	1 -	4	2
7	IT707M	DLC	Self-Learning Presentation (SWAYAM/NPTEL/MOOC)	-	-	-	-	-	-	-	-	-	8
			Total	350	100	50	150	100	750	15	2	10	22
8	IT708M		NSS/NCC/Swachhata Abhiyan/Rural Outreach	Qualifier			100	100	750	13	1-	10	
dditio	nal Course		rs or Minor Specialization			maximum thecialization).		tional cou	ırses in sul	oject code	T707M	for the av	vard of

Note: 01. Departmental BOS will decide list of three/four elective subjects for each PEC and OEC.

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

03. Industrial training presentation & viva shall take place in VII Sem. which students have already done in VI Sem.

	Professional Elective Course-II									
S.No.	Subject Code	Subject Name								
1	IT704M A	Simulation and Modelling								
2	IT704M B	Advanced Computer Arcthitecture								
3	IT704M C	Real Time Systems								

	Open Elective Course-III									
S.No.	Subject Code	Subject Name								
1	IT705M A	Wireless & Mobile Communication								
2	IT705M B	Embedded Systems								
3	IT705M C	Distributed Systems								

PEC: Professional Elective Course (Branch Specific), OEC: Open Elective Course (Interdisciplinary), PCC: Professional Core Course, DLC: Distance Learning Course,

MC: Mandatory Course

1 hour lecture (L) = 1 credit

1 hour Tutorial (T) = 1 credit

2 hour Practical (P) = 1 credit

DEAN Jabalpur Engineering (M.P.)

(Declared Autonomous by MP Govt., Affiliated to RGPV, Bhopal) (AICTE Model Curriculum Based Scheme) with Provision for Internship Bachelor of Technology (B.Tech.) VII Semester (Mechanical Engineering)

w.e.f. July 2024

			y Subject Name		Maxim	um Marks Al		Contact Hours Per Week					
	Subject	Category		Theory			Practical		Total				Total
S.No.	Code	Code		End. Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem.	Lab Work	Marks	L	T	P	Credits
1	ME701M	PCC	Refrigeration & Air Conditioning	70	20	10	30	20	150	3	-	2	4
2	ME702M	PCC	Vibration & Noise Control	70	20	10	30	20	150	3	-	2	4
3	ME703M	PCC	Advance Machine Design	70	20	10	30	20	150	3	-	2	4
4	ME704M	PEC	Professional Elective Course-II	70	20	10	-	-	100	3	1	-	4
5	ME705M	OEC	Open Elective Course-III	70	20	10	-	-	100	3	1	-	4
6	ME706M	MC	Industrial Training Evaluation	-	-	-	60	40	100	-	-	4	2
7	ME707M	DLC	Self-Learning Presentation (SWAYAM/NPTEL/MOOC)	-	-	-	-	-	-	-	-	-	8
	Y M		Total	350	100	50	150	100	750	15	2	10	22
8	ME708M	MC	NSS/NCC/Swachhata Abhiyan/Rural Outreach	Qualifi		200							
Additio	nal Course f	or Honours	s or Minor Specialization			maximum thecialization).		itional co	urses in su	bject code	ME707N	M for the	award of

Note: 01. Departmental BOS will decide list of three/four elective subjects for each PEC and OEC.

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

03. Industrial training presentation & viva shall take place in VII Sem. which students have already done in VI Sem.

Professional Elective Course-II								
S.No.	Subject Code	Subject Name						
1	ME704M A	Industrial Robotics						
2	ME704M B	Product Design						
3	ME704M C	Gas Dynamics and Jet Propulsion						
4	ME704M D	Automobile Engineering						

	Open Elective Course-III									
S.No.	Subject Code	Subject Name								
1	ME705M A	Renewable Energy Systems								
2	ME705M B	Artificial Intelligence								
3	ME705M C	Internet of Things								
4	ME705M D	Operation Research & Supply Chain								

PEC: Professional Elective Course (Branch Specific), OEC: Open Elective Course (Interdisciplinary), PCC: Professional Core Course, DLC: Distance Learning Course,

MC: Mandatory Course

1 hour lecture (L) = 1 credit

1 hour Tutorial (T) = 1 credit

2 hour Practical (P) = 1 credit



DEAN Academic Shalpur Engineering (M.P.)

(Declared Autonomous by MP Govt., Affiliated to RGPV, Bhopal)
(AICTE Model Curriculum Based Scheme) with Provision for Internship
Bachelor of Technology (B.Tech.) VII Semester (Mechatronics Engineering)

w.e.f. July 2024

			M1 V		Maxim	Total	Contact Hours Per Week						
CN	Subject	Category		Theory			Practical					Total	
S.No.	Code	Code	Subject Name	End. Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem.	Lab Work	Marks	L	T	P	Credits
1	MT701M	PCC	Mechatronics System Design	70	20	10	30	20	150	3	-	2	4
2	MT702M	PCC	EV and HV Technology	70	20	10	30	20	150	3		2	4
3	MT703M	PCC	AI & ML	70	20	10	30	20	150	3	-	2	4
4	MT704M	PEC	Professional Elective Course-II	70	20	10	-	-	100	3	1	-	4
5	MT705M	OEC	Open Elective Course-III	70	20	10	-	-	100	3	1	-	4
6	MT706M	MC	Industrial Training Evaluation	-	-	-	60	40	100	-	-	4	2
7	MT707M	DLC	Self-Learning Presentation (SWAYAM/NPTEL/MOOC)	-	-	-	-	-	-	-1		-	8
702			Total	350	100	50	150	100	750	15	2	10	22
8	MT708M	MC	NSS/NCC/Swachhata Abhiyan/Rural Outreach	Qualifie	er					4			
Additio	nal Course	for Honour	s or Minor Specialization			maximum thecialization).		itional cou	urses in su	bject code	MT707N	A for the	award of

Note: 01. Departmental BOS will decide list of three/four elective subjects for each PEC and OEC.

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

03. Industrial training presentation & viva shall take place in VII Sem. which students have already done in VI Sem.

Professional Elective Course-II			
S.No.	Subject Code	Subject Name	
1	MT704M A	CAD/CAM	
2	MT704M B	Mechanical Vibration & Noise	
3	MT704M C	Power Plant Engineering	

Open Elective Course-III			
S.No.	Subject Code	Subject Name	
1	MT705M A	Wireless Sensor Networks	
2	MT705M B	Aerial Robotics	
3	MT705M C	Simulation & Modelling	

PEC: Professional Elective Course (Branch Specific), OEC: Open Elective Course (Interdisciplinary), PCC: Professional Core Course, DLC: Distance Learning Course,

MC: Mandatory Course

1 hour lecture (L) = 1 credit

1 hour Tutorial (T) = 1 credit

2 hour Practical (P) = 1 credit

Jabalpur Engineering (M.P.)