



CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY

Courses of Study and Scheme of Examination of B.E. First Year (2012-13)
Common to all branches of Engineering except Bio-Tech. & Bio-Medical Engg.

FIRST SEMESTER

S. No	Board of Study	Subject Code	Subject	Periods Per Week			Scheme of Examination			Total Marks	Credit [L+[T+P]] 2
							Theory				
				L	T	P	ESE	CT	TA		
1	Basic Sciences	300114(14)	Applied Mathematics-I	4	1	-	80	20	20	120	5
2	Humanities	300111(46)	Professional Communication in English	4	-	-	80	20	20	120	4
3	Basic Sciences	300112(11)	Applied Chemistry	4	1	-	80	20	20	120	5
4	Mechanical Engineering	300211(37)	Engineering Graphics	2	1	4	80	20	20	120	5
5	Elect. Engg.	300118(24)	Elements of Electrical Engineering (New)	4	1	-	80	20	20	120	5
6	Basic Sciences	300121(11)	Applied Chemistry (Lab)	-	-	2	40	-	20	60	1
7	Elect. Engg.	300126(24)	Elements of Electrical Engineering (Lab)	-	-	2	40	-	20	60	1
8	Mechanical Engineering	300124(37)	Workshop Practice	-	-	3	40	-	20	60	2
9	Humanities	300127(46)	Library & Seminar	-	-	1	-	-	20	20	1
TOTAL				18	4	12	520	100	180	800	29

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

Note: (i) The teaching in the 1st and 2nd semester will be divided in two groups consisting of various branches as shown below: P1-GROUP: Electronics & Communication, Information Technology, Electronics & Instrumentation, Electrical, Chemical, Electrical & Electronics; Q1-GROUP: Computer Science, Mechanical, Civil, Mining and Applied Electronics & Instrumentation, Metallurgy Mechatronics.

(ii) Applied Mathematics-I will be taught to both the groups in the first semester.

(iii) Library & seminar will be conducted by the relevant discipline/humanities as decided by the Principal.



CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY

Courses of Study and Scheme of Examination of B.E. First Year (2012-13)
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SECOND SEMESTER

S. No	Board of Study	Subject Code	Subject	Periods Per Week			Scheme of Examination			Total Marks	Credit [L+[T+P] 2
							Theory				
				L	T	P	ESE	CT	TA		
1	Basic Sciences	300214(14)	Applied Mathematics-II	4	1	-	80	20	20	120	5
2	Civil Engg.	300212(20)	Environment & Ecology	4	-	-	80	20	20	120	4
3	Basic Sciences	300218(15)	Applied Physics (New)	4	1	-	80	20	20	120	5
4	Civil Engg.	300216(20)	Basic Civil Engineering	4	1	-	80	20	20	120	5
5	Mechanical Engg.	300219(37)	Fundamental of Mechanical Engineering (New)	4	1	-	80	20	20	120	5
6	Basic Sciences	300228(15)	Applied Physics (Lab)	-	-	2	40	-	20	60	1
7	Mechanical Engg.	300229(37)	Mechanical Engineering (Lab)	-	-	2	40	-	20	60	1
8	Humanities	300221(46)	Communication Skills (Lab)	-	-	3	40	-	20	60	2
9	Humanities	300220(46)	Library & Seminar	-	-	1	-	-	20	20	1
TOTAL				20	4	8	520	100	180	800	29

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

Note:

- The teaching in the 1st and 2nd semester will be divided in two groups consisting of various branches as shown below:
P1-GROUP: Electronics & Communication, Information Technology, Electronics & Instrumentation, Electrical, Chemical, Electrical & Electronics; Q1-GROUP: Computer Science, Mechanical, Civil, Mining and Applied Electronics & Instrumentation, Metallurgy, Mechatronics.
- Applied Mathematics-II will be taught to both the groups in the second semester.
- Library & seminar will be conducted by the relevant discipline/humanities as decided by the Principal.

Chhattisgarh Swami Vivekanand Technical University, Bhilai

SCHEME OF TEACHING AND EXAMINATION

BE (MINING ENGINEERING) III SEMESTER

S. 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	Appl. Mathematics	339351(14)	Mathematics-III	3	1	-	80	20	20	120	4
2	Civil Egg.	339352(20)	Mechanics of Solids & Fluid Mechanics	3	1	-	80	20	20	120	4
3	Electronics & Telecom.	339353(28)	Programming with C	3	1	-	80	20	20	120	4
4	Mining Egg.	339354(39)	Mining Geology-I	4	-	-	80	20	20	120	4
5	Mining Engg.	339355(39)	Mine Surveying-I	4	1	-	80	20	20	120	5
6	Mining Engg.	339356(39)	Mine Development	3	1	-	80	20	20	120	4
7	Mining Engg.	339361(39)	Mine Development Lab	-	-	2	40	-	20	60	1
8	Mining Engg.	339362(39)	Mining Geology-I Lab	-	-	2	40	-	20	60	1
9	Mining Engg.	339363(39)	Mine Surveying-I Lab	-	-	4	40	-	20	60	2
10	Elect. & Telecom.	339364(28)	Programming with C Lab	-	-	4	40	-	20	60	2
11	Humanities	339365(46)	Value Education	-	-	2	-	-	40	40	1
12			Library	-	-	1	-	-	-	-	-
Total				20	5	15	640	120	240	1000	32

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

Chhattisgarh Swami Vivekanand Technical University, Bhilai

SCHEME OF TEACHING AND EXAMINATION

BE (MINING ENGINEERING) IV SEMESTER

S. 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	Mining Engg.	339451(39)	Mine Climate & Ventilation	3	1	-	80	20	20	120	4
2	Mining Engg.	339452(39)	Engineering Materials	3	-	-	80	20	20	120	3
3	Electrical Engg.	339453(24)	Basic Electrical Engineering	4	1	-	80	20	20	120	5
4	Mining Engg.	339454(39)	Mining Geology – II	3	1	-	80	20	20	120	4
5	Mining Engg.	339455(39)	Underground Coal Mining	3	1	-	80	20	20	120	4
6	Electronics & Telecom	339456(28)	Basic Electronics and Instrumentation	4	1	-	80	20	20	120	5
7	Mining Engg.	339461(39)	Mining Geology – II Lab	-	-	2	40	-	20	60	1
8	Mining Engg.	339462(39)	Mine Climate & Ventilation Lab	-	-	2	40	-	20	60	1
9	Electrical Engg.	339463(24)	Basic Electrical Engineering Lab	-	-	4	40	-	20	60	2
10	Mining Engg.	339464(39)	Underground Coal Mining Lab	-	-	4	40	-	20	60	2
11	Humanities	339465(46)	Health, Hygiene & Yoga	-	-	2	-	-	40	40	1
12			Library	-	-	1	-	-	-	-	-
				20	5	15	640	120	240	1000	32

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

Note (1): Duration of all theory papers will be of Three Hours.

Note (2): Industrial Training of six weeks is mandatory for B.E. students. It is to be completed in two parts. The first part will be in summer after IV semester after which students have to submit a training report which will be evaluated by the college teachers during V Semester.

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

SCHEME OF TEACHING AND EXAMINATION

B.E.V SEMESTER MINING ENGINEERING

S. 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	Computer Sc. & Engg.	339551 (22)	Numerical Analysis & Computer Programming	3	1	-	80	20	20	120	4
2	Mining Engg.	339552 (39)	Mine Survey - II	3	1	-	80	20	20	120	5
3	Mining Engg.	339553 (39)	Mine Legislation – I	3	1	-	80	20	20	120	4
4	Mining Engg.	339554 (39)	Under ground Metal Mining	4	-	-	80	20	20	120	5
5	Mining Engg.	339555 (39)	Surface Mining - I	4	1	-	80	20	20	120	5
6	Mining Engg.	339556 (39)	Mine Machinery – I	3	1	-	80	20	20	120	4
7	Mining Engg.	339561 (39)	Mine Machinery - I Lab	-	-	2	40	-	20	60	1
8	Computer Sc. & Engg.	339562 (22)	Numerical Analysis & computer Programming Lab	-	-	4	40	-	20	60	2
9	Mining Engg.	339563 (39)	Surface Mining - I Lab	-	-	2	40	-	20	60	1
10	Mining Engg.	339564 (39)	Mine Survey- II Lab	-	-	4	40	-	20	60	2
11	Humanities	300565(46)	Personality Development	-	-	2	-	-	20	20	1
12	Mining Engg.	339566 (39)	*Practical Training/Library	-	1	-	-	-	20	20	1
Total				20	5	15	640	120	240	1000	35

L: Lecture

T: Tutorial

P: Practical

ESE: End Semester Examination

CT: Class Test

TA: Teacher's Assessment

** Industrial Training of eight weeks is mandatory for B.E. student. It is to be completed in two parts. The first part will be in summer after IV sem. after which students have to submit a training report which will be evaluated by the college teachers during B.E. V sem.*

Chhattisgarh Swami Vivekanand Technical University, Bhilai

Name of the Programme: :::: Duration of the Programme: Four Years

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

SCHEME OF TEACHING AND EXAMINATION

B.E. VI SEMESTER MINING ENGINEERING

S. 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	T		
1	Mining Engg.	339651 (39)	Blasting Engineering	4	1	-	80	20	20	120	5
2	Mining Engg.	339652 (39)	Mine Health and Safety	3	1	-	80	20	20	120	4
3	Mining Engg.	339653 (39)	Mine Machinery - II	3	1	-	80	20	20	120	4
4	Mining Engg.	339654 (39)	Mine Legislation - II	3	-	-	80	20	20	120	3
5	Mining Engg.	339655 (39)	Mineral Dressing	4	1	-	80	20	20	120	5
6	Refer Table -1		Professional Elective-I	3	1	-	80	20	20	120	4
7	Mining Engg.	339661 (39)	Blasting Engg. Lab	-	-	2	40	-	20	60	1
8	Mining Engg.	339662 (39)	Mine Health and Safety Engg. Lab	-	-	2	40	-	20	60	1
9	Mining Engg.	339663 (39)	Mineral Dressing Lab	-	-	4	40	-	20	60	2
10	Mining Engg.	339664 (39)	Mining Machinery - II Lab	-	-	4	40	-	20	60	2
11	Management	300665 (76)	Managerial Skills	-	-	2	-	-	40	40	1
12			Library	-	-	1	-	-	-	--	-
Total				20	5	15	640	120	240	1000	32

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	Code	Name of Subject
1	Mining Engg.	339671 (39)	Mine Management
2	Mining Engg.	339672 (39)	Small Scale & Dimensional Stone Mining

- 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.

Chhattisgarh Swami Vivekanand Technical University, Bhilai

SCHEME OF TEACHING AND EXAMINATION B.E. VII SEMESTER MINING ENGINEERING

S. 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	Mining Engg.	339731(39)	Mine Economics	4	1	-	80	20	20	120	5
2	Mining Engg.	339732(39)	Mine Surveying - III	4	1	-	80	20	20	120	5
3	Mining Engg.	339733(39)	Rock Mechanics	4	1	-	80	20	20	120	5
4	Mining Engg.	339734(39)	Mine Fires and hazards	4	1	-	80	20	20	120	5
5	Refer Table -2		Professional Elective-II	4	1	-	80	20	20	120	5
6	Mining Engg.	339761(39)	Mine Surveying – III Lab	-	-	4	40	-	20	60	2
7	Mining Engg.	339762(39)	Rock Mechanics Lab	-	-	4	40	-	20	60	2
8	Mining Engg.	339763(39)	Mine Fires and hazards Lab	-	-	2	40	-	20	60	1
9	Mining Engg.	339764(39)	Minor Project	-	-	2	100	-	40	140	1
10	Mining Engg.	339765(76)	Innovative & Entrepreneurial Skills	-	-	2	-	-	40	40	1
11	Mining Engg.	339766(39)	**Practical Training	-	-	-	-	-	40	40	-
12			Library	-	-	1	-	-	-	-	-
Total Periods of 40 per week				20	05	15	620	100	280	1000	32

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

**To be completed after VIth Sem. and before the commencement of VIIth Sem.

Table –2

Professional Elective - II			
S.No.	Board of Studies	Name of Subject	Code
1	Mining Engg.	Mine Planning	339741(39)
2	Mining Engg.	Industrial Engg.	339742(39)

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.

Chhattisgarh Swami Vivekanand Technical University, Bhilai

SCHEME OF TEACHING AND EXAMINATION B.E. VIII SEMESTER MINING ENGINEERING

S. 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	Mining Engg.	339831 (39)	Mining Machinery - III	4	1	-	80	20	20	120	5
2	Mining Engg.	339832 (39)	Pollution Control in Mining	4	1	-	80	20	20	120	5
3	Mining Engg.	339833 (39)	Strata Control	4	1	-	80	20	20	120	5
4	Refer Table -2		Professional Elective -III	4	1	-	80	20	20	120	5
5	Refer Table -3		Open Elective - IV	4	-	-	80	20	20	120	4
6	Mining Engg.	339861 (39)	Mining Machinery – III Lab	-	-	2	40	-	20	60	1
7	Mining Engg.	339862 (39)	Strata Control Lab	-	-	2	40	-	20	60	1
8	Mining Engg.	339863 (39)	Pollution Control Lab	-	-	2	40	-	20	60	1
9	Mining Engg.	339864 (39)	Major Project	-	-	7	100	-	80	180	4
10	Mining Engg.	339865(39)	Report Writing & Seminar	-	-	2	-	-	40	40	1
11			Library	-	-	1	-	-	-	-	-
Total Periods of 40 per week				20	04	16	620	100	280	1000	32

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

Table –2

Professional Elective - III			
S.No.	Board of Studies	Code	Name of Subject
1	Mining Engg.	339841(39)	Surface Mining - II
2	Mining Engg.	339842(39)	Application of Computer, Geographical Information System (GIS) and Remote Sensing (RS) in Mining.

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.

Table -3

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

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