



Chhattisgarh Swami Vivekanand Technical University (CSVTVU, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION

B Tech (Fifth Semester - Biotechnology Engineering)

Sl. No.	Board of Studies	Courses (Subject)	Course Code	L	T	P	Theory/Lab			Total Marks	Credits
							ESE	CT	TA		
1.	Biotechnology	Entrepreneurship and Startups	C018511(018)	3	1	-	100	20	30	150	4
2.	Biotechnology	Metabolic Engineering	C018512(018)	3	1	-	100	20	30	150	4
3.	Biotechnology	Analytical Techniques	C018513(018)	3	1	-	100	20	30	150	4
4.	Biotechnology	Biosafety and Bioethics	C018514(018)	2	1	-	100	20	30	150	3
5.	Professional Elective-I (Refer Table I)			2	0	-	100	20	30	150	2
6.	Biotechnology	Entrepreneurship and Startups Lab	C018521(018)	-	-	2	40	-	20	60	1
7.	Biotechnology	Metabolic Engineering Lab	C018522(018)	-	-	2	40	-	20	60	1
8.	Biotechnology	Analytical Techniques Lab	C018523(018)	-	-	2	40	-	20	60	1
9.	Biotechnology	Project -I based on summer internship/ Industrial Training	C018524(018)	-	-	2	40	-	20	60	1
10.	Civil Engg.	Environmental Studies	C000506(020)	-	-	2	-	-	10	10	-
TOTAL				13	4	10	660	100	240	1000	21

L – Lecturer
P – Practical,
TA – Teacher's Assessment

T – Tutorial,
ESE – End Semester Exam,

CT – Class Test

Table I (Professional Elective I)

S.N.	Board of Studies	Course Code	Subject
1.	Biotechnology	C018531(018)	Marine Biotechnology
2.	Biotechnology	C018532(018)	Genome Editing
3.	Biotechnology	C018533(018)	Biosimilars Technology

Note: (1) 1/4th of total strength of students subject to minimum of 20 students is required to offer and elective in the college in a particular academic session.

(2) Choice of elective course once made for an examination cannot be changed in future examinations.



[Signature]
PRINCIPAL

RAJPUR INSTITUTE OF TECHNOLOGY
BHATAPURA, BHANDIR HASAUD, RAJPUR (C.G.)



(CSV TU, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION

B Tech (Sixth Semester – Biotechnology Engineering)

Sl. No.	Board of Studies	Courses (Subject)	Course Code	Period per Week			Theory/Lab			Total Marks	Credits
				L	T	P	ESE	CT	TA		
1.	Biotechnology	Plant and Animal Biotechnology	C018611(018)	3	1	-	100	20	30	150	4
2.	Biotechnology	Enzyme Technology	C018612(018)	3	1	-	100	20	30	150	4
3.	Biotechnology	Food Processing Technology	C018613(018)	3	1	-	100	20	30	150	4
4.	Professional Elective-II(Refer Table I)			2	1	-	100	20	30	150	3
5.	Open Elective – I (Refer Table III)			2	0	-	100	20	30	150	2
6.	Biotechnology	Plant and Animal Biotechnology Lab	C018621(018)	-	-	2	40	-	20	60	1
7.	Biotechnology	Enzyme Technology Lab	C018622(018)	-	-	2	40	-	20	60	1
8.	Biotechnology	Food Processing Technology Lab	C018623(018)	-	-	2	40	-	20	60	1
9.	Biotechnology	Professional Elective-II Lab (Refer Table II)		-	-	2	40	-	20	60	1
10.	Humanities	Technical Communication and Soft Skill	C000601(046)	-	-	2	-	-	10	10	-
Total				13	4	10	660	100	240	1000	21

L – Lecturer
P – Practical,

T – Tutorial, TA – Teacher's Assessment
ESE – End Semester Exam,

CT – Class Test

Table I (Professional Elective I)

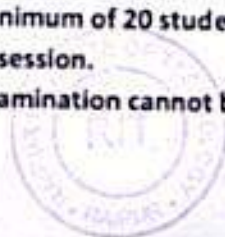
S.N.	Board of Studies	Subject	Course Code
1.	Biotechnology	Machine Learning	C018631(018)
2.	Biotechnology	Waste Management & Up cycling	C018632(018)
3.	Biotechnology	Stem-Cell Technology	C018633(018)

Table II (Professional Elective Lab)

S.N.	Board of Studies	Subject	Course Code
1.	Biotechnology	Machine Learning Lab	C018624(018)
2.	Biotechnology	Waste Management & Up cycling Lab	C018625(018)
3.	Biotechnology	Stem-Cell Technology	C018626(018)

Note: (1) 1/4th of total strength of students subject to minimum of 20 students is required to offer and elective in the college in a particular academic session.

(2) Choice of elective course once made for an examination cannot be changed in future examinations.



Date: _____
Signature: _____



Chhattisgarh Swami Vivekanand Technical University (CSVTV, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION B Tech (Eight Semester - Biotechnology Engineering)

Sl. No.	Board of Studies (BOS)	Courses (Subject)	Course Code	Period per Week			Scheme of Examination			Total Mark	Credit
				L	T	P	Theory/Lab				
							ESE	CT	TA		
1.	Biotechnology	Agriculture Technology	D018811(018)	3	1	-	100	20	30	150	4
2.	Professional Elective-IV (Refer to Table-I)			2	1	-	100	20	30	150	3
3.	Open Elective-III (Refer to Table-III)			2	0	-	100	20	30	150	2
4.	Biotechnology	Agriculture Biotechnology (Lab)	D018821(018)	-	-	2	40	-	20	60	1
5.	Professional Elective Lab-IV (Refer to Table-II)			-	-	2	40	-	20	60	1
6.	Biotechnology	Project (Phase-II)	D018825(018)	-	-	14	350	-	80	430	7
Total Marks				7	2	18	730	60	210	1000	18

L – Lecturer, T – Tutorial, P – Practical, CT – Class Test, ESE – End Semester Exam, TA – Teacher's Assessment

Table-I (Professional Elective – IV)

S.N.	Board of Studies	Course Code	Courses (Subject)
1.	Biotechnology	D018831(018)	Applied Forensics in Biotechnology
2.	Biotechnology	D018832(018)	Biofuel Technology
3.	Biotechnology	D018833(018)	Biofertilizer and Biopesticide

Table-II (Professional Elective Lab – IV)

S.N.	Board of Studies	Course Code	Courses (Subject)
1.	Biotechnology	D018822(018)	Applied Forensics in Biotechnology (Lab)
2.	Biotechnology	D018823(018)	Biofuel Technology (Lab)
3.	Biotechnology	D018824(018)	Biofertilizer and Biopesticide (Lab)

Note: (1) 1/4th of total strength of students subject to minimum of 20 students is required to offer and elective in the college in a particular academic session.

(2) Choice of elective course once made for an examination cannot be changed in future examinations.



[Signature]
PRINCIPAL
RAJIV INSTITUTE OF TECHNOLOGY
DHATAUNDA, RAIPUR (C.G.)



Chhattisgarh Swami Vivekanand Technical University (CSVTU, NEWAI (C.G.))

B.Tech (Eight Semester)

List of Open Elective – III (Table – III) (For 8th Semester)

S.N.	Board of Studies	Course Code	Subject
1	Agriculture Engineering	D000801(094)	Environmental Science
2	Management	D000802(076)	Industrial Engineering & Management
3	Computer Science & Engineering	D000803(022)	Soft Computing Techniques
4	Mechanical	D000804(037)	Composite Materials
5	Electrical & Electronics Engineering	D000805(025)	Industrial Automation
6	Mechanical Engineering	D000806(037)	Production & Product Management
7	Electronics & Telecommunication	D000807(028)	Virtual Instrumentation
8	Computer Science & Engineering	D000808(022)	Data Sciences
9	Mechanical Engineering	D000809(037)	Computational Fluid Dynamics
10	Biotechnology	D000810(018)	Medical Biotechnology
11	Biotechnology	D000811(018)	Bioterrorism and National Security
12	Biotechnology	D000812(018)	Precision Medicine and Wellness
13	Chemical Engineering	D000813(019)	Non Conventional Energy Sources (NCES) (Except Electrical Engg. and Agriculture Engg.)
14	Civil Engineering	D000814(020)	Air pollution and control measures
15	Civil Engineering	D000815(020)	Solid and hazardous waste management
16	Computer Science Engineering	D000816(022)	Natural language processing
17	Computer Science Engineering	D000817(022)	Cluster and Grid Computing
18	Computer Science Engineering	D000818(022)	Blockchain
19	Computer Science Engineering	D000819(022)	Data Compression
20	Electrical & Electronics Engineering	D000820(025)	Power Plant Engineering
21	Electrical & Electronics Engineering	D000821(025)	Utilization of Electrical Energy and Electric Traction
22	Electrical & Electronics Engineering	D000822(025)	Introduction to Micro-electromechanical systems (MEMS)
23	Management	D000823(076)	Management Concept Techniques
24	Electronics & Telecom.	D000824(028)	Operational Research



PROF. DR. S. K. SINGH
HOD, DEPARTMENT OF ELECTRONICS
CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY

25	Electronics & Telecom.	D000825(028)	Android Apps Development
26	Electronics & Telecom.	D000826(028)	Digital Switching & Multiplexing
27	Electronics & Telecom.	D000827(028)	Optimization Techniques
28	Information Technology	D000828(033)	Business Intelligence
29	Information Technology	D000829(033)	Game Theory
30	Information Technology	D000830(033)	Optimization Design And Techniques
31	Information Technology	D000831(033)	Software Metrics and Quality Assurance
33	Mechanical Engineering	D000833(037)	Energy Management and Audit
34	Information Technology	D000834(033)	Cyber Security and Information Security
35	Mechatronics Engineering	D000835(067)	Nanotechnology
36	Computer Science & Engineering	D000836(022)	Supply Chain Management
37	Electrical Engineering	D000837(024)	Electrical Estimation and Costing
38	Computer Science & Engineering	D000838(022)	Data Mining & Warehousing
39	Plastics Engineering	D000839(095)	Fiber Technology
40	Electrical Engineering	D000840(024)	Wind Energy



Handwritten signature
 RAJASTHAN INSTITUTE OF TECHNOLOGY
 DHANADHARA, MANDAL, DIST. RAIPUR (C.O.)



Chhattisgarh Swami Vivekanand Technical University (CSVTV, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION

B Tech (Fifth Semester – Information Technology)

Sl. No.	Board of Studies	Courses (Subject)	Course Code	Period per Week			Theory/Lab			Total Marks	Credits
				L	T	P	ESE	CT	TA		
1.	Information Technology	Artificial Intelligence & Machine Learning	C033511(033)	3	1		100	20	30	150	4
2.	Information Technology	Theory of Computation	C033512(033)	3	1	-	100	20	30	150	4
3.	Information Technology	Principles of Communication System	C033513(033)	3	1	-	100	20	30	150	4
4.	Information Technology	Software Engineering & Project Management	C033514(033)	2	1	-	100	20	30	150	3
	Professional Elective-1 (Refer Table I)			2	0	-	100	20	30	150	2
6.	Information Technology	Artificial Intelligence & Machine Learning Lab	C033521(033)	-	-	2	40	-	20	60	1
7.	Information Technology	Software Engineering & Project Management Lab	C033522(033)	-	-	2	40	-	20	60	1
8.	Information Technology	Principles of Communication System Lab	C033523(033)	-	-	2	40	-	20	60	1
9.	Information Technology	Project-I based on Summer Internship/ Industrial Training	C033524(033)	-	-	2	40	-	20	60	1
10.	Civil Engg.	Environmental Studies	C000506(020)	-	-	2	-	-	10	10	-
Total				13	4	10	660	100	240	1000	21

L – Lecturer, T – Tutorial, P – Practical, CT – Class Test ESE – End Semester Exam TA – Teacher's Assessment

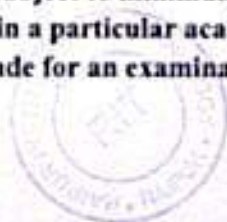
➤ Note: - The students has to attended the four weeks industrial training / summer internship in B. Tech program after fourth semester, which will be evaluated in fifth semester.

Table I (Professional Elective I)

S.N.	Board of Studies	Course Code	Subject
1.	Information Technology	C033531(033)	Design and Analysis of Algorithms
2.	Information Technology	C033532(033)	Computer Vision
3.	Information Technology	C033533(033)	Multimedia Systems
4.	Information Technology	C033534(033)	Signal Processing
5.	Information Technology	C033535(033)	Artificial Neural Networks

Note: (1) 1/4th of total strength of students subject to minimum of 20 students is required to offer and elective in the college in a particular academic session.

(2) Choice of elective course once made for an examination cannot be changed in future examinations.



PRINCIPAL
KAPUR PESTECH TECHNICAL
CHHATTISGARH, INDIA



(CSV TU, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION

B Tech (Sixth Semester – Information Technology)

Sl. No.	Board of Studies	Courses (Subject)	Course Code	Period per Week			Theory/Lab			Total Marks	Credits
				L	T	P	ESE	CT	TA		
1.	Information Technology	Computer Graphics & Data Visualization	C033611(033)	3	1	-	100	20	30	150	4
2.	Information Technology	Compiler Design	C033612(033)	3	1	-	100	20	30	150	4
3.	Information Technology	Information Theory & Coding	C033613(033)	3	1	-	100	20	30	150	4
4.	Professional Elective-II (Refer Table I)			2	1	-	100	20	30	150	3
5.	Open Elective – I (Refer Table II)			2	0	-	100	20	30	150	2
6.	Information Technology	Computer Graphics & Data Visualization Lab	C033621(033)	-	-	2	40	-	20	60	1
7.	Information Technology	Mobile Application Development (Android) Lab	C033622(033)	-	-	2	40	-	20	60	1
8.	Information Technology	Web Application Development Lab	C033623(033)	-	-	2	40	-	20	60	1
9.	Information Technology	Project – I (Android)	C033624(033)	-	-	2	40	-	20	60	1
10.	Humanities	Technical Communication and Soft Skill	C000601(046)	-	-	2	-	-	10	10	-
Total				13	4	10	660	100	240	1000	21

L – Lecturer
P – Practical,

T – Tutorial, TA – Teacher's Assessment
ESE – End Semester Exam,

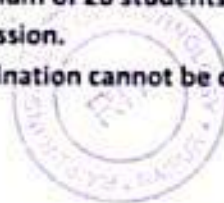
CT – Class Test

Table I (Professional Elective II)

S.N.	Board of Studies	Subject	Course Code
1.	Information Technology	Wireless and Mobile Communication	C033631(033)
2.	Information Technology	Parallel Computing	C033632(033)
3.	Information Technology	Advanced DBMS	C033633(033)
4.	Information Technology	Augmented and Virtual Reality	C033634(033)
5.	Information Technology	Data mining	C033635(033)

Note: (1) 1/4th of total strength of students subject to minimum of 20 students is required to offer and elective in the college in a particular academic session.

(2) Choice of elective course once made for an examination cannot be changed in future examinations.



[Signature]



**Chhattisgarh Swami Vivekanand Technical
University (CSVTV, NEWAI (C.G.))
SCHEME OF TEACHING AND EXAMINATION
B Tech (Seventh Semester – Information Technology)**

Sl.No.	Board of Studies (BOS)	Courses (Subject)	Course Code	Period per Week			Scheme of Examination			Total Marks	Credit
				L	T	P	Theory/Lab				
							ESE	CT	TA		
1.	Information Technology	Cryptography and Network Security	D033711(033)	3	1	-	100	20	30	150	4
2.	Information Technology	Cloud Computing	D033712(033)	2	1	-	100	20	30	150	3
3.	Information Technology	Enterprise Resource Planning	D033713(033)	2	1	-	100	20	30	150	3
	Professional Elective –III (Refer to Table I)			1	1	-	100	20	30	150	2
5.	Open Elective- II (Refer to Table II)			2	0	-	100	20	30	150	2
6.	Information Technology	Cryptography and Network Security Lab	D033721(033)	-	-	2	40	-	20	60	1
7.	Information Technology	Cloud Computing Lab	D033722(033)	-	-	2	40	-	20	60	1
8.	Information Technology	Project (Phase I)	D033723(033)	-	-	6	60	-	40	100	3
9.	Information Technology	Industrial Training	D033724(033)			2			20	20	1
10.	Humanities	Universal Human Values 2	D000701(046)	-	-	2	-	-	10	10	-
Total Marks				10	4	14	640	100	260	1000	20

L – Lecturer, T – Tutorial, P – Practical, CT – Class Test ESE – End Semester Exam TA – Teacher's Assessment

➤ Note: - The students have to attend the four weeks industrial training / summer internship in B. Tech program after sixth semester, which will be evaluated in seventh semester.

Table I (Professional Elective III)

S.N.	Board of Studies	Course Code	Subject
1.	Information Technology	D033731(033)	Natural Language Processing
2.	Information Technology	D033732(033)	Applied Fuzzy logic & Fuzzy Sets
3.	Information Technology	D033733(033)	Grid Computing
4.	Information Technology	D033734(033)	Decision Support System
5.	Information Technology	D033735(033)	Real Time Operating Systems



[Signature]
PRINCIPAL
RAJIV INSTITUTE OF TECHNOLOGY
SRINAGAR, JAMNABAD, RAJASTHAN



**Chhattisgarh Swami Vivekanand Technical
University (CSVTV, NEWAI (C.G.))**
SCHEME OF TEACHING AND EXAMINATION
B Tech (Eighth Semester – Information Technology)

Sl. No.	Board of Studies (BOS)	Courses (Subject)	Course Code	Period per Week			Scheme of Examination			Total Mark	Credit
				L	T	P	Theory/Lab				
							ESE	CT	TA		
1.	Information Technology	Big Data Analytics	D033811(033)	3	1	-	100	20	30	150	4
2.	Professional Elective-IV (Refer to Table-I)			2	1	-	100	20	30	150	3
3.	Open Elective-III (Refer to Table-III)			2	0	-	100	20	30	150	2
4.	Information Technology	Hadoop (Lab)	D033821(033)	-	-	2	40	-	20	60	1
5.	Information Technology	Simulation (Lab)	D033822(033)	-	-	2	40	-	20	60	1
6.	Information Technology	Project (Phase-II)	D033823(033)	-	-	14	350	-	80	430	7
Total Marks				7	2	18	730	60	210	1000	18

L – Lecturer, T – Tutorial, P – Practical, CT – Class Test, ESE – End Semester Exam, TA – Teacher's Assessment

Table-I (Professional Elective-IV)

S.N.	Board of Studies	Course Code	Subject
1.	Information Technology	D033831(033)	Introduction to Data Science
2.	Information Technology	D033832(033)	Digital Image Processing
3.	Information Technology	D033833(033)	Blockchain Technology and Applications
4.	Information Technology	D033834(033)	Deep Learning Fundamentals
5.	Information Technology	D033835(033)	Cyber Security

Note: (1) 1/4th of total strength of students subject to minimum of 20 students is required to offer and elective in the college in a particular academic session.

(2) Choice of elective course once made for an examination cannot be changed in future Examinations.



[Signature]
PRINCIPAL
RAJPUR INSTITUTE OF TECHNOLOGY
CHHATAUNA, BANGSI HASAUL, RAJPUR (C.G.)



University (CSVTV, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION
B Tech (Fifth Semester – Computer Science & Engineering)

Sl. No.	Board of Studies	Courses (Subject)	Course Code	Period per Week			Theory/Lab			Total Marks	Credits
				L	T	P	ESE	CT	TA		
1.	Computer Science & Engineering	Microprocessors & Interfaces	C022511(022)	3	1		100	20	30	150	4
2.	Computer Science Engineering	Computer Networks	C022512(022)	3	1	-	100	20	30	150	4
3.	Computer Science Engineering	Formal Languages and Automata Theory	C022513(022)	3	1	-	100	20	30	150	4
4.	Computer Science Engineering	Data Analytics with Python	C022514(022)	2	1	-	100	20	30	150	3
5.	Professional Elective-I (Refer Table I)			2	0	-	100	20	30	150	2
6.	Computer Science Engineering	Microprocessors & Interfaces Laboratory	C022521(022)	-	-	2	40	-	20	60	1
7.	Computer Science Engineering	Computer Networks Laboratory	C022522(022)	-	-	2	40	-	20	60	1
8.	Computer Science Engineering	Data Analytics with Python Laboratory	C022523(022)	-	-	2	40	-	20	60	1
9.	Computer Science Engineering	Project-I based on Summer Internship/ Industrial Training	C022524(022)	-	-	2	40	-	20	60	1
10.	Civil Engg.	Environmental Studies	C000506(020)	-	-	2	-	-	10	10	-
Total				13	4	10	660	100	240	1000	21

L – Lecturer, T – Tutorial, P – Practical, CT – Class Test ESE – End Semester Exam TA – Teacher's Assessment

- Note: - The students have to attend the four weeks industrial training / summer internship in B. Tech program after fourth semester, which will be evaluated in fifth semester.

Table I (Professional Elective I)

S.N.	Board of Studies	Course Code	Subject
1.	Computer Science Engineering	C022531(022)	Computer Graphics
2.	Computer Science Engineering	C022532(022)	Object Oriented Analysis & Design
3.	Computer Science Engineering	C022533(022)	Digital Image Processing
4.	Computer Science Engineering	C022534(022)	Multimedia & Virtual Reality

Note: (1) 1/4th of total strength of students subject to minimum of 20 students is required to offer and elective in the college in a particular academic session.

(2) Choice of elective course once made for an examination cannot be changed in future



(CSV TU, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION

B Tech (Sixth Semester – Computer Science Engineering)

Sl. No.	Board of Studies	Courses (Subject)	Course Code	Period per Week			Theory/Lab			Total Marks	Credits
				L	T	P	ESE	CT	TA		
1.	Computer Science Engg.	Compiler Design	C022611(022)	3	1	-	100	20	30	150	4
2.	Computer Science Engg.	Software Engineering & Project Management	C022612(022)	3	1	-	100	20	30	150	4
3.	Computer Science Engg.	Artificial Intelligence & Expert Systems	C022613(022)	3	1	-	100	20	30	150	4
4.	Professional Elective-II (Refer Table I)			2	1	-	100	20	30	150	3
5.	Open Elective – I (Refer Table III)			2	0	-	100	20	30	150	2
6.	Computer Science Engg.	Software Engineering & Project Management Laboratory	C022621(022)	-	-	2	40	-	20	60	1
7.	Computer Science Engg.	Artificial Intelligence & Expert Systems Laboratory	C022622(022)	-	-	2	40	-	20	60	1
8.	Professional Elective –II(Lab) (Refer Table II)			-	-	2	40	-	20	60	1
9.	Computer Science Engg.	Android Application Laboratory	C022627(022)	-	-	2	40	-	20	60	1
10.	Non-Credit	Technical Communication and Soft Skill	C000601(046)	-	-	2	-	-	10	10	-
Total				13	4	10	660	100	240	1000	21

L – Lecturer
P – Practical,

T – Tutorial, TA – Teacher's Assessment
ESE – End Semester Exam,

CT – Class Test

Table I (Professional Elective II)

S.N.	Board of Studies	Subject	Course Code
1.	Computer Science Engg	Web Technologies	C022631(022)
2.	Computer Science Engg	Internet Of Things	C022632(022)
3.	Computer Science Engg	Soft Computing	C022633(022)
4.	Computer Science Engg	Network Programming	C022634(022)

Table II (Professional Elective II Lab)

S.N.	Board of Studies	Subject	Course Code
1.	Computer Science Engg	Web Technologies lab	C022623(022)
2.	Computer Science Engg	Internet Of Things Lab	C022624(022)
3.	Computer Science Engg	Soft Computing Lab	C022625(022)
4.	Computer Science Engg	Network Programming Lab	C022626(022)



Principal
Rajiv Gandhi Institute of Technology
Bhatinda, Punjab 151001



Chhattisgarh Swami Vivekanand Technical University (CSVTV, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION B Tech (Seventh Semester – Computer Science Engineering)

Sl. No.	Board of Studies (BOS)	Courses (Subject)	Course Code	Period per Week			Scheme of Examination			Total Marks	Credit
				L	T	P	Theory/Lab				
							ESE	CT	TA		
1.	Computer Science Engg.	Machine Learning	D022711(022)	3	1	-	100	20	30	150	4
2.	Computer Science Engg.	Data Mining and Warehousing	D022712(022)	2	1	-	100	20	30	150	3
3.	Computer Science Engg.	Internet and Web Technology	D022713(022)	2	1	-	100	20	30	150	3
Professional Elective –III (Refer to Table I)				1	1	-	100	20	30	150	2
5.	Open Elective- II (Refer to Table II)			2	0	-	100	20	30	150	2
6.	Computer Science Engg.	Machine Learning Lab	D022721(022)	-	-	2	40	-	20	60	1
7.	Computer Science Engg.	Internet and Web Technology Lab	D022722(022)	-	-	2	40	-	20	60	1
8.	Computer Science Engg.	Project (Phase I)	D022723(022)	-	-	6	60	-	40	100	3
9.	Computer Science Engg.	Industrial Training	D022724(022)			2			20	20	1
10.	Humanities	Universal Human Values 2	D000701(046)	-	-	2	-	-	10	10	-
Total Marks				10	4	14	640	100	260	1000	20

L – Lecturer, T – Tutorial, P – Practical, CT – Class Test ESE – End Semester Exam TA – Teacher's Assessment

➤ Note: - The students have to attend the four weeks industrial training / summer internship in B. Tech program after sixth semester, which will be evaluated in seventh semester.

Table I (Professional Elective III)

S.N.	Board of Studies	Course Code	Subject
1.	Computer Science Engg.	D022731(022)	Parallel and Distributed Algorithms
2.	Computer Science Engg.	D022732(022)	Cyber Security
3.	Computer Science Engg.	D022733(022)	Quantum Computing
4.	Computer Science Engg.	D022734(022)	Distributing Systems

Note: (1) 1/4th of total strength of students subject to minimum of 20 students is required to offer and elective in the college in a particular academic session.

(2) Choice of elective course once made for an examination cannot be changed in future examinations.



Chhattisgarh Swami Vivekanand Technical University (CSVTV, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION

B.Tech (Eight Semester – Computer Science Engineering)

Sl. No.	Board of Studies (BOS)	Courses (Subject)	Course Code	Period per Week			Scheme of Examination			Total Mark	Credit
				L	T	P	Theory/Lab				
							ESE	CT	TA		
1.	Computer Science Engineering	Cyber Law and Intellectual Property	D022811(022)	3	1	-	100	20	30	150	4
2.	Professional Elective-IV (Refer to Table-I)			2	1	-	100	20	30	150	3
3.	Open Elective-III (Refer to Table-III)			2	0	-	100	20	30	150	2
4.	Computer Science Engineering	Computer Vision Laboratory	D022821(022)	-	-	2	40	-	20	60	1
5.	Computer Science Engineering	R Programming Laboratory	D022822(022)	-	-	2	40	-	20	60	1
6.	Computer Science Engineering	Project (Phase-II)	D022823(022)	-	-	14	350	-	80	430	7
Total Marks				7	2	18	730	60	210	1000	18

L – Lecturer, T – Tutorial, P – Practical, CT –Class Test, ESE – End Semester Exam, TA – Teacher's Assessment

Table-I (Professional Elective-IV)

S.N.	Board of Studies	Course Code	Subject
1	Computer Science Engineering	D022831(022)	Introduction to Game Theory
2	Computer Science Engineering	D022832(022)	R Programming
3	Computer Science Engineering	D022833(022)	Multimedia & Computer Vision
4	Computer Science Engineering	D022833(022)	Augmented & Virtual Reality

Note: (1) 1/4th of total strength of students subject to minimum of 20 students is required to offer and elective in the college in a particular academic session.

(2) Choice of elective course once made for an examination cannot be changed in future Examinations.



[Signature]
PRINCIPAL
RAJIV INSTITUTE OF TECHNOLOGY
DHATAUNA, BILASAR, RAJASTHAN



Chhattisgarh Swami Vivekanand Technical University (CSVTVU, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION

B Tech (Fifth Semester – Mechanical Engineering)

Sl. No.	Board of Studies	Courses (Subject)	Course Code	Period per Week			Theory/Lab			Total Marks	Credits
				L	T	P	ESE	CT	TA		
1.	Mech. Engg.	Internal Combustion Engine	C037511(037)	2	1		100	20	30	150	3
2.	Mech. Engg.	Solid Mechanics	C037512(037)	3	1	-	100	20	30	150	4
3.	Mech. Engg.	Fluid Machines	C037513(037)	2	1	-	100	20	30	150	4
4.	Mech. Engg.	Dynamics of Machine	C037514(037)	3	1	-	100	20	30	150	3
5.	Professional Elective-1 (Refer Table I)			2	1	-	100	20	30	150	3
6.	Mech. Engg.	Internal Combustion Engine Lab	C037521(037)	-	-	2	40	-	20	60	1
7.	Mech. Engg.	Dynamics of Machine Lab	C037522(037)	-	-	2	40	-	20	60	1
8.	Mech. Engg.	Fluid Machines Lab	C037523(037)	-	-	2	40	-	20	60	1
9.	Mech. Engg.	Project-I based on Summer Internship/ Industrial Training	C037524(037)	-	-	2	40	-	20	60	1
10.	Civil Engg.	Environmental Studies	C000506(020)	-	-	2	-	-	10	10	-
Total				13	5	10	660	100	240	1000	21

L – Lecturer, T – Tutorial, P – Practical, CT – Class Test ESE – End Semester Exam TA – Teacher's Assessment

- Note: - The students have to attend the four weeks industrial training / summer internship in B. Tech program after fourth semester, which will be evaluated in fifth semester.

Table I (Professional Elective I)

S.N.	Board of Studies	Course Code	Subject
1.	Mechanical Engg.	C037531(037)	Operation Research
2.	Mechanical Engg.	C037532(037)	Composite Materials
3.	Mechanical Engg.	C037533(037)	Gas Dynamics and Jet Propulsion

Note: (1) 1/4th of total strength of students subject to minimum of 20 students is required to offer and elective in the college in a particular academic session.

(2) Choice of elective course once made for an examination cannot be changed in future examinations.



PRINCIPAL
RAJIV INSTITUTE OF TECHNOLOGY
33644TAUNA, BHANDHARASAR, RAIPUR (C.G.)



(CSV TU, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION

B Tech (Sixth Semester – Mechanical Engineering)

Sl. No.	Board of Studies	Courses (Subject)	Course Code	Period per Week			Theory/Lab			Total Marks	Credits
				L	T	P	ESE	CT	TA		
1.	Mech. Engg.	Design of Machine Elements	C037611(037)	3	1	-	100	20	30	150	4
2.	Mech. Engg.	Manufacturing Technology	C037612(037)	3	1	-	100	20	30	150	4
3.	Mech. Engg.	Heat & Mass Transfer	C037613(037)	3	1	-	100	20	30	150	4
4.	Professional Elective-II (Refer Table I)			2	1	-	100	20	30	150	3
5.	Open Elective – I (Refer Table II)			2	0	-	100	20	30	150	2
6.	Mech. Engg.	Design of Machine Elements Lab	C037621(037)	-	-	2	40	-	20	60	1
7.	Mech. Engg.	Computer Aided Modeling & Analysis Lab	C037622(037)	-	-	2	40	-	20	60	1
8.	Mech. Engg.	Heat & Mass Transfer Lab	C037623(037)	-	-	2	40	-	20	60	1
9.	Mech. Engg.	Virtual Lab-2	C037624(037)	-	-	2	40	-	20	60	1
10.	Humanities	Technical Communication and Soft Skill	C000601(046)	-	-	2	-	-	10	10	-
Total				13	4	10	660	100	240	1000	21

L – Lecturer
P – Practical,

T – Tutorial, TA – Teacher's Assessment
ESE – End Semester Exam,

CT – Class Test

Table I (Professional Elective II)

S.N.	Board of Studies	Subject	Course Code
1.	Mechanical Engineering	Finite Element Analysis	C037631(037)
2.	Mechanical Engineering	Power Plant Engineering	C037632(037)
3.	Mechanical Engineering	Maintenance and Reliability	C037633(037)

Note: (1) 1/4th of total strength of students subject to minimum of 20 students is required to offer and elective in the college in a particular academic session.

(2) Choice of elective course once made for an examination cannot be changed in future examinations.



[Signature]
PRINCIPAL
RAJPUR INSTITUTE OF TECHNOLOGY
DHATAUDA, RAJPUR (C.G.)



Chhattisgarh Swami Vivekanand Technical University (CSVTV, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION B Tech (Seventh Semester – Mechanical Engineering)

Sl.No.	Board of Studies (BOS)	Courses (Subject)	Course Code	Period per Week			Scheme of Examination			Total Marks	Credit
				L	T	P	Theory/Lab				
							ESE	CT	TA		
1.	Mechanical Engg.	Design of Transmission System	D037711(037)	3	1	-	100	20	30	150	4
2.	Mechanical Engg.	Refrigeration & Air-Conditioning	D037712(037)	2	1	-	100	20	30	150	3
3.	Mechanical Engg.	Automation in Manufacturing	D037713(037)	2	1	-	100	20	30	150	3
Professional Elective –III (Refer to Table I)				1	1	-	100	20	30	150	2
5.	Open Elective- II (Refer to Table II)			2	0	-	100	20	30	150	2
6.	Mechanical Engg.	Refrigeration & Air-Conditioning Lab	D037721(037)	-	-	2	40	-	20	60	1
7.	Mechanical Engg.	CIM & Automation Lab	D037722(037)	-	-	2	40	-	20	60	1
8.	Mechanical Engg.	Project (Phase I)	D037723(037)	-	-	6	60	-	40	100	3
9.	Mechanical Engg.	Industrial Training	D037724(037)			2			20	20	1
10.	Humanities	Universal Human Values 2	D000701(046)	-	-	2	-	-	10	10	-
Total Marks				10	4	14	640	100	260	1000	20

L – Lecturer, T – Tutorial, P – Practical, CT – Class Test ESE – End Semester Exam TA – Teacher's Assessment

➤ Note: - The students have to attend the four weeks industrial training / summer internship in B. Tech program after sixth semester, which will be evaluated in seventh semester.

Table I (Professional Elective III)

S.N.	Board of Studies	Course Code	Subject
1.	Mechanical Engg.	D037731(037)	Machine Tool Technology
2.	Mechanical Engg.	D037732(037)	Quality Control and Total Quality Management
3.	Mechanical Engg.	D037733(037)	Thermal System Design
4.	Mechanical Engg.	D037734(037)	Industrial Hydraulics
5.	Mechanical Engg.	D037735(037)	Applied Elasticity and Plasticity



PRINCIPAL
RAIPUR INSTITUTE OF TECHNOLOGY
DHATAUNA, RAIPUR (C.G.)



**Chhattisgarh Swami Vivekanand Technical
University (CSVTV, NEWAI (C.G.))**
SCHEME OF TEACHING AND EXAMINATION
B.Tech (Eighth Semester – Mechanical Engineering)

Sl. No.	Board of Studies (BOS)	Courses (Subject)	Course Code	Period per Week			Scheme of Examination			Total Mark	Credit
				L	T	P	Theory/Lab				
							ESE	CT	TA		
1.	Mechanical Engineering	Robotics	D037811(037)	3	1	-	100	20	30	150	4
2.	Professional Elective – IV (Refer to Table – I)			2	1	-	100	20	30	150	3
3.	Open Elective – III (Refer to Table – III)			2	0	-	100	20	30	150	2
4.	Mechanical Engineering	Robotics (Lab)	D037821(037)	-	-	2	40	-	20	60	1
5.	Mechanical Engineering	Computer Aided Simulation & Analysis (Lab)	D037822(037)	-	-	2	40	-	20	60	1
6.	Mechanical Engineering	Project (Phase-II)	D037823(037)	-	-	14	350	-	80	430	7
Total Marks				7	2	18	730	60	210	1000	18

L – Lecturer, T – Tutorial, P – Practical, CT – Class Test, ESE – End Semester Exam, TA – Teacher's Assessment

Table – I (Professional Elective – IV)

S.N.	Board of Studies	Course Code	Subject
1	Mechanical Engineering	D037831(037)	Automobile Engineering
2	Mechanical Engineering	D037832(037)	Computational Fluid Dynamics
3	Mechanical Engineering	D037833(037)	Product Design and Development
4	Mechanical Engineering	D037834(037)	Vibration and Noise Control
5	Mechanical Engineering	D037835(037)	Mechanical Handling System and Equipments
6	Mechanical Engineering	D037836(037)	Numerical Control of Machine Tools

Note: (1) 1/4 th of total strength of students subject to minimum of 20 students is required to offer and elective in the college in a particular academic session.

(2) Choice of elective course once made for an examination cannot be changed in future Examinations.





Chhattisgarh Swami Vivekanand Technical University (CSVTV, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION

B Tech (Fifth Semester - CIVIL ENGINEERING)

Sl. No.	Board of Studies	Courses (Subject)	Course Code	Period per Week			Theory/Lab			Total Marks	Credits
				L	T	P	ESE	CT	TA		
1.	Civil Engg.	Structural Engineering Design-I	C020511(020)	3	1	-	100	20	30	150	4
2.	Civil Engg.	Hydrology & Water Resources Engineering	C020512(020)	3	1	-	100	20	30	150	4
3.	Civil Engg.	Geotechnical Engineering	C020513(020)	3	1	-	100	20	30	150	4
4.	Civil Engg.	Transportation Engineering	C020514(020)	2	1	-	100	20	30	150	3
5.	Professional Elective -I(Refer Table I)			2	0	-	100	20	30	150	2
6.	Civil Engg.	Structural Analysis lab	C020521(020)	-	-	2	40	-	20	60	1
7.	Civil Engg.	Transportation Engineering Lab	C020522(020)	-	-	2	40	-	20	60	1
8.	Civil Engg.	Geotechnical Engineering Lab	C020523(020)	-	-	2	40	-	20	60	1
9.	Civil Engg.	Project-I based on Summer Internship/ Industrial Training	C020524(020)	-	-	2	40	-	20	60	1
10.	Civil Engg.	Environmental Studies	C000506(020)	-	-	2	-	-	10	10	-
Total				13	4	10	660	100	240	1000	21

L – Lecturer

P – Practical,

TA – Teacher's Assessment

T – Tutorial,

ESE – End Semester Exam,

CT – Class Test

Professional Elective I

S.N.	Board of Studies	Course Code	Subject
1	Civil Engg	C020531(020)	Structural Analysis-II
2	Civil Engg	C020532(020)	Repairs and rehabilitation of structures
3	Civil Engg	C020533(020)	Groundwater Engineering

Note: (1) 1/4th of total strength of students subject to minimum of 20 students is required to offer and elective in the college in a particular academic session.

(2) Choice of elective course once made for an examination cannot be changed in future examinations.



PRINCIPAL
RAJPUR INSTITUTE OF TECHNOLOGY
CHHATTISGARH, RAJPUR (C.G.)



(CSVTU, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION

B Tech (Sixth Semester – Civil Engineering)

Sl. No.	Board of Studies	Courses (Subject)	Course Code	Period per Week			Theory/Lab			Total Marks	Credits
				L	T	P	ESE	CT	TA		
1.	Civil Engg	Structural Engineering Design-II	C020611(020)	3	1	-	100	20	30	150	4
2.	Civil Engg	Environmental Engineering	C020612(020)	3	1	-	100	20	30	150	4
3.	Civil Engg	Engineering economics, estimating and costing	C020613(020)	3	1	-	100	20	30	150	4
4.	Professional Elective-II (Refer Table I)			2	1	-	100	20	30	150	3
5.	Open Elective – I (Refer Table II)			2	0	-	100	20	30	150	2
6.	Civil Engg	Structural Engineering Lab	C020621(020)	-	-	2	40	-	20	60	1
7.	Civil Engg	Environmental Engineering Lab	C020622(020)	-	-	2	40	-	20	60	1
8.	Civil Engg	Computer Aided Civil Engineering Drawing lab	C020623(020)	-	-	2	40	-	20	60	1
9.	Civil Engg	Concrete Technology Lab	C020624(020)	-	-	2	40	-	20	60	1
10.	Humanities	Technical Communication and Soft Skill	C000601(046)	-	-	2	-	-	10	10	-
Total				13	4	10	660	100	240	1000	21

L – Lecturer
P – Practical,

T – Tutorial, TA – Teacher's Assessment
ESE – End Semester Exam,

CT – Class Test

Table I (Professional Elective II)

S.N.	Board of Studies	Subject	Course Code
1.	Civil Engg	Structural Analysis by matrix method	C020631(020)
2.	Civil Engg	Concrete technology	C020632(020)
3.	Civil Engg	Traffic engineering and management	C020633(020)

Note: (1) 1/4th of total strength of students subject to minimum of 20 students is required to offer and elective in the college in a particular academic session.

(2) Choice of elective course once made for an examination cannot be changed in future examinations.



PRINCIPAL
 RAIPUR INSTITUTE OF TECHNOLOGY
 BHAGAT SINGH MARG, RAIPUR (C.G.)



**Chhattisgarh Swami Vivekanand Technical
University (CSVTV, NEWAI (C.G.))**
SCHEME OF TEACHING AND EXAMINATION
B Tech (Seventh Semester - Civil Engineering)

Sl.No.	(BOS)	Courses (Subject)	Course Code	Period per Week			Scheme of Examination			Total Marks	Credit
				L	T	P	Theory/Lab				
							ESE	CT	TA		
1.	Civil Engg	Structural design-III engineering	D020711(020)	3	1	-	100	20	30	150	4
2.	Civil Engg	Design of hydraulic structures	D020712(020)	2	1	-	100	20	30	150	3
3.	Civil Engg	Foundation Engineering	D020713(020)	2	1	-	100	20	30	150	3
4.	Professional Elective -III (Refer to Table I)			1	1	-	100	20	30	150	2
5.	Open Elective- II (Refer to Table II)			2	0	-	100	20	30	150	2
6.	Civil Engg	Advanced Geotechnical Engineering lab.	D020721(020)	-	-	2	40	-	20	60	1
7.	Civil Engg	Advanced Environmental engineering lab	D020722(020)	-	-	2	40	-	20	60	1
8.	Civil Engg	Project (Phase I)	D020723(020)	-	-	6	60	-	40	100	3
9.	Civil Engg	Industrial Training	D020724(020)			2			20	20	1
10.	Humanities	Universal Human Values 2	D000701(046)	-	-	2	-	-	10	10	-
Total Marks				10	4	14	640	100	260	1000	20

L – Lecturer, T – Tutorial, P – Practical, CT – Class Test ESE – End Semester Exam TA – Teacher's Assessment

➤ Note: - The students have to attend the four weeks industrial training / summer internship in B. Tech program after sixth semester, which will be evaluated in seventh semester.

Table I (Professional Elective III)

S.N.	Board of Studies	Course Code	Subject
1.	Civil Engineering	D020731(020)	Seismic design of structures
2.	Civil Engineering	D020732(020)	Pre stressed Concrete
3.	Civil Engineering	D020733(020)	Construction equipment and techniques

Note: (1) 1/4th of total strength of students subject to minimum of 20 students is required to offer and elective in the college in a particular academic session.

(2) Choice of elective course once made for an examination cannot be changed in future examinations.



Signature
RIT
RAJIV INSTITUTE OF TECHNOLOGY
RAIPUR, CHHATTISGARH



**Chhattisgarh Swami Vivekanand Technical
University (CSVTV, NEWAI (C.G.))**
SCHEME OF TEACHING AND EXAMINATION
B.Tech (Eight Semesters - Civil Engineering)

B.Tech (Eight Semesters - Civil Engineering)												
Sl.No.	Board of Studies (BOS)	Courses (Subject)	Course Code	Period per Week			Scheme of Examination			Total Mark	Credit	
				L	T	P	Theory/Lab					
							ESE	CT	TA			
1.	Civil Engineering	Structural Engineering Design-IV	D020811(020)	3	1	-	100	20	30	150	4	
2.	Professional Elective – IV (Refer to Table-I)			2	1	-	100	20	30	150	3	
3.	Open Elective – III (Refer to Table-III)			2	0	-	100	20	30	150	2	
4.	Civil Engineering	Structural Engineering Drawing (Lab)	D020821(020)	-	-	2	40	-	20	60	1	
5.	Civil Engineering	Computer Application in Civil Engineering (Lab)	D020822(020)	-	-	2	40	-	20	60	1	
6.	Civil Engineering	Project (Phase-II)	D020823(020)	-	-	14	350	-	80	430	7	
Total Marks				7	2	18	730	60	210	1000	18	

L – Lecturer, T – Tutorial, P – Practical, CT – Class Test, ESE – End Semester Exam, TA – Teacher's Assessment

Table-I (Professional Elective-IV)

S.N.	Board of Studies	Course Code	Courses (Subject)
1.	Civil Engineering	D020831(020)	Airport Planning and Design
2.	Civil Engineering	D020832(020)	Open Channel Flow
3.	Civil Engineering	D020833(020)	Construction Management

Note: (1) 1/4 th of total strength of students subject to minimum of 20 students is required to offer and elective in the college in a particular academic session.

(2) Choice of elective course once made for an examination cannot be changed in future Examinations.



[Signature]
PRINCIPAL
RAIPUR INSTITUTE OF TECHNOLOGY
CHHATTISGARH, INDIA



Chhattisgarh Swami Vivekanand Technical University (CSVTV, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION

B Tech (Fifth Semester - ELECTRICAL & ELECTRONICS ENGINEERING)

Sl. No.	Board of Studies	Courses (Subject)	Course Code	L	T	P	Theory/Lab			Total Marks	Credits
							ESE	CT	TA		
1.	EEE	Signal & System	C025511(025)	3	1	-	100	20	30	150	4
2.	EEE	Control System	C025512(025)	3	1	-	100	20	30	150	4
3.	EEE	Electrical Power System-I	C025513(025)	3	1	-	100	20	30	150	4
4.	EEE	Micro Processor and Micro Controller	C025514(025)	2	1	-	100	20	30	150	3
5.	EEE	Professional Elective -I (Refer Table I)		2	0	-	100	20	30	150	2
6.	EEE	Control System Lab	C025521(025)	-	-	2	40	-	20	60	1
7.	EEE	Electrical Power System-I Lab	C025522(025)	-	-	2	40	-	20	60	1
8.	EEE	Micro Processor and Micro Controller Lab	C025523(025)	-	-	2	40	-	20	60	1
9.	EEE	Project-I based on Summer Internship/ Industrial Training	C025524(025)	-	-	2	40	-	20	60	1
10.	Civil Engg.	Environmental Studies	C000506(020)	-	-	2	-	-	10	10	-
Total				13	4	10	660	100	240	1000	21

L – Lecturer
P – Practical,
TA – Teacher's Assessment

T – Tutorial,
ESE – End Semester Exam,

CT – Class Test

Professional Elective I

S.N.	Board of Studies	Course Code	Subject
1	EEE	C025531(025)	Linear Integrated Circuit
2	EEE	C025532(025)	Electrical Machine Design
3	EEE	C025533(025)	Modern Instrumentation Techniques
4	EEE	C025534(025)	Wind and Solar Energy Systems
5	EEE	C025535(025)	Testing & Commissioning of Electrical Equipments

Note: (1) 1/4th of total strength of students subject to minimum of 20 students is required to offer and elective in the college in a particular academic session.

(2) Choice of elective course once made for an examination cannot be changed in future

PRINCIPAL
RAIPUR INSTITUTE OF TECHNOLOGY
CHHATAULA, MANDAL HASAUD, RAIPUR (C.G.)



(CSV TU, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION

B Tech (Sixth Semester – Electrical and Electronics Engineering)

Sl. No.	Board of Studies	Courses (Subject)	Course Code	Period per Week			Theory/Lab			Total Marks	Credits
				L	T	P	ESE	CT	TA		
1.	EEE	Power Electronics	C025611(025)	3	1	-	100	20	30	150	4
2.	EEE	Electrical Power System-II	C025612(025)	3	1	-	100	20	30	150	4
3.	EEE	Digital Signal Processing	C025613(025)	3	1	-	100	20	30	150	4
4.	Professional Elective-II (Refer Table I)			2	1	-	100	20	30	150	3
5.	Open Elective – I (Refer Table II)			2	0	-	100	20	30	150	2
6.	EEE	Power Electronics lab	C025621(025)	-	-	2	40	-	20	60	1
7.	EEE	Electrical Power System-II Lab	C025622(025)	-	-	2	40	-	20	60	1
8.	EEE	Computer Simulation Lab	C025623(025)	-	-	2	40	-	20	60	1
9.	EEE	Digital Signal Processing lab	C025624(025)	-	-	2	40	-	20	60	1
10.	Humanities	Technical Communication and Soft Skill	C000601(046)	-	-	2	-	-	10	10	-
Total				13	4	10	660	100	240	1000	21

L – Lecturer
P – Practical,

T – Tutorial, TA – Teacher's Assessment
ESE – End Semester Exam,

CT – Class Test

Table I (Professional Elective II)

S.N.	Board of Studies	Subject	Course Code
1.	EEE	Communication System	C025631(025)
2.	EEE	Distributed Generation	C025632(025)
3.	EEE	Testing & Commissioning of Electrical Equipments	C025633(025)
4.	EEE	Simulation & Programming	C025634(025)
5.	EEE	Medical Electronics	C025635(025)

Note: (1) 1/4th of total strength of students subject to minimum of 20 students is required to offer and elective in the college in a particular academic session.

(2) Choice of elective course once made for an examination cannot be changed in future examinations.



PRINCIPAL
RAIPUR INSTITUTE OF TECHNOLOGY
DHANALAYA, MANDELA, RAIPUR (C.G.)



Chhattisgarh Swami Vivekanand Technical University (CSVTVU, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION B Tech (Seventh Semester – Electrical & Electronics Engineering)

Engineering)											
Sl. No.	Board of Studies (BOS)	Courses (Subject)	Course Code	Period per Week			Scheme of Examination			Total Marks	Credit
				L	T	P	Theory/Lab				
							ESE	CT	TA		
1.	EEE	Power System Protection	D025711(025)	3	1	-	100	20	30	150	4
2.	EEE	Electrical Drives	D025712(025)	2	1	-	100	20	30	150	3
3.	EEE	High Voltage Engineering	D025713(025)	2	1	-	100	20	30	150	3
4.	Professional Elective –III (Refer to Table I)			1	1	-	100	20	30	150	2
5.	Open Elective- II (Refer to Table II)			2	0	-	100	20	30	150	2
6.	EEE	Power System Protection Lab	D025721(025)	-	-	2	40	-	20	60	1
7.	EEE	High Voltage Engineering Lab	D025722(025)	-	-	2	40	-	20	60	1
8.	EEE	Project (Phase I)	D025723(025)	-	-	6	60	-	40	100	3
9.	EEE	Industrial Training	D025724(025)			2			20	20	1
10.	Humanities	Universal Human Values 2	D000701(046)	-	-	2	-	-	10	10	-
Total Marks				10	4	14	640	100	260	1000	20

L – Lecturer, T – Tutorial, P – Practical, CT – Class Test ESE – End Semester Exam TA – Teacher's Assessment

➤ Note: - The students have to attend the four weeks industrial training / summer internship in B. Tech program after sixth semester, which will be evaluated in seventh semester.

Table I (Professional Elective III)

S.N.	Board of Studies	Course Code	Subject
1.	EEE	D025731(025)	Soft Computing Techniques
2.	EEE	D025732(025)	Illumination Engineering
3.	EEE	D025733(025)	Industrial Electrical Systems
4.	EEE	D025734(025)	Electric and Hybrid vehicle
5.	EEE	D025735(025)	VLSI Design

Note: (1) 1/4th of total strength of students subject to minimum of 20 students is required to offer and elective in the college in a particular academic session.

(2) Choice of elective course once made for an examination cannot be changed in future examinations.



[Signature]
PRINCIPAL
RAJABAI INSTITUTE OF TECHNOLOGY
CHHATTISGARH, RAJABAI (C.G.)



Chhattisgarh Swami Vivekanand Technical University (CSVTVU, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION

B Tech (Eight Semester – Electrical & Electronics Engineering)

Sl. No.	Board of Studies (BOS)	Courses (Subject)	Course Code	Period per Week			Scheme of Examination			Total Mark	Credit
				L	T	P	Theory/Lab				
							ESE	CT	TA		
1.	Electrical & Electronics Engineering	Computer Aided Power System	D025811(025)	3	1	-	100	20	30	150	4
2.	Professional Elective-IV (Refer to Table-I)			2	1	-	100	20	30	150	3
3.	Open Elective-III (Refer to Table-III)			2	0	-	100	20	30	150	2
6.	Electrical & Electronics Engineering	Computer Aided Power System (Lab)	D025821(025)	-	-	2	40	-	20	60	1
7.	Electrical & Electronics Engineering	Installation, Maintenance and Testing of Electrical Equipment (Lab)	D025822(025)	-	-	2	40	-	20	60	1
8.	Electrical & Electronics Engineering	Project (Phase-II)	D025823(025)	-	-	14	350	-	80	430	7
Total Marks				7	2	18	730	60	210	1000	18

L – Lecturer, T – Tutorial, P – Practical, CT – Class Test ESE – End Semester Exam TA – Teacher's Assessment

Table-I (Professional Elective-IV)

S.N.	Board of Studies	Course Code	Subject
1.	Electrical & Electronics Engineering	D025831(025)	Power Apparatus System
2.	Electrical & Electronics Engineering	D025832(025)	Power System Dynamics and Control
3.	Electrical & Electronics Engineering	D025833(025)	Control Systems Design
4.	Electrical & Electronics Engineering	D025834(025)	EHV AC & DC Transmission
5.	Electrical & Electronics Engineering	D025835(025)	Flexible AC Transmission System

Note: (1) 1/4th of total strength of students subject to minimum of 20 students is required to offer and elective in the college in a particular academic session.

(2) Choice of elective course once made for an examination cannot be changed in future Examinations.



[Signature]
PRINCIPAL
RUPPUR INSTITUTE OF TECHNOLOGY
3014 DURA, NARDA HASTAG, RUPPUR (C.G.)



Chhattisgarh Swami Vivekanand Technical University (CSVTV, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION

B Tech (Fifth Semester - Chemical Engineering)

Sl. No.	Board of Studies	Courses (Subject)	Course Code	Period per Week			Theory/Lab			Total Marks	Credits
				L	T	P	ESE	CT	TA		
1.	Chemical Engineering	Chemical Engineering Thermodynamics	C019511(019)	3	1	-	100	20	30	150	4
2.	Chemical Engineering	Chemical Engineering Reaction	C019512(019)	3	1	-	100	20	30	150	4
3.	Chemical Engineering	Process Equipment Design - I	C019513(019)	3	1	-	100	20	30	150	4
4.	Chemical Engineering	Mechanical Operation	C019514(019)	2	1	-	100	20	30	150	3
5.	Professional Elective-I(Refer Table I)			2	0	-	100	20	30	150	2
6.	Chemical Engineering	Chemical Engineering Lab Reaction	C019521(019)	-	-	2	40	-	20	60	1
7.	Chemical Engineering	Process Equipment Design - I Viva	C019522(019)	-	-	2	40	-	20	60	1
8.	Chemical Engineering	Mechanical Operation Lab	C019523(019)	-	-	2	40	-	20	60	1
9.	Chemical Engineering	Project - I (Based on Summer Internship/Industrial Training)	C019524(019)	-	-	2	40	-	20	60	1
10.	Non-Credit	Environmental Studies	C000506(020)	-	-	2	-	-	10	10	-
Total				13	4	10	660	100	240	1000	21

L – Lecturer

P – Practical,

TA – Teacher's Assessment

T – Tutorial,

ESE – End Semester Exam,

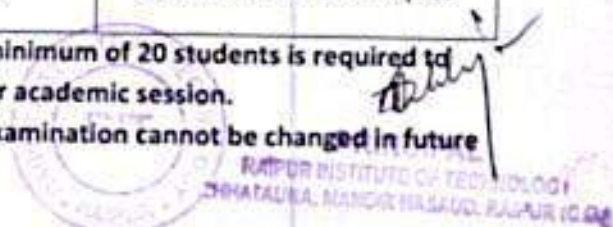
CT – Class Test

Table I (Professional Elective I)

S.N.	Board of Studies	Course Code	Subject
1.	Chemical Engineering	C019531(019)	Nanotechnology
2.	Chemical Engineering	C019532(019)	Optimization Techniques

Note: (1) 1/4th of total strength of students subject to minimum of 20 students is required to offer and elective in the college in a particular academic session.

(2) Choice of elective course once made for an examination cannot be changed in future examinations.





**Chhattisgarh Swami Vivekanand Technical
University (CSVTV, NEWAI (C.G.))
SCHEME OF TEACHING AND EXAMINATION
B Tech (Sixth Semester – Chemical Engineering)**

Sl. No.	Board of Studies	Courses (Subject)	Course Code	Period per Week			Theory/Lab			Total Marks	Credits
				L	T	P	ESE	CT	TA		
1.	Chemical Engineering	Mass Transfer –I	C019611(019)	3	1	-	100	20	30	150	4
2.	Chemical Engineering	Transport Phenomena	C019612(019)	3	1	-	100	20	30	150	4
3.	Chemical Engineering	Process Equipment Design –II	C019613(019)	3	1	-	100	20	30	150	4
4.	Professional Elective-II (Refer Table I)			2	1	-	100	20	30	150	3
5.	Open Elective – I (Refer Table III)			2	0	-	100	20	30	150	2
6.	Chemical Engineering	Mass Transfer –I Lab	C019621(019)	-	-	2	40	-	20	60	1
7.	Chemical Engineering	Transport Phenomena - Lab	C019622(019)	-	-	2	40	-	20	60	1
8.	Chemical Engineering	Process Equipment Design –II - Viva	C019623(019)	-	-	2	40	-	20	60	1
9.	Professional Elective – II Lab (Refer Table II)			-	-	2	40	-	20	60	1
10.	Humanities	Technical Communication and Soft Skill	C000601(046)	-	-	2	-	-	10	10	-
Total				13	4	10	660	100	240	1000	21

L – Lecturer
P – Practical,

T – Tutorial, TA – Teacher's Assessment
ESE – End Semester Exam,

CT –ClassTest

Table I (Professional Elective II)

S.N.	Board of Studies	Subject	Course Code
1.	Chemical Engineering	Petroleum Refinery Engineering	C019631(019)
2.	Chemical Engineering	Polymer Science & Engineering	C019632(019)

Table I (Professional Elective II Lab)

S.N.	Board of Studies	Subject	Course Code
1.	Chemical Engineering	Petroleum Refinery Engineering	C019624(019)
2.	Chemical Engineering	Polymer Science & Engineering	C019625(019)

Note: (1) 1/4th of total strength of students subject to minimum of 20 students is required to offer and Elective in the college in a particular academic session.

(2) Choice of elective course once made for an examination cannot be changed in future examinations.



PRINCIPAL
RAIPUR INSTITUTE OF TECHNOLOGY
RAIPUR, CHHATTISGARH



Chhattisgarh Swami Vivekanand Technical University (CSVTVU, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION B Tech (Seventh Semester - Chemical Engineering)

C-Tech (Seventh Semester - Chemical Engineering)											
Sl. No.	Board of Studies (BOS)	Courses (Subject)	Course Code	Period per Week			Scheme of Examination			Total Marks	Credit
				L	T	P	Theory/Lab				
							ESE	CT	TA		
1.	Chemical Engg	Mass Transfer-II	D019711(019)	3	1	-	100	20	30	150	4
2.	Chemical Engg	Process Dynamics & Control	D019712(019)	2	1	-	100	20	30	150	3
3.	Chemical Engg	Process Equipment Design-III	D019713(019)	2	1	-	100	20	30	150	3
4.	Professional Elective -III (Refer to Table I)			1	1	-	100	20	30	150	2
5.	Open Elective- II (Refer to Table II)			2	0	-	100	20	30	150	2
6.	Chemical Engg	Mass Transfer-II Lab	D019721(019)	-	-	2	40	-	20	60	1
7.	Chemical Engg	Process Dynamics & Control Lab	D019722(019)	-	-	2	40	-	20	60	1
8.	Chemical Engg	Project (Phase I)	D019723(019)	-	-	6	60	-	40	100	3
9.	Chemical Engg	Industrial Training	D019724(019)			2			20	20	1
10.	Humanities	Universal Human Values 2	D000701(046)	-	-	2	-	-	10	10	-
Total Marks				10	4	14	640	100	260	1000	20

L - Lecturer, T - Tutorial, P - Practical, CT - Class Test ESE - End Semester Exam TA - Teacher's Assessment

➤ Note: - The students have to attend the four weeks industrial training / summer internship in B. Tech program after sixth semester, which will be evaluated in seventh semester.

Table I (Professional Elective III)

S.N.	Board of Studies	Course Code	Subject
1.	Chemical Engineering	D019731(019)	Solid Waste Engineering
2.	Chemical Engineering	D019732(019)	Food Technology

Note: (1) 1/4th of total strength of students subject to minimum of 20 students is required to offer and elective in the college in a particular academic session.

(2) Choice of elective course once made for an examination cannot be changed in future examinations.



[Signature]
PRINCIPAL
RAIPUR INSTITUTE OF TECHNOLOGY
BHATAUNA, MAHARAJA SAHU, RAIPUR (C.G.)



**Chhattisgarh Swami Vivekanand Technical
University (CSVTV, NEWAI (C.G.))**
SCHEME OF TEACHING AND EXAMINATION
B.Tech (Eight Semester - Chemical Engineering)

B.Tech (Eight Semester - Chemical Engineering)											
Sl.No.	Board of Studies (BOS)	Courses (Subject)	Course Code	Period per Week			Scheme of Examination			Total Mark	Credit
				L	T	P	Theory/Lab				
							ESE	CT	TA		
1.	Chemical Engineering	Modeling & Simulation (MS)	D019811(019)	3	1	-	100	20	30	150	4
2.	Professional Elective – IV (Refer to Table – I)			2	1	-	100	20	30	150	3
3.	Open Elective – III (Refer to Table – III)			2	0	-	100	20	30	150	2
4.	Chemical Engineering	Modeling & Simulation (Lab) (MS Lab)	D019821(019)	-	-	2	40	-	20	60	1
5.	Chemical Engineering	Biochemical Engineering (Lab) (BCE Lab)	D019822(019)	-	-	2	40	-	20	60	1
6.	Chemical Engineering	Project (Phase – II)	D019823(019)	-	-	14	350	-	80	430	7
Total Marks				7	2	18	730	60	210	1000	18

L – Lecturer, T – Tutorial, P – Practical, CT – Class Test, ESE – End Semester Exam, TA – Teacher's Assessment

Table-I (Professional Elective-IV)

S.N.	Board of Studies	Course Code	Subject
1.	Chemical Engineering	D019831(019)	Biochemical Engineering (BCE)
2.	Chemical Engineering	D019832(019)	Membrane Science & Technology (MST)

Note: (1) 1/4th of total strength of students subject to minimum of 20 students is required to offer and elective in the college in a particular academic session.

(2) Choice of elective course once made for an examination cannot be changed in future examinations.



[Signature]
PRINCIPAL
RAJPUT INSTITUTE OF TECHNOLOGY
BHATAUNA, MAHESWARA, RAIPUR (C.G.)



Chhattisgarh Swami Vivekanand Technical University (CSVTV, NEWAI (C.G.))

B Tech (Sixth Semester)

List of Open Elective – I (Table III) (For 6th Semester)

S.N.	Board of Studies	Subject	Course Code
1	Agriculture Engg.	Food Packaging Technology	C000601(094)
2	Agriculture Engg.	Energy Management & Audit	C000602(094)
3	Agriculture Engg.	Energy Conservation & Management	C000603(094)
4	Agriculture Engg.	Disaster Management	C000604(094)
5	Agriculture Engg.	Ecology and Sustainable Development	C000605(094)
6	Agriculture Engg.	Non Conventional Energy Sources	C000606(094)
7	Mechanical Engineering	Safety Engineering	C000607(037)
8	Mechanical Engineering	Value Engineering	C000608(037)
9	Mechanical Engineering	Managing Innovation & Entrepreneurship	C000609(037)
10	Mechanical Engineering	Environment Pollution & Control	C000610(037)
11	Management	Enterprise Resource Planning ((Except CSE & IT Branch))	C000611(076)
12	Computer Science Engg.	Artificial Intelligence	C000612(022)
13	Computer Science Engg.	Quantum Computing	C000613(022)
14	Computer Science Engg.	Cyber Security	C000614(022)
15	Civil Engg.	Construction engineering and management	C000615(020)
16	Civil Engg.	Metro system and engineering	C000616(020)
17	Civil Engg.	Infrastructure Planning and Management	C000617(020)
18	Computer Science Engg.	Parallel Processing & Computing	C000618(022)
19	Computer Science Engg.	Cryptography & Network Security	C000619(022)
20	Computer Science Engg.	Cloud Computing	C000620(022)
21	Computer Science Engg.	Computer Networks	C000621(022)
22	Computer Science Engg.	Internet of Things	C000622(022)
23	Computer Science Engg.	Data Structures and Algorithms	C000623(022)
24	Computer Science Engg.	Big Data Analytics	C000624(022)
25	Electrical and Electronics Engg.	Electrical Estimation and Costing	C000625(025)
26	Electrical and Electronics Engg.	Energy Auditing and Management	C000626(025)
27	Management	Finance Management	C000627(076)
28	Mechanical Engineering	Safety Engineering	C000628(037)
29	Electronics & Telecom.	AI and Machine learning	C000629(028)
30	Electronics & Telecom.	Operating Systems	C000630(028)
31	Electronics & Telecom.	Internet & Web Technology	C000631(028)
32	Electronics & Telecom.	Database Management Systems (DBMS)	C000632(028)
33	Electronics & Telecom.	Device Modelling	C000633(028)
34	Electronics & Telecom.	Introduction to MEMS	C000634(028)
35	Mechanical Engineering	Principles of Management	C000635(037)
36	Mechanical Engineering	Advanced I.C. Engines	C000636(037)



Signature

OFFICE OF THE
PROFESSOR IN CHARGE
TECHNICAL EDUCATION
RAJIV GANDHI INSTITUTE OF TECHNOLOGY

37	Mechanical Engineering	Mechanical Vibrations & Condition Monitoring	C000637(037)
38	Mechatronics	Entrepreneurship Developments	C000638(067)
39	Plastic Engineering	Heat Transfer Operation	C000639(095)
40	Plastic Engineering	Process Economics and Management	C000640(095)
41	Plastic Engineering	Adhesive and Surface Coating	C000641(095)
42	Information Technology	E-Commerce	C000642(033)
43	Information Technology	Industrial Economics and Management	C000643(033)
44	Information Technology	Project Planning & Management	C000644(033)
45	Information Technology	Bio-Informatics	C000645(033)
46	Information Technology	Management Information System	C000646(033)
47	Chemical Engineering	Plant Utility & Safety Engineering	C000647(019)
48	Chemical Engineering	Environment Pollution & Control	C000648(019)



Handwritten signature
PRINCIPAL
 RAJPUR INSTITUTE OF TECHNOLOGY
 BHARATPUR, DISTRICT TALUKA BHARATPUR (C.D.)



Chhattisgarh Swami Vivekanand Technical University (CSVTV, NEWAI (C.G.))

B Tech (Seventh Semester)

List of Open Elective – II (Table III) (For 7th Semester)

S.N.	Board of Studies	Course Code	Subject
1	Agriculture Engg	D000701(094)	Biomass Management For Fodder And Energy.
2	Agriculture Engg	D000702(094)	Gully And Ravine Control Structures
3	Civil Engg	D000703(020)	Design Of Structures.
4	Agriculture Engg	D000704(094)	Reservoir And Farm Pond Design.
5	Mechanical	D000705(037)	3 D Printing & design
6	Management	D000706(076)	Technology Management
7	Information Technology	D000707(033)	Decision Support & Executive Information system
8	CSE	D000708(022)	Software Technology
9	Management	D000709(076)	Knowledge Entrepreneurship
10	Management	D000710(076)	Intellectual Property Rights
11	Biotechnology	D000711(018)	Phytochemistry
12	Biotechnology	D000712(018)	Clinical Research and Trial Management
13	Biotechnology	D000713(018)	Cellular and Molecular Diagnostics
14	Chemical Engineering	D000714(019)	Environmental Legislation & Impact Assessment
15	Civil Engineering	D000715(020)	Environmental management and Legislations
16	Civil Engineering	D000716(020)	Hydraulics of water and waste water
17	Civil Engineering	D000717(020)	Disaster Management
18	CSE	D000718(022)	Neural Network and Deep Learning
19	CSE	D000719(022)	Big data and Hadoop
20	CSE	D000720(022)	BioInformatics
21	CSE	D000721(022)	Software Testing
22	EEE	D000722(025)	Switched Mode Power Converter
23	EEE	D000723(025)	Internet of Things
24	EEE	D000724(025)	Non Conventional Energy Sources
25	EEE	D000725(025)	Sensors and Transducers
26	Information Technology	D000726(033)	E-Commerce & strategic IT
27	Computer Science & Engg.	D000727(022)	Software Technology
28	Electrical Engineering	D000728(024)	Solar PV Energy System
29	Mechanical Engineering	D000729(037)	Energy Conservation & Management
30	Information Technology	D000730(033)	Information Theory & Coding
31	Management	D000731(076)	Project Planning, Management & Evaluation
32	Electronics & Telecom	D000732(028)	Java Programming
33	Electronics & Telecom	D000733(028)	Cloud computing



PRINCIPAL
RAIPUR INSTITUTE OF TECHNOLOGY
DHATAUNA, NANGIR HASAUD, RAIPUR (C.G.)

34	Electronics & Telecom	D000734(028)	Big data Mining
35	Electronics & Telecom	D000735(028)	Cryptography & Network security
36	Electronics & Telecom	D000736(028)	Neural Network & Fuzzy Logic
37	Electronics & Telecom	D000737(028)	RF IC Design
38	Information Technology	D000738(033)	Graph Theory And Applications
39	Information Technology	D000739(033)	Biometrics
40	Information Technology	D000740(033)	Quantum Computing
41	Information Technology	D000741(033)	Entrepreneurship essentials
42	Information Technology	D000742(033)	Managerial Skills
43	Mechanical Engineering	D000743(037)	Mechatronics
44	Mechanical Engineering	D000744(037)	Engineering Economics
45	Mechanical Engineering	D000745(037)	Computer Graphics
46	Mechanical Engineering	D000746(037)	Control Engineering
47	Management	D000747(076)	Finance Management
48	Mechanical Engg.	D000748(037)	Energy Conservation & Management
49	Plastics Engineering	D000749(095)	Renewable Energy
50	Plastics Engineering	D000750(095)	Plastics Waste Management and Recycling




 PRINCIPAL
 RAJPUR INSTITUTE OF TECHNOLOGY
 BHATAPUR, HANUMAN MANDAL, RAJPUR IC Q2



Chhattisgarh Swami Vivekanand Technical University (CSVTV, NEWAI (C.G.))

B.Tech (Eight Semester)

List of Open Elective – III (Table – III) (For 8th Semester)

S.N.	Board of Studies	Course Code	Subject
1	Agriculture Engineering	D000801(094)	Environmental Science
2	Management	D000802(076)	Industrial Engineering & Management
3	Computer Science & Engineering	D000803(022)	Soft Computing Techniques
4	Mechanical	D000804(037)	Composite Materials
5	Electrical & Electronics Engineering	D000805(025)	Industrial Automation
6	Mechanical Engineering	D000806(037)	Production & Product Management
7	Electronics & Telecommunication	D000807(028)	Virtual Instrumentation
8	Computer Science & Engineering	D000808(022)	Data Sciences
9	Mechanical Engineering	D000809(037)	Computational Fluid Dynamics
10	Biotechnology	D000810(018)	Medical Biotechnology
11	Biotechnology	D000811(018)	Bioterrorism and National Security
12	Biotechnology	D000812(018)	Precision Medicine and Wellness
13	Chemical Engineering	D000813(019)	Non Conventional Energy Sources (NCES) (Except Electrical Engg. and Agriculture Engg.)
14	Civil Engineering	D000814(020)	Air pollution and control measures
15	Civil Engineering	D000815(020)	Solid and hazardous waste management
16	Computer Science Engineering	D000816(022)	Natural language processing
17	Computer Science Engineering	D000817(022)	Cluster and Grid Computing
18	Computer Science Engineering	D000818(022)	Blockchain
19	Computer Science Engineering	D000819(022)	Data Compression
20	Electrical & Electronics Engineering	D000820(025)	Power Plant Engineering
21	Electrical & Electronics Engineering	D000821(025)	Utilization of Electrical Energy and Electric Traction
22	Electrical & Electronics Engineering	D000822(025)	Introduction to Micro-electromechanical systems (MEMS)
23	Management	D000823(076)	Management Concept Techniques
24	Electronics & Telecom.	D000824(028)	Operational Research



[Signature]
PRINCIPAL
RAIPUR INSTITUTE OF TECHNOLOGY
BHIMATADIA, RAIPUR (C.G.)

25	Electronics & Telecom.	D000825(028)	Android Apps Development
26	Electronics & Telecom.	D000826(028)	Digital Switching & Multiplexing
27	Electronics & Telecom.	D000827(028)	Optimization Techniques
28	Information Technology	D000828(033)	Business Intelligence
29	Information Technology	D000829(033)	Game Theory
30	Information Technology	D000830(033)	Optimization Design And Techniques
31	Information Technology	D000831(033)	Software Metrics and Quality Assurance
33	Mechanical Engineering	D000833(037)	Energy Management and Audit
34	Information Technology	D000834(033)	Cyber Security and Information Security
35	Mechatronics Engineering	D000835(067)	Nanotechnology
36	Computer Science & Engineering	D000836(022)	Supply Chain Management
37	Electrical Engineering	D000837(024)	Electrical Estimation and Costing
38	Computer Science & Engineering	D000838(022)	Data Mining & Warehousing
39	Plastics Engineering	D000839(095)	Fiber Technology
40	Electrical Engineering	D000840(024)	Wind Energy



Handwritten signature

PRINCIPAL

RAJPUR INSTITUTE OF TECHNOLOGY
BHATAPUR, MANDI HATIA, RAJPUR IC 62

Chhattisgarh Swami Vivekanand Technical University, Bhilai

SCHEME OF TEACHING & EXAMINATION

B.E. (VIII Semester) BIOTECHNOLOGY

S.No.	Board of Study	Subject Code	Subject	Period per week			Scheme of Exam			Total Marks	Credit L+(T+P)/2
				L	T	P	ESE	CT	TA		
1	Biotechnology	318831(18)	Industrial Biotechnology	3	1	-	80	20	20	120	4
2	Biotechnology	318832(18)	Food Processing Technology	4	1	-	80	20	20	120	5
3	Biotechnology	318833(18)	Agriculture Technology	4	1	-	80	20	20	120	5
4	Refer Table III		Professional Elective III	4	-	-	80	20	20	120	4
5	Refer Table IV		Open Elective	4	-	-	80	20	20	120	4
6	Biotechnology	318861(18)	Industrial Biotechnology Lab	-	-	3	40	-	20	60	2
7	Biotechnology	318862(18)	Food Processing Technology Lab	-	-	3	40	-	20	60	2
8	Biotechnology	318863(18)	Agriculture Technology Lab	-	-	3	40	-	20	60	2
9	Biotechnology	318864(18)	Major Project	-	-	6	100	-	80	180	3
10	Biotechnology	318865(18)	Report writing and Seminar	-	-	2	-	-	40	40	1
11			Library	-	-	1	-	-	-	-	-
			Total	19	3	18	620	100	280	1000	32

SCHEME OF TEACHING & EXAMINATION VIII Sem BIOTECHNOLOGY

L: Lecture, T: Tutorial, P: Practical, ESE: End Semester Exam, CT: Class Test, TA: Teachers Assessment

Note: Duration of all theory papers will be of Three Hours.

Professional Elective Table III

S.No	Board of Studies	Subject Code	Subject
1	Biotechnology	318841(18)	Bioentrepreneurship



Signature
PRINCIPAL
 RAJIV INSTITUTE OF TECHNOLOGY
 MANDALBAUD, RAIPUR

2	Biotechnology	318842(18)	Clinical Research and Trial Management
3	Biotechnology	318843(18)	Cellular and Molecular Diagnostics

Table IV Open Elective

Open Elective -IV			
S.No.	Board of Studies	Code	Name of Subject
1	Management	300851(76)	Enterprise Resource Planning (Except CSE & IT Branch)
2	Information Technology	300852(33)	E-Commerce & strategic IT (Except CSE & IT Branch)
3	Management	300853(76)	Technology Management
4	Information Technology	300854(33)	Decision Support & Executive Information system
5	Computer Science & Engg.	300855(22)	Software Technology
6	Management	300856(76)	Knowledge Entrepreneurship
7	Management	300857(76)	Finance Management
8	Management	300858(76)	Project Planning, Management & Evaluation
9	Mechanical Engg.	300859(37)	Safety Engineering
10	Computer Science & Engg.	300801(22)	Bio Informatics
11	Mechanical Engg.	300802(37)	Energy Conservation & Management
12	Nanotechnology	300803(47)	Nanotechnology
13	Management	300804(76)	Intellectual Property Rights
14	Mechanical Engg.	300805(37)	Value Engineering
15	Civil Engg.	300806(20)	Disaster Management
16	Civil Engg.	300807(20)	Construction Management
17	Civil Engg.	300808(20)	Ecology and Sustainable Development
18	Chem. Engg.	300809(19)	Non Conventional Energy Sources
19	Electrical Engg.	300810(24)	Energy Auditing & Management (Except Electrical Engg. Branch)
20	Mechanical Engg.	300811(37)	Managing Innovation & Entrepreneurship
21	Information Technology	300812(33)	Biometrics
22	Information Technology	300813(33)	Information Theory & Coding
23	Computer Science & Engg.	300814(22)	Supply Chain Management
24	Computer Science & Engg.	300815(22)	Internet & Web Technology
25	Electrical Engg.	300816(24)	Electrical Estimation and Costing
26	Electrical & Electronics Engg.	300817(25)	Non Conventional Energy Sources
27	Computer Science & Engg.	300818(22)	Big Data and Hadoop

Note (1) 1/4th of total strength of students is required to offer an elective in the college in a particular academic session.

(2) -Choice of elective course once made for an examination cannot be changed



PRINCIPAL
RAIPUR INSTITUTE OF TECHNOLOGY
CHHATAUNA, MANDIRHASAÚ, RAIPUR (C.G.)

Chhattisgarh Swami Vivekanand Technical University, Bhilai

SCHEME OF TEACHING & EXAMINATION VII Sem. BIOTECHNOLOGY

S.No.	Board of Study	Subject Code	Subject	Period per week			Scheme of Exam			Total Marks	Credit $L+(T+P)/2$
				L	T	P	ESE	CT	TA		
1	Chemical Engineering	318731(19)	Unit Operation	4	1	-	80	20	20	120	5
2	Biotechnology	318732(18)	Immunotechnology	4	1	-	80	20	20	120	5
3	Biotechnology	318733(18)	Stem Cell in Health Care	4	-	-	80	20	20	120	4
4	Biotechnology	318734(18)	Pharmaceutical Biotechnology	4	1	-	80	20	20	120	5
5	Refer Table II		Professional Elective-II	4	-	-	80	20	20	120	4
6	Chemical Engineering	318761(19)	Unit Operation Lab	-	-	3	40	-	20	60	2
7	Biotechnology	318762(18)	Immunotechnology Lab	-	-	3	40	-	20	60	2
8	Biotechnology	318763(18)	Pharmaceutical Biotechnology Lab	-	-	3	40	-	20	60	2
9	Biotechnology	318764(18)	Minor Project	-	-	4	100	-	40	140	2
10	Management	318765(76)	Innovative and Entrepreneurial Skills	-	-	2	-	-	40	40	1
11	Humanities	318766(46)	Practical Training ** Evaluation / Library	-	-	2	-	-	40	40	1
			Total	20	3	17	620	100	280	1000	33

L: Lecture, T: Tutorial, P: Practical, ESE: End Semester Exam, CT: Class Test, TA: Teachers Assessment
 Note: Duration of all theory papers will be of Three Hours.

****To be completed after VI semester and before the commencement of VII semester.**

Professional Elective Table II

S.No	Board of Studies	Subject Code	Subject
1	Biotechnology	318741(18)	Oncology
2	Biotechnology	318742(18)	Drug Design and Drug Delivery
3	Biotechnology	318743(18)	Biofuel technology



Principal
PRINCIPAL
 RAIPUR INSTITUTE OF TECHNOLOGY
 CHHAIJANA, RAJAHMUNDRAM, RAIPUR (C.G.)

Chhattisgarh Swami Vivekanand Technical University Bhilai (C.G.)

SCHEME OF TEACHING & EXAMINATION

B.E. (VI Semester) BIOTECHNOLOGY

S. No.	Board of Study	Subject Code	Subject	Period per week			Scheme of Exam			Total Marks	Credit L+(T+P)/2
				L	T	P	ESE	CT	TA		
1	Biotechnology	318651 (18)	Bioprocess Technology	3	1	-	80	20	20	120	4
2	Biotechnology	318652 (18)	Basic Immunology	3	1	-	80	20	20	120	4
3	Biotechnology	318653 (18)	Environmental Biotechnology	3	1	-	80	20	20	120	4
4	Biotechnology	318654 (18)	Bioinformatics	3	1	-	80	20	20	120	4
5	Biotechnology	318655 (18)	Applied forensics in Biotechnology	3	1	-	80	20	20	120	4
6	Refer Table I		Professional Elective -I	4	-	-	80	20	20	120	4
7	Biotechnology	318661 (18)	Bioprocess Technology Lab	-	-	3	40	-	20	60	2
8	Biotechnology	318662 (18)	Basic Immunology Lab	-	-	3	40	-	20	60	2
9	Biotechnology	318663 (18)	Environmental Biotechnology Lab	-	-	3	40	-	20	60	2
10	Biotechnology	318664 (18)	Bioinformatics Lab	-	-	3	40	-	20	60	2
11	Management	300665 (76)	Managerial Skills	-	-	2	-	-	40	40	1
12	Biotechnology	-----	Library	-	-	1	-	-	-	-	-
Total				19	5	15	640	120	240	1000	33

L: Lecture T: Tutorial P: Practical
ESE: End Semester Examination CT: Class Test TA: Teachers' Assessment

Note: Industrial Training of eight weeks is mandatory for B.E. students. It is to be completed in two equal parts. The first part must have been completed in summer after IV semester. The second part to be completed during summer after VI semester after which students have to submit a training report which will be evaluated by college teachers during B.E. VII semester.

Table I: Professional Elective - I

S. No	Board of Studies	Subject Code	Subject
1	Biotechnology	318671 (18)	Biofertilizer and Biopesticide
2	Biotechnology	318672 (18)	Biomechanics
3	Biotechnology	318673 (18)	Marine Biotechnology
4	Biotechnology	318674 (18)	Bioprocess Plant Design
5	Biotechnology	318675 (18)	Catalyst Engineering
6	Biotechnology	318676 (18)	Fertilizer Technology

Name of the Programme: Bachelor of Engineering in Duration of the Programme:



Principal
PRINCIPAL
RAIPUR INSTITUTE OF TECHNOLOGY
CHHATAUNA, MANDIRHASAUD, RAIPUR (C.G.)

**CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY,
BHILAI (C.G.)**

**SCHEME OF TEACHING AND EXAMINATION
SEMESTER VIII CHEMICAL ENGINEERING**

S. No	Board of Study	Subject Code	Subject	Period per week			Scheme of Exam Theory/Practical			Total Marks	Credit
				L	T	P	ESE	CT	TA		
1	Chemical Engineering	319831(19)	Process Equipment Design III	4	1	-	80	20	20	120	5
2	Chemical Engineering	319832(19)	Modeling and Simulation	3	1	-	80	20	20	120	4
3	Chemical Engineering	319833(19)	Process Dynamics and Control	4	1	-	80	20	20	120	5
4	Refer Table -III		Professional Elective-III	4	0	-	80	20	20	120	4
5	Refer Table-IV		Open Elective-IV	4	0	-	80	20	20	120	4
6	Chemical Engineering	319861(19)	Process Equipment Design-III Viva	-	-	3	40		20	60	2
7	Chemical Engineering	319862(19)	Modeling and Simulation Lab	-	-	3	40		20	60	2
8	Chemical Engineering	319863(19)	Process Dynamics and Control Lab	-	-	3	40		20	60	2
9	Chemical Engineering	319864(19)	Major Project	-	-	6	100		80	180	3
10	Management	319865(76)	Report Writing and Seminar	-	-	2	-		40	40	1
11	Chemical Engineering		Library	-	-	1	-		-		-
Total				19	3	18	620	100	280	1000	32

**Table - III
Professional Elective- III**

Board of Study	Subject Code	Subject
Chemical	319841(19)	Process Economics and Management
Chemical	319842(19)	Process Engg. & Costing
Chemical	319843(19)	Sugar Technology
Chemical	319844(19)	Pulp and Paper Technology

- Note:** 1. All theory papers will be of three hours duration
 2. 1/4th of total strength of students subject to minimum of 20 students is required to offer an elective in the college in a particular Academic session.
 3. Choice of elective course once made for an examination cannot be change in future examination.

L- Lecture, T- Tutorial, P- Practical, ESE- End Semester Exam, TA- Teacher's Assessment



Principal
PRINCIPAL
 RAIPUR INSTITUTE OF TECHNOLOGY
 CHHATAUNA, KANDAMASAUD, RAIPUR (C.G.)

Table - IV

Open Elective -IV			
S.No.	Board of Studies	Code	Name of Subject
1	Management	300851(76)	Enterprise Resource Planning (Except CSE & IT Branch)
2	Information Technology	300852(33)	E-Commerce & strategic IT (Except CSE & IT Branch)
3	Management	300853(76)	Technology Management
4	Information Technology	300854(33)	Decision Support & Executive Information system
5	Computer Science & Engg.	300855(22)	Software Technology
6	Management	300856(76)	Knowledge Entrepreneurship
7	Management	300857(76)	Finance Management
8	Management	300858(76)	Project Planning, Management & Evaluation
9	Mechanical Engg.	300859(37)	Safety Engineering
10	Computer Science & Engg.	300801(22)	Bio Informatics
11	Mechanical Engg.	300802(37)	Energy Conservation & Management
12	Nanotechnology	300803(47)	Nanotechnology
13	Management	300804(76)	Intellectual Property Rights
14	Mechanical Engg.	300805(37)	Value Engineering
15	Civil Engg.	300806(20)	Disaster Management
16	Civil Engg.	300807(20)	Construction Management
17	Civil Engg.	300808(20)	Ecology and Sustainable Development
18	Chem. Engg.	300809(19)	Non Conventional Energy Sources
19	Electrical Engg.	300810(24)	Energy Auditing & Management (Except Electrical Engg. Branch)
20	Mechanical Engg.	300811(37)	Managing Innovation & Entrepreneurship
21	Information Technology	300812(33)	Biometrics
22	Information Technology	300813(33)	Information Theory & Coding
23	Computer Science & Engg.	300814(22)	Supply Chain Management
24	Computer Science & Engg.	300815(22)	Internet & Web Technology
25	Electrical Engg.	300816(24)	Electrical Estimation and Costing
26	Electrical & Electronics Engg.	300817(25)	Non Conventional Energy Sources
27	Computer Science & Engg.	300818(22)	Big Data and Hadoop

Note (1) 1/4th of total strength of students is required to offer an elective in the college in a particular academic session.

(2) Choice of elective course once made for an examination cannot be changed



[Signature]
 PRINCIPAL
 RAJSHREE INSTITUTE OF TECHNOLOGY
 K. J. Somaiya Institute of Management Studies & Research

**CHHATTISGARH SWAMI VIVEKANAD TECHNICAL UNIVERSITY,
BHILAI (C.G.)**

**SCHEME OF TEACHING AND EXAMINATION
SEMESTER VII CHEMICAL ENGINEERING**

S. No	Board of Study	Subject Code	Subject	Period per Week			Scheme of Exam Theory/Practical			Total Marks	Credit
				L	T	P	ESE	CT	TA		
1	Chemical Engineering	319731(19)	Petroleum Refinery Engineering	4	1	-	80	20	20	120	5
2	Chemical Engineering	319732(19)	Environment legislation and Impact Assessment	3	1	-	80	20	20	120	4
3	Chemical Engineering	319733(19)	Separation Processes - II	4	1	-	80	20	20	120	5
4	Chemical Engineering	319734(19)	Process Equipment Design-II	4	1	-	80	20	20	120	5
5	Refer Table -II		Professional Elective-II	4	1	-	80	20	20	120	5
6	Chemical Engineering	319761(19)	Petroleum Refinery Engineering - lab	-	-	3	40		20	60	2
7	Chemical Engineering	319762(19)	Separation Processes-II -Lab	-	-	3	40		20	60	2
8	Chemical Engineering	319763(19)	Process Equipment Design-II Viva	-	-	3	40		20	60	2
9	Chemical Engineering	319764(19)	Minor Project	-	-	4	100		40	140	2
10	Management	319765(76)	Innovative and Entrepreneurial Skills	-	-	2	-		40	40	1
11	Chemical Engineering	319766(19)	**Practical Training and Library	-	-	1	-		40	40	1
Total				19	5	16	620	100	280	1000	34

Table - II

Professional Elective-II		
Board of Study	Subject Code	Subject
Chemical	319741(19)	Reactor Design
Chemical	319742(19)	Transport Phenomena
Chemical	319743(19)	Polymer Technology
Chemical	319744(19)	Oil and Fat Technology

Note: 1. All theory papers will be of three hours duration

2. ** To be completed after VI semester and before the Commencement of VII semester

3. 1/4th of total strength of students subject to minimum of 20 students is required to offer an elective in the college in a particular Academic session.

4. Choice of elective course once made for an examination cannot be change in future examination.

L- Lecture, T- Tutorial, P- Practical, ESE- End Semester Exam, TA- Teacher's Assessment



Principal
PRINCIPAL
RAIPUR INSTITUTE OF TECHNOLOGY
CHHATAUNA, MANDIRHASAUD, RAIPUR (C.G.)

CHHATTISGARH SWAMI VIVEKANANDA TECHNICAL UNIVERSITY BHILAI (C.G.)

SCHEME OF TEACHING AND EXAMINATION BE (VI Semester) CHEMICAL ENGINEERING

S. No	Board of Study	Subject Code	Subject	Period per Week			Scheme of Exam Theory/Practical			Total Marks	Credit $L+(T+P)/2$
				L	T	P	ESE	CT	TA		
1	Chemical Engineering	319651 (19)	Systems Analysis and computer programming	3	1	-	80	20	20	120	4
2	Chemical Engineering	319652 (19)	Chemical Reaction Engineering	3	1	-	80	20	20	120	4
3	Chemical Engineering	319653 (19)	Separation Processes -I	4	1	-	80	20	20	120	4
4	Chemical Engineering	319654 (19)	Process Safety and Plant Utility	4	1	-	80	20	20	120	4
5	Chemical Engineering	319655 (19)	Process Equipment Design I	4	1	-	80	20	20	120	4
6	Refer Table -I		Professional Elective - I	4	-	-	80	20	20	120	4
7	Chemical Engineering	319661 (19)	Systems Analysis and computer programming lab	-	-	3	40		20	60	2
8	Chemical Engineering	319662 (19)	Chemical Reaction Engineering Lab	-	-	3	40		20	60	2
9	Chemical Engineering	319663 (19)	Separation Processes I Lab	-	-	3	40		20	60	2
10	Chemical Engineering	319664 (19)	Process Equipment Design-I Viva	-	-	2	40		20	60	2
11	Management	300665 (76)	Managerial Skills	-	-	2	-		20	20	1
12			Seminar/Library	-	-	1			20	20	1
Total				22	4	14	640	120	240	1000	34

Table - I: Professional Elective - I

Board of Study	Subject Code	Subject
Chemical Engineering	319671 (19)	Optimization Technique
Chemical Engineering	319672 (19)	Membrane Science and Engineering
Chemical Engineering	319673 (19)	Project Engineering
Chemical Engineering	319674 (19)	Nanotechnology

L- Lecture, T- Tutorial, P- Practical, ESE- End Semester Exam, TA- Teacher's Assessment

Note:

- Industrial Training of eight weeks is mandatory for B.E. students. It is to be completed in two equal parts. The first part must have been completed in summer after IV semester. The second part to be completed during summer after VI semester after which students have to submit a training report which will be evaluated by college teachers during B.E. VII semester.
- 1/4th of total strength of students subject to minimum of 20 students is required to offer an elective in the college in a particular Academic session.
- Choice of elective course once made for an examination cannot be change in future examination.



Name of the Programme: Bachelor of Engineering

Duration of the Programme: 4 Years

[Signature]
PRINCIPAL
RAJAPUR INSTITUTE OF TECHNOLOGY
CHHATTISGARH, RAJAPUR (C.G.)

Chhattisgarh Swami Vivekanand Technical University, Bhilai

SCHEME OF TEACHING & EXAMINATION

R.E. (Civil) – 8th SEMESTER

S. No.	Board of Study	Subject Code	Subject	Periods per Week			Scheme of Examination Theory/Pract.			Total Marks	Credit
				L	T	P	ESE	CT	TA		
1	Civil Engg.	320831(20)	Structural Engineering Design - IV	4	1	-	80	20	20	120	5
2	Civil Engg.	320832(20)	Water Resources Engineering - II	4	1	-	80	20	20	120	5
3	Civil Engg.	320833(20)	Structural Analysis-III	4	1	-	80	20	20	120	5
4	Refer Table -3		Professional Elective - III	3	1	-	80	20	20	120	4
5	Refer Table -4		Open Elective - IV	3	1	-	80	20	20	120	4
6	Civil Engg.	320861(20)	Structural Engineering Drawing – II Lab	-	-	3	40	-	20	60	2
7	Civil Engg.	320862(20)	Water Resources Engineering Drawing Lab	-	-	3	40	-	20	60	2
8	Civil Engg.	320863(20)	Computer Applications in Civil Engineering Lab	-	-	3	40	-	20	60	2
9	Civil Engg.	320864(20)	Major Project	-	-	5	100	-	80	180	7
10	Civil Engg.	320865(20)	Report Writing and Seminar	-	-	2	-	-	40	40	1
11			Library	-	-	1	-	-	-	-	-
Total				18	5	17	620	100	280	1000	33

L= Lecture; T= Tutorial; P= Practical; ESE= End Semester Exam; CT= Class Test; TA= Teacher's Assessment.

Table-3: Professional Elective III

S. No.	Board of Study	Subject Code	Subject
1	Civil Engg.	320841(20)	Industrial Waste Treatment
2	Civil Engg.	320842(20)	Advanced Environmental Engineering
3	Civil Engg.	320843(20)	Environmental Pollution and Management
4	Civil Engg.	320844(20)	Air Pollution and Control Measures
5	Civil Engg.	320845(20)	Prestressed Concrete Structures
6	Civil Engg.	320846(20)	Computer Applications in Civil Engineering
7	Civil Engg.	320847(20)	Seismic Design of Structures
8	Civil Engg.	320848(20)	Open Channel Flow
9	Civil Engg.	320849(20)	Water Resources Planning and Management
10	Civil Engg.	320850(20)	Water Shed Management



Subj
PRINCIPAL
 RAIPUR INSTITUTE OF TECHNOLOGY
 CHHATAUNA, MANDIRHASAUD, RAIPUR (C.G.)

Table-4, Open Elective -IV

Open Elective -IV			
S.No.	Board of Studies	Code	Name of Subject
1	Management	300851(76)	Enterprise Resource Planning (Except CSE & IT Branch)
2	Information Technology	300852(33)	E-Commerce & strategic IT (Except CSE & IT Branch)
3	Management	300853(76)	Technology Management
4	Information Technology	300854(33)	Decision Support & Executive Information system
5	Computer Science & Engg.	300855(22)	Software Technology
6	Management	300856(76)	Knowledge Entrepreneurship
7	Management	300857(76)	Finance Management
8	Management	300858(76)	Project Planning, Management & Evaluation
9	Mechanical Engg.	300859(37)	Safety Engineering
10	Computer Science & Engg.	300801(22)	Bio Informatics
11	Mechanical Engg.	300802(37)	Energy Conservation & Management
12	Nanotechnology	300803(47)	Nanotechnology
13	Management	300804(76)	Intellectual Property Rights
14	Mechanical Engg.	300805(37)	Value Engineering
15	Civil Engg.	300806(20)	Disaster Management
16	Civil Engg.	300807(20)	Construction Management
17	Civil Engg.	300808(20)	Ecology and Sustainable Development
18	Chem. Engg.	300809(19)	Non Conventional Energy Sources
19	Electrical Engg.	300810(24)	Energy Auditing & Management (Except Electrical Engg. Branch)
20	Mechanical Engg.	300811(37)	Managing Innovation & Entrepreneurship
21	Information Technology	300812(33)	Biometrics
22	Information Technology	300813(33)	Information Theory & Coding
23	Computer Science & Engg.	300814(22)	Supply Chain Management
24	Computer Science & Engg.	300815(22)	Internet & Web Technology
25	Electrical Engg.	300816(24)	Electrical Estimation and Costing
26	Electrical & Electronics Engg.	300817(25)	Non Conventional Energy Sources
27	Computer Science & Engg.	300818(22)	Big Data and Hadoop

Note (1) 1/4th of total strength of students is required to offer an elective in the college in a particular academic session.

(2) - Choice of elective course once made for an examination cannot be changed



Principal
PRINCIPAL
 RAIPUR INSTITUTE OF TECHNOLOGY
 Email: rit@raipurinstituteoftechnology.org, manojkumar@raipurinstituteoftechnology.org, Raipur (C.G.)

Chhattisgarh Swami Vivekanand Technical University, Bhilai

SCHEME OF TEACHING & EXAMINATION

B.E. (Civil) – 7th SEMESTER

S. No	Board of Study	Subject Code	Subject	Periods per Week			Scheme of Examination			Total Marks	Credit
				L	T	P	Theory/ Pract.				
							ESE	CT	TA		$T+(T+P)/2$
1	Civil Engg.	320731(20)	Structural Engineering Design - III	4	1	-	80	20	20	120	5
2	Civil Engg.	320732(20)	Water Resources Engineering - I	4	1	-	80	20	20	120	5
3	Civil Engg.	320733(20)	Environmental Engineering - II	4	1	-	80	20	20	120	5
4	Civil Engg.	320734(20)	Quantity Surveying and Cost Evaluation	3	1	-	80	20	20	120	4
5	Refer	Table-2	Professional Electives- II	3	1	-	80	20	20	120	4
6	Civil Engg.	320761(20)	Structural Engineering Drawing - I Lab	-	-	3	40	-	20	60	2
7	Civil Engg.	320762(20)	Environmental Engineering - II Lab	-	-	3	40	-	20	60	2
8	Civil Engg.	320763(20)	Quantity Surveying and Cost Evaluation Lab	-	-	3	40	-	20	60	2
9	Civil Engg.	320764(20)	Minor Project	-	-	5	100	-	40	140	3
10	Management	320765(76)	Innovative and Entrepreneurial Skills	-	-	2	-	-	40	40	1
11	Civil Engg.	320766(20)	**Practical Training Evaluation and Library	-	-	1	-	-	40	40	1
Total				18	5	17	620	100	280	1000	34

L = Lecture; T = Tutorial; P = Practical; ESE = End Semester Exam; CT = Class Test; TA = Teacher's Assessment

** To be completed after VI Sem. and before the commencement of VII Sem.

Table-2: Professional Elective-II

S. No.	Board of Study	Subject Code	Subject
1	Civil Engg.	320741(20)	Quality Control and Assurance in Construction
2	Civil Engg.	320742(20)	Safety in Construction
3	Civil Engg.	320743(20)	Fabrication and Erection of Structures
4	Civil Engg.	320744(20)	Construction Equipments and Techniques
5	Civil Engg.	320745(20)	Expansive Soils
6	Civil Engg.	320746(20)	Geotechnical Processes
7	Civil Engg.	320747(20)	Foundation Engineering
8	Civil Engg.	320748(20)	Transportation Planning and Management
9	Civil Engg.	320749(20)	Advanced Transportation Engineering
10	Civil Engg.	320750(20)	Traffic Engineering

Note:

- (1) 1/4th of total strength of students subject to minimum of twenty students is required to offer an elective in the college in a particular academic session.
- (2) Choice of elective course once made for an examination cannot be changed in future examinations.



[Signature]
PRINCIPAL
 RAIPUR INSTITUTE OF TECHNOLOGY
 CHHATAUNA, MANDIRHASAUD, RAIPUR (C.G.)

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY

BHILAI (C.G.)

Scheme of Teaching & Examination

B.E. (VI Semester) Civil Engineering

S. No.	Board of Study	Subject Code	Subject	Periods per Week			Scheme of Examination			Total Marks	Credit L+(T+P)/2
				L	T	P	ESE	CT	TA		
1.	Civil Engineering	320651 (20)	Structural Engineering Design-II	4	1	-	80	20	20	120	5
2.	Civil Engineering	320652 (20)	Geotech Engineering-II	4	1	-	80	20	20	120	5
3.	Civil Engineering	320653 (20)	Environmental Engineering-I	3	1	-	80	20	20	120	4
4.	Civil Engineering	320654 (20)	Concrete Technology	3	1	-	80	20	20	120	4
5.	Civil Engineering	320655 (20)	Construction Planning	2	1	-	80	20	20	120	3
6.	Refer Table-I.	Professional Elective-I		3	1	-	80	20	20	120	4
7.	Civil Engineering	320661 (20)	Structural Engineering Lab	-	-	3	40	-	20	60	2
8.	Civil Engineering	320662 (20)	Geotech Engineering-II Lab	-	-	3	40	-	20	60	2
9.	Civil Engineering	320663 (20)	Environmental Engineering-I Lab	-	-	3	40	-	20	60	2
10.	Civil Engineering	320664 (20)	Concrete Technology Lab	-	-	3	40	-	20	60	2
11.	Management	300665 (76)	Managerial Skills	-	-	2	-	-	40	40	1
12.			Library	-	-	1	-	-	-	-	-
Total				19	6	15	640	120	240	1000	34

Table - I: Professional Elective - I

S. No.	Board of Study	Subject Code	Subject
1.	Civil Engineering	320671 (20)	Modern Construction Materials
2.	Civil Engineering	320672 (20)	Composite Materials
3.	Civil Engineering	320673 (20)	Advanced Strength of Materials
4.	Civil Engineering	320674 (20)	Modern Surveying Techniques
5.	Civil Engineering	320675 (20)	Remote Sensing and its Applications
6.	Civil Engineering	320676 (20)	GIS and its Applications
7.	Civil Engineering	320677 (20)	Computational Hydraulics
8.	Civil Engineering	320678 (20)	Instrumentation in Fluid Mechanics
9.	Civil Engineering	320679 (20)	Water Power Engineering
10.	Civil Engineering	320680 (20)	Earthquake Engineering

L: Lecture

T: Tutorial

P: Practical

ESE: End Semester Examination

CT: Class Test

TA: Teachers' Assessment

Note: Industrial Training of twelve weeks is mandatory for B.E. students. It is to be completed in two equal parts. The first part must have been completed in summer after IV sem. The second part to be completed during summer after VI sem. after which students have to submit a training report which will be evaluated by college teachers during B.E. VII sem.



[Signature]
PRINCIPAL
 RAIPUR INSTITUTE OF TECHNOLOGY
 CHHATTISGARH, RAIPUR (C.G.)

Name of the Programme: Bachelor of Engineering

Name of the Programme

Chhattisgarh Swami Vivekanand Technical University, Bhilai

SCHEME OF TEACHING AND EXAMINATION

B.E. VIIIth SEMESTER ELECTRICAL AND ELECTRONICS ENGINEERING

Sr. No.	Board of Study	Subject Code	Subject	Periods per week			Scheme of Exam			Total Marks	Credit L+ (T+P) /
				L	T	P	Theory / Practical				
							ESE	CT	TA		
1	Electrical & Electronics Engg.	325831(25)	High Voltage Engg.	4	0	-	80	20	20	120	4
2	Electrical & Electronics Engg.	325832(25)	Management Concepts & Techniques	4	0	-	80	20	20	120	4
3	Electrical Engg.	325833(25)	Computer Aided Power System	4	0	-	80	20	20	120	4
4	Refer Table -3		Professional Elective -III	3	1	-	80	20	20	120	4
5	Refer Table -4		Open Elective - IV	3	1	-	80	20	20	120	4
6	Electrical & Electronics Engg.	325861(25)	Computer Simulation Lab	-	-	3	40	-	20	60	2
7	Electrical & Electronics Engg.	325862(25)	Installation Maintenance & Testing of Electrical Equipments, Lab	-	-	3	40	-	20	60	2
8	Electrical & Electronics Engg.	325863(25)	High Voltage Engg. Lab	-	-	3	40	-	20	60	2
9	Electrical & Electronics Engg.	325864(25)	Major Project	-	-	6	100	-	80	180	3
10	Electrical & Electronics Engg.	325865(25)	Report Writing & Seminar	-	-	1	-	-	40	40	1
11	Library			-	-	1	-	-	-	-	-
	Total			18	2	17	620	100	280	1000	30

L- Lecture T- Tutorial P- Practical, ESE- End Semester Exam CT- Class Test TA- Teacher's Assessment
 ** To be completed after VI Sem. and before the commencement of VII Sem.

Table -3
Professional Elective -III

S. No.	Board of Study	Subject Code	Subject
1	Electrical & Electronics Engg.	325841(25)	EHV AC & DC Transmission
2	Electrical Engg.	324842(24)	Flexible AC Transmission System
3	Electrical & Electronics Engg.	325843(25)	Power Quality
4	Electrical & Electronics Engg.	325844(25)	Smart Grid Systems
5	Electrical Engg.	324844(24)	VLSI Design
6	Electrical Engg.	324848(24)	Satellite Communication



PRINCIPAL
 RAIPUR INSTITUTE OF TECHNOLOGY
 CHHATAUNA, MANDIRHASAUD, RAIPUR (C.G.)

Table - 4

Open Elective -IV			
S.No.	Board of Studies	Code	Name of Subject
1	Management	300851(76)	Enterprise Resource Planning (Except CSE & IT Branch)
2	Information Technology	300852(33)	E-Commerce & strategic IT (Except CSE & IT Branch)
3	Management	300853(76)	Technology Management
4	Information Technology	300854(33)	Decision Support & Executive Information system
5	Computer Science & Engg.	300855(22)	Software Technology
6	Management	300856(76)	Knowledge Entrepreneurship
7	Management	300857(76)	Finance Management
8	Management	300858(76)	Project Planning, Management & Evaluation
9	Mechanical Engg.	300859(37)	Safety Engineering
10	Computer Science & Engg.	300801(22)	Bio Informatics
11	Mechanical Engg.	300802(37)	Energy Conservation & Management
12	Nanotechnology	300803(47)	Nanotechnology
13	Management	300804(76)	Intellectual Property Rights
14	Mechanical Engg.	300805(37)	Value Engineering
15	Civil Engg.	300806(20)	Disaster Management
16	Civil Engg.	300807(20)	Construction Management
17	Civil Engg.	300808(20)	Ecology and Sustainable Development
18	Chem. Engg.	300809(19)	Non Conventional Energy Sources
19	Electrical Engg.	300810(24)	Energy Auditing & Management (Except Electrical Engg. Branch)
20	Mechanical Engg.	300811(37)	Managing Innovation & Entrepreneurship
21	Information Technology	300812(33)	Biometrics
22	Information Technology	300813(33)	Information Theory & Coding
23	Computer Science & Engg.	300814(22)	Supply Chain Management
24	Computer Science & Engg.	300815(22)	Internet & Web Technology
25	Electrical Engg.	300816(24)	Electrical Estimation and Costing
26	Electrical & Electronics Engg.	300817(25)	Non Conventional Energy Sources
27	Computer Science & Engg.	300818(22)	Big Data and Hadoop

Note (1) 1/4th of total strength of students is required to offer an elective in the college in a particular academic year.
 (2) - Choice of elective course once made for an examination cannot be changed



Subj
 PRINCIPAL
 RAIPUR INSTITUTE OF TECHNOLOGY
 CHHATAUNA, MANDIRHASAUD, RAIPUR (C.G.)

Chhattisgarh Swami Vivekanand Technical University, Bhilai

SCHEME OF TEACHING AND EXAMINATION

B.E. VIIth SEMESTER ELECTRICAL AND ELECTRONICS ENGINEERING

Sr. No.	Board of Study	Subject Code	Subject	Periods per week			Scheme of Exam			Total Marks	Credit L+ (T+P) / 2
				L	T	P	Theory / Practical				
							ES E	CT	TA		
1	Electrical Engg.	324731(24)	Switchgear & Protection	4	1	-	80	20	20	120	5
2	Electrical & Electronics Engg	325732(25)	Soft Computing and its Applications	4	1	-	80	20	20	120	5
3	Electrical Engg.	324733(24)	Electrical Drives	4	1	-	80	20	20	120	5
4	Electrical & Electronics Engg.	325734(25)	Microcontrollers and Applications	4	1	-	80	20	20	120	5
5	Refer Table -2		Professional Elective -II	4	1	-	80	20	20	120	5
6	Electrical & Electronics Engg.	325761(25)	Switchgear & Protection Lab	-	-	3	40	-	20	60	2
7	Electrical & Electronics Engg.	325762(25)	Electric Drives Lab	-	-	3	40	-	20	60	2
8	Electrical & Electronics Engg.	325763(25)	Microcontrollers and Applications Lab	-	-	3	40	-	20	60	2
9	Electrical & Electronics Engg.	325764(25)	Minor Project	-	-	4	100	-	40	140	2
10	Electrical & Electronics Engg.	325765(25)	Innovative & Entrepreneurial Skills	-	-	1	-	-	40	40	1
11	Electrical & Electronics Engg.	325766(25)	** Practical Training Evaluation and Library	-	-	1	-	-	40	40	1
			Total	20	5	15	620	100	280	1000	35

L- Lecture T- Tutorial P- Practical , ESE- End Semester Exam CT- Class Test TA- Teacher's Assessment

** To be completed after VI Sem. and before the commencement of VII Sem ,



Signature
PRINCIPAL
 RAIPUR INSTITUTE OF TECHNOLOGY
 CHHATAUKA, MANDHASAUD, RAIPUR (C.G.)

S.No.	Board of Study	Subject Code	Subject
1	Electrical Engg.	324741(24)	Power Apparatus System
2	Electrical & Electronics Engg.	325742(25)	Illumination Engineering
3	Electrical Engg.	324747(24)	Digital Image Processing
4	Electrical & Electronics Engg.	325744(25)	Fiber optics
5	Electrical & Electronics Engg.	325745(25)	Industrial Automation
6	Electrical & Electronics Engg.	325746(25)	Electrical Machine Design

Note: 1/4th of total strength of students is required to offer an elective in the college in a particular academic session.



[Signature]
PRINCIPAL
 RAIPUR INSTITUTE OF TECHNOLOGY
 Chhatrapati, Indraprastha, Raipur, C.G.

Chhattisgarh Swami Vivekanand Technical University, Bhilai (C.G.)
SCHEME OF TEACHING AND EXAMINATION
B.E. VI SEMESTER ELECTRICAL AND ELECTRONICS ENGINEERING

Sr. No.	Board of Study	Subject Code	Subject	Periods per week			Scheme of Exam			Total Marks	Credit L + (T+P) / 2
				L	T	P	Theory / Practical				
							ESE	CT	TA		
1	Electrical & Electronics Engg.	325651(25)	Electrical Power System -II	3	1	-	80	20	20	120	4
2	Electrical & Electronics Engg.	325652(25)	Modern Instrumentation Techniques	4	0	-	80	20	20	120	4
3	Electrical & Electronics Engg.	325653(25)	Advanced Microprocessors and Peripherals	3	1	-	80	20	20	120	4
4	Electrical & Electronics Engg.	325654(25)	Power Electronics Devices and Circuits	3	1	-	80	20	20	120	4
5	Electrical & Electronics Engg.	325655(25)	Digital Signal Processing	3	1	-	80	20	20	120	4
6	Refer Table - I		Professional Elective -I	4	0	-	80	20	20	120	4
7	Electrical & Electronics Engg.	325661(25)	Digital Signal Processing Lab	-	-	3	40	-	20	60	2
8	Electrical & Electronics Engg.	325662(25)	Power System Simulation Lab	-	-	3	40	-	20	60	2
9	Electrical & Electronics Engg.	325663(25)	Power Electronics Devices and Circuits Lab	-	-	3	40	-	20	60	2
10	Electrical & Electronics Engg.	325664(25)	Advanced Microprocessors and Peripherals Lab	-	-	3	40	-	20	60	2
11	Management	300665(76)	Managerial Skills	-	-	2	-	-	40	40	1
12	Electrical & Electronics Engg.		Library	-	-	2	-	-	-	--	1
			Total	20	4	16	640	120	240	1000	34

L: Lecture T: Tutorial P: Practical
ESE: End Semester Examination CT: Class Test TA: Teachers' Assessment

Note: Industrial Training of eight weeks is mandatory for B.E. students. It is to be completed in two equal parts. The first part must have been completed in summer after IV semester. The second part to be completed during summer after VI semester after which students have to submit a training report which will be evaluated by college teachers during B.E. VII semester.

Table - I: Professional Elective - 1

S. No.	Board of Study	Subject Code	Subject
1	Electrical & Electronics Engg.	325671(25)	Medical Electronics
2	Electrical & Electronics Engg.	325672(25)	Computer Organization and Architecture
3	Electrical & Electronics Engg.	325673(25)	Testing & Commissioning of Electrical Equipments
4	Electrical & Electronics Engg.	325674(25)	Simulation & Programming
5	Electrical & Electronics Engg.	325675(25)	Distributed Generation

Note (1) - 1/4th of the total strength of students subject to minimum of twenty students is required to offer an elective in the college in a particular academic session.

Note (2) - Choice of elective course once made for an examination cannot be changed in future examinations.



[Signature]
PRINCIPAL
RAIPUR INSTITUTE OF TECHNOLOGY
CHHATAUNA, MANDHASAUD, RAIPUR (C.G.)

Name of the Programme: Bachelor of Engineering Duration of the programme: Four Years

Chhattisgarh Swami Vivekanand Technical University, Bhilai
Scheme of Teaching and Examination
B.E. VIII Semester Electronics & Telecommunication Engineering

Sl. No.	Board of Study	Code No.	Theory Subjects	Period Per Week			Scheme of Exam			Total Marks	Credit L+(T+P)
				L	T	P	Theory/ Practical				
							ESE	CT	TA		
1	Electronics & Telecom.	328831(28)	Advanced Communication Systems	3	1	-	80	20	20	120	4
2	Electronics & Telecom.	328832(28)	Consumer Electronics	3	1	-	80	20	20	120	4
3	Electronics & Telecom.	328833(28)	Power Electronics	3	1	-	80	20	20	120	4
4	Refer Table -3		Professional Elective - III	3	1	-	80	20	20	120	4
5	Refer Table -4		Open Elective - IV	3	1	-	80	20	20	120	4
6	Electronics & Telecom.	328861(28)	Optical Communication Lab	-	-	4	40	-	20	60	2
7	Electronics & Telecom.	328862(28)	Digital Circuit Simulation Lab	-	-	4	40	-	20	60	2
8	Electronics & Telecom.	328863(28)	Power Electronics Lab	-	-	4	40	-	20	60	2
9	Electronics & Telecom.	328864(28)	Major Project	-	-	5	100	-	80	180	3
10	Electronics & Telecom.	328865(28)	Project Management & Report writing	-	-	2	-	-	40	40	1
11			Library & Seminar	-	-	1	-	-	-	-	-
TOTAL				15	5	20	620	100	280	1000	30

L-Lecture, T- Tutorial, P - Practical, ESE- End Semester Examination, CT - Class Test, TA - Teacher's Assessment

Table-3
Professional Elective - III

Sl. No.	Board of Study	Code	Subject
1	Electronics & Telecom.	328840(28)	Cryptography & Secure Communication
2	Electronics & Telecom.	328841(28)	MEMS in Communication Engineering
3	Electronics & Telecom.	328842(28)	Embedded Systems & RTOS
4	Electronics & Telecom.	328843(28)	CMOS Mixed Signal Circuit Design
5	Electronics & Telecom.	328844(28)	Microelectronic Devices & VLSI Technology
6	Electronics & Telecom.	328845(28)	Biometric Techniques
7	Electronics & Telecom.	328846(28)	RISC Microcontrollers & DSP Processors
8	Electronics & Telecom.	328847(28)	Artificial Intelligence & Expert Systems
9	Electronics & Telecom.	328848(28)	Telecommunication Switching Circuits & Networks
10	Electronics & Telecom.	328849(28)	Speech Signal Processing

Note (1)- 1/4th of total strength of students subject to minimum of twenty students is required to offer an elective in the college in a particular academic session.

Note (2) - Choice of elective course once made for an examination cannot be changed in future examinations.



Principal
PRINCIPAL
RAIPUR INSTITUTE OF TECHNOLOGY
 CHHATAUNA, MARUDHASAUD, RAIPUR (C.G.)

Chhattisgarh Swami Vivekanand Technical University, Bhilai

Scheme of Teaching and Examination

B.E. VII Semester Electronics & Telecommunication Engineering

Sl. No.	Board of Study	Code No.	Subjects	Period Per Week			Scheme of Exam			Total Marks	Credit L+(T+P)
				L	T	P	Theory/ ESE	Practical/ CT	TA		
1	Electronics & Telecom.	328731(28)	Microwave Communication and Engineering	4	1	-	80	20	20	120	5
2	Electronics & Telecom.	328732(28)	Computer Networks	3	1	-	80	20	20	120	4
3	Electronics & Telecom.	328733(28)	Wireless Communications	3	1	-	80	20	20	120	4
4	Electronics & Telecom.	328734(28)	Management Concepts & Techniques	3	1	-	80	20	20	120	4
5	Refer Table -2		Professional Elective - II	3	1	-	80	20	20	120	4
6	Electronics & Telecom.	328761(28)	Microwave Communication and Engineering Lab	-	-	4	40	-	20	60	2
7	Electronics & Telecom.	328762(28)	Computer Networks Lab	-	-	4	40	-	20	60	2
8	Electronics & Telecom.	328763(28)	Advance Communication Lab	-	-	4	40	-	20	60	2
9	Electronics & Telecom.	328764(28)	Minor Project	-	-	4	100	-	40	140	2
10	Management	328765(28)	Innovative & Entrepreneurial Skills	-	-	2	-	-	40	40	1
11	Electronics & Telecom.	328766(28)	**Practical Training Evaluation and Library	-	-	1	-	-	40	40	1
TOTAL				16	5	19	620	100	280	1000	31

L-Lecture, T- Tutorial, P - Practical, ESE- End Semester Examination, CT - Class Test, TA - Teacher's Assessment

** To be completed after VI Semester and before the commencement of VII Semester

Table -2

Professional Elective - II

Sl. No.	Board of Study	Code	Subject
1	Electronics & Telecom.	328741(28)	Digital Circuit Design with Verilog HDL
2	Electronics & Telecom.	328742(28)	System Design with ARM
3	Electronics & Telecom.	328743(28)	Robotics & Controls
4	Electronics & Telecom.	328744(28)	Radar and Navigational Aids
5	Electrical and Electronics	325745(25)	Industrial Automation
6	Electronics & Telecom.	328746(28)	Neural Network & Fuzzy Logic
7	Electronics & Telecom.	328747(28)	RF Communication Design
8	Electronics & Telecom.	328748(28)	VLSI System Design
9	Electronics & Telecom.	328749(28)	Digital Image Processing

Note (1)- 1/4th of total strength of students subject to minimum of twenty students is required to offer an elective in the college a particular academic session.

Note (2) - Choice of elective course once made for any examination, it should not be changed in future examinations.



Principal
RAJIV INSTITUTE OF TECHNOLOGY
Kharagpur, West Bengal, India

Chhattisgarh Swami Vivekanand Technical University, Bhilai
Scheme of Teaching and Examination
B.E. VI Semester
Electronics & Telecommunication Engineering

Sl. No.	Board of Study	Code No.	Subjects	Period Per Week			Scheme of Exam			Total Marks	Credit L+(T+P) 2
				L	T	P	Theory/ ESE	Practical/ CT	TA		
1	Electronics & Telecommunication	328651(28)	Digital Signal Processing	3	1	-	80	20	20	120	4
2	Electronics & Telecommunication	328652(28)	Electronic Circuit Design	3	1	-	80	20	20	120	4
3	Electronics & Telecommunication	328653(28)	Microcontroller & Embedded	3	1	-	80	20	20	120	4
4	Electronics & Telecommunication	328654(28)	VLSI Design	3	1	-	80	20	20	120	4
5	Electronics & Telecommunication	328655(28)	Information Theory & Coding	3	1	-	80	20	20	120	4
6	Refer Table -1		Professional Elective -I	3	-	-	80	20	20	120	3
7	Electronics & Telecommunication	328661(28)	Digital Signal Processing Lab	-	-	2	40	-	20	60	1
8	Electronics & Telecommunication	328662(28)	Electronic Circuit Design Lab	-	-	4	40	-	20	60	2
9	Electronics & Telecommunication	328663(28)	Microcontroller & Embedded	-	-	4	40	-	20	60	2
10	Electronics & Telecommunication	328664(28)	VLSI Design Lab	-	-	4	40	-	20	60	2
11	Management	300665(76)	Managerial Skills	-	-	2	-	-	40	40	1
12			Library	-	-	1	-	-	-	-	-
TOTAL				18	5	17	640	120	240	1000	31

L: Lecture T: Tutorial P: Practical
 ESE: End Semester Examination CT: Class Test TA: Teachers' Assessment

Note: Industrial Training of eight weeks is mandatory for B.E. students. It is to be completed in two equal parts. The first part must have been completed in summer after IV semester. The second part to be completed during summer after VI semester after which students have to submit a training report which will be evaluated by college teachers during B.E. VII semester.

Table 1
Professional Elective - 1

Sl. No.	Board of Study	Code	Subject
1	Electronics & Telecom.	328671(28)	Internet & Web Technology
2	Electronics & Telecom.	328672(28)	Operating System
3	Electronics & Telecom.	328673(28)	Biomedical Electronics
4	Electronics & Telecom.	328674(28)	Electronic Engineering Materials & Components
5	Electronics & Telecom.	328675(28)	Computer Organization & Architecture
6	Electronics & Telecom.	328676(28)	Advanced Semiconductor Devices

Note:

- 1/4th of total strength of students to minimum of twenty students is required to offer an elective in the college in a particular academic session
- Choice of elective course once made for an examination cannot be changed in future examinations.

Name of the Programme: Bachelor of Engineering



PRINCIPAL
 RAIPUR INSTITUTE OF TECHNOLOGY
 CHHATAUNA, MANDIKHASAUD, RAIPUR (C.G.)

Chhattisgarh Swami Vivekananda Technical University, Bhilai(C.G)
Scheme of Teaching and Examination
B.E. VI Semester Information Technology

S. No	Board of Study	Subject Code	Subject Name	Periods per week			Scheme of Exam			Total Marks	Credit L+(T+P)/2
				L	T	P	ESE	CT	TA		
1	Information Technology	333651(33)	Web Application Development	4	1	-	80	20	20	120	5
2	Information Technology	333652(33)	Information Theory & Coding	3	1	-	80	20	20	120	4
3	Information Technology	333653(33)	Software Engineering & Project Management	3	1	-	80	20	20	120	4
4	Information Technology	333654(33)	UNIX & Shell Programming	3	1	-	80	20	20	120	4
5	Information Technology	333655(33)	Computer Graphics & Animation	3	1	-	80	20	20	120	4
6	Refer Table - I		Professional Electives-I	3	1	-	80	20	20	120	4
7	Information Technology	333661(33)	Web Application Development Lab (PHP, MySQL, Ajax)	-	-	3	40	-	20	60	2
8	Information Technology	333662(33)	Software Engineering & Project Management Lab	-	-	3	40	-	20	60	2
9	Information Technology	333663(33)	UNIX & Shell Programming Lab	-	-	3	40	-	20	60	2
10	Information Technology	333664(33)	Computer Graphics & Animation Lab	-	-	3	40	-	20	60	2
11	Management	300665(76)	Managerial Skills	-	-	2	-	-	40	40	1
12	Information Technology	-----	Library	-	-	1	-	-	-	-	-
TOTAL				19	6	15	640	120	240	1000	34

L: Lecture

T: Tutorial

P: Practical

ESE: End Semester Examination

CT: Class Test

TA: Teachers' Assessment

Note: Industrial Training of eight weeks is mandatory for B.E. students. It is to be completed in two equal parts. The first part must have been completed in summer after IV semester. The second part to be completed during summer after VI semester after which students have to submit a training report which will be evaluated by college teachers during B.E. VII semester.

Table -I: Professional Elective - I

S. N.	Board of Studies	Subject Code	Subject Name
1	Computer Science & Engg	333671(22)	Digital Signal Processing
2	Information Technology	333672(33)	Image Processing
3	Information Technology	333673(33)	Multimedia & Virtual Reality
4	Computer Science & Engg	333674(22)	Inter-Networking with TCP/IP
5	Information Technology	333675(33)	Advanced computer Network
6	Information Technology	333676(33)	Embedded and Real Time Operating Systems
7	Computer Science & Engg	333677(22)	Object Oriented Modeling & Design

Note:

- 1/4th of total strength of students subject to Minimum Strength of twenty students is required to offer an elective in the college in a particular academic session.
- Choice of elective course once made for an examination cannot be changed for future examinations.

Name of the Programme: Bachelor of Engineering



Name of the Programme: Bachelor of Engineering

Principal
RAIPUR INSTITUTE OF TECHNOLOGY
C-1, RAIPUR, (M.P.) (Distt. RAIPUR) (C.G.)

Chhattisgarh Swami Vivekanand Technical University, Bhilai

Scheme of teaching and examination

B.E. VII Semester Computer Science & Engineering

S.No	Board of Study	Subject Code	Subject Name	Periods per week			Scheme of Exam			Total Marks	Credit L+(T+P)/2
				L	T	P	Theory:Practical				
							ESE	CT	TA		
1	Information Technology	322731(33)	Mobile Computing & Application	3	1		80	20	20	120	4
2	Comp. Science & Engg.	322732(22)	Parallel Processor and Computing	3	1		80	20	20	120	4
3	Comp. Science & Engg.	322733(22)	Network Programming	3	1		80	20	20	120	4
4	Comp. Science & Engg.	322734(22)	Cryptography & Network Security	3	1		80	20	20	120	4
5	Refer Table-2		Professional Elective-2	4			80	20	20	120	4
6	Comp. Science & Engg.	322761(22)	Soft Computing Lab (Matlab/Sci lab)			4	40		20	60	2
7	Comp. Science & Engg.	322762(22)	Network Programming Lab			4	40		20	60	2
8	Information Technology	322763(33)	Android Lab			4	40		20	60	2
9	Comp. Science & Engg.	322764(22)	Minor Project			5	100		40	140	3
10	Management	322765(76)	Innovative & Entrepreneurial Skills			2			40	40	1
11	Comp. Science & Engg.	322766(22)	** Practical Training ** Evaluation / Library			1			40	40	1
			TOTAL	16	4	20	620	100	280	1000	31

L: Lecture

T: Tutorial

P: Practical

ESE: End Semester Examination

CT: Class Test

TA: Teacher's Assessment

Note 1: Duration of All theory papers will be of Three Hours

Note 2: ** To be completed after VI semester and before the commencement of VII Semester

Table-2 : Professional Elective-2

S. No.	Board of Study	Subject Code	Subject
1	Computer Science & Engg.	322740(22)	Digital Image Processing
2	Computer Science & Engg.	322741(22)	Advanced Computer Architecture
3	Computer Science & Engg.	322742(22)	Operation Research
4	Computer Science & Engg.	322743(22)	E-Commerce & Strategic IT
5	Computer Science & Engg.	322744(22)	Natural Languages Processing
6	Computer Science & Engg.	322745(22)	OODBMS
7	Computer Science & Engg.	322746(22)	Cloud Computing
8	Computer Science & Engg.	322747(22)	Grid Computing



Principal
PRINCIPAL
RAIPUR INSTITUTE OF TECHNOLOGY
 CHHATAUNA, MANORHASAUD, RAIPUR (C.G.)

Chhattisgarh Swami Vivekanand Technical University, Bhilai
Scheme of Teaching and Examination
B.E. VI Semester Computer Science & Engineering

Sl. No.	Board of Study	Code No.	Subjects	Period Per Week			Scheme of Exam			Total Marks	Credit L+(T+P)/2
				L	T	P	Theory/Practical				
							ESE	CT	TA		
1	Computer Sc. & Engg.	322651(22)	Computer Networks	4	1	-	80	20	20	120	5
2	Computer Sc. & Engg.	322652(22)	Compiler Design	3	1	-	80	20	20	120	4
3	Computer Sc. & Engg.	322653(22)	Enterprise Resource Planning	3	1	-	80	20	20	120	4
4	Computer Sc. & Engg.	322654(22)	Software Engineering & Project Management	3	1	-	80	20	20	120	4
5	Computer Sc. & Engg.	322655(22)	Computer Graphics	3	1	-	80	20	20	120	4
6	Refer Table -I		Professional Elective -I	3	1	-	80	20	20	120	4
7	Computer Sc. & Engg.	322661(22)	Computer Networks Lab	-	-	3	40	-	20	60	2
8	Computer Sc. & Engg.	322662(22)	Software Engineering & Project Management Lab – With Minor Project	-	-	3	40	-	20	60	2
9	Computer Sc. & Engg.	322663(22)	Computer Graphics Lab	-	-	3	40	-	20	60	2
10	Computer Sc. & Engg.	322664(22)	Advanced Java Programming Lab	-	-	3	40	-	20	60	2
11	Management	300665(76)	Managerial Skills	-	-	2	-	-	40	40	1
12	Computer Sc. & Engg.	-----	Library	-	-	1	-	-	-	-	-
TOTAL				19	6	15	640	120	240	1000	34

L: Lecture T: Tutorial P: Practical
 ESE: End Semester Examination CT: Class Test TA: Teachers' Assessment

Note: Industrial Training of eight weeks is mandatory for B.E. students. It is to be completed in two equal parts. The first part must have been completed in summer after IV semester. The second part to be completed during summer after VI semester after which students have to submit a training report which will be evaluated by college teachers during B.E. VII semester.

Table 1: Professional Elective-I

S. No.	Board of Studies	Subject Code	Subject Name
1	Computer Science & Engg	322671(22)	Digital Signal Processing
2	Computer Science & Engg	322672(22)	Advanced Microprocessors & Micro Controllers
3	Information Technology	322673(33)	Multimedia & Virtual Reality
4	Computer Science & Engg	322674(22)	Inter-Networking with TCP/IP
5	Computer Science & Engg	322675(22)	Management Information Systems
6	Computer Science & Engg	322676(22)	Advanced Operating System
7	Computer Science & Engg	322677(22)	Advanced Data Base Systems
8	Computer Science & Engg	322678(22)	Object Oriented Modelling & Design

Note: 1/4th of total strength of students to minimum of twenty students is required to offer an elective in the college in a particular academic session.

- Choice of elective course once made for an examination cannot be changed in future examinations.

Name of the Programme: Bachelor of Engineering



Duration of the Programme: 3 Years

Principal
PRINCIPAL
 RAJIV INSTITUTE OF TECHNOLOGY
 CHHATTISGARH, RAIPUR

Chhattisgarh Swami Vivekanand Technical University, Bhilai (C.G.)

SCHEME OF TEACHING AND EXAMINATION

B.E. VIII SEMESTER MECHANICAL ENGINEERING

S. No.	Board of Study	Sub. Code	SUBJECT	PERIODS PER WEEK			SCHEME OF EXAM Theory/Practical			Total Marks	Credit 1/2/1+Pr2
				L	T	P	ESE	CT	TA		
1.	Mech. Engg.	337831(37)	Robotics	4	1	-	80	20	20	120	5
2.	Mech. Engg.	337832(37)	Finite Element Methods	4	1	-	80	20	20	120	5
3.	Mech. Engg.	337833(37)	Industrial Engineering & Management	4	1	-	80	20	20	120	5
4.	Refer Table - III		Professional Elective-III	4	1	-	80	20	20	120	5
5.	Refer Table - IV		Open Elective-IV	4	-	-	80	20	20	120	4
6.	Mech. Engg.	337861(37)	Robotics Lab	-	-	2	40	-	20	60	1
7.	Mech. Engg.	337862(37)	Finite Element Methods Lab	-	-	2	40	-	20	60	1
8.	Mech. Engg.	337863(37)	Industrial Engineering & Management Lab	-	-	2	40	-	20	60	1
9.	Mech. Engg.	337864(37)	Major Project	-	-	7	100	-	80	180	4
10.	Mech. Engg.	337865(37)	Report Writing & Seminar	-	-	2	-	-	40	40	1
11.			Library	-	-	1	-	-	-	-	-
Total				20	4	16	620	100	280	1000	32

L - Lecture,

ESE - End Semester Exam,

T - Tutorial,

CT - Class Test,

P - Practical,

TA - Teacher's Assessment.

Table - III
Professional Elective - II

S.No.	Branch	Subject Code	Subject
1	Mechanical	337841(37)	Mechatronics
2	Mechanical	337842(37)	Vibration & noise control
3	Mechanical	337843(37)	Optimization Techniques
4	Mechanical	337844(37)	Computational Fluid Dynamics
5	Mechanical	337845(37)	Soft Computing Techniques
6	Mechanical	337846(37)	Environment Pollution & Control
7	Mechanical	337847(37)	Mechanical Handling System & Equipments

Note: (1) 1/4th of total strength of students subject to minimum strength of 20 students is required to offer and elective in the college in a particular academic session.

Note: (2) Choice of elective course once made for an examination cannot be changed in future examinations.



Principal
PRINCIPAL
RAIPUR INSTITUTE OF TECHNOLOGY
CHHATAUNA, MAHARASHTRA, RAIPUR (C.G.)

Table - IV

Open Elective -IV			
S.No.	Board of Studies	Code	Name of Subject
1	Management	300851(76)	Enterprise Resource Planning (Except CSE & IT Branch)
2	Information Technology	300852(33)	E-Commerce & strategic IT (Except CSE & IT Branch)
3	Management	300853(76)	Technology Management
4	Information Technology	300854(33)	Decision Support & Executive Information system
5	Computer Science & Engg.	300855(22)	Software Technology
6	Management	300856(76)	Knowledge Entrepreneurship
7	Management	300857(76)	Finance Management
8	Management	300858(76)	Project Planning, Management & Evaluation
9	Mechanical Engg.	300859(37)	Safety Engineering
10	Computer Science & Engg.	300801(22)	Bio Informatics
11	Mechanical Engg.	300802(37)	Energy Conservation & Management
12	Nanotechnology	300803(47)	Nanotechnology
13	Management	300804(76)	Intellectual Property Rights
14	Mechanical Engg.	300805(37)	Value Engineering
15	Civil Engg.	300806(20)	Disaster Management
16	Civil Engg.	300807(20)	Construction Management
17	Civil Engg.	300808(20)	Ecology and Sustainable Development
18	Chem. Engg.	300809(19)	Non Conventional Energy Sources
19	Electrical Engg.	300810(24)	Energy Auditing & Management (Except Electrical Engg. Branch)
20	Mechanical Engg.	300811(37)	Managing Innovation & Entrepreneurship
21	Information Technology	300812(33)	Biometrics
22	Information Technology	300813(33)	Information Theory & Coding
23	Computer Science & Engg.	300814(22)	Supply Chain Management
24	Computer Science & Engg.	300815(22)	Internet & Web Technology
25	Electrical Engg.	300816(24)	Electrical Estimation and Costing
26	Electrical & Electronics Engg.	300817(25)	Non Conventional Energy Sources
27	Computer Science & Engg.	300818(22)	Big Data and Hadoop

Note (1) 1/4th of total strength of students is required to offer an elective in the college in a particular academic session.

(2) - Choice of elective course once made for an examination cannot be changed



Kuljeet
PRINCIPAL
 RAIPUR INSTITUTE OF TECHNOLOGY
 Chhatra Ghat, Mallan Road, RAIPUR (C.G.)

Chhattisgarh Swami Vivekanand Technical University, Bhilai (C.G.)

SCHEME OF TEACHING & EXAMINATION

B.E. VII SEMESTER MECHANICAL ENGINEERING

S. No.	Board of Study	Sub. Code	SUBJECT	PERIODS PER WEEK			SCHEME OF EXAM Theory/Practical			Total Marks	Credit L+(T+P)/2
				L	T	P	ESE	CT	TA		
1.	Mech. Engg	337731(37)	Automobile Engineering	3	1	-	80	20	20	120	4
2.	Mech. Engg	337732(37)	Refrigeration & Air-conditioning	4	1	-	80	20	20	120	5
3.	Mech. Engg	337733(37)	Computer Aided Design & Manufacturing	4	1	-	80	20	20	120	5
4.	Mech. Engg	337734(37)	Machine Tool Technology	4	1	-	80	20	20	120	5
5.	Refer Table - II		Professional Elective-II	4	1	-	80	20	20	120	5
6.	Mech. Engg	337761(37)	Automobile Engineering Lab	-	-	3	40	-	20	60	2
7.	Mech. Engg	337762(37)	Refrigeration & Air-conditioning Lab	-	-	3	40	-	20	60	2
8.	Mech. Engg	337763(37)	Computer Aided Design and Manufacturing Lab	-	-	3	40	-	20	60	2
9.	Mech. Engg	337764(37)	Minor Project	-	-	3	100	-	40	140	2
10.	Management	337765(76)	Innovative & Entrepreneurial Skills	-	-	2	-	-	40	40	1
11.	Mech. Engg	337766(37)	** Practical Training Evolution Library	-	-	1	-	-	40	40	1
Total				19	5	15	620	100	280	1000	34

L – Lecture,

ESE – End Semester Exam,

T – Tutorial,

CT – Class Test,

P – Practical,

TA – Teacher's Assessment

**To be completed after VI semester and before the commencement of VII Semester.

Table – II

Professional Elective - II

S.No.	Branch	Subject Code	Subject
1	Mechanical	337741(37)	Quality Control & Total Quality Management
2	Mechanical	337742(37)	Energy Management & Audit
3	Mechanical	337743(37)	Applied Elasticity & Plasticity
4	Mechanical	337744(37)	Product Design & Development
5	Mechanical	337745(37)	Numerical Control of Machines Tools
6	Mechanical	337746(37)	Thermal System Design
7	Mechanical	337747(37)	Cyber Security/Information Security

Note: (1) 1/4th of total strength of students subject to minimum of 20 students is required to offer and elective in the college in a particular academic session.

Note: (2) Choice of elective course once made for an examination cannot be changed in future examinations.



Subj
PRINCIPAL
RAIPUR INSTITUTE OF TECHNOLOGY
CHHATAUNA, MANDRHASAUD, RAIPUR (C.G.)

Chhattisgarh Swami Vivekanand Technical University, Bhilai

SCHEME OF TEACHING AND EXAMINATION

B.E. VI SEMESTER MECHANICAL ENGINEERING

S. No.	Board of Study	Sub. Code	SUBJECT	PERIODS PER WEEK			SCHEME OF EXAM Theory/Practical			Total Marks	Credit L+(T+P)/2
				L	T	P	ESE	CT	TA		
1.	Mech. Engg	337651 (37)	Machine Design – II	4	1	-	80	20	20	120	5
2.	Mech. Engg	337652 (37)	Energy Systems	4	1	-	80	20	20	120	5
3.	Mech. Engg	337653 (37)	Internal Combustion Engines	4	1	-	80	20	20	120	5
4.	Mech. Engg	337654 (37)	Heat & Mass Transfer	4	1	-	80	20	20	120	5
5.	Mech. Engg	337655 (37)	Production Management	3	1	-	80	20	20	120	4
6.	Refer Table I		Professional Elective-I	4	1	-	80	20	20	120	5
7.	Mech. Engg	337661 (37)	Machine Design-II Lab	-	-	2	40	-	20	60	1
8.	Mech. Engg	337662 (37)	Internal Combustion Engines Lab	-	-	2	40	-	20	60	1
9.	Mech. Engg	337663 (37)	Production Management Lab	-	-	2	40	-	20	60	1
10.	Mech. Engg	337664 (37)	HMT Lab	-	-	2	40	-	20	60	1
11.	Management	300665 (76)	Managerial Skills	-	-	2	-	-	40	40	1
12.	Mech. Engg		Library	-	-	1	-	-	-	-	-
Total				23	6	11	640	120	240	1000	34

L: Lecture

ESE: End Semester Examination

T: Tutorial

CT: Class Test

P: Practical

TA: Teacher's Assessment

Note: Industrial Training of eight weeks is mandatory for B.E. students. It is to be completed in two equal parts. The first part must have been completed in summer after IV semester. The second part to be completed during summer after VI semester after which students have to submit a training report which will be evaluated by college teachers during B.E. VII semester.

Table – 1
Professional Elective – I

S. No.	Board of Study	Subject Code	Subject
1	Mechanical Engineering	337671 (37)	Industrial Hydraulics
2	Mechanical Engineering	337672 (37)	Control Engineering
3	Mechanical Engineering	337673 (37)	Engineering Economics
4	Mechanical Engineering	337674 (37)	Composite Materials
5	Mechanical Engineering	337675 (37)	Power Plant Engineering
6	Mechanical Engineering	337676 (37)	Maintenance and Reliability
7	Mechanical Engineering	337677 (37)	Computer Graphics

Note (1) – 1/4th of total strength of students subject to minimum of twenty students is required to offer an elective in the college in a particular academic session.

Note (2) – Choice of elective course once made for an examination cannot be changed in future examinations.



Signature
PRINCIPAL
RAJPUR INSTITUTE OF TECHNOLOGY
CHHATAUNA, MANDHATAUDA, RAJPUR (C.G.)

RCET, BHILAI

Chhattisgarh Swami Vivekanand Technical University, Bhilai

Scheme of Teaching and Examination

M.Tech. (Computer Science & Engineering)

I Semester

I Semester											
S.N.	Board of Study	Subject Code	Subject Name	Periods per week			Scheme of Exam			Total Marks	Credit L+T+P/2
				L	T	P	Theory Practical				
							ESE	CT	TA		
1	Computer Sc.& Engg.	522111 (22)	Advanced Operating System	3	1	-	100	20	20	140	4
2	Computer Sc.& Engg.	522112 (22)	Java Programming and Applications	3	1	-	100	20	20	140	4
3	Computer Sc.& Engg.	522113 (22)	Advanced Computer Architecture	3	1	-	100	20	20	140	4
4	Computer Sc.& Engg.	522114 (22)	Advanced Computer Networks	3	1	-	100	20	20	140	4
5	Refer Table - I		Elective - I	3	1	-	100	20	20	140	4
6	Computer Sc.& Engg.	522121 (22)	Advanced Operating System Lab	-	-	3	75		75	150	2
7	Computer Sc.& Engg.	522122 (22)	Java Programming and Applications Lab	-	-	3	75		75	150	2
TOTAL				15	5	6	650	100	250	1000	24

L-Lecture, T- Tutorial, P- Practical, ESE- End Semester Examination, CT- Class Test, TA- Teacher's Assessment
Note : Duration of all theory papers will be of Three Hours.

Table - I			
Elective - I			
S.No.	Board of Study	Code	Subject
1	Computer Science Engineering	522131 (22)	Advanced Digital Communication
2	Computer Science Engineering	522132 (22)	Numerical Computing
3	Computer Science Engineering	522133 (22)	System Simulation
4	Computer Science Engineering	522134 (22)	Analysis and Design of Algorithms
5	Computer Science Engineering	522135 (22)	Digital Signal Processing

Note (1) - 1/4th of total strength of students subject to minimum of twenty students is required to offer an elective in the college in a Particular academic session.

Note (2) - Choice of elective course once made for an examination cannot be changed in future examinations.



[Signature]
PRINCIPAL
RAIPUR INSTITUTE OF TECHNOLOGY
CHHATAUNA, MANDIRHASAUL, RAIPUR (C.G.)

Chhattisgarh Swami Vivekanand Technical University, Bilai

Scheme of Teaching and Examination

M.Tech. (Computer Science & Engineering)

II Semester

S.N.	Board of Study	Subject Code	Subject Name	Periods per week			Scheme of Exam			Total Marks	Credit L+(T+P)/2
				L	T	P	ESE	CT	TA		
1	Computer Sc. & Engg.	522211 (22)	A. I. and Applications	3	1	-	100	20	20	140	4
2	Computer Sc. & Engg.	522212 (22)	Advanced Database Management System	3	1	-	100	20	20	140	4
3	Computer Sc. & Engg.	522213 (22)	Software Engineering Techniques	3	1	-	100	20	20	140	4
4	Computer Sc. & Engg.	522214 (22)	Computer Graphics & Multimedia	3	1	-	100	20	20	140	4
5	Refer Table - I		Elective -II	3	1	-	100	20	20	140	4
6	Computer Sc. & Engg.	522221 (22)	Advanced Database Management System Lab	-	-	3	75		75	150	2
7	Computer Sc. & Engg.	522222 (22)	Computer Graphics & Multimedia Lab	-	-	3	75		75	150	2
TOTAL				15	5	6	650	100	250	1000	24

L-Lecture, T-Tutorial, P-Practical, ESE-End Semester Examination, CT-Class Test, TA-Teacher's Assessment
 Note: Duration of all theory papers will be of Three Hours.

Table - II			
Elective -II			
S.No.	Board of Study	Code	Subject
1	Computer Science Engineering	522231 (22)	Neural Networks
2	Computer Science Engineering	522232 (22)	Cryptography & Network Security
3	Computer Science Engineering	522233 (22)	Distributed Computing
4	Computer Science Engineering	522234 (22)	Cellular mobile Communication (Prerequisite: Advanced Digital Communication)
5	Computer Science Engineering	522235 (22)	Digital Image Processing (Prerequisite: Digital Signal Processing)

Note (1) - 1/4th of total strength of students subject to minimum of twenty students is required to offer an elective in the college in a Particular academic session.

Note (2) - Choice of elective course once made for an examination cannot be changed in future examinations.



Principal
 PRINCIPAL
 RAIPUR INSTITUTE OF TECHNOLOGY
 Chaitanya Nagar, Raipur (C.G.)

Chhattisgarh Swami Vivekanand Technical University, Bhilai

Scheme of Teaching and Examination

M. Tech (Computer Science & Engineering) III Semester

S.N.	Board of Study	Subject Code	Subject Name	Periods per week			Scheme of Exam			Total Marks	Credit L+(T+P)/2
				L	T	P	Theory/Practical				
							ESE	CT	TA		
1	Computer Sc. Engg	522311 (22)	Data Warehousing & Data Mining	3	1	-	100	20	20	140	4
2	Refer Table -III		Elective-III	3	1	-	100	20	20	140	4
3	Computer Sc. Engg	522321 (22)	Preliminary work on Dissertation	-	-	28	100	-	100	200	14
4	Computer Sc. Engg	522322 (22)	Seminar based on Dissertation	-	-	3	-	-	20	20	2
Total				6	2	31	300	40	160	500	24

L-Lecture, T- Tutorial, P- Practical, ESE- End Semester Examination, CT- Class Test, TA- Teacher's Assessment

Table - III Elective -III			
S.No.	Board of Study	Code	Subject
1	Computer Science Engineering	522331 (22)	Embedded Systems
2	Computer Science Engineering	522332 (22)	Object Oriented Software Engineering
3	Computer Science Engineering	522333 (22)	Enterprise Resource Planning
4	Computer Science Engineering	522334 (22)	Mobile Computing
5	Computer Science Engineering	522335 (22)	Multimedia and Wireless Technology

Note (1) -

1/4th of total strength of students subject to minimum of twenty students is required to offer an elective in the college in a Particular academic session.

Note (2) -

Choice of elective course once made for an examination cannot be changed in future examinations.



Signature
PRINCIPAL
RAIPUR INSTITUTE OF TECHNOLOGY
CHHATAUNA, MANDIRHASAUD, RAIPUR (C.G.)

RCET, BHILAI

Chhattisgarh Swami Vivekanand Technical University, Bhilai

Scheme of Teaching and Examination M.Tech. (Software Engineering) Semester - I

S.N.	Board of Study	Subject Code	Subject Name	Periods per week			Scheme of Exam			Total Marks	Credit L+(T+P)/2
				L	T	P	Theory/Practical				
							ESE	CT	TA		
1	Computer Sc. & Engg.	568111(22)	Software Engineering Methodology	3	1	-	100	20	20	140	4
2	Computer Sc. & Engg.	522112(22)	Java Programming & Applications	3	1	-	100	20	20	140	4
3	Computer Sc. & Engg.	568112(22)	Object Oriented Modeling	3	1	-	100	20	20	140	4
4	Computer Sc. & Engg.	568113(22)	Software Agents	3	1	-	100	20	20	140	4
5	Computer Sc. & Engg.	Elective -I		3	1	-	100	20	20	140	4
6	Computer Sc. & Engg.	568121(22)	Java Programming & Applications Lab	-	-	3	75	-	75	150	2
7	Computer Sc. & Engg.	568122(22)	Object Oriented Modeling Lab	-	-	3	75	-	75	150	2
Total				15	5	6	650	100	250	1000	24

L-Lecture, T- Tutorial, P - Practical, ESE- End Semester Examination, CT- Class Test, TA- Teacher's Assessment
Note : Duration of all theory papers will be of Three Hours.

Elective -I			
S.N.	Board of Study	Code	Subject Name
1	Computer Science & Engineering	522133 (22)	System Simulation
2	Computer Science & Engineering	568131 (22)	Information Security Systems
3	Computer Science & Engineering	568132 (22)	Software Reengineering



Signature
PRINCIPAL
RAIPUR INSTITUTE OF TECHNOLOGY
CHHATAUNA, MANDRAKSAHU, RAIPUR (C.G.)

RCET, BHILAI

Chhattisgarh Swami Vivekanand Technical University, Bhilai

Scheme of Teaching and Examination

M.Tech. (Software Engineering)

Semester - II

S.N.	Board of Study	Subject Code	Subject Name	Periods per week			Scheme of Exam			Total Marks	Credit L+(T+P)/2
				L	T	P	Theory/Practical				
							ESE	CT	TA		
1	Computer Sc. & Engg.	568211(22)	Software Architecture and Design Pattern	3	1	-	100	20	20	140	4
2	Computer Sc. & Engg.	522212(22)	Advanced Database Management System	3	1	-	100	20	20	140	4
3	Computer Sc. & Engg.	568212(22)	Real Time Systems	3	1	-	100	20	20	140	4
4	Computer Sc. & Engg.	568213(22)	Software Project Management	3	1	-	100	20	20	140	4
5	Computer Sc. & Engg.	Elective -II		3	1	-	100	20	20	140	4
6	Computer Sc. & Engg.	568221(22)	Advanced DBMS Lab	-	-	3	75		75	150	2
7	Computer Sc. & Engg.	568222(21)	Software Engineering Case Studies Lab	-	-	3	75		75	150	2
Total				15	5	6	650	100	250	1000	24

L-Lecture, T- Tutorial, P - Practical, ESE- End Semester Examination, CT- Class Test, TA- Teacher's Assessment
Note : Duration of all theory papers will be of Three Hours.

Elective -II			
S.N.	Board of Study	Code	Subject Name
1	Computer Science & Engineering	522232(22)	Cryptography & Network Security
2	Computer Science & Engineering	554231(22)	Neural Network & Fuzzy Logic
3	Computer Science & Engineering	568232(22)	Software Testing & Quality Assurance



Signature
PRINCIPAL
RAIPUR INSTITUTE OF TECHNOLOGY
CHHATAUNA, MANDIRHASAUD, RAIPUR (C.G.)

RCET, BHILAI

Chhattisgarh Swami Vivekanand Technical University, Bhilai
Scheme of Teaching and Examination
M.Tech. (Software Engineering)
Semester - III

S.N	Board of Study	Subject Code	Subject Name	Periods per week			Scheme of Exam			Total Marks	Credit L+(T+P)/2
				L	T	P	ESE	CT	TA		
1	Computer Sc. & Engg	568311 (22)	Data Warehousing and Mining Techniques	3	1	-	100	20	20	140	4
2	Computer Sc. & Engg		Elective -III	3	1	-	100	20	20	140	4
3	Computer Sc. & Engg.	568321(22)	Preliminary Work on Dissertation	-	-	28	100	-	100	200	14
4	Computer Sc. & Engg.	568322(22)	Seminar based on Dissertation	-	-	3	-	-	20	20	2
Total				6	2	31	300	40	160	500	24

L-Lecture, T- Tutorial, P - Practical, ESE- End Semester Examination, CT- Class Test, TA- Teacher's Assessment
 Note : Duration of all theory papers will be of Three Hours.

Elective -III			
S.N.	Board of Study	Code	Subject Name
1	Computer Science & Engineering	522333 (22)	Enterprise Resource Planning
2	Computer Science & Engineering	568331 (22)	Distributed Computing
3	Computer Science & Engineering	568332 (22)	Wireless and Mobile Computing



Signature
PRINCIPAL
 RAIPUR INSTITUTE OF TECHNOLOGY
 CHHATAUNA, RAIPUR (C.G.)

Chhattisgarh Swami Vivekanand Technical University, Bhilai

Scheme of teaching and examination

M.E. (POWER ELECTRONICS) in the Department of Electrical Engg.

1st SEMESTER

S N	Board of study	Subject code	Subject Name	Periods per week			Scheme of exam			Total Marks	Credit $\frac{L+(T+P)}{2}$
				L	T	P	Theory/Practical				
							ESE	CT	TA		
1	Electrical Engg.	562111(24)	Power Converters	3	1	-	100	20	20	140	4
2	Electrical Engg.	562112(24)	Industrial Control Electronics	3	1	-	100	20	20	140	4
3	Electronics & Telecomm.	562113(24)	Microcontroller & Embedded System Design	3	1	-	100	20	20	140	4
4	Electrical Engg.	562114(24)	Modern Control Theory	3	1	-	100	20	20	140	4
5	Refer table-1		Elective - 1	3	1	-	100	20	20	140	4
6	Electrical Engg.	562121(24)	Power Converters Lab	-	-	3	75	-	75	150	2
7	Electrical Engg.	562122(24)	Microcontroller Lab	-	-	3	75	-	75	150	2
TOTAL				15	5	6	650	100	250	1000	24

L- Lecture, T- Tutorial, P- Practical, ESE- End Semester Examination,

CT - Class Test, TA- Teacher's Assessment.

Note : Duration of all theory papers will be of Three Hours.

Table - I		
Elective - I		
Board of Study	Code	Subject
Electrical Engg.	562131(24)	Analysis & Design of Artificial Neural Network
Electrical Engg.	562132(24)	Modelling & Analysis of Electrical Machines
Electrical Engg.	562133(24)	Digital Controllers in Power Electronics Application

Note (1) - 1/4th of total strength of students subject to minimum of twenty students is required to offer an elective in the college in a Particular academic session.

Note (2) - Choice of elective course once made for an examination cannot be changed in future examinations.



Handwritten signature
PRINCIPAL
 RAIPUR INSTITUTE OF TECHNOLOGY
 CHHATAUNA, MANDIRHASAUD, RAIPUR (C.G.)

Chhattisgarh Swami Vivekanand Technical University, Bhilai

SCHEME OF EXAMINATION

M.E. (POWER ELECTRONICS) in the Department of Electrical Engg.

IInd SEMESTER

S N	Board of study	Subject code	Subject Name	Periods per week			Scheme of exam			Total Marks	Credit $\frac{L+T+P}{2}$
				L	T	P	Theory/Practical				
							ESE	CT	TA		
1	Electrical Engg.	562211(24)	Switched mode Power Conversion	3	1	-	100	20	20	140	4
2	Electrical Engg.	562212(24)	Power Electronics Drives	3	1	-	100	20	20	140	4
3	Electrical Engg.	562213(24)	PWM Converters & Applications	3	1	-	100	20	20	140	4
4	Electrical Engg.	559211(24)	EHV AC & DC	3	1	-	100	20	20	140	4
5	Refer table 2		Elective – 2	3	1	-	100	20	20	140	4
6	Electrical Engg.	562221(24)	Power Modules Lab	-	-	3	75	-	75	150	2
7	Electrical Engg.	562222(24)	Power Electronics Simulation Lab	-	-	3	75	-	75	150	2
TOTAL				15	5	6	650	100	250	1000	24

L- Lecture,
CT - Class Test,

T- Tutorial,
TA- Teacher's Assessment.

P- Practical,

ESE- End Semester Examination,

Note : Duration of all theory papers will be of Three Hours.

Table – 2		
Elective – 2		
Board of Study	Code	Subject
Electrical Engg.	562231(24)	Fuzzy Systems
Electrical Engg.	562232(24)	Optimization Techniques

Note (1) – 1/4th of total strength of students subject to minimum of twenty students is required to offer an elective in the college in a Particular academic session.

Note (2) – Choice of elective course once made for an examination cannot be changed in future examinations.



Signature
PRINCIPAL
RAIPUR INSTITUTE OF TECHNOLOGY
CHHATGAON, NARAYANAPUR, RAIPUR (C.G.)

Chhattisgarh Swami Vivekanand Technical University, Bhilai

Scheme of teaching and examination

M.E.(POWER ELECTRONICS) in the Department of Electrical Engg.

IIIrd SEMESTER

S N	Board of study	Subject code	Subject Name	Periods per week			Scheme of exam			Total Marks	Credit $\frac{L+T+P}{2}$
				L	T	P	Theory/Practical				
							ESE	CT	TA		
1	Electrical Engg.	562311(24)	Static VAR Controller & Harmonic Filtering	3	1	-	100	20	20	140	4
5	Refer table 3		Elective – 3	3	1	-	100	20	20	140	4
6	Electrical Engg.	562321(24)	Preliminary Project	-	-	15	100	-	100	200	14
7	Electrical Engg.	562322(24)	Seminar based on Dissertation	-	-	3	-	-	20	20	2
TOTAL				6	2	18	300	40	160	500	24

L- Lecture, T- Tutorial, P- Practical, ESE- End Semester Examination.

CT - Class Test, TA- Teacher's Assessment.

Note : Duration of all theory papers will be of Three Hours.

Table - 3		
Elective - 3		
Board of Study	Code	Subject
Electrical Engg.	562331(24)	Digital Control Theory
Electrical Engg.	562332(24)	Advanced Control of PWM Inverters fed Induction Motor.
Electrical Engg.	562333(24)	Power Electronics in wind & Solar Power Converters.

Note (1) - 1/4th of total strength of students subject to minimum of twenty students is required to offer an elective in the college in a Particular academic session.

Note (2) - Choice of elective course once made for an examination cannot be changed in future examinations.



Principal
PRINCIPAL
RAIPUR INSTITUTE OF TECHNOLOGY
CHHATAUNA, MANDIRHASAUD, RAIPUR (C.G.)



Chhattisgarh Swami Vivekanand Technical University, Bhilai

Scheme of Teaching and Examination

Master of Computer Applications (MCA)

Semester-II

S. No	Board of Studies	Subject Code	Subject Name	Periods Per Week			Scheme of Examination					Total Marks
							Theory			Practical		
				L	T	P	ESE	CT	TA	ESE	TA	
1	Computer Applications	5021271 (021)	Programming with Java	4	1	-	100	20	20	-	-	140
2	Computer Applications	5021272 (021)	Computer Network	4	1	-	100	20	20	-	-	140
3	Computer Applications	5021273 (021)	Artificial Intelligence	4	1	-	100	20	20	-	-	140
4	Computer Applications	5021274 (021)	Operating System with Unix	4	1	-	100	20	20	-	-	140
5	Refer Table-I		Elective-I	4	1	-	100	20	20	-	-	140
6	Computer Applications	5021261 (021)	Java (Lab)	0	0	4	-	-	-	75	25	100
7	Computer Applications	5021262 (021)	Unix (Lab)	-	-	4	-	-	-	75	25	100
8	Computer Applications	5021263 (021)	Web Technology (Lab)	-	-	5	-	-	-	75	25	100
9	Humanities	5021264 (046)	Personality Development	-	-	2	-	-	-	-	-	-
Total				20	05	15	500	100	100	225	75	1000

L: Lecture T: Tutorial P: Practical ESE : End Semester Examination TA: Teacher's Assessment CT: Class Test

Table-I (Elective-I)

S.No	Board of Studies	Subject Code	Subject Name Elective-I (Management)
1	Management	5021281(076)	Accounting and Financial Management
2	Management	5021282(076)	Supply Chain Management
3	Management	5021283(076)	Managerial Economics
4	Management	5021284(076)	Enterprise Resource Planning
5	Management	5021285(076)	Management Information System
6	Management	5021286(076)	Digital Marketing



PRINCIPAL
RAIPUR INSTITUTE OF TECHNOLOGY
CHHATAUNA, MANDIRHASAUD, RAIPUR



Chhattisgarh Swami Vivekanand Technical University, Bhilai

Scheme of Teaching and Examinations

Master of Computer Applications (MCA)

Semester-III

S. No	Board of Studies	Subject ode	Subject Name	Periods Per Week			Scheme Of Examination					Total Mark	Credits
							Theory			Practical			
				L	T	P	ESE	CT	TA	ESE	TA		
1	Computer Applications	5021371 (021)	Computer Graphics and Image Processing	4	1	-	100	20	20	-	-	140	5
2	Computer Applications	5021372 (021)	Cryptography and Network Security	4	1	-	100	20	20	-	-	140	5
3	Computer Applications	5021373 (021)	Data Science	4	1	-	100	20	20	-	-	140	5
4	Refer Table-I		Elective-I	4	1	-	100	20	20	-	-	140	5
5	Refer Table-II		Elective-II	4	1	-	100	20	20	-	-	140	5
6	Computer Applications	5021361 (021)	Data Science (Lab)	0	0	5	-	-	-	75	25	100	3
7	Computer Applications	5021362 (021)	Android (Lab)	-	-	4	-	-	-	75	25	100	2
8	Computer Applications	5021363 (021)	Minor Project*	-	-	4	-	-	-	75	25	100	2
9	Computer Applications	5021364 (021)	Report Writing	-	-	2	-	-	-	-	-	-	-
Total				20	5	15	500	100	100	225	75	1000	32

L:Lecture T: Tutorial P:Practical ESE : End Semester Examination TA: Teacher's Assessment CT: Class Test

Note: * Student has to undergo 4 weeks training/certification/internship/online course after the second semester during summer vacation, which would be given weightage in assessments of 3rd semester minor project.

Table-I (Elective-I)

Board of Studies	Subject Code	Subject Name
Computer Applications	5021381(021)	Natural Language Processing
Computer Applications	5021382(021)	Mobile Computing
Computer Applications	5021383(021)	Compiler Design
Computer Applications	5021384(021)	Neural network & Fuzzy Logic
Computer Applications	5021385(021)	Blockchain Technology

Table-II (Elective-II)

Board of Studies	Subject Code	Subject Name
Computer Applications	5021391(021)	Machine Learning
Computer Applications	5021392(021)	Parallel Processing
Computer Applications	5021393(021)	Internet of Things
Computer Applications	5021394(021)	Formal Language and Automata Theory
Computer Applications	5021395(021)	Operation Research



Principal
PRINCIPAL
 RAIPUR INSTITUTE OF TECHNOLOGY
 CHHATAUNA, MANDEKHAJOD, RAIPUR (C.G.)



CHHATTISGARH SWAMI VIVEKANANDA TECHNICAL UNIVERSITY

MBA SEMESTER III

Sl. No.	Board of Studies	Subject Code	Subject	Periods Per Week			Scheme of Examination			Total Marks	Credits
				L	T	P	ESE	CT	TA		
1	Mgmt.	576311(76)	Optimization Methods (New)	3	2	0	80	10	10	100	4
2	Mgmt.	576312(76)	Organizational Development (New)	3	1	0	80	10	10	100	4
3	Mgmt.	576313(76)	Innovation & Technology Management (New)	3	1	0	80	10	10	100	4
4	Mgmt.	576314(76)	Consumer Behavior (New)	3	1	0	80	10	10	100	4
5	Mgmt.	Codes are given in the list of electives	Elective I (Major Sp I; Group I)	3	1	0	80	10	10	100	4
6	Mgmt.		Elective II (Major Sp I; Group II)	3	1	0	80	10	10	100	4
7	Mgmt.		Elective III (Major Sp II; Group I)	3	1	0	80	10	10	100	4
8	Mgmt.		Elective IV (Major Sp II; Group II)	3	1	0	80	10	10	100	4
9	Mgmt.	576321(76)	Negotiation Skill and Techniques Lab	0	0	3	60	0	40	100	2
10	Mgmt.	576322(76)	Summer Training Report and Viva	0	0	2	60	0	40	100	1
11	Mgmt.		Library	0	0	2	0	0	0	0	0
			Total	24	9	7	760	80	160	1000	35

L – Lecture, T- Tutorial; ESE – End Semester Examination, CT – Class, Test, TA – Teacher's Assessment

The list of specializations and electives offered in third semester is given in the subsequent page. For each specialization, electives are offered in two groups, namely Group I and Group II. A candidate has to select one elective each from Group I and Group II. The institutes must send its choice of Electives within one month of the start of the semester.



[Signature]
PRINCIPAL
 RAIPUR INSTITUTE OF TECHNOLOGY
 CHHATAUNA, MANDIRHASAUD, RAIPUR (C.G.)

SPECIALIZATION AND ELECTIVES I TO IV FOR THIRD SEM

Marketing Management		
GROUP I	576331(76)	Marketing Research (New)
	576332(76)	Distribution and Inventory Management (New)
	576333(76)	Advertising and Sales Promotion (New)
GROUP II	576334(76)	Services Marketing (New)
	576335(76)	Sales Management (New)
	576336(76)	Customer Relationship Management (New)

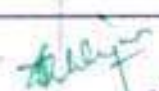
Finance Management		
GROUP I	576341(76)	Security Analysis and Portfolio Management (New)
	576342(76)	Corporate Risk Management (New)
	576343(76)	Working of Stock Exchanges (New)
GROUP II	576344(76)	Corporate Finance and Valuation (New)
	576345(76)	Taxation and Tax Planning (New)
	576346(76)	Futures and Options (New)

Human Resource Management		
GROUP I	576351(76)	Human Resources Planning and Development (New)
	576352(76)	Cross Cultural and Global Management (New)
	576353(76)	Executive Compensation (New)
GROUP II	576354(76)	Compensation Management (New)
	576355(76)	Performance Management (New)
	576356(76)	Management of Training and Development (New)

Systems Management		
GROUP I	576361(76)	Computer Networking (New)
	576362(76)	Internet Business Models and Business Strategies (New)
	576363(76)	RDBMS & SQL Concepts (New)
GROUP II	576364(76)	Mobile Commerce and Security (New)
	576365(76)	Knowledge Management and Innovation (New)
	576366(76)	Software Engineering & Project Management (New)

Production and Operations Management		
GROUP I	576371(76)	Production Planning and Control (New)
	576372(76)	Manufacturing and Enterprise Resources Planning (New)
	576373(76)	Productivity Improvement Techniques (New)
GROUP II	576374(76)	Lean and Agile Systems (New)
	576375(76)	Quality Control, Quality Assurance and Reliability (New)
	576376(76)	Logistics and Services (New)




 PRINCIPAL
 RAIPUR INSTITUTE OF TECHNOLOGY
 CHHATAUNA, MANDIKHASRAO, RAIPUR (C.G.)



CHHATTISGARH SWAMI VIVEKANANDA TECHNICAL UNIVERSITY

MBA SEMESTER IV

Sl. No.	Board of Studies	Subject Code	Subject	Periods Per Week			Scheme of Examination			Total Marks	Credits
				L	T	P	ESE	CT	TA		
1	Mgmt.	576411(76)	Corporate Strategy (New)	3	1	0	80	10	10	100	4
2	Mgmt.	576412(76)	Econometrics and Decision Science (New)	3	2	0	80	10	10	100	4
3	Mgmt.	Codes are given in the list of electives	Elective V (Major Sp I; Group I)	3	1	0	80	10	10	100	4
4	Mgmt.		Elective VI (Major Sp I; Group II)	3	1	0	80	10	10	100	4
5	Mgmt.		Elective VII (Major Sp II; Group I)	3	1	0	80	10	10	100	4
6	Mgmt.		Elective VIII (Major Sp II; Group II)	3	1	0	80	10	10	100	4
7	Mgmt.		Applied Elective Theory (New)	3	1	0	80	10	10	100	4
8	Mgmt.		Applied Elective Lab	0	0	3	60	0	40	100	2
9	Mgmt.	576422(76)	Major Project Report and Viva Voce	0	1	5	140	0	60	200	3
			Total	21	9	8	760	70	170	1000	33

L – Lecture, T- Tutorial; ESE – End Semester Examination, CT – Class, Test, TA – Teacher's Assessment

The list of specializations and electives offered in fourth semester is given in the subsequent page. For each specialization, electives are offered in two groups, namely Group I and Group II. A candidate has to select one elective each from Group I and Group II. Specializations as selected in Semester III will continue in Semester IV also. The institutes must send its choice of Electives within one month of the start of the semester.



Principals
PRINCIPAL
 RAIPUR INSTITUTE OF TECHNOLOGY
 CHHATAUNA, MANDIRHASAUD, RAIPUR (C.G.)

SPECIALIZATION AND ELECTIVES V TO VIII FOR FOURTH SEM

Marketing Management		
GROUP I	576431(76)	Product and Brand Management (New)
	576432(76)	Rural and Agro Marketing (New)
	576433(76)	International Business Marketing (New)
GROUP II	576434(76)	Internet and Social Media Marketing (New)
	576435(76)	Retail Management (New)
	576436(76)	Corporate Communications (New)

Finance Management		
GROUP I	576441(76)	Management of Working Capital (New)
	576442(76)	International Financial Management (New)
	576443(76)	Business Analysis and Valuation (New)
GROUP II	576444(76)	Project Planning and Analysis (New)
	576445(76)	Banking and Insurance (New)
	576446(76)	Operations Research for Finance and Risk Analysis (New)

Human Resource Management		
GROUP I	576451(76)	Industrial Relations (New)
	576452(76)	Negotiation and Counseling (New)
	576453(76)	Strategic Human Resource Management (New)
GROUP II	576454(76)	Industrial and Organizational Psychology (New)
	576455(76)	Emerging Issues in HR Management (New)
	576456(76)	Interpersonal Processes and Counseling Skills for Managers (New)

Systems Management		
GROUP I	576461(76)	Business Process Re-engineering and ERP (New)
	576462(76)	IT Enabled Services Management (New)
	576463(76)	Internet Security and Cyber Laws (New)
GROUP II	576464(76)	Data Warehousing and Data Mining (New)
	576465(76)	Internet Marketing (New)
	576466(76)	Wireless Technologies and Convergence (New)

Production and Operations Management		
GROUP I	576471(76)	Supply Chain Management (New)
	576472(76)	Project Planning, Evaluation & Management (New)
	576473(76)	Six Sigma (New)
GROUP II	576474(76)	Push and Pull Based Manufacturing Systems (New)
	576475(76)	Quality Management Systems (New)
	576476(76)	Manufacturing Strategy (New)




 PRINCIPAL
 RAIPUR INSTITUTE OF TECHNOLOGY
 CHHATAURA, NARORA SAHU, RAIPUR (C.G.)

APPLIED ELECTIVES FOR FOURTH SEMESTER

Theory

Applied Electives	
576481(76)	Hospital Management (New)
576482(76)	Travel and Tourism (New)
576483(76)	Transport and Logistics (New)
576484(76)	Insurance (New)
576485(76)	Banking (New)
576486(76)	Management of SME & Family Business (New)
576487(76)	Media Management (New)
576488(76)	Event Management (New)
576489(76)	Advanced Corporate Communications (New)
576480(76)	Sports Management (New)

- A student can select any one of the above electives.
- For each applied elective a student must take two papers, namely *Applied Elective Theory* and *Applied Elective Lab*.
- An institute may offer to run the above electives through its own faculty or through faculty from outside.
- At least a feasible number must register for a course to be offered by the institute. The feasible number is at the discretion of the institute.
- The institutes must send its choice of Applied Electives within one month of the start of the semester.

APPLIED ELECTIVES FOR FOURTH SEMESTER

Practical

Applied Electives	
576491(76)	Hospital Management
576492(76)	Travel and Tourism
576493(76)	Transport and Logistics
576494(76)	Insurance
576495(76)	Banking
576496(76)	Management of SME & Family Business
576497(76)	Media Management
576498(76)	Events Management
576499(76)	Advanced Corporate Communications
576490(76)	Sports Management



Shilpi
PRINCIPAL
RAIPUR INSTITUTE OF TECHNOLOGY
CHHATAUNA, MANDIKHASAU, RAIPUR (C.G.)

Chhattisgarh Swami Vivekanand Technical University, Bhilai

SCHEME OF TEACHING AND EXAMINATION

**M. E. Mechanical Engineering (Energy Management)
1st Semester**

S N o.	Board Of Studies	Sub. Code	Subject	Periods Per Week			Scheme of Exam Theory/Practical			Total Marks	Credit L+(T+P)/ 2
				L	T	P	ESE	CT	TA		
1	Mechanical Engg	583111(37)	Solar Energy Utilization	3	1		100	20	20	140	4
2	Mechanical Engg	583112(37)	Numerical Methods in Energy Management	3	1		100	20	20	140	4
3	Mechanical Engg	583113(37)	Energy Conversion Systems & Devices	3	1		100	20	20	140	4
4	Mechanical Engg	583114(37)	Energy optimization	3	1		100	20	20	140	4
5	Elective- I			3	1		100	20	20	140	4
6	Mechanical Engg	583121(37)	Energy Lab			3	75		75	150	2
7	Mechanical Engg	583122(37)	Computational Lab			3	75		75	150	2
				15	5	6	650	100	250	1000	24

**L – Lecture, T – Tutorial, P – Practical,
ESE - End Semester Exam, CT - Class Test, TA – Teacher's Assessment**

List of Electives I

S.No	Board of Study	Subject Code	Subject
1	Mechanical Engg	583131(37)	Energy, Environment & Sustainable Development
2	Mechanical Engg	583132(37)	Computer Applications: Energy Software
3	Mechanical Engg	583133(37)	Electric Power Generation & Distribution
4	Mechanical Engg	583134(37)	Energy Resources & Economics



(Signature)
PRINCIPAL
RAIPUR INSTITUTE OF TECHNOLOGY
C-10/10/10, BHANDARWADI, RAIPUR (C.G.)

Chhattisgarh Swami Vivekanand Technical University, Bhilai

SCHEME OF TEACHING AND EXAMINATION

**M. E. Mechanical Engineering (Energy Management)
2nd Semester**

S r	Board Of Studies	Sub. Code	Subject	Periods Per Week			Scheme of Exam Theory/Practical			Total Marks	Credit L+(T+P) /2
				L	T	P	ESE	CT	TA		
1	Mechanical Engg	583211(37)	Energy Audit & Management	3	1		100	20	20	140	4
2	Mechanical Engg	583212(37)	Renewable Energy Sources and Technologies	3	1		100	20	20	140	4
3	Mechanical Engg	583213(37)	Modeling of Energy Systems	3	1		100	20	20	140	4
4	Mechanical Engg	583214(37)	Modern Measurement Techniques	3	1		100	20	20	140	4
5	Elective II			3	1		100	20	20	140	4
6	Mechanical Engg	583221(37)	Measurement Lab			3	75		75	150	2
7	Mechanical Engg	583222(37)	Renewable Energy Lab			3	75		75	150	2
				15	5	6	650	100	250	1000	24

L – Lecture, T – Tutorial, P – Practical,
ESE - End Semester Exam CT - Class Test TA – Teacher's Assessment

List of Electives II

S.No.	Board of Study	Subject Code	Subject
1	Mechanical Engg	583231(37)	Energy Policy & Legislation
2	Mechanical Engg	583232(37)	Air & Water pollution control
3	Mechanical Engg	583233(37)	Power System Planning & Reliability
4	Mechanical Engg	583234(37)	Environmental Impact Assessment



[Signature]
PRINCIPAL
RAIPUR INSTITUTE OF TECHNOLOGY
CHHATAUNA, MANORHASAUD, RAIPUR (C.G.)

Chhattisgarh Swami Vivekanand Technical University, Bhilai

SCHEME OF TEACHING AND EXAMINATION

M. E. Mechanical Engineering (Thermal Engineering)

Ist Semester

S. N o.	Board of Study	Sub. Code	SUBJECT	PERIODS PER WEEK			SCHEME OF EXAM Theory/Practical			TOTAL MARKS	Credit L+(T+P)/2
				L	T	P	ESE	CT	TA		
1.	Mechanical Engg	564111 (37)	Numerical Methods in Thermal Engineering	3	1	.	100	20	20	140	4
2.	Mechanical Engg	564112 (37)	Advanced Thermodynamics	3	1	.	100	20	20	140	4
3.	Mechanical Engg	564113 (37)	Advance Fluid Mechanics	3	1	.	100	20	20	140	4
4.	Mechanical Engg	564114 (37)	Advanced Heat Transfer	3	1	.	100	20	20	140	4
5.	Elective - I			3	1	.	100	20	20	140	4
6.	Mechanical Engg	564121 (37)	Computational Fluid Flow & Heat Transfer Lab	.	.	3	75	.	75	150	2
7.	Mechanical Engg	564122 (37)	Experiments in Thermal Engineering	.	.	3	75	.	75	150	2
			Total	15	5	6	650	100	250	1000	24

L – Lecture, – T – Tutorial,
P – Practical, ESE, End Semester Exam,
CT, Class Test TA – Teacher's Assessment

Table, I
List of Electives, I

Elective , I			
S.No.	Board of Study	Subject Code	Subject
1	Mechanical Engee.	564131 (37)	Design of Heat Exchangers
2	Mechanical Engee.	564132 (37)	Fluid Power Engineering
3	Mechanical Engee.	564133 (37)	Advanced I.C. Engines Technology
4	Mechanical Engee.	564134 (37)	Non Conventional Energy Systems.

Note (1) - 1/4th of total strength of students is required to offer an elective in the college. in a particular academic session.

Note (2) - Choice of elective course once made for an examination cannot be changed in future examinations.



Suby
PRINCIPAL
RAIPUR INSTITUTE OF TECHNOLOGY
CHHATAUNA, NANDIMASAUDI, RAIPUR (C.G.)

Chhattisgarh Swami Vivekanand Technical University, Bhilai

SCHEME OF TEACHING AND EXAMINATION

M. E. Mechanical Engineering (Thermal Engineering)

IInd Semester

S. No.	Board of Study	Sub. Code	SUBJECT	PERIODS PER WEEK			SCHEME OF EXAM Theory/Practical			TOTAL MARKS	Credit L+(T+P)/2
				L	T	P	ESE	CT	TA		
1.	Mechanical Engg	564211 (37)	Modeling & Simulation of Thermal Systems	3	1	.	100	20	20	140	4
2.	Mechanical Engg	564212 (37)	Experimental Methods in Thermal Engineering	3	1	.	100	20	20	140	4
3.	Mechanical Engg	564213 (37)	Energy Management	3	1	.	100	20	20	140	4
4.	Mechanical Engg	564214 (37)	Refrigeration & Air Conditioning System Design	3	1	.	100	20	20	140	4
5.	Elective – II			3	1	.	100	20	20	140	4
6.	Mechanical Engg	564221 (37)	Instrumentation Lab	.	.	3	75	.	75	150	2
7.	Mechanical Engg	564222 (37)	Modeling & Simulation Lab	.	.	3	75	.	75	150	2
Total				15	5	6	650	100	250	1000	24

L – Lecture, T – Tutorial,
P – Practical, ESE, End Semester Exam,
CT, Class Test TA – Teacher's Assessment

Table, II
List of Electives, II

Elective - II			
S.No.	Board of Study	Subject Code	Subject
1	Mechanical Engg	564231 (37)	Boundary layer Theory
2	Mechanical Engg	564232 (37)	Two Phase Flow & Heat Transfer
3	Mechanical Engg	564233 (37)	Advance Gas Dynamics
4	Mechanical Engg	564234 (37)	Theory of Combustion & Emission

Note (1) - 1/4th of total strength of students subject is required to offer an elective in the college in a particular academic session.

Note (2) - Choice of elective course once made for an examination cannot be changed in future examinations.



[Signature]
PRINCIPAL
RAIPUR INSTITUTE OF TECHNOLOGY
CHHATAUNA, MANDIKHASAUD, RAIPUR (C.G.)

Chhattisgarh Swami Vivekanand Technical University, Bhilai

SCHEME OF TEACHING AND EXAMINATION

M. E. Mechanical Engineering (Thermal Engineering)

IIIrd Semester

S. No.	Board of Study	Sub. Code	SUBJECT	PERIODS PER WEEK			SCHEME OF EXAM Theory/Practical			TOTAL MARKS	Credit L+(T+P)/2
				L	T	P	ESE	CT	TA		
1.	Mechanical Engg	564311 (37)	Computational Fluid Dynamics & Heat Transfer	3	1	.	100	20	20	140	4
2.	Electives - III			3	1	.	100	20	20	140	4
3.	Mechanical Engg	564321 (37)	Preliminary work on Dissertation	.	.	28	100	.	100	200	14
4.	Mechanical Engg	564322 (37)	Seminar on Industrial Training and Dissertation	.	.	3	.	.	20	20	2
Total				6	2	31	300	40	160	500	24

L – Lecture, T – Tutorial,
P – Practical, ESE, End Semester Exam
CT, Class Test TA – Teacher's Assessment

Table - I
List of Electives - III

Elective , I			
S.No.	Board of Study	Subject Code	Subject
1	Mechanical Engineering	564331 (37)	Power Plant Engineering
2	Mechanical Engineering	564332 (37)	Cold Preservation of Food
3	Mechanical Engineering	564333 (37)	Bio-Fluid Mechanics
4	Mechanical Engineering	564334 (37)	Micro & Nano Scale Thermal Engineering



Signature
PRINCIPAL
RAIPUR INSTITUTE OF TECHNOLOGY
CHHATAUNA, NANDURJASAUD, RAIPUR (C.G.)

**CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
(C.G.)**

Scheme of Teaching & Examination

M.E. Mechanical Engg. (Design)

I Semester

S. No.	Board of Study	Subject Code	Subject	Periods per Week			Scheme of Examination			Total Marks	Credit L+(T+P)/2
							Theory / Practical				
				L	T	P	ESE	CT	TA		
1	Mech. Engg.	548111 (37)	Tribology	3	1	-	100	20	20	140	4
2	Mech. Engg.	548112 (37)	Mechanical Vibration	3	1	-	100	20	20	140	4
3	Mech. Engg.	548113 (37)	Advanced Dynamics of Machine	3	1	-	100	20	20	140	4
4	Mech. Engg.	548114 (37)	Theory of Elasticity & Plasticity	3	1	-	100	20	20	140	4
5	Refer Table-4		Elective-1	3	1	-	100	20	20	140	4
6	Mech. Engg.	548121 (37)	Tribology Lab	-	-	3	75	-	75	150	2
7	Mech. Engg.	548122 (37)	Mechanical Vibration Lab	-	-	3	75	-	75	150	2
Total				15	5	6	650	100	250	1000	24

L- Lecture

P- Practical

CT- Class Test

T- Tutorial

ESE- End Semester Exam

TA- Teacher's Assessment

Table -4

ELECTIVE I

S.No.	Board of Study	Subject Code	Subject
1	Mech. Engg.	548131 (37)	Optimization Techniques
2	Mech. Engg.	548132 (37)	Composite Materials
3	Mech. Engg.	548133 (37)	Analysis & Design of Pressure Vessels & Components

Note (1) – 1/4th of total strength of students subject to minimum of twenty students is required to offer an elective in the college in a Particular academic session .

Note (2) – Choice of elective course once made for an examination cannot be changed in future examinations.



Handwritten signature
PRINCIPAL
 RAIPUR INSTITUTE OF TECHNOLOGY
 CHHATAUNA, MANDIKHASAUD, RAIPUR (C.G.)

**CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
(C.G.)**

Scheme of Teaching & Examination

M.E. Mechanical Engg. (Design)

II Semester

S. No.	Board of Study	Subject Code	Subject	Periods per Week			Scheme of Examination			Total Marks	Credit L+(T+P)?
							Theory / Practical				
				L	T	P	ESE	CT	TA		
1	Mech. Engg.	548211 (37)	Finite Element Methods	3	1	-	100	20	20	140	4
2	Mech. Engg	548212 (37)	CAD/CAM Application	3	1	-	100	20	20	140	4
3	Mech. Engg	548213 (37)	Advanced Machine Tool Design	3	1	-	100	20	20	140	4
4	Mech. Engg	548214 (37)	Advanced Mechanism	3	1	-	100	20	20	140	4
5	Refer Table-II		Elective-1	3	1	-	100	20	20	140	4
6	Mech. Engg	548221 (37)	Finite Element Method Lab	-	-	3	75	-	75	150	2
7	Mech. Engg	548222 (37)	CAD/CAM Lab	-	-	3	75	-	75	150	2
Total				15	5	6	650	100	250	1000	24

L- Lecture
P- Practical ,
CT- Class Test

T- Tutorial
ESE- End Semester Exam
TA- Teacher's Assessment

Table-II

ELECTIVE - II

S.No.	Board of Study	Subject Code	Subject
1	Mech. Engg.	548231 (37)	Experimental Stress Analysis
2	Mech. Engg.	548232 (37)	Measurement System Analysis
3	Mech. Engg.	548233 (37)	Computer Graphics & Visualization

Note (1) – 1/4th of total strength of students subject to minimum of twenty students is required to offer an elective in the college in a Particular academic session .

Note (2) – Choice of elective course once made for an examination cannot be changed in future examinations.



[Signature]
PRINCIPAL
RAIPUR INSTITUTE OF TECHNOLOGY
(CHHATTISGARH, RAIPUR (C.G.))