



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.

ChhattisgarhSwamiVivekanand Technical University, Bhilai
SCHEME OF TEACHING & EXAMINATION
BE (Computer Science & Engineering) III Semester

Sl.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	ESE	CT	TA		
1	Appl. Mathematics	322351(14)	Mathematics-III	4	1	-	80	20	20	120	5
2	Electronics & Telecom.	322352(28)	Basic Electronics	3	1	-	80	20	20	120	4
3	Comp. Science &Engg.	322353(22)	Computational Science	3	1	-	80	20	20	120	4
4	Comp. Science &Engg.	322354(22)	Problem Solving & Logic Building using C	3	1	-	80	20	20	120	4
5	Comp. Science &Engg.	322355(22)	Computer Concepts & Web Technology	3	1	-	80	20	20	120	4
6	Electronics & Telecom.	322356(28)	Digital Electronics & Logic Design	3	1	-	80	20	20	120	4
7	Electronics & Telecom.	322361(28)	Basic Electronics Lab	-	-	3	40		20	60	2
8	Comp. Science &Engg.	322362(22)	Problem Solving & Logic Building using C Lab	-	-	3	40		20	60	2
9	Electronics & Telecom.	322363(28)	Digital Electronic and Logic Design Lab	-	-	3	40		20	60	2
10	Comp. Science &Engg.	322364(22)	Web Technology Lab(HTML / DHTML/CSS/XML)	-	-	3	40		20	60	2
11	Humanities	322365(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 (Computer Science & Engineering) IV Semester

Sr 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	Appl. Mathematics	322451(14)	Computational Mathematics	4	1		80	20	20	120	5
2	Appl. Mathematics	322452(14)	Discrete Structures	3	1		80	20	20	120	4
3	Comp. Science &Engg.	322453(22)	Data Structures	3	1		80	20	20	120	4
4	Comp. Science &Engg.	322454(22)	Computer Systems Architecture	3	1		80	20	20	120	4
5	Comp. Science &Engg.	322455(22)	Object Oriented Concepts & Programming using C++	3	1		80	20	20	120	4
6	Comp. Science &Engg.	322456(22)	Operating System	3	1		80	20	20	120	4
7	Comp. Science &Engg.	322461(22)	Data Structures Lab			3	40		20	60	2
8	Comp. Science &Engg.	322462(22)	Computer Hardware Maintenance Lab			3	40		20	60	2
9	Comp. Science &Engg.	322463(22)	Object Oriented Concepts Programming using C++ Lab			3	40		20	60	2
10	Comp. Science &Engg.	322464(22)	GUI programming (VB/Gambus/ Other tools)			3	40		20	60	2
11	Humanities	322465(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 (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	Computer Science & Engg	322551(22)	Microprocessor and Interfaces	4	1	-	80	20	20	120	5
2	Computer Science & Engg	322552(22)	Analysis and Design of Algorithms	3	1	-	80	20	20	120	4
3	Computer Science & Engg	322553(22)	Programming in Java	3	1	-	80	20	20	120	4
4	Computer Science & Engg	322554(22)	Theory of Computation	3	1	-	80	20	20	120	4
5	Computer Science & Engg	322555(22)	Unix & Shell Programming	3	1	-	80	20	20	120	4
6	Computer Science & Engg	322556(22)	Database Management System	3	1	-	80	20	20	120	4
7	Computer Science & Engg	322561(22)	Microprocessor and Interfaces Lab	-	-	3	40		20	60	2
8	Computer Science & Engg	322562(22)	Programming in Java Lab	-	-	3	40		20	60	2
9	Computer Science & Engg	322563(22)	Unix & Shell Programming Lab	-	-	3	40		20	60	2
10	Computer Science & Engg	322564(22)	DBMS Lab	-	-	3	40		20	60	2
11	Humanities	300565(46)	Personality Development	-	-	2			20	20	1
12	Computer Science & Engg	322566(22)	* 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

**To be completed after IV Semester and before the commencement of V Semester*

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 -1		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.

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

Chhattisgarh Swami Vivekanand Technical University, Bhilai

Scheme of teaching and examination

B.E. VIII Semester Computer Science & Engineering

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	Comp. Science & Engg.	322831(22)	Artificial Intelligence & Expert Systems	4	1		80	20	20	120	5
2	Comp. Science & Engg.	322832(22)	Data Mining & Warehousing	3	1		80	20	20	120	4
3	Comp. Science & Engg.	322833(22)	Cyber Security	3	1		80	20	20	120	4
4	Refer Table-3		Professional Elective-3	4	1		80	20	20	120	5
5	Refer Table-4		Open Elective – 4	4			80	20	20	120	4
6	Comp. Science & Engg.	322861(22)	Artificial Intelligence & Expert Systems Lab			3	40		20	60	2
7	Comp. Science & Engg.	322862(22)	Network Security lab			3	40		20	60	2
8	Comp. Science & Engg.	322863(22)	Software Technology Lab			3	40		20	60	2
9	Comp. Science & Engg.	322864(22)	Major Project			7	100		80	180	4
10	Comp. Science & Engg.	322865(22)	Report Writing & Seminar			2			40	40	1
11			Library			1					
			TOTAL	18	4	19	620	100	280	1000	33

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	Computer Science & Engg.	322846(22)	Pattern Recognition
8	Computer Science & Engg.	322847(22)	Internet & Multimedia Technology
9	Computer Science & Engg.	322848(22)	Software Testing
10	Computer Science & Engg.	322849(22)	Wireless Networks

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