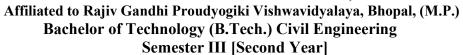


## Institute of Engineering and Science, Indore (M.P.)







Third Semester w.e.f. July 2023

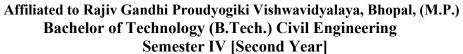
					Ma	ximum Mark	s Allotte	ed		Hrs./Week			
	Course	Course			Theo	ry	P	ractical	Total	пг	s./ vv e	ек	Total
S.No.	Course	Course Code	Course Title	End	Mid	Quiz/	End	Term work	Total Marks				Total Credits
	Type	Coue		Sem.	Sem.	Assignment	End Sem	Lab Work &	IVIAI KS	L	T	P	Credits
				Sem.	Exam.	Assignment	Sem	Sessional					
1	BSC	MA04	Program Specific Mathematics	60	25	15	-	-	100	2	1	-	3
2	PCC	CE01	Building Design and Drawing	60	25	15	-	-	100	3	-	-	3
3	PCC	CE02	Engineering Geology and Remote Sensing	60	25	15	-	-	100	3	-	-	3
4	PCC	CE03	Surveying and Geomatics	60	25	15	-	-	100	2	1	-	3
5	PCC	CE04	Strength of Materials	60	25	15	-	-	100	2	1	-	3
6	HSMC	HS03	Innovation and Creativity	-	-	-	-	100	100	1	-	-	1
7	LC	CE01(P)	Building Design and Drawing Lab	-	-	-	60	40	100	ı	ı	2	1
8	LC	CE02(P)	Engineering Geology and Remote Sensing Lab	-	-	-	60	40	100	•	1	2	1
9	LC	CE03(P)	Surveying and Geomatics Lab	-	-	-	60	40	100	-	-	2	1
10	LC	CE04(P)	Strength of Materials Lab	-	-	-	60	40	100	ı	-	2	1
11	MLC	MLC01	Professional Laws, Ethics, Gender, Human Values and Harmony (Internal Assessment)	60	25	15	-	-	100	1	-	-	Audit
			Total	300	125	75	240	360	1100	Tota	al Cr	edit	20

• Basic Science Course (BSC), Program Specific Mathematics, (MA04)	• Liberal Learning Course-II, LLC02 (Any One Course from NCC/NSO/NCA)
(Any One Course)	A. NCC
(a) Numerical Method and Laplace Transforms	B. NSO
(b) Differential Equations	Any one Sports at State Level
(c) Continuous and Discrete Transforms	C. NCA
(d) Laplace Transforms and Complex Analysis	(a) Music
	(b) Dance
	(c) Photography
	(d) Cinematography
	(e) Podcasting
	(f) Theatre
	(g) Painting



### Institute of Engineering and Science, Indore (M.P.)







#### **Fourth Semester**

					Ma	ximum Mark	s Allotte	ed		Hrs./Week			
	Course	Course			Theo	ry	P	ractical	Total	пг	s./ vv e	ек	Total
S.No.	Course	Course Code	Course Title	End	Mid	Owie/	End	Term work	Total Marks				Total Credits
	Type	Coue		End Sem.	Sem.	Quiz/ Assignment	End Sem	Lab Work &	Wiai KS	L	T	P	Credits
				Sem.	Exam.	Assignment	Sem	Sessional					
1	BSC	MA03	Probability and Statistics	60	25	15	-	-	100	2	1	-	3
2	PCC	CE05	Fluid Mechanics	60	25	15	-	-	100	2	1	ı	3
3	PCC	CE06	Material Technology and Mix Design	60	25	15	-	-	100	3	-	-	3
4	PCC	CE07	Structural Analysis	60	25	15	-	-	100	2	1	ı	3
5	PCC	CE08	Railway and Bridge Engineering	60	25	15	-	-	100	2	-	ı	2
6	HSMC	HS04	Entrepreneurship and Principles of Management	60	25	15	-	-	100	1	-	-	1
7	IFC	EC01	Interdisciplinary Foundation Course-I	60	25	15	-	-	100	2	-	-	2
8	LC	CE05(P)	Fluid Mechanics Lab	-	_	-	60	40	100	-	-	2	1
9	LC	CE06(P)	Material Technology and Mix Design Lab	-	_	-	60	40	100	-	-	2	1
10	SBC	CE01(P)	Digital Surveying Skills	-	_	-	60	40	100	-	-	4	2
11	SBC	CE02(P)	Design Studio-I	-	_	-	60	40	100	-	-	2	1
12	LLC	LLC02	Liberal Learning Course –II	-	-	-	-	100	100	-	-	2	1
13	MLC	MLC02	Constitution of India	60	25	15	-	-	100	1	-	-	Audit
_			Total	420	175	105	240	160	1100	Tota	al Cr	edit	23

•	Skill Based Courses, Design Studio (SBC) –I, CE02(P)
	Drafting Tool Auto CAD (2D and 2D)

➤ Drafting Tool, Auto CAD (2D and 3D)

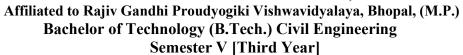
• Interdisciplinary Foundation Course (IFC)-I, EC01 (Offered by Electronics and Communication Department.)

> Sensors and Automation



## Institute of Engineering and Science, Indore (M.P.)







#### **Fifth Semester**

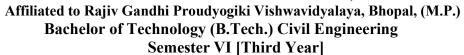
					Ma	aximum Marl	ks Allott	ed		Hrs./Week			
	Course	Course			Theo	ory	P	ractical	Total	ш	S./ VV E	ек	Total
S.No.		Code	Course Title	End	Mid	Quiz/	End	Term work	Marks				Credits
	Type	Coue		Sem.	Sem.	Assignment	Sem	Lab Work &	IVIAI KS	L	T	P	Credits
				Sem.	Exam.	Assignment	Sem	Sessional					
1	PCC	CE09	Advanced Structural Analysis	60	25	15	-	-	100	2	1	-	3
2	PCC	CE10	Design of RCC Structures	60	25	15	-	-	100	2	1	-	3
3	PCC	CE11	Transportation Engineering	60	25	15	-	-	100	3	-	-	3
4	PCC	CE12	Water Resources Engineering	60	25	15	-	-	100	2	1	-	3
5	HSMC	HS05	Humanities and Social Sciences Open Courses - I	60	25	15	-	-	100	2	-	-	2
6	IFC	CS01	Interdisciplinary Foundation Course-II	60	25	15	60	40	200	1	-	2	2
7	LC	CE09(P)	Advanced Structural Analysis Lab				60	40	100	1	-	2	1
8	LC	CE10(P)	Design of RCC Structures Lab				60	40	100	1	-	2	1
9	LC	CE11(P)	Transportation Engineering Lab				60	40	100	-	-	2	1
10	SBC	CE03(P)	Design Studio-II				60	40	100	-	-	4	2
11	MLC	MLC03	Environmental Studies (Internal Assessment)	60	25	15	-	_	100	1	-	-	Audit
			Total	360	150	90	300	200	1100	Tota	al Cr	edit	21

•	Skill Based Courses (SBC), Design Studio –II, CE03(P)  > Structural Design Tool, STAAD Pro	•	Humanities and Social Sciences Open Courses (HSMC) – I, HS05 (Any One Course) (a) English Language Proficiency (b) German Language (c) French Language (d) Japanese Language (e) Soft Skills and Interpressonal Communication	Interdisciplinary Foundation Course (IFC)- II, CS01 (Offered by Computer Science and Engg. Deptt.)     ➤ IoT in Civil Engineering
			(e) Soft Skills and Interpersonal Communication	



## Institute of Engineering and Science, Indore (M.P.)







#### **Sixth Semester**

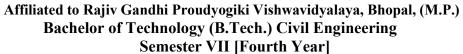
				Maximum Marks Allotted						Ши	s./We	alr	
	Course	Course			Theo	ry	P	ractical	Total	пп	s./ vv e	ек	Total
S.No.		Code	Course Title	End	Mid	Quiz/	End	Term work	Marks				Credits
	Type	Coue		Sem.	Sem.	Assignment	Sem	Lab Work &	IVIAI KS	L	T	P	Credits
				Sciii.	Exam.	rissignment	Sem	Sessional					
1	PCC	CE13	Design of Steel Structures	60	25	15	-	-	100	2	1	-	3
2	PCC	CE14	Geotechnical Engineering	60	25	15	-	-	100	2	1	-	3
3	PCC	CE15	Water Supply and Waste Water Engineering	60	25	15	-	-	100	3	ı	-	3
4	PCC	CE16	Estimating and Costing in Civil Engineering	60	25	15	-	-	100	2	1	-	3
5	HSMC	HS06	Humanities and Social Sciences Open Courses - II	60	25	15	-	-	100	2	-	-	2
6	IOC	Code*	Interdisciplinary Open Course-I	60	25	15	-	-	100	3	-	-	3
7	LC	CE13(P)	Design of Steel Structures Lab	-	-	-	60	40	100	-	-	2	1
8	LC	CE14(P)	Geotechnical Engineering Lab	-	-	-	60	40	100	-	-	2	1
9	LC	CE15(P)	Water Supply and Waste Water Engineering Lab	-	-	-	60	40	100	-	-	2	1
10	SBC	CE04(P)	Design Studio-III	-	-	-	60	40	100	-	-	4	2
11	LLC	LLC03	Liberal Learning Course -III	-	-	-	-	100	100	-	-	2	1
12	MLC	MLC04	Intellectual Property Rights	60	25	15	-	-	100	1	-	-	Audit
13	PROJ	CE01	Intern	ship- <i>To b</i>	e complete	d anytime durin	g Fifth/Six	th semester	•				
13	LKOJ	CEUI	(Minimum 151	Days/90H	rs.)Its eval	uation/credit to	be added i	in Seventh Semeste	er.				
			Total	360	150	90	240	260	1100	Tota	al Cr	edit	23

Skill Based Courses (SBC),	Humanities and Social Sciences Open Courses		• Liberal learning Course
Design Studio –III, CE04(P)	(HSMC) – III, HS06	(Code* as per below subjects)	(LLC)-III, LLC03
Software Based Field Project Skills	(Any One Course)	(Any One Course)	(Any One Course)
(Drafting, Analysis, Design and Layout	(a) Industrial Psychology	<ul> <li>Metro System and Engineering (EC03)</li> </ul>	(a) Sociology
of a Structure)	(b) Engineering Psychology	➤ JAVA (CS02)	(b) Interior Design
	(c) Engineering Economics	➤ Data Science (DS01)	(c) Graphic Design
	(d) Finance for Engineers	➤ Basics of Python (CI02)	(d) Animation
	(e) Stress Management	Artificial Intelligence and Machine	(e) Corporate Culture
	(f) Business Communication	Learning (CL01)	
	(1) Dusiness Communication	<ul> <li>Higher Mathematics (Operation</li> </ul>	
		Research) (MA01)	



### Institute of Engineering and Science, Indore (M.P.)

### A UGC Autonomous Institute,





#### **Seventh Semester**

					Ma	ximum Mark	s Allotte	ed		Hrs./Week			
	Course	Course			Theo	ry	P	ractical	Total	пг	s./ vv t	ек	Total
S.No.	Course	Course Code	Course Title	End	Mid	Quiz/	End	Term work	Total Marks				Credits
	Type	Coue		Sem.	Sem.	Assignment	Sem	Lab Work &	IVIAI KS	L	T	P	Credits
				Sem.	Exam.	Assignment	Sem	Sessional					
1	PCC	CE17	Foundation Engineering	60	25	15	-	-	100	2	1	-	3
2	PCC	CE18	Design of Advanced RCC Structures	60	25	15	-	-	100	2	1	-	3
3	PCC	CE19	Design of Hydraulic Structures	60	25	15	-	-	100	2	1	-	3
4	PEC	CE01	Professional Elective Course-I	60	25	15	-	-	100	3	1	-	3
5	PEC	CE02	Professional Elective Course-II	60	25	15	-	-	100	3	-	-	3
6	LC	CE17(P)	Foundation Engineering Lab	-	-	-	60	40	100	-	1	2	1
7	LC	CE18(P)	Design of Advanced RCC Structures Lab	-	-	-	60	40	100	-	1	2	1
8	PROJ	CE02	Project Phase -I	-	-	-	60	40	100	-	-	8	4
	Evaluatio	on of Interns	hip- Completed in Fifth/Sixth Semester	-	-		-	100	100	-	_	4	2
			Total	300	125	75	180	220	900	Tota	al Cr	edit	23

### Professional Elective Course (PEC) -I, CE01 (Any One Course)

- (a) Advanced Water resources Engineering
- (b) Traffic Engineering
- (c) Advanced Fluid Mechanics
- (d) Urban and Town Planning
- (e) Building Services

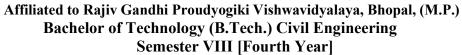
### • Program Elective Course (PEC)-II, CE02 (Any One Course)

- (a) Construction Planning and Management
- (b) Air and Noise Pollution Control
- (c) Integrated Waste Management
- (d) Geo-Informatics Engineering
- (e) Marine Construction



### Institute of Engineering and Science, Indore (M.P.)







**Eighth Semester (Scheme A)** 

				Maximum Marks Allotted				ed		Шм	s./We	alr	
	Course	Course			Theor	ry	P	ractical	Total	ш	s./ vv e	ek	Total
S.No.	Course Type	Course Code	Course Title	End	Mid	Quiz/	End	Term work	Marks				Credits
	Type	Coue		Sem.	Sem.	Assignment	Sem	Lab Work &	IVIAI KS	L	T	P	Credits
				Sem.	Exam.	Assignment	Sem	Sessional					
1	PEC	CE03	Professional Elective Course-III	60	25	15	-	-	100	3	ı	1	3
2	IOC	Code*	Interdisciplinary Open Course-II	60	25	15	-	-	100	3	ı	ı	3
3	SBC	CE05(P)	Structural Health Monitoring Skills	-	-	-	60	40	100	ı	ı	4	2
4	PRO	CE03(A)	Project Phase -II	-	-	-	120	80	200	ı	ı	16	8
			Total	120	50	30	180	120	500	Tota	al Cro	edit	16

**Eighth Semester (Scheme B)** 

				Maximum Marks Allotted						Hrs./Week		. alz	
	Course	Course			Theo	ry	P	ractical	Total	ш	5./ VV E	ek	Total
S.No.	Course	Code	Course Title	End	Mid	Quiz/	End	Term work	Marks				Credits
	Type	Couc		Sem.	Sem. Assignment S	I ah Wark &		IVIAI KS	L	T	P	Cicuits	
				Sciii.	Exam.	Assignment	Sciii	Sessional					
1	PEC	CE03	Professional Elective Course-III	60	25	15	-	-	100	3	-	-	3
2	IOC	Code*	Interdisciplinary Open Course-II	60	25	15	-	-	100	3	-	-	3
3	SBC	CE05(P)	Structural Health Monitoring Skills	-	-	-	60	40	100	-	-	4	2
4	PRO	CE03(B)	Internship and Project		_		120	80	200	_		16	8
	TKO	СБ03(В)	(Industry/Corporate/Academia)	_	_	-		00			_		O
			Total	120	50	30	180	120	500	Tota	al Cr	edit	16

#### Note:

> In Eighth Semester, students may opt for 'SCHEME A' or 'SCHEME B'.

- Professional Elective Course (PEC)-III, CE03 (Any One Course)
  - (a) Design of Advanced Steel Structures
  - (b) Structural Dynamics
  - (c) Design of Prestressed Structures
  - (d) Ground Improvement Techniques
  - (e) Pavement Design

- Interdisciplinary Open Course (IOC)-II, (Code\* as per below subjects) (Any One Course)
  - Disaster Management- Forecasting and Mitigation (FT01)
  - Disaster Management- Legislation (FT02)
  - Occupation Health and First Aid (FT03)
  - Principles of Safety Management (FT05)
  - Any MOOC Course, Minimum 12 Weeks, (AICTE/SWAYAM/ Other Relevant Online Learning Platform)
- Skill Based Courses (SBC), Structural Health Monitoring Skills, CE05(P)
- ➤ Health monitoring of existing structures through "Non Destructive Testing Skills".