CURRICULA FOR UG PROGRAMS

Table 1: Coverage of Subject Area over Curriculum (UG Programs)

Semester	Subject Area Coverage
I-II	Basic Science Courses, Engineering Science Course, Program Core Courses, Vocational and Skill Enhancement Courses, Ability Enhancement Courses, Indian Knowledge System (IKS), Co-curricular Courses.
III-IV	Combined institute and program core courses, Open Electives, Multidisciplinary Minor, Value Added Courses, Vocational and Skill Enhancement Courses, Ability Enhancement Courses, Entrepreneurship/Economics/Management Course, Value Education Courses, Community Engineering Project.
V-VI	Combined institute and program core courses, Program Electives, Multidisciplinary Minor, Open Elective, Vocational and Skill Enhancement Course.
VII - VIII	Program Core Courses, Program Electives, Multidisciplinary Minor, Internship, Research Methodology, Project work.

Assessment for Theory Course *(Scaled to allotted marks)*		
CIA	**Weightage (Marks)**	**Description**
CIA 1	10	Home Assignments
CIA 2	20	Written Exam Components
CIA 3	10	Activity/Project and Research Based Learning along with Seminar Presentation
CIA 4	10	Behavioral Attitude and General Discipline (5%), Theory and Practical Attendance (5%)
ESE	50	End Semester Examination
TOTAL	**100**	

		Formative Assessment		
CIA: Continuous Internal Assessment **L**: Theory Lecture **T**: Tutorial **P**: Practical **ESE**: End Semester Exam	*: Oral Examination **PCC**: Program Core course **PEC**: Programme elective Core **OE:** Open Elective **VAC:** Value Added Courses **AEC :**Ability Enhancement Courses **CEP/FP:** Community Engineering Project/Field Project **VSEC:** Vocational and Skill Enhancement Course **MDM:** Multidisciplinary Minor Course	**CIA**	**Weightage**	**Description**
		CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Seminar Presentation
		CIA 4	10%	• Behavioral Attitude + General Discipline (5%) • Theory + practical attendance 5%)
		TOTAL	**50%**	

SANDIP UNIVERSITY
SCHOOL OF COMPUTER SCIENCE & ENGINEERING
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
MAHIRAVANI, TRIMBAK ROAD, TAL & DIST: NASHIK-422213, MAHARASHTRA,INDIA

Multidisciplinary Minor offered by Computer Science & Engineering Department Minor in Cloud Technology and Information Security

Sr. No.	Course Name	Course Code	Scheme	Credits	Semester
1	Object Oriented Programming	NYCTM--	2-0-0	2	III
2	Cloud Computing	NYCTM--	2-0-0	2	IV
3	Cloud Architecture	NYCTM--	4-0-0	4	V
4	AWS for Cloud Computing	NYCTM--	2-0-0	2	VI
5	Data Mining and Data warehouse	NYCTM--	2-0-0	2	VII
6	Cloud Security	NYCTM--	2-0-0	2	VIII
TOTAL				**14**	

Honors Courses offered by Computer Science & Engineering Department Minor in Cloud Technology and Information Security

Sr. No.	Course Name	Course Code	Scheme	Credits	Semester
1	Cloud Migration	NYCTH01	3-0-0	3	V
2	Advanced Cloud Computing	NYCTH02	3-0-0	3	V
3	Cloud Architecture	NYCTH03	3-0-0	3	VI
4	Cloud Database	NYCTH03	3-0-0	3	VI
5	Cloud Networking	NYCTH04	3-0-0	3	VII
6	Cloud Security	NYCTH05	3-0-0	3	VIII
TOTAL				**18**	

SANDIP UNIVERSITY
SCHOOL OF COMPUTER SCIENCE & ENGINEERING
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
MAHIRAVANI, TRIMBAK ROAD, TAL & DIST: NASHIK-422213, MAHARASHTRA,INDIA

Open Electives offered by Computer Science & Engineering Department in Cloud Technology and Information Security

Sr. No.	Open Elective #	Course Name	Course Code	Scheme	Credits	Semester
1	Open Elective I	Fundamental of Computer Basics	NYCSO01	3-0-0	3	III
2	Open Elective I	Multimedia System	NYCSO02	3-0-0		III
3	Open Elective II	Introduction to Artificial Intelligence	NYCSO03	3-0-0	3	IV
4	Open Elective II	Introduction to DBMS	NYCSO04	3-0-0		IV
5	Open Elective III	Cyber Law & Ethics	NYCSO05	2-0-0	2	V
6	Open Elective III	Introduction to Reverse Engineering	NYCSO06	2-0-0		V
TOTAL					08	

SANDIP UNIVERSITY
SCHOOL OF COMPUTER SCIENCE & ENGINEERING
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
MAHIRAVANI, TRIMBAK ROAD, TAL & DIST: NASHIK-422213, MAHARASHTRA,INDIA

Program Elective Courses offered by Computer Science & Engineering Department in Cloud Technology and Information Security

Sr. No.	Program Elective Courses#	Course Name	Course Code	Scheme	Credits	Semester
1	PEC#1	Introduction to Information Security	NYCTE01	3-0-0	3	V
2	PEC#1	Cyber Forensics Investigation	NYCTE02	3-0-0		V
3	PEC#2	Ethical Hacking	NYCTE03	3-0-0	3	VI
4	PEC#2	Cloud Application and Web Security	NYCTE04	3-0-0		VI
5	PEC#3	Artificial Intelligence in Cloud Security	NYCTE05	3-0-0	3	VI
6	PEC#3	Cloud DevOps	NYCTE06	3-0-0		VI
7	PEC#4	Infrastructure solutions on cloud	NYCTE07	3-0-0	3	VII
8	PEC#4	Mobile Security	NYCTE08	3-0-0		VII
9	PEC#5	Cloud Migration	NYCTE09	3-0-0	3	VIII
10	PEC#5	IT Governance, Risk, and information security management	NYCTE10	3-0-0		VIII
11	PEC#6	Emerging Trends in Cloud Security	NYCTE11	3-0-0	3	VIII
12	PEC#6	Security and Privacy in Big Data Analytics	NYCTE12	3-0-0		VIII
TOTAL					**18**	

SANDIP UNIVERSITY
SCHOOL OF COMPUTER SCIENCE & ENGINEERING
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
MAHIRAVANI, TRIMBAK ROAD, TAL & DIST: NASHIK-422213, MAHARASHTRA,INDIA

B. Tech. Computer Science and Engineering(Specialization in Cloud Technology and Information Security)
Semester – III

Sr. No.	Course Type	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
								Formative Assessment CIA		Summative Assessment ESE		
				L	T	P	C	Theory	Lab	Theory	Lab	
1	PCC	NYCT301	Discrete Mathematics and Logic	3	--	--	3	50	--	100	--	100
2	PCC	NYCT302	Fundamental of Information Security	3	--	--	3	50	--	100	--	100
3	PCC	NYCT303	Data Structures	3	--	--	3	50	--	100	--	100
4	PCC	NYCT311	Data Structure Laboratory	--	--	2	1	--	50	--	50*	50
5	MDM	----------	Minor Course #1	2	--		2	50	--	100	--	100
6	OE	NYCTO01	Open Elective-I	3	--	--	3	50	--	100	--	100
7	AEC (HSSM)	NHSA11	Key Competencies for Career Growth	--	--	4	2		50		50*	50
8	VEC (HSSM)	NLWV01	The Constitution & Human Rights	2	--	--	2	50	--	100	--	100
9	CEP	NYCT312	Community Engineering Project	--	--	4	2	--	50		50*	50
TOTAL				**16**	**00**	**10**	**21**	**300**	**150**	**600**	**150**	**750**
Value Added Course												
10	VAC	---------	Information Security Practice	--	--	2	--	--	25	--	--	25

		Formative Assessment		
CIA: Continuous Internal Assessment **L**: Theory Lecture **T**: Tutorial **P**: Practical **ESE**: End Semester Exam	*: Oral Examination **PCC**: Program Core course **PEC**: Programme elective Core **OE:** Open Elective **VAC:** Value Added Courses **AEC :**Ability Enhancement Courses **CEP/FP:** Community Engineering Project/Field Project **VSEC:** Vocational and Skill Enhancement Course **MDM:** Multidisciplinary Minor Course	**CIA**	**Weightage**	**Description**
		CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Seminar Presentation
		CIA 4	10%	• Behavioral Attitude + General Discipline (5%) • Theory + practical attendance (5%)
		TOTAL	**50%**	

SANDIP UNIVERSITY
SCHOOL OF COMPUTER SCIENCE & ENGINEERING
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
MAHIRAVANI, TRIMBAK ROAD, TAL & DIST: NASHIK-422213, MAHARASHTRA,INDIA

B. Tech. Computer Science and Engineering(Specialization in Cloud Technology and Information Security)
Semester – IV

Sr. No.	Course Type	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		
								Theory	Lab	Theory	Lab	
1	PCC	NYCT401	Object Oriented Programming using Java	3	--	--	3	50	--	100	--	100
2	PCC	NYCT402	Database Management System	3	--	--	3	50	--	100	--	100
3	PCC	NYCT403	Computer Organization and Architecture	3	--	--	3	50	--	100	--	100
4	PCC	NYCT411	Database Management System Laboratory	--	--	2	1	--	50	--	50*	50
5	MDM	----------	Minor course 2 #	2	--	--	2	50	--	100	--	100
6	OE	----------	Open Elective-II	3			3	50	--	100	--	100
7	VSEC	NYCT412	Object Oriented Programming Laboratory	--	--	4	2	--	50	--	50*	50
8	AEC (HSSM)	NHSA12	Strategic Communication for professionals	--	--	4	2	--	50	--	50*	50
9	EEMC (HSSM)	NYCT413	Personal Finance Management	--	--	4	2	--	50	--	50*	50
10	VEC (HSSM)	NYCT414	Innovation and Entrepreneurship	--	--	4	2	--	50	--	50*	50
TOTAL				**14**	**--**	**18**	**23**	**250**	**250**	**500**	**250**	**750**
Value Added Course												
9	VAC	----------	MySql	--	--	2	--	--	25	--	--	25

		Formative Assessment		
CIA: Continuous Internal Assessment **L**: Theory Lecture **T**: Tutorial **P**: Practical **ESE**: End Semester Exam	*: Oral Examination **PCC**: Program Core course **PEC**: Programme Elective Core **OE:** Open Elective **VAC:** Value Added Courses **AEC :**Ability Enhancement Courses **CEP/FP:** Community Engineering Project/Field Project **VSEC:** Vocational and Skill Enhancement Course **MDM:** Multidisciplinary Minor Course	**CIA**	**Weightage**	**Description**
		CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Seminar Presentation
		CIA 4	10%	• Behavioral Attitude + General Discipline (5%) • Theory + practical attendance (5%)
		TOTAL	**50%**	

Exit option:

- Award of UG Certificate in exiting the First Year programme after securing minimum 40 credits will be awarded UG Certificate in the Computer Sciences and Engineering (Specialization in Cloud Technology and Information Security) provided they secure 8 credits in work-based vocational courses or internship / Apprenticeship offered during summer vacation in addition to 4 credit from skill based courses earn during first and second semester. **Refer Annexure 1**

- Award of UG Diploma in exiting the second Year programme after securing minimum 80 credits will be awarded UG Diploma in the Computer Sciences and Engineering (Specialization in Cloud Technology and Information Security) provided they secure 8 credits in work-based vocational courses or internship / Apprenticeship offered during summer vacation in addition to 4 credit from skill based courses earn during first and second semester. **Refer Annexure 1**

SANDIP UNIVERSITY
SCHOOL OF COMPUTER SCIENCE & ENGINEERING
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
MAHIRAVANI, TRIMBAK ROAD, TAL & DIST: NASHIK-422213, MAHARASHTRA,INDIA

Annexure-1

Course Work (for Exit Criterion to UG Diploma)

Sr. No.	Core	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		
								Course	Lab	Course	Lab	
1	EC	NYCSX01	Prompt Engineering for Software Development	3	--	--	3	50	--	100	--	100
2	EC	NYCSX02	Python Programming for AI	3	--	--	3	50	--	100	--	100
3	EC	NYCSX03	Internship (2 Weeks)	--	--	--	2	--	50	--	--	50

SANDIP UNIVERSITY
SCHOOL OF COMPUTER SCIENCE & ENGINEERING
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
MAHIRAVANI, TRIMBAK ROAD, TAL & DIST: NASHIK-422213, MAHARASHTRA,INDIA

B. Tech. Computer Science and Engineering(Specialization in Cloud Technology and Information Security)
Semester – V

Sr. No.	Course Type	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		
								Theory	Lab	Theory	Lab	
1	PCC	NYCT501	Theory of Computation	3	--	--	3	50	--	100	--	100
2	PCC	NYCT502	Operating System	3	--	--	3	50	--	100	--	100
3	PCC	NYCT503	Data Communication	3	--	--	3	50	--	100	--	100
4	PCC	NYCT511	Operating System Lab	--	--	2	1	--	50	--	50*	50
5	PEC	NYCTE--	Program Elective-I	3	--	--	3	50	--	100	--	100
6	MDM	---------	Minor course 3 #	3	--	--	3	50	--	100	--	100
7	OE	--------	Open Elective III	2	--	--	2	50	--	100	--	100
8	AEC (HSSM)	NHSA13	Essential Aptitude Skills	--	--	4	2	--	50	--	50*	50
TOTAL				**17**	**00**	**06**	**20**	**300**	**100**	**600**	**100**	**700**
Value Added Course (VAC)												
9	VAC	--------	Network Programming	--	--	2	--	--	25	--	--	25

		Formative Assessment		
CIA: Continuous Internal Assessment **L**: Theory Lecture **T**: Tutorial **P**: Practical **ESE**: End Semester Exam	*: Oral Examination **PCC**: Program Core course **PEC**: Programme Elective Core **OE:**Open Elective **VAC:** Value Added Courses **AEC :**Ability Enhancement Courses **CEP/FP:** Community Engineering Project /Field Project **VSEC:** Vocational and Skill Enhancement Course **MDM:** Multidisciplinary Minor Course	**CIA**	**Weightage**	**Description**
		CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Seminar Presentation
		CIA 4	10%	• Behavioural Attitude + General Discipline (5%) • Theory + Practical attendance (5%)
		TOTAL	**50%**	

SANDIP UNIVERSITY
SCHOOL OF COMPUTER SCIENCE & ENGINEERING
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
MAHIRAVANI, TRIMBAK ROAD, TAL & DIST: NASHIK-422213, MAHARASHTRA,INDIA

B. Tech. Computer Science and Engineering(Specialization in Cloud Technology and Information Security)
Semester – VI

Sr. No.	Course Type	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		
								Theory	Lab	Theory	Lab	
1	PCC	NYCT601	Design and Analysis of Algorithm	3	--	--	3	50	--	100	--	100
2	PCC	NYCT602	Computer Networks	3	--	--	3	50	--	100	--	100
3	PCC	NYCT603	Software Engineering	3	--	--	3	50	--	100	--	100
4	PCC	NYCT611	Design and Analysis of Algorithm Laboratory	--	--	2	1	--	50	--	50*	50
5	PEC	NYCTE--	Program Elective-II	3	--	--	3	50	--	100	--	100
6	PEC	NYCTE--	Program Elective-III	3	--	--	3	50	--	100	--	100
7	MDM	--------	Minor Course 4#	2	--	--	2	50	--	100	--	100
8	VSEC	NYCT612	Computer Networks Laboratory	--	--	4	2		50		50*	50
9	AEC	NHSA14	Employability Skills and Career Advancement	--	--	4	2	--	50	--	50*	50
TOTAL				**17**	**00**	**10**	**22**	**300**	**150**	**600**	**150**	**750**
Value Added Course												
10	EEC	--------	Cloud Computing Practice	--	--	2	--	--	50	--	--	50

		Formative Assessment		
CIA: Continuous Internal Assessment **L**: Theory Lecture **T**: Tutorial **P**: Practical **ESE**: End Semester Exam	*: Oral Examination **PCC**: Program Core course **PEC**: Programme Elective Core **OE:** Open Elective **VAC:** Value Added Courses **AEC :**Ability Enhancement Courses **CEP/FP:** Community Engineering Project /Field Project **VSEC:** Vocational and Skill Enhancement Course **MDM:** Multidisciplinary Minor Course	**CIA**	**Weightage**	**Description**
		CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Seminar Presentation
		CIA 4	10%	• Behavioural Attitude + General Discipline (5%) • Theory + Practical attendance (5%)
		TOTAL	**50%**	

Exit option:

- Students exiting the 3-year UG program will be awarded B.Voc. In the Computer Sciences and Engineering (Specialization in Cloud technology and Information Security) upon securing minimum 120 credits with additional 8 credits in skill-based vocational courses (skill-based courses, internship, mini projects etc.) offered during summer vacation after the sixth semester. **Refer Annexure 2**

Annexure-2

Course Work (for Exit Criterion to UG Diploma)

Sr. No.	Core	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		
								Course	Lab	Course	Lab	
1	EC	NYCSX04	Networking Essentials	3	--	--	3	50	--	100	--	100
2	EC	NYCSX05	Cloud Computing with Practical Applications	3	--	--	3	50	--	100	--	100
3	EC	NYCSX06	Internship (4 weeks)	--	--	--	2	--	50	--	--	50

SANDIP UNIVERSITY
SCHOOL OF COMPUTER SCIENCE & ENGINEERING
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
MAHIRAVANI, TRIMBAK ROAD, TAL & DIST: NASHIK-422213, MAHARASHTRA,INDIA

B. Tech. Computer Science and Engineering(Specialization in Cloud Technology and Information Security)
Semester – VII

Sr. No.	Course Type	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		
								Theory	Lab	Theory	Lab	
1	PCC	NYCT701	Complier Design	3	--	--	3	50	--	100	--	100
2	PCC	NYCT702	Data Science and Machine Learning	3	--	--	3	50	--	100	--	100
3	PEC	NYCTE--	Program Elective-IV	2	--	--	2	50	--	100	--	100
4	MDM	---------	Minor course 5 #	2	--	--	2	50	--	100	--	100
5	ELC	NYCT711	Internship	--	--	--	12	--	100	--	100*	200
6	AEC	NHSA15	Corporate Readiness and Entrepreneurial Excellence	--	--	4	2	--	50	--	50*	100
TOTAL				**10**	**00**	**04**	**24**	**200**	**150**	**400**	**150**	**700**
Value Added Course												
7	VAC	---------	Data Science Essentials	--	--	2	--	--	25	--	--	25

***45 Days Internship during summer vacation of 6th Semester**

		Formative Assessment		
CIA: Continuous Internal Assessment **L**: Theory Lecture **T**: Tutorial **P**: Practical **ESE**: End Semester Exam	*: Oral Examination **PCC**: Program Core course **PEC**: Programme Elective Core **OE:** Open Elective **VAC:** Value Added Courses **AEC :**Ability Enhancement Courses **CEP/FP:** Community Engineering Project/Field Project **VSEC:** Vocational and Skill Enhancement Course **MDM:** Multidisciplinary Minor Course	**CIA**	**Weightage**	**Description**
		CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Seminar Presentation
		CIA 4	10%	• Behavioural Attitude + General Discipline (5%) • Theory + practical attendance (5%)
		TOTAL	**50%**	

SANDIP UNIVERSITY
SCHOOL OF COMPUTER SCIENCE & ENGINEERING
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
MAHIRAVANI, TRIMBAK ROAD, TAL & DIST: NASHIK-422213, MAHARASHTRA,INDIA

B. Tech. Computer Science and Engineering(Specialization in Cloud Technology and Information Security)
Semester – VIII

Sr. No.	Course Type	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		
								Theory	Lab	Theory	Lab	
1	PCC	NYCT801	Cryptography and Security	3	--	--	3	50	--	100	--	100
2	PCC	NYCT802	High Performance Computing	3	--	--	3	50	--	100	--	100
3	PEC	NYCTE--	Program Elective V	3	--	--	3	50	--	100	--	100
4	PEC	NYCTE--	Program Elective VI	3	--	--	3	50	--	100	--	100
5	RM	NRDP101	Research Methodology	4	--	--	4	50	--	100	--	100
6	ELC	NYCT811	Project	--	--	8	4	--	50	--	100*	100
7	MDM	--------	Minor Course 6#	2	--	--	2	50	--	100	--	100
TOTAL				**18**	**00**	**08**	**22**	**300**	**50**	**600**	**100**	**700**
Value Added Course												
8	VAC	---------	Cryptography-A practical Approach	--	--	2	--	--	25	--	--	25

		Formative Assessment		
CIA: Continuous Internal Assessment	*: Oral Examination	**CIA**	**Weightage**	**Description**
L: Theory Lecture	**PCC**: Program Core course	CIA 1	10%	Home Assignment
T: Tutorial	**PEC**: Programme Elective Core	CIA 2	20%	Written Exam
P: Practical	**OE:** Open Elective	CIA 3	10%	Seminar Presentation
ESE: End Semester Exam	**VAC:** Value Added Courses	CIA 4	10%	• Behavioural Attitude + General Discipline (5%) • Theory + practical attendance (5%)
	AEC : Ability Enhancement Courses			
	CEP/FP: Community Engineering Project/Field Project			
	VSEC: Vocational and Skill Enhancement Course	**TOTAL**	**50%**	
	MDM: Multidisciplinary Minor Course			

SANDIP UNIVERSITY
SCHOOL OF COMPUTER SCIENCE & ENGINEERING
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
MAHIRAVANI, TRIMBAK ROAD, TAL & DIST: NASHIK-422213, MAHARASHTRA,INDIA

Credit Distribution

1

Semester		Total Credits as per GR	Total Credits SUN CSE-CTIS
Basic Science Course	BSC/ESC	14-18	16
Engineering Science Course		16-12	12
Programme Core Course (PCC)	Program Courses	44-56	52
Programme Elective Course (PEC)		20	18
Multidisciplinary Minor (MD M)	Multidisciplinary Courses	14	14
Open Elective (OE) Other than a particular program		08	8
Vocational and Skill Enhancement Course (VSEC)	Skill Courses	08	08
Ability Enhancement Course (AEC -01, AEC-02)	Humanities Social Science and Management (HSSM)	04	12
Entrepreneurship/ Economics / Management Course		04	02
Indian knowledge System (IKS)		02	02
Value Education Course (VEC)		04	04
Research Methedology	Experiential Learning Courses	04	04
Comm. Engg. Project (CEP) / Field Project (FP)		02	02
Project		04	04
Internship/ OJT		12	12
Co-curricular Course (CC)	Liberal Learning Courses	04	04
Total Credits (Major)		**160-176**	**174**