



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.



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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+ <u>[T+P]</u>] 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 & EXAMINATION
BE (Information Technology) III Semester

Sl. 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	Appl. Mathematics	333351(14)	Mathematics-III	4	1	-	80	20	20	120	5
2	Appl. Mathematics	333352(14)	Discrete Structures	3	1	-	80	20	20	120	4
3	Info. Technology	333353(33)	Basic Electronics & Network Theory	3	1	-	80	20	20	120	4
4	Info. Technology	333354(33)	Concepts of IT & Web Technology	3	1	-	80	20	20	120	4
5	Info. Technology	333355(33)	Problem Solving & Logic Building using C	3	1	-	80	20	20	120	4
6	Info. Technology	333356(33)	Digital Electronics and Logic Design	3	1	-	80	20	20	120	4
7	Info. Technology	333361(33)	Basic Electronics & Network Theory Lab	-	-	3	40	-	20	60	2
8	Info. Technology	333362(33)	Problem Solving & Logic Building using C Lab)	-	-	3	40	-	20	60	2
9	Info. Technology	333363(33)	Digital Electronic and Logic Design Lab	-	-	3	40	-	20	60	2
10	Info. Technology	333364(33)	Web Technology Lab (HTML / DHTML/CSS/XML)	-	-	3	40	-	20	60	2
11	Humanities	333365(46)	Value Education	-	-	2	-	-	40	40	1
12			Library	-	-	1	-	-	-	-	-
			TOTAL	19	6	15	640	120	240	1000	34

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.

Chhattisgarh Swami Vivekanand Technical University, Bhilai

Scheme of Teaching & Examination BE (Information Technology) IV Semester

Sl. 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	Appl. Mathematics	333451(14)	Computational Mathematics	4	1		80	20	20	120	5
2	Info. Technology	333452(33)	Telecom Switching & Computer Networks	3	1		80	20	20	120	4
3	Comp. Science & Engg.	333453(22)	Data Structures and Algorithm Analysis	3	1		80	20	20	120	4
4	Electronics & Telecom.	333454(28)	Analog Electronics Circuits	3	1		80	20	20	120	4
5	Info. Technology	333455(33)	Object Oriented Concepts & Programming using C++	3	1		80	20	20	120	4
6	Info. Technology	333456(33)	Computer Organization and Architecture	3	1		80	20	20	120	4
7	Info. Technology	333461(33)	Telecom Switching & Computer Networks Lab (NS-2/QUALNET/OPNET)			3	40		20	60	2
8	Info. Technology	333462(33)	Data Structures and Algorithm Analysis Lab			3	40		20	60	2
9	Electronics & Telecom.	333463(28)	Analog Electronics Circuits lab			3	40		20	60	2
10	Info. Technology	333464(33)	Object Oriented Concepts & Programming using C++ Lab			3	40		20	60	2
11	Humanities	333465(46)	Health , Hygiene and Yoga			2			40	40	1
12			Library			1					
			TOTAL	19	6	15	640	120	240	1000	34

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 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(C.G)

Scheme of Teaching and Examination B.E. V 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	Theory/Practical				
							ESE	CT	TA		
1	Computer Science & Engg.	322551(22)	Microprocessor & Interfaces	3	1	-	80	20	20	120	4
2	Information Technology	333552(33)	Principles of Communication system	4	1	-	80	20	20	120	5
3	Information Technology	333553(33)	Database Management System	3	1	-	80	20	20	120	4
4	Information Technology	333554(33)	Operating System	3	1	-	80	20	20	120	4
5	Information Technology	333555(33)	Programming in Java	3	1	-	80	20	20	120	4
6	Information Technology	333556(33)	Theory of Computation	3	1	-	80	20	20	120	4
7	Information Technology	333562(33)	Principles of Communication System Lab	-	-	3	40		20	60	2
8	Information Technology	322561(22)	Microprocessor and Interfaces Lab	-	-	3	40		20	60	2
9	Information Technology	333563(33)	Database Management System Lab	-	-	3	40		20	60	2
10	Computer Science & Engg	333564(33)	Programming in Java Lab	-	-	3	40		20	60	2
11	Humanities	300565(46)	Personality Development	-	-	2			20	20	1
12	Information Technology	333566(33)	* Practical Training Evaluation & Library	-	-	1			20	20	1
TOTAL				19	6	15	640	120	240	1000	35

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

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

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	Theory/Practical				
							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 Elctives-1	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 -1: 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 ::::: Duration of the Programme: Four Years

Chhattisgarh Swami Vivekanand Technical University, Bhilai

Scheme of teaching and examination

B.E. VII Semester Information Technology

S.N o	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	333731(22)	Data Mining & Warehousing	3	1		80	20	20	120	4
2	Information Technology	333732(33)	Management Information System & IT	3	1		80	20	20	120	4
3	Computer Sc. & Engg	333733(22)	Artificial Intelligence & Expert Systems	3	1		80	20	20	120	4
4	Computer Sc. & 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	Computer Sc. & Engg	333761(22)	Network Security Lab			4	40		20	60	2
7	Computer Sc. & Engg	333762(22)	Artificial Intelligence & Expert Systems Lab			4	40		20	60	2
8	Info. Technology	333763(33)	Andriod Lab			4	40		20	60	2
9	Info. Technology	333764(33)	Minor Project			5	100		40	140	3
10	Management	333765(76)	Innovative & Entrepreneurial Skills			2			40	40	1
11	Info. Technology	333766(33)	** 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 II

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
9	Information Technology	333748(33)	Multimedia and Communication
10	Computer Science & Engg.	333749(22)	Wireless Networks
11	Computer Science & Engg.	333750(22)	Advanced Database Management System

Note (1)- 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.

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

Chhattisgarh Swami Vivekanand Technical University, Bhilai

Scheme of teaching and examination B.E. VIII 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	Theory/Practical				
							ES E	CT	TA		
1	Info. Technology	333831(33)	Enterprise Resource Planning (ERP)	4	1		80	20	20	120	5
2	Info. Technology	333832(33)	Mobile Computing and Application	3	1		80	20	20	120	4
3	Comp. Sc. & Engg	322833(22)	Cyber Security	3	1		80	20	20	120	4
4	Refer Table-3		Professional Elective-3	4			80	20	20	120	4
5	Refer Table-4		Open Elective – 4	4			80	20	20	120	4
6	Info. Technology	333861(33)	Simulation Lab			3	40		20	60	2
7	Comp. Sc. & Engg	333862(22)	Software Technology Lab			3	40		20	60	2
8	Info. Technology	333863(33)	Mobile Application Development Lab (J2ME)			3	40		20	60	2
9	Info. Technology	333864(33)	Major Project			7	100		80	180	4
10	Info. Technology	333865(33)	Report Writing & Seminar			2			40	40	1
11			Library			1					
			TOTAL	18	3	19	620	100	280	1000	32

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

**Professional Elective-3
Table -3**

S.No.	Board of Study	Subject Code	Subject Name	
1	Computer Science & Engg.	322840(22)	Neural Network & Fuzzy Logic	
2	Computer Science & Engg.	322841(22)	Distributed Parallel Processing	
3	Computer Science & Engg.	322842(22)	Distributed Multimedia	
4	Computer Science & Engg.	322843(22)	Decision Support System	
5	Computer Science & Engg.	322844(22)	Embedded systems	
6	Computer Science & Engg.	322845(22)	Real Time Systems	
7	Information Technology	333846(33)	Advance Information System	
8	Computer Science & Engg.	322848(22)	Software Testing	

Note (1)- 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.

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

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