

Mohan Lal Sukhadia University Udaipur



B. Tech. Program (Effective from session 2021-2022)

Computer Science and Engineering

Semesters III - VIII

Course structure

**Teaching & Examination Scheme
Semester III**

SN	Category	Course Code	Course Title	Credit	Contact Hours				Max. Marks			
					Total	L	T	P	End Exam Hr.	IA	ETE	Total
THEORY												
1	BSC	BT3CS01-CT01	Advanced Engineering Mathematics	3	3	3	-	-	3	30	120	150
2	HSMC	BT3CS02-CT02	Technical Communication	2	2	2	-	-	2	20	80	100
3	ESC	BT3CS03-CT03	Digital Electronics	3	3	3	-	-	3	30	120	150
4	PCC	BT3CS04-CT04	Data Structures and Algorithms	3	3	3	-	-	3	30	120	150
5		BT3CS05-CT05	Object Oriented Programming	3	3	3	-	-	3	30	120	150
6		BT3CS06-CT06	Software Engineering	3	3	3	-	-	3	30	120	150
Total				17	17	17	0	0	-	170	680	850
PRACTICAL & SESSIONAL												
1	PCC	BT3CS07-CP01	Data Structures and Algorithms Lab	2	4	-	-	4	-	40	60	100
2		BT3CS08-CP02	Object Oriented Programming lab	2	4	-	-	4	-	40	60	100
3		BT3CS09-CP03	Software Engineering Lab	2	4	-	-	4	-	40	60	100
4	ESC	BT3CS10-CP04	Digital Electronics Lab	1	2	-	-	2	-	20	30	50
5	PSIT	BT3CS11-CP05	Industrial Training	1	2	-	-	2	-	-	-	50
Total				8	16	0	0	16	-	140	210	-
Grand Total of 3rd SEM				25	32					310	890	1250

L: Lecture, T: Tutorial, P: Practical, Cr: Credits, ETE: End Term Exam, IA: Internal Assessment

**Teaching & Examination Scheme
Semester IV**

	Category	Course Code	Course Title	Credit	Contact Hours			Max. Marks				
				Total Credit	Total	L	T	P	End Exam Hr.	IA	ETE	Total
THEORY												
1	BSC	BT4CS01-CT01	Discrete Mathematics Structure	3	3	3	-	-	3	30	120	150
2	HSMC	BT4CS02-CT02	Managerial Economics and Financial Accounting	2	2	2	-	-	2	20	80	100
3	ESC	BT4CS03-CT03	Microprocessor & Interfaces	3	3	3	-	-	3	30	120	150
4	PCC	BT4CS04-CT04	Database Management System	3	3	3	-	-	3	30	120	150
5		BT4CS05-CT05	Theory of Computation	3	3	3	-	-	3	30	120	150
6		BT4CS06-CT06	Data Communication and Computer Networks	3	3	3	-	-	3	30	120	150
Total				17	17	17	0	0	-	170	680	850
PRACTICAL & SESSIONAL												
1	ESC	BT4CS07-CP01	Microprocessor & Interfaces Lab	1	2	-	-	2	-	20	30	50
2	PCC	BT4CS08-CP02	Database Management System Lab	2	4	-	-	4	-	40	60	100
3		BT4CS09-CP03	Network Programming Lab	2	4	-	-	4	-	40	60	100
4		BT4CS10-CP04	Linux Shell Programming Lab	1	2	-	-	2	-	20	30	50
5		BT4CS11-CP05	Java Lab	1	2	-	-	2	-	20	30	50
Total				7	14	0	0	14	-	140	210	-
Grand Total of 4th SEM				24	31			-	310	890	1200	

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B. Tech. Program (Effective from session 2021-2022)

Computer Science and Engineering

Semesters V - VI

Course structure

Teaching & Examination Scheme Semester V

SN	Category	Course Code	Course Title	Credit	Contact Hours				Max. Marks				
					Total	L	T	P	End Exam Hr.	IA	ETE	Total	
THEORY													
1	ESC	BT5CS01-CT01	Information Theory & Coding	2	2	2	-	-	2	20	80	100	
2	PCC/ PEC	BT5CS02-CT02	Compiler Design	3	3	3	-	-	3	30	120	150	
3		BT5CS03-CT03	Operating System	3	3	3	-	-	3	30	120	150	
4		BT5CS04-CT04	Computer Graphics & Multimedia	3	3	3	-	-	3	30	120	150	
5		BT5CS05-CT05	Analysis of Algorithms	3	3	3	-	-	3	30	120	150	
6		Professional Elective 1: (any one)			2	2	2	-	-	2	20	80	100
		BT5CS06-CT6A	Wireless Communication										
		BT5CS06-CT6B	Human-Computer Interaction										
		BT5CS06-CT6C	Bioinformatics										
Total				16	16	16	0	0	16	160	640	800	
PRACTICAL & SESSIONAL													
1	PCC	BT5CS07-CP01	Computer Graphics & Multimedia Lab	2	4	-	-	4	-	40	60	100	
2		BT5CS08-CP02	Compiler Design Lab	1	2	-	-	2	-	20	30	50	
3		BT5CS09-CP03	Analysis of Algorithms Lab	2	4	-	-	4	-	40	60	100	
4		BT5CS10-CP04	Advance Java Lab	1	2	-	-	2	-	20	30	50	
5	PSIT	BT5CS11-CP05	Industrial Training	2	1	-	-	1	-	-	-	100	
Total				8	13	-	-	13	-	120	180	400	
Grand Total of 5th SEM				24	29					280	820	1200	

L: Lecture, T: Tutorial, P: Practical, Cr: Credits, ETE: End Term Exam, IA: Internal Assessment

**Teaching & Examination Scheme
Semester VI**

SN	Category	Course Code	Course Title	Credit	Contact Hours				Max. Marks				
					Total	L	T	P	End Exam Hr.	IA	ETE	Total	
THEORY													
1	ESC PCC/PE C	BT6CS01-CT01	Digital Image Processing	2	2	2	-	-	2	20	80	100	
2		BT6CS02-CT02	Machine Learning	3	3	3	-	-	3	30	120	150	
3		BT6CS03-CT03	Information Security System	2	2	2	-	-	2	20	80	100	
4		BT6CS04-CT04	Computer Architecture and Organization	3	3	3	-	-	3	30	120	150	
		BT6CS05-CT05	Artificial Intelligence	2	2	2	-	-	2	20	80	100	
5		BT6CS06-CT06	Cloud Computing	3	3	3	-	-	3	30	120	150	
		Professional Elective 1: (any one)			2	2	2	-	-	2	20	80	100
6		BT6CS07-CT6A	Distributed System										
		BT6CS07-CT6B	Software Defined Network										
		BT6CS07-CT6C	Ecommerce & ERP										
Total				17	17	17	0	0	17	170	680	850	
PRACTICAL & SESSIONAL													
1	PCC	BT6CS08-CP01	Digital Image Processing Lab	2	4	-	-	4	-	40	60	100	
2		BT6CS09-CP02	Machine Learning Lab	2	4	-	-	4	-	40	60	100	
3		BT6CS10-CP03	Python Lab	2	4	-	-	4	-	40	60	100	
4		BT6CS11-CP04	Mobile Application Development Lab	2	4	-	-	4	-	40	60	100	
Total				8	16	-	-	16	-	160	240	400	
Grand Total of 6th SEM				25	33					330	920	1250	

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B. Tech. Program **(Effective from session 2021-2022)**

Computer Science and Engineering

Semesters VII - VIII

Course structure

**Teaching & Examination Scheme
Semester VII**

SN	Category	Course Code	Course Title	Credit	Contact Hours				Max. Marks				
					Total	L	T	P	End Exam Hr.	IA	ETE	Total	
THEORY													
1	PCC	BT7CS01-CT01	Internet of Things	3	3	3	-	-	3	30	120	150	
2	OE	BT7CS02-CE	Open Elective – I	3	3	3	-	-	3	30	120	150	
Total				6	6	6	0	0	6	60	240	300	
PRACTICAL & SESSIONAL													
1	PCC	BT7CS03-CP01	Internet of Things Lab	2	4	-	-	4	-	40	60	100	
2		BT7CS04-CP02	Cyber Security Lab	2	4	-	-	4	-	40	60	100	
3	PSIT	BT7CS05-CP03	Industrial Training	3	1	-	-	1	-	-	-	150	
4		BT7CS6-CP04	Seminar	2	2	-	-	2	-	-	-	100	
Total				9	11	-	-	11	-	80	120	450	
Grand Total of 7th SEM				15	17						140	360	750

L: Lecture, T: Tutorial, P: Practical, ETE: End Term Exam, IA: Internal Assessment

**Teaching & Examination Scheme
Semester VIII**

SN	Category	Course Code	Course Title	Credit	Contact Hours				Max. Marks			
					Total	L	T	P	End Exam Hr.	IA	ETE	Total
THEORY												
1	PCC	BT8CS01-CT01	Big Data Analytics	3	3	3	-	-	3	30	120	150
2	OE	BT8CS02-CE	Open Elective – II	3	3	3	-	-	3	30	120	150
Total				6	6	6	0	0	6	60	240	300
PRACTICAL & SESSIONAL												
1	PCC	BT8CS03-CP01	Big Data Analytics Lab	1	2	-	-	2	-	20	30	50
2		BT8CS04-CP02	Software Testing and Validation Lab	1	2	-	-	2	-	20	30	50
3	PSIT	BT8CS05-CP03	Project	7	3	-	-	3	-	-	-	350
Total				9	7	-	-	7	-	40	60	450
Grand Total of 8th SEM				15	13					100	300	750

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List of Open Electives				
Subject Code	Title			
Open Elective - I			Open Elective - II	
BT7CS02-CE01	Human Engineering and Safety		BT8CS02-CE01	Energy Management
BT7CS02-CE02	Environmental Engineering and Disaster Management		BT8CS02-CE02	Waste and By-product Utilization
BT7CS02-CE03	Aircraft Avionic System		BT8CS02-CE03	Finite Element Methods
BT7CS02-CE04	Non-Destructive Testing		BT8CS02-CE04	Factor of Human Interactions
BT7CS02-CE05	Optimization Techniques		BT8CS02-CE05	Refinery Engineering Design
BT7CS02-CE06	Sustainable Engineering		BT8CS02-CE06	Fertilizer Technology
BT7CS02-CE07	Introduction to Ceramic Science & Technology		BT8CS02-CE07	Electrical and Electronic Ceramics
BT7CS02-CE08	Plant, Equipment and Furnace Design		BT8CS02-CE08	Biomaterials
BT7CS02-CE09	Environmental Impact Analysis		BT8CS02-CE09	Composite Materials
BT7CS02-CE10	Disaster Management		BT8CS02-CE10	Fire and Safety Engineering
BT7CS02-CE11	Electrical Machines and Drives		BT8CS02-CE11	Energy Audit and Demand side Management
BT7CS02-CE12	Power Generation Sources.		BT8CS02-CE12	Soft Computing
BT7CS02-CE13	Principle of Electronic communication		BT8CS02-CE13	Industrial and Biomedical applications of RF Energy
BT7CS02-CE14	Micro and Smart System Technology		BT8CS02-CE14	Robotics and control
BT7CS02-CE15	Finite Element Analysis		BT8CS02-CE15	Operations Research
BT7CS02-CE16	Quality Management		BT8CS02-CE16	Simulation Modeling and Analysis
BT7CS02-CE17	Rock Engineering		BT8CS02-CE17	Experimental Stress Analysis
BT7CS02-CE18	Mineral Processing		BT8CS02-CE18	Maintenance Management
BT7CS02-CE19	Pipeline Engineering		BT8CS02-CE19	Unconventional Hydrocarbon Resources
BT7CS02-CE20	Water Pollution control Engineering		BT8CS02-CE20	Energy Management & Policy
BT7CS02-CE21	Technical Textiles		BT8CS02-CE21	Material and Human Resource Management
BT7CS02-CE22	Garment Manufacturing Technology		BT8CS02-CE22	Disaster Management