

SANJIVANI RURAL EDUCATION SOCIETY'S
SANJIVANI COLLEGE OF ENGINEERING
KOPARGAON

(An Autonomous Institute Affiliated to SPPU Pune)



DEPARTMENT OF INFORMATION TECHNOLOGY
COURSE STRUCTURE - 2023 PATTERN
(AS PER NEP 2020)
B. Tech. Information Technology

B. TECH. IT COURSE STRUCTURE - 2023 PATTERN (AS PER NEP 2020)
SECOND YEAR B. TECH. INFORMATION TECHNOLOGY

SEMESTER III

Course		Course Title	Teaching Scheme			Credits	Evaluation Scheme			
Category	Code		L	T	P		CIA	ESE Type	ESE	Total
PCC	PCIT201	Discrete Mathematics	3	-	-	3	40	TH	60	100
	PCIT202	Data Structures	3	-	-	3	40	TH	60	100
	PCIT203	Object Oriented Programming using JAVA	2	-	-	2	20	TH(O)	30	50
	PCIT204	Data Structures Laboratory	-	-	4	2	20	PR(E)	30	50
	PCIT205	Object Oriented Programming using JAVA Laboratory	-	-	4	2	20	OR(E)	30	50
		PCC Summary		8	-	8	12	140	-	210
MDM	MDIT221	Digital Logic Design (Minor)	3	-	-	3	40	TH	60	100
	MDIT222	Digital Laboratory (Minor)	-	-	2	1	20	PR(E)	30	50
		MDM Summary	3	-	2	4	60	-	90	150
VEC	VEIT251	Universal Human Values And Ethics	2	-	-	2	20	TH(IPR)	30	50
CEP	CEIT266	Minor Project (App Development)	-	-	4	2	40	PR(IPR)	60	100
EEM	EEIT241	Digital Marketing	2	-	-	2	20	TH	30	50
		SEM III Summary	15	-	14	22	280	-	420	700

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SEMESTER IV

Course		Course Title	Teaching Scheme Hours/Week			Credits	Evaluation Scheme			
Category	Code		L	T	P		CIA	ESE Type	ESE	Total
PCC	PCIT206	Engineering Mathematics-III	2	1	-	3	40	TH	60	100
	PCIT207	Database Management System	3	-	-	3	40	TH	60	100
	PCIT208	Software Engineering Modeling & Design	3	-	-	3	40	TH	60	100
	PCIT209	Database Management System Laboratory	-	-	4	2	20	PR(E)	30	50
	PCIT210	Software Modeling & Design Laboratory	-	-	2	1	20	OR(E)	30	50
		PCC Summary		8	1	6	12	160	-	240
OE	OEIT231A	Employment Communication: A Lab Based Course	2	-	-	2	20	TH(O)	30	50
	OEIT231B	Ethics in Engineering Practice	2	-	-	2	20	TH(O)	30	50
	OEIT231C	Education for Sustainable Development	2	-	-	2	20	TH(O)	30	50
	OEIT231D	Effective Writing	2	-	-	2	20	TH(O)	30	50
	OEIT231E	Enhancing soft skills and Personality	2	-	-	2	20	TH(O)	30	50
	OEIT231F	Modernisation Creative Communication	2	-	-	2	20	TH(O)	30	50
		Open Elective-I Summary		2	-	-	2	20		30
MDM	MDIT223	Fundamentals of IOT (Minor)	-	-	4	2	20	OR(I)	30	50
VSEC	SEIT261	Data Visualization & Story Telling	-	-	4	2	40	OR(I)	60	100
VEC	VEIT252	Environmental Studies	2	-	-	2	20	PR(IPR)	30	50
AEC	AEIT281	Soft Skills	1	-	2	2	20	TH(O)	30	50
		SEM IV Summary	13	1	16	22	280	-	420	700
Honors Specialization in Cyber Security										
HOIT	HOIT291	Foundation For Cyber Security	4	-	-	4	40	TH(O)	60	100
		HS SEM IV Summary	4	-	-	4	40	-	60	100
Exit Course for Two Years UG Diploma in Information Technology										
EXIT	EXIT296	Website Hosting and Publishing	-	-	16	8	80	PR(IPR)	120	200

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THIRD YEAR B. TECH. INFORMATION TECHNOLOGY

SEMESTER V

Course		Course Title	Teaching Scheme Hours/Week			Credits	Evaluation Scheme			
Category	Code		L	T	P		CIA	ESE Type	ESE	Total
PCC	PCIT301	Machine Learning	3	-	-	3	40	TH	60	100
	PCIT302	Computer Networks	3	-	-	3	40	TH	60	100
	PCIT303	Cryptography and Information Security	2	-	-	2	20	TH	30	50
	PCIT304	Machine Learning Laboratory	-	-	4	2	20	PR(E)	30	50
	PCIT305	Computer Network Laboratory	-	-	2	1	20	OR(E)	30	50
	PCIT306	Cryptography and Information Security Laboratory	-	-	2	1	20	OR(E)	30	50
		PCC Summary		8	0	8	12	160	-	240
PEC	PEIT311A	Ethical Hacking	3	-	-	3	40	TH	60	100
	PEIT312A	Ethical Hacking Laboratory	-	-	2	1	20	OR(I)	30	50
	PEIT311B	Foundation of Data Science	3	-	0	3	40	TH	60	100
	PEIT312B	Foundation of Data Science Lab	-	-	2	1	20	OR(I)	30	50
	PEIT311C	Applied Machine Learning for Industry Solutions	3	-	0	3	40	TH	60	100
	PEIT312C	Applied Machine Learning for Industry Solutions Lab	-	-	2	1	20	OR(I)	30	50
	PEIT311D	Foundation of Embedded Systems and IoT	3	-	0	3	40	TH	60	100
	PEIT312D	Foundation of Embedded Systems and IoT Lab	-	-	2	1	20	OR(I)	30	50
		Program Elective-I Summary		3	-	2	4	40	-	60
OE	OEIT331A	E-Business	2	-	-	2	20	TH(O)	30	50
	OEIT331B	Strategic Management	2	-	-	2	20	TH(O)	30	50
	OEIT331C	Brand Management	2	-	-	2	20	TH(O)	30	50
	OEIT331D	Project Management Planning, Execution, Evaluation and Control	2	-	-	2	20	TH(O)	30	50
	OEIT331E	Foundation of Digital Business	2	-	-	2	20	TH(O)	30	50
	OEIT331F	Decision Making with Spreadsheet	2	-	-	2	20	TH(O)	30	50
		Open Elective - II Summary		2	-	-	2	20	-	30

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SEMESTER V

Course		Course Title	Teaching Scheme Hours/Week			Credits	Evaluation Scheme			
Category	Code		L	T	P		CIA	ESE Type	ESE	Total
MDM	MDIT321	Internet of Things	-	-	4	2	20	Project(I)	30	50
VSEC	SEIT361	Corporate Readiness - I	-	-	2	1	20	TH	30	50
	SEIT362	IT Based Skill Enhancement Course	-	-	2	1	20	PR(EPR)	30	50
		VSEC Summary	-	-	4	2	40	-	60	100
		SEM V Summary	13	-	18	22	280	-	420	700
HOIT	HOIT391	Web Security	4	-	-	4	40	TH	60	100
	HOIT392	Web Security Tools Laboratory	-	-	2	1	50			50
		HS SEM V Summary	4	-	2	5	90	-	60	150

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SEMESTER VI

Course		Course Title	Teaching Scheme Hours/Week			Credits	Evaluation Scheme			
Category	Code		L	T	P		CIA	ESE Type	ESE	Total
PCC	PCIT307	Theory of Computation	3	-	-	3	40	TH	60	100
	PCIT308	Operating System	3	-	-	3	40	TH	60	100
	PCIT309	Web Technology	1	-	-	1	20	TH(IPR)	30	50
	PCIT310	Operating System Laboratory	-	-	2	1	40	PR(E)	60	100
	PCIT311	Web Technology Laboratory	-	-	4	2	40	PR(EPR)	60	100
		PCC Summary		7	0	6	10	180	-	270
PEC	PEIT313A	Cyber Threat Intelligence	3	-	-	3	40	TH	60	100
	PEIT314A	Cyber Threat Intelligence Laboratory	-	-	2	1	20	PR(E)	30	50
	PEIT313B	Applied Data Science	3	-	-	3	40	TH	60	100
	PEIT314B	Applied Data Science Laboratory	-	-	2	1	20	PR(E)	30	50
	PEIT313C	Deep Learning and Generative AI	3	-	-	3	40	TH	60	100
	PEIT314C	Deep Learning and Generative AI Laboratory	-	-	2	1	20	PR(E)	30	50
	PEIT313D	Applied Internet of Things	3	-	-	3	40	TH	60	100
	PEIT314D	Applied Internet of Things Laboratory	-	-	2	1	20	PR(E)	30	50
		Program Elective-I Summary		4	-	-	4	40	-	60
OE	OEIT332A	English for Thesis Writing (Open Elective -III)	2	-	-	2	20	TH(O)	30	50
	OEIT332B	Effective Writing (Open Elective -III)	2	-	-	2	20	TH(O)	30	50
	OEIT332C	English Language for Competitive Exams (Open Elective -III)	2	-	-	2	20	TH(O)	30	50
		Open Elective - III Summary		2	-	-	2	20	-	30
MDM	MDIT323	Industrial Internet of Things (Minor)	-	-	4	2	40	PR(IPR)	60	100
VSEC	SEIT363	Corporate Readiness- II		-	2	1	20	PR(I)	30	50
	SEIT364	IPR & EDP		-	2	1	20	OR(I)	30	50
		VSEC Summary	-	-	4	2	40	-	60	100
MLC	MLIT399	Disaster Management and Preparedness	2	-	-	0	-	-	Pass/Fail	0
		SEM VI Summary	15	0	14	20	320	-	480	800

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Honors Specialization in Cyber Security										
HSIT	HOIT393	Ethical Hacking & Digital Forensic Tools	4	-	-	4	40	TH(O)	60	100
	HOIT394	Ethical Hacking & Digital Forensic Tools Lab	-	-	2	1	50			50
		HS SEM VI Summary	4	-	2	5	90	-	60	150
Exit Course for Three Years Bachelor's of Vocation in Information Technology										
EXIT	EXIT396	Java Full Stack Development	-	-	8	4	80	PR(IPR)	120	200

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