

**Jabalpur Engineering College, Jabalpur**  
**(Declared Autonomous by MP Govt., Affiliated to RGPV, Bhopal)**  
**(AICTE Model Curriculum Based Scheme)**  
**Bachelor of Technology (B.Tech.) VIII 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			L	T	P	
				End. Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem.	Lab Work					
1	CE81	PEC/DLC	Professional Elective Course-IV	70	20	10	-	-	100	3	1	-	4
2	CE82	OEC/DLC	Open Elective Course-III	70	20	10	-	-	100	3	1	-	4
3	CE83	PI	Major Project / Internship	-	-	-	150	100	250	-	-	16	8
<b>Total</b>				140	40	20	150	100	450	6	2	16	16

**Note:** 1. Departmental BOS will decide list of three/four optional subjects those are available in MOOC/NPTEL, PEC as well for OEC.

Professional Elective Course-IV		
S.No.	Subject Code	Subject Name
1	CE81A	Structural Design & Drawing-IV (Steel)
2	CE81B	Pavement Design
3	CE81C	Traffic Engineering

Open Elective Course-III		
S.No.	Subject Code	Subject Name
1	CE82A	Finite Element Method
2	CE82B	Air Quality Monitoring & Control
3	CE82C	FRP Composites

**Note:** 2. Students going for internship would have to opt MOOC/NPTEL subjects decided / listed by the HOD / Coordinator.

Professional Elective Course-IV		
S.No.	Subject Code	Subject Name
1	CE81D	NPTEL-1
2	CE81E	NPTEL-2
3	CE81F	NPTEL-3

Open Elective Course-III		
S.No.	Subject Code	Subject Name
1	CE82D	NPTEL-4
2	CE82E	NPTEL-5
3	CE82F	NPTEL-6

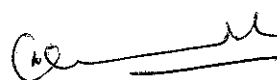
**Note:** 3. For Major Project/ Internship, evaluation is based on work done, quality of report, presentation and performance in viva-voce through department project supervisor / Industry Project Coordinator.

1 hour lecture (L) = 1 credit

1 hour Tutorial (T) = 1 credit

2 hour Practical (P) = 1 credit

PEC: Professional Elective Course, OEC: Open Elective Course, PI: Project and Internship, DLC: Distance Learning Course




  
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(AICTE Model Curriculum Based Scheme)

**Bachelor of Technology (B.Tech.) VIII Semester (Mechanical 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	ME81	PEC/DLC	Professional Elective Course-IV	70	20	10	-	-	100	3	1	-	4
2	ME82	OEC/DLC	Open Elective Course-III	70	20	10	-	-	100	3	1	-	4
3	ME83	PI	Major Project / Internship	-	-	-	150	100	250	-	-	16	8
<b>Total</b>				140	40	20	150	100	450	6	2	16	16

**Note:** 1. Departmental BOS will decide list of three/four optional subjects those are available in MOOC/NPTEL, PEC as well for OEC.

Professional Elective Course-IV		
S.No.	Subject Code	Subject Name
1	ME81A	Computer Integrated Manufacturing
2	ME81B	Tribology
3	ME81C	Advance Machining Processes

Open Elective Course-III		
S.No.	Subject Code	Subject Name
1	ME82A	Energy Conservation & Audit
2	ME82B	Quality Management
3	ME82C	Management Information System

**Note:** 2. Students going for internship would have to opt MOOC/NPTEL subjects decided / listed by the HOD / Coordinator.

Professional Elective Course-IV		
S.No.	Subject Code	Subject Name
1	ME81D	NPTEL-1
2	ME81E	NPTEL-2
3	ME81F	NPTEL-3

Open Elective Course-III		
S.No.	Subject Code	Subject Name
1	ME82D	NPTEL-4
2	ME82E	NPTEL-5
3	ME82F	NPTEL-6

**Note:** 3. For Major Project/ Internship, evaluation is based on work done, quality of report, presentation and performance in viva-voce through department project supervisor / Industry Project Coordinator.


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**Bachelor of Technology (B.Tech.) VIII 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			L	T	P	
				End. Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem.	Lab Work					
1	EE81	PEC/DLC	Professional Elective Course-IV	70	20	10	-	-	100	3	1	-	4
2	EE82	OEC/DLC	Open Elective Course-III	70	20	10	-	-	100	3	1	-	4
3	EE83	PI	Major Project / Internship	-	-	-	150	100	250	-	-	16	8
<b>Total</b>				140	40	20	150	100	450	6	2	16	16

**Note:** 1. Departmental BOS will decide list of three/four optional subjects those are available in MOOC/NPTEL, PEC as well for OEC.

Professional Elective Course-IV		
S.No.	Subject Code	Subject Name
1	EE81A	Process Control
2	EE81B	SCADA System & Applications
3	EE81C	Renewable & Non Conventional Energy Sources

Open Elective Course-III		
S.No.	Subject Code	Subject Name
1	EE82A	Embedded Systems
2	EE82B	Intellectual Property Rights (IPR)
3 ★	EE82C	Advanced Digital Signal Processing

**Note:** 2. Students going for internship would have to opt MOOC/NPTEL subjects decided / listed by the HOD / Coordinator.

Professional Elective Course-IV		
S.No.	Subject Code	Subject Name
1	EE81D	NPTEL-1
2	EE81E	NPTEL-2
3	EE81F	NPTEL-3

Open Elective Course-III		
S.No.	Subject Code	Subject Name
1	EE82D	NPTEL-4
2	EE82E	NPTEL-5
3	EE82F	NPTEL-6

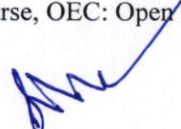
**Note:** 3. For Major Project/ Internship, evaluation is based on work done, quality of report, presentation and performance in viva-voce through department project supervisor / Industry Project Coordinator.

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Professor & Head, Electrical Engg. Dept.  
Government Engineering College  
Jabalpur (M.P.)

  
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**Bachelor of Technology (B.Tech.) VIII 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			L	T	P	
				End. Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem.	Lab Work					
1	EC81	PEC/DLC	Professional Elective Course-IV	70	20	10	-	-	100	3	1	-	4
2	EC82	OEC/DLC	Open Elective Course-III	70	20	10	-	-	100	3	1	-	4
3	EC83	PI	Major Project / Internship	-	-	-	150	100	250	-	-	16	8
<b>Total</b>				140	40	20	150	100	450	6	2	16	16

**Note:** 1. Departmental BOS will decide list of three/four optional subjects those are available in MOOC/NPTEL, PEC as well for OEC.

Professional Elective Course-IV		
S.No.	Subject Code	Subject Name
1	EC81A	Advanced Mobile Communication
2	EC81B	Adaptive Signal Processing
3	EC81C	Sensor Technology

Open Elective Course-III		
S.No.	Subject Code	Subject Name
1	EC82A	Economics & Social Issues
2	EC82B	Sustainable Engineering
3	EC82C	AI & Machine Learning

**Note:** 2. Students going for internship would have to opt MOOC/NPTEL subjects decided / listed by the HOD / Coordinator.

Professional Elective Course-IV		
S.No.	Subject Code	Subject Name
1	EC81D	NPTEL-1
2	EC81E	NPTEL-2
3	EC81F	NPTEL-3

Open Elective Course-III		
S.No.	Subject Code	Subject Name
1	EC82D	NPTEL-4
2	EC82E	NPTEL-5
3	EC82F	NPTEL-6

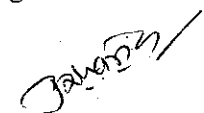

**Note:** 3. For Major Project/ Internship, evaluation is based on work done, quality of report, presentation and performance in viva-voce through department project supervisor / Industry Project Coordinator.

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**Bachelor of Technology (B.Tech.) VIII 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			L	T	P	
				End. Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem.	Lab Work					
1	CS81	PEC/DLC	Professional Elective Course-IV	70	20	10	-	-	100	3	1	-	4
2	CS82	OEC/DLC	Open Elective Course-III	70	20	10	-	-	100	3	1	-	4
3	CS83	PI	Major Project / Internship	-	-	-	150	100	250	-	-	16	8
<b>Total</b>				140	40	20	150	100	450	6	2	16	16

**Note:** 1. Departmental BOS will decide list of three/four optional subjects those are available in MOOC/NPTEL, PEC as well for OEC.

Professional Elective Course-IV		
S.No.	Subject Code	Subject Name
1	CS81A	Computational Intelligence
2	CS81B	Natural Language Processing
3	CS81C	Network Management

Open Elective Course-III		
S.No.	Subject Code	Subject Name
1	CS82A	Ethical Hacking
2	CS82B	Data Analytics
3	CS82C	Data Warehouse & Mining

**Note:** 2. Students going for internship would have to opt MOOC/NPTEL subjects decided / listed by the HOD / Coordinator.

Professional Elective Course-IV		
S.No.	Subject Code	Subject Name
1	CS81D	NPTEL-1
2	CS81E	NPTEL-2
3	CS81F	NPTEL-3

Open Elective Course-III		
S.No.	Subject Code	Subject Name
1	CS82D	NPTEL-4
2	CS82E	NPTEL-5
3	CS82F	NPTEL-6

**Note:** 3. For Major Project/ Internship, evaluation is based on work done, quality of report, presentation and performance in viva-voce through department project supervisor / Industry Project Coordinator.


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**(AICTE Model Curriculum Based Scheme)**  
**Bachelor of Technology (B.Tech.) VIII 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	IT81	PEC/DLC	Professional Elective Course-IV	70	20	10	-	-	100	3	1	-	4
2	IT82	OEC/DLC	Open Elective Course-III	70	20	10	-	-	100	3	1	-	4
3	IT83	PI	Major Project / Internship	-	-	-	150	100	250	-	-	16	8
<b>Total</b>				140	40	20	150	100	450	6	2	16	16

**Note:** 1. Departmental BOS will decide list of three/four optional subjects those are available in MOOC/NPTEL, PEC as well for OEC.

Professional Elective Course-IV		
S.No.	Subject Code	Subject Name
1	IT81A	Fuzzy Logic & Neural Networks
2	IT81B	Natural Language Processing
3	IT81C	Sensor Networks

Open Elective Course-III		
S.No.	Subject Code	Subject Name
1	IT82A	Introduction to Robotics
2	IT82B	Image Processing and GIS
3	IT82C	Computer Vision

**Note:** 2. Students going for internship would have to opt MOOC/NPTEL subjects decided / listed by the HOD / Coordinator.

Professional Elective Course-IV		
S.No.	Subject Code	Subject Name
1	IT81D	NPTEL-1
2	IT81E	NPTEL-2
3	IT81F	NPTEL-3

Open Elective Course-III		
S.No.	Subject Code	Subject Name
1	IT82D	NPTEL-4
2	IT82E	NPTEL-5
3	IT82F	NPTEL-6

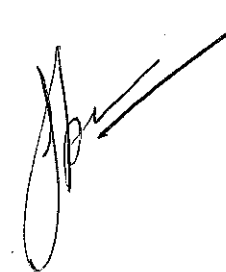
**Note:** 3. For Major Project/ Internship, evaluation is based on work done, quality of report, presentation and performance in viva-voce through department project supervisor / Industry Project Coordinator.

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**Bachelor of Technology (B.Tech.) VIII 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	IP81	PEC/DLC	Professional Elective Course-IV	70	20	10	-	-	100	3	1	-	4
2	IP82	OEC/DLC	Open Elective Course-III	70	20	10	-	-	100	3	1	-	4
3	IP83	PI	Major Project / Internship	-	-	-	150	100	250	-	-	16	8
<b>Total</b>				140	40	20	150	100	450	6	2	16	16

**Note:** 1. Departmental BOS will decide list of three/four optional subjects those are available in MOOC/NPTEL, PEC as well for OEC.

Professional Elective Course-IV		
S.No.	Subject Code	Subject Name
1	IP81A	Computer Integrated Manufacturing
2	IP81B	Management Information System
3	IP81C	Industrial Psychology & Human Behaviour
4	IP81D	Finite Element Methods

Open Elective Course-III		
S.No.	Subject Code	Subject Name
1	IP82A	Entrepreneurship & Management
2	IP82B	Work Design and Ergonomics
3	IP82C	Computer Aided Design
4	IP82D	Concurrent Product Design

**Note:** 2. Students going for internship would have to opt MOOC/NPTEL subjects decided / listed by the HOD / Coordinator.

Professional Elective Course-IV		
S.No.	Subject Code	Subject Name
1	IP81D	NPTEL-1
2	IP81E	NPTEL-2
3	IP81F	NPTEL-3

Open Elective Course-III		
S.No.	Subject Code	Subject Name
1	IP82D	NPTEL-4
2	IP82E	NPTEL-5
3	IP82F	NPTEL-6

**Note:** 3. For Major Project/ Internship, evaluation is based on work done, quality of report, presentation and performance in viva-voce through department project supervisor / Industry Project Coordinator.

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**Bachelor of Technology (B.Tech.) VIII 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			L	T	P	
				End. Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem.	Lab Work					
1	AI81	PEC/DLC	Professional Elective Course-IV	70	20	10	-	-	100	3	1	-	4
2	AI82	OEC/DLC	Open Elective Course-III	70	20	10	-	-	100	3	1	-	4
3	AI83	PI	Major Project / Internship	-	-	-	150	100	250	-	-	16	8
<b>Total</b>				140	40	20	150	100	450	6	2	16	16

**Note:** 1. Departmental BOS will decide list of three/four optional subjects those are available in MOOC/NPTEL, PEC as well for OEC.

Professional Elective Course-IV		
S.No.	Subject Code	Subject Name
1	AI81A	Financial Engineering
2	AI81B	DevOps & MLOPs
3	AI81C	Advanced AI Algorithms-Gen AI

Open Elective Course-III		
S.No.	Subject Code	Subject Name
1	AI82A	Computer Vision
2	AI82B	Bio Informatics
3	AI82C	Design Thinking

**Note:** 2. Students going for internship would have to opt MOOC/NPTEL subjects decided / listed by the HOD / Coordinator.

Professional Elective Course-IV		
S.No.	Subject Code	Subject Name
1	AI81D	NPTEL-1
2	AI81E	NPTEL-2
3	AI81F	NPTEL-3

Open Elective Course-III		
S.No.	Subject Code	Subject Name
1	AI82D	NPTEL-4
2	AI82E	NPTEL-5
3	AI82F	NPTEL-6

**Note:** 3. For Major Project/ Internship, evaluation is based on work done, quality of report, presentation and performance in viva-voce through department project supervisor / Industry Project Coordinator.


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**Bachelor of Technology (B.Tech.) VIII 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			L	T	P	
				End. Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem.	Lab Work					
1	MT81	PEC/DLC	Professional Elective Course-IV	70	20	10	-	-	100	3	1	-	4
2	MT82	OEC/DLC	Open Elective Course-III	70	20	10	-	-	100	3	1	-	4
3	MT83	PI	Major Project / Internship	-	-	-	150	100	250	-	-	16	8
<b>Total</b>				140	40	20	150	100	450	6	2	16	16

**Note:** 1. Departmental BOS will decide list of three/four optional subjects those are available in MOOC/NPTEL, PEC as well for OEC.

Professional Elective Course-IV		
S.No.	Subject Code	Subject Name
1	MT81A	Total Quality Management
2	MT81B	Renewable Energy Technology
3	MT81C	Refrigeration and Air Conditioning

Open Elective Course-III		
S.No.	Subject Code	Subject Name
1	MT82A	Image Processing & Machine Vision
2	MT82B	MEMS and NEMS Technology
3	MT82C	Operation Research and Supply Chain

**Note:** 2. Students going for internship would have to opt MOOC/NPTEL subjects decided / listed by the HOD / Coordinator.

Professional Elective Course-IV		
S.No.	Subject Code	Subject Name
1	MT81D	NPTEL-1
2	MT81E	NPTEL-2
3	MT81F	NPTEL-3

Open Elective Course-III		
S.No.	Subject Code	Subject Name
1	MT82D	NPTEL-4
2	MT82E	NPTEL-5
3	MT82F	NPTEL-6

**Note:** 3. For Major Project/ Internship, evaluation is based on work done, quality of report, presentation and performance in viva-voce through department project supervisor / Industry Project Coordinator.

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