



Symbiosis Institute of Technology, Pune
Bachelor of Technology (Electronics & Tele-Communication Engineering)
Programme Structure 2019-23

1. OBJECTIVE	<p>B.Tech is a full-time four year graduation programme, which aims at transforming a student into a technically sound professional. The syllabus contains courses on basic sciences, technical arts, humanities & liberal arts and professional courses. The mix of these courses has been evolved with an aim to produce professionals who have knowledge not only of Engineering but who are good managers to contribute in a cross-functional team and have human values. Being a professional programme it ensures a healthy balance between theoretical foundation and practical exposure to the present day world. The emphasis is to develop all round personality that would enable the students to take up the challenges of the corporate world and also become responsible citizens of the society.</p>			
2. DURATION (IN MONTHS)	48 (Full Time)			
3. INTAKE	120			
4. RESERVATION	I. Within the sanctioned intake	a) SC (In Percentage)	b) ST (In Percentage)	c) Differently abled (In Percentage)
		15	7.5	3
	II. Over and above the sanctioned intake	a) Kashmiri Migrants (In Seats)		b) International Students (In Percentage)
		2		15
5. ELIGIBILITY	<p>Passed 10+2 examination with Physics and Mathematics as compulsory subjects along with one of Chemistry/ Biotechnology/ Biology/ Technical Vocational subjects. Obtained at least 45% marks or equivalent grade (40% marks or equivalent grade for Scheduled Caste /Scheduled Tribes) in the above subjects taken together.</p> <p>B. Tech (Lateral entry to second year) :</p> <p>a) Passed Diploma examination from an AICTE approved Institution; with at least 45% marks or equivalent grade (40% marks or equivalent grade for Scheduled Caste /Scheduled Tribes) in appropriate branch of Engineering / Technology.</p> <p>b) Passed B.Sc. Degree from a recognized University as defined by UGC, with at least 45% marks or equivalent grade (40% marks or equivalent grade for Scheduled Caste /Scheduled Tribes) and passed XII standard with mathematics as a subject.</p> <p>c) Provided that in case of students belonging to B. Sc. Stream, shall clear the subjects of Engineering Graphics / Engineering Drawing and Engineering Mechanics of the first year Engineering program along with the second year subjects.</p> <p>d) Provided further that, the students belonging to B. Sc. Stream shall be considered only after filling the supernumerary seats in this category with students belonging to the Diploma stream.</p> <p>e) Provided further that students, who have passed Diploma in Engineering and Technology from an AICTE approved Institution or B. Sc. Degree from a recognized University as defined by UGC, shall also be eligible for admission to</p>			



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		the first year Engineering Degree courses subject to vacancies in the first year class in case the vacancies at lateral entry are exhausted. However the admissions shall be based strictly on the eligibility criteria as mentioned in a, b, c, and d above.			
6.	SELECTION PROCEDURE	Merit list by valid score of Symbiosis Entrance Test (SET) or Joint Entrance Examination (JEE - Main) or Maharashtra Common Entrance Test (MHT-CET)			
7.	MEDIUM OF INSTRUCTION	English			
8.	PROGRAMME PATTERN	Semester			
9.	COURSE & SPECIALIZATION	<p>As per Annexure A Students can pursue additional specialization in the following areas by completing 20 credits specified in the program structure of that specialization beyond the minimum requirement for the award of degree.</p> <ul style="list-style-type: none"> - Embedded System - Signal Processing - Mechatronics and Automation - Optoelectronics and Communication - Bioelectronics System - Sustainable Energy Devices and Systems 			
10.	FEE		Academic Fee p.a	Institute Deposit	Total
		Indian Students	260000	20000	280000
		International Students (USD equivalent to INR)	390000	20000	410000
11.	ASSESSMENT	All internal courses will have 100% component as internal evaluation at the institute level. All external courses will have 40% internal component and 60% component as external [University] examination. The internal and external will be separate heads of passing.			
12.	STANDARD OF PASSING	The assessment of the student for each examination is done, based on relative performance. Maximum Grade Point (GP) is 10 corresponding to O (Outstanding). For all courses, a student is required to pass both internal and external examination separately with a minimum Grade Point of 4 corresponding to Grade P. Students securing less than 40% absolute marks in each head of passing will be declared FAIL. The University awards a degree to the student who has achieved a minimum CGPA of 4 out of maximum of 10 CGPA for the programme.			
13.	AWARD OF DEGREE/ DIPLOMA/ CERTIFICATE	Bachelor of Technology (Electronics and Telecommunication Engineering) will be awarded at the end of semester VIII examination by taking into consideration the performance of all semester examinations after obtaining minimum 4.00 CGPA out of 10 CGPA.			

14. NATURE WISE DISTRIBUTION OF CREDITS							
Semester	Generic Core	Generic Elective	Specialization Core	Specialization Elective	Open Elective	Audit	Total
1	21	0	0	0	0	0	21
2	19	0	0	0	0	0	19
3	19	1	0	0	0	0	20
4	22	2	0	0	0	1*	24
5	20	4	0	0	0	0	24
6	18	7	0	0	0	0	25
7	8	15	0	0	0	0	23
8	14	0	0	0	0	0	14
Total	141	29	0	0	0	0	170
Optional Additional Courses							
Total	0	0	20	0	0	0	20
Grand Total							190

* Satisfactory completion of the non letter grade course 'Integrated Disaster Management' is mandatory for award of degree.

Note: For additional specializations (optional) as applicable, fees of Rs.25000/- will be charged, additionally in the third year

The revised programme structure supersedes the previously approved programme structure dated 25/06/2019 for the programme.

Programme Structure is approved by the Academic Council subject to its norms & conditions. Any provision in the Programme Structure which violates the basic rules & regulations is deemed to be termed "Null & Void".

Head-Academics

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Annexure A

Catalog Course Code	Course Code	Course Title	Specialization	Credits	Internal Marks	External Mark	Internal Practical Marks	External Practical Marks	Total Marks
Semester : 1									
Generic Core Courses									
TE7168	070123101	Engineering Mathematics -I		4	40	60	0	0	100
T7391	070123102	Physics		3	30	45	0	0	75
T7383	070123103	Communication Skills		2	20	30	0	0	50
TE7188	070123104	Environmental Science		2	20	30	0	0	50
TE7286	070123105	Programming and Problem Solving		2	20	30	0	0	50
TE7300	070123106	Tinker Lab		2	0	0	50	0	50
TE7310	070123107	Computational Techniques I		2	50	0	0	0	50
T7384	070123108	Communication skills lab		1	0	0	10	15	25
T7392	070123109	Physics lab		1	0	0	10	15	25
TE7287	070123110	Programming and Problem Solving Lab		1	0	0	10	15	25
T6773	070123111	Creative Thinking		1	25	0	0	0	25
Total				21	205	195	80	45	525
Semester : 2									
Generic Core Courses									
TE7169	070123201	Engineering Mathematics -II		4	40	60	0	0	100
T7540	070123202	Basic Electrical and Electronics Engineering		3	30	45	0	0	75
T7381	070123203	Chemistry		3	30	45	0	0	75
TE7311	070123204	Computational Techniques II		3	75	0	0	0	75
T7924	070123205	Engineering Graphics		2	0	0	20	30	50
T7593	070123206	Basic Electrical and Electronics Engineering Lab		1	0	0	10	15	25
T7382	070123207	Chemistry Lab		1	0	0	10	15	25
T6732	070123208	Critical Thinking		1	25	0	0	0	25
TE7396	070123209	Software Tools		1	0	0	25	0	25
Total				19	200	150	65	60	475
Semester : 3									
Generic Core Courses									
F7011	070123301	Digital Circuits and Logic Design		4	100	0	0	0	100
TE7083	070123302	Signals and Systems		3	30	45	0	0	75
TE7170	070123303	Engineering Mathematics-III		3	30	45	0	0	75
TE7320	070123304	Electronic Devices and Circuits		3	30	45	0	0	75
TE7336	070123305	Network Theory		3	30	45	0	0	75



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T2646	070123306	Entrepreneurship Venture		1	25	0	0	0	25
TE7321	070123307	Electronic Devices and Circuits Lab		1	0	0	10	15	25
TE7322	070123308	Electronic Measurements Lab		1	0	0	10	15	25
Total				19	245	180	20	30	475
Generic Elective Courses Group									
T6761	070123309	Foundation of Ethics		1	25	0	0	0	25
T6760	070123310	Introduction to Indian Philosophy		1	25	0	0	0	25
Total Required Credits				1	25	0	0	0	25
Semester : 4									
Generic Core Courses									
T7547	070123401	Control Systems		4	40	60	0	0	100
T7562	070123402	Electromagnetic Field Theory		4	40	60	0	0	100
TE7084	070123403	Analog Circuit Design		3	30	45	0	0	75
F0003	070123404	Flexi-Credit Course		3	75	0	0	0	75
TE7425	070123405	Principles of Communication		3	30	45	0	0	75
TE7290	070123406	Project Based Learning -I		2	50	0	0	0	50
T7536	070123407	Analog Circuit Design Lab		1	0	0	10	15	25
T7548	070123408	Control Systems Lab		1	0	0	10	15	25
TE7029	070123409	Principles of Communication Lab		1	0	0	10	15	25
T4005	070123410	Integrated Disaster Management *		0	0	0	0	0	Non Letter Grade
Total				22	265	210	30	45	550
Generic Elective Courses Group									
T6184	070123411	Basic German I		2	50	0	0	0	50
T6186	070123412	Basic French I		2	50	0	0	0	50
T6188	070123413	Basic Spanish I		2	50	0	0	0	50
Total Required Credits				2	50	0	0	0	50
Semester : 5									
Generic Core Courses									
T7558	070123501	Digital Signal Processing		4	40	60	0	0	100
TE7316	070123502	Digital Communication		3	30	45	0	0	75



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TE7174	070123503	Probability, Random Variables and Stochastic Process		3	30	45	0	0	75
T8000	070123504	Service Learning		4	100	0	0	0	100
F0002	070123505	Flexi-Credit Course		2	50	0	0	0	50
TE7291	070123506	Project Based Learning-II		2	50	0	0	0	50
T7559	070123507	Digital Signal Processing Lab		1	0	0	10	15	25
T7552	070123508	Digital Communication Lab		1	0	0	10	15	25
Total				20	300	150	20	30	500
Specialization Core Courses for Optional Additional Specialization : Bioelectronics Systems (Major)									
TE7333	070123509	Introduction to Computer Vision	Bioelectronics Systems	4	40	60	0	0	100
T7801	070123510	Project Phase- I	Bioelectronics Systems	1	0	0	10	15	25
Total				5	40	60	10	15	125
Specialization Core Courses for Optional Additional Specialization : Embedded Systems (Major)									
T7801	070123510	Project Phase- I	Embedded Systems	1	0	0	10	15	25
TE7298	070123511	System Programming	Embedded Systems	4	40	60	0	0	100
Total				5	40	60	10	15	125
Specialization Core Courses for Optional Additional Specialization : Mechatronics and Automation (Major)									
T7801	070123510	Project Phase- I	Mechatronics and Automation	1	0	0	10	15	25
TE7330	070123512	Industrial Robotics	Mechatronics and Automation	4	40	60	0	0	100
Total				5	40	60	10	15	125
Specialization Core Courses for Optional Additional Specialization : Optoelectronics and Communication (Major)									
T7801	070123510	Project Phase- I	Optoelectronics and Communication	1	0	0	10	15	25
TE7345	070123513	Theory of Light and Lasers	Optoelectronics and Communication	4	40	60	0	0	100
Total				5	40	60	10	15	125
Specialization Core Courses for Optional Additional Specialization : Signal Processing (Major)									
T7801	070123510	Project Phase- I	Signal Processing	1	0	0	10	15	25
T7086	070123514	Advanced Digital Signal Processing	Signal Processing	4	40	60	0	0	100
Total				5	40	60	10	15	125



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Specialization Core Courses for Optional Additional Specialization : Sustainable Energy Devices and Systems (Major)									
T7801	070123510	Project Phase- I	Sustainable Energy Devices and Systems	1	0	0	10	15	25
TE7344	070123515	Sustainable Energy And Solar Photovoltaic Systems	Sustainable Energy Devices and Systems	4	40	60	0	0	100
Total				5	40	60	10	15	125
Generic Elective Courses Group									
TE7090	070123516	Antenna and Wave Propagation		3	30	45	0	0	75
TE7323	070123517	Electronic System Design		3	30	45	0	0	75
TE7085	070123518	Power Electronics		3	30	45	0	0	75
Total Required Credits				3	30	45	0	0	75
Generic Elective Courses Group									
TE7091	070123519	Antenna and Wave Propagation Lab		1	0	0	10	15	25
TE7324	070123520	Electronic System Design Lab		1	0	0	10	15	25
T7583	070123521	Power Electronics Lab		1	0	0	10	15	25
Total Required Credits				1	0	0	10	15	25
Semester : 6									
Generic Core Courses									
F0004	070123601	Flexi-Credit Course		4	100	0	0	0	100
T7908	070123602	Computer Networks		3	30	45	0	0	75
T2658	070123603	Design Thinking		2	50	0	0	0	50
T7802	070123604	Project Based Learning-III		2	50	0	0	0	50
TE7426	070123605	Electronic Design Workshop		2	0	0	20	30	50
T7802	070123606	Capstone Course		2	50	0	0	0	50
T6774	070123607	Principles of Economics		2	50	0	0	0	50
T7482	070123608	Computer Networks Lab		1	0	0	10	15	25
Total				18	330	45	30	45	450
Specialization Core Courses for Optional Additional Specialization : Bioelectronics Systems (Major)									
TE7308	070123609	Biomedical Imaging Systems	Bioelectronics Systems	4	40	60	0	0	100
T7802	070123610	Seminar	Bioelectronics Systems	2	0	0	20	30	50



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T7802	070123611	Project Phase- II	Bioelectronics Systems	2	0	0	20	30	50
Total				8	40	60	40	60	200
Specialization Core Courses for Optional Additional Specialization : Embedded Systems (Major)									
T7802	070123610	Seminar	Embedded Systems	2	0	0	20	30	50
T7802	070123611	Project Phase- II	Embedded Systems	2	0	0	20	30	50
TE7325	070123612	Embedded Linux	Embedded Systems	4	40	60	0	0	100
Total				8	40	60	40	60	200
Specialization Core Courses for Optional Additional Specialization : Mechatronics and Automation (Major)									
T7802	070123610	Seminar	Mechatronics and Automation	2	0	0	20	30	50
T7802	070123611	Project Phase- II	Mechatronics and Automation	2	0	0	20	30	50
T7100	070123613	Mechatronics	Mechatronics and Automation	4	40	60	0	0	100
Total				8	40	60	40	60	200
Specialization Core Courses for Optional Additional Specialization : Optoelectronics and Communication (Major)									
T7802	070123610	Seminar	Optoelectronics and Communication	2	0	0	20	30	50
T7802	070123611	Project Phase- II	Optoelectronics and Communication	2	0	0	20	30	50
TE7337	070123614	Optical Devices and Fiber Optics	Optoelectronics and Communication	4	40	60	0	0	100
Total				8	40	60	40	60	200
Specialization Core Courses for Optional Additional Specialization : Signal Processing (Major)									
T7802	070123610	Seminar	Signal Processing	2	0	0	20	30	50
T7802	070123611	Project Phase- II	Signal Processing	2	0	0	20	30	50
T7112	070123615	VLSI Digital Signal Processing System	Signal Processing	4	40	60	0	0	100
Total				8	40	60	40	60	200
Specialization Core Courses for Optional Additional Specialization : Sustainable Energy Devices and Systems (Major)									
T7802	070123610	Seminar	Sustainable Energy Devices and Systems	2	0	0	20	30	50



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T7802	070123611	Project Phase- II	Sustainable Energy Devices and Systems	2	0	0	20	30	50
TE7346	070123616	Wind Energy Systems	Sustainable Energy Devices and Systems	4	40	60	0	0	100
Total				8	40	60	40	60	200
Generic Elective Courses Group									
T7580	070123617	Microwaves and Radar		3	30	45	0	0	75
TE7089	070123618	Modern Control Theory		3	30	45	0	0	75
TE7427	070123619	Embedded System Design		3	30	45	0	0	75
TE7088	070123620	Digital Image Processing		3	30	45	0	0	75
TE7315	070123621	Digital CMOS VLSI Design		3	30	45	0	0	75
Total Required Credits				3	30	45	0	0	75
Generic Elective Courses Group									
T7579	070123622	Microwave and Radar Lab		1	0	0	10	15	25
TE7039	070123623	Modern Control Theory Lab		1	0	0	10	15	25
T7567	070123624	Embedded System Design Lab		1	0	0	10	15	25
T7094	070123625	Digital Image Processing Lab		1	0	0	10	15	25
TE7132	070123626	CAD for VLSI Design Lab		1	0	0	10	15	25
Total Required Credits				1	0	0	10	15	25
Generic Elective Courses Group									
T7574	070123627	MATLAB		3	30	45	0	0	75
TE7335	070123628	Introduction to Robotics		3	30	45	0	0	75
TE7339	070123629	Renewable Energy Systems		3	30	45	0	0	75
TE7428	070123630	Introduction to Image Processing		3	30	45	0	0	75
TE7223	070123631	Smart Urban Planning		3	30	45	0	0	75
TE7240	070123632	Water Resource Planning and Management		3	30	45	0	0	75
T7499	070123633	Java		3	30	45	0	0	75
TE7265	070123634	Introduction to Data Science		3	30	45	0	0	75
TE7263	070123635	Introduction to AI and Machine Learning		3	30	45	0	0	75
TE7388	070123636	Quality Management Techniques		3	30	45	0	0	75



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TE7319	070123637	Electrical and Electronics Materials		3	30	45	0	0	75
TE7351	070123638	3D Printing and Prototyping		3	30	45	0	0	75
T2618	070123639	Project Management		3	30	45	0	0	75
T7020	070123640	Nanotechnology		3	30	45	0	0	75
T7393	070123641	Computer Based Statistical Packages		3	30	45	0	0	75
Total Required Credits				3	30	45	0	0	75
Semester : 7									
Generic Core Courses									
T7804	070123701	Project		4	0	0	40	60	100
T7674	070123702	Cyber Security		2	50	0	0	0	50
F0002	070123703	Flexi-Credit Course		2	50	0	0	0	50
Total				8	100	0	40	60	200
Specialization Core Courses for Optional Additional Specialization : Bioelectronics Systems (Major)									
TE7050	070123704	Biomedical Instrumentation	Bioelectronics Systems	4	40	60	0	0	100
T7802	070123705	Project Phase- III	Bioelectronics Systems	2	0	0	20	30	50
TE7309	070123706	Biomedical Instrumentation Lab	Bioelectronics Systems	1	0	0	10	15	25
Total				7	40	60	30	45	175
Specialization Core Courses for Optional Additional Specialization : Embedded Systems (Major)									
T7802	070123705	Project Phase- III	Embedded Systems	2	0	0	20	30	50
TE7304	070123707	Advanced Microcontrollers and RTOS	Embedded Systems	4	40	60	0	0	100
TE7305	070123708	Advanced Microcontrollers and RTOS Lab	Embedded Systems	1	0	0	10	15	25
Total				7	40	60	30	45	175
Specialization Core Courses for Optional Additional Specialization : Mechatronics and Automation (Major)									
T7802	070123705	Project Phase- III	Mechatronics and Automation	2	0	0	20	30	50
TE7125	070123709	Mobile Robotics	Mechatronics and Automation	4	40	60	0	0	100
TE7056	070123710	Mobile Robotics Lab	Mechatronics and Automation	1	0	0	10	15	25
Total				7	40	60	30	45	175
Specialization Core Courses for Optional Additional Specialization : Optoelectronics and Communication (Major)									



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T7802	070123705	Project Phase- III	Optoelectronics and Communication	2	0	0	20	30	50
TE7432	070123711	Optical Communication Systems	Optoelectronics and Communication	4	40	60	0	0	100
TE7433	070123712	Optical Communication Systems Lab	Optoelectronics and Communication	1	0	0	10	15	25
Total				7	40	60	30	45	175
Specialization Core Courses for Optional Additional Specialization : Signal Processing (Major)									
T7802	070123705	Project Phase- III	Signal Processing	2	0	0	20	30	50
TE7302	070123713	Adaptive Signal Processing	Signal Processing	4	40	60	0	0	100
TE7303	070123714	Adaptive Signal Processing Lab	Signal Processing	1	0	0	10	15	25
Total				7	40	60	30	45	175
Specialization Core Courses for Optional Additional Specialization : Sustainable Energy Devices and Systems (Major)									
T7802	070123705	Project Phase- III	Sustainable Energy Devices and Systems	2	0	0	20	30	50
TE7313	070123715	Devices and Grid Systems for Sustainable Energy	Sustainable Energy Devices and Systems	4	40	60	0	0	100
TE7314	070123716	Devices and Grid Systems for Sustainable Energy Lab	Sustainable Energy Devices and Systems	1	0	0	10	15	25
Total				7	40	60	30	45	175
Generic Elective Courses Group									
T7473	070123717	Artificial Intelligence		3	30	45	0	0	75
TE7045	070123718	IoT and Applications		3	30	45	0	0	75
TE7326	070123719	Fiber Optics And Satellite Communication		3	30	45	0	0	75
TE7340	070123720	Scientific Computing		3	30	45	0	0	75
Total Required Credits				3	30	45	0	0	75
Generic Elective Courses Group									
TE7014	070123721	Artificial Intelligence Lab		1	0	0	10	15	25
TE7048	070123722	IoT and Applications Lab		1	0	0	10	15	25



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TE7327	070123723	Fiber Optics And Satellite Communication Lab		1	0	0	10	15	25
TE7341	070123724	Scientific Computing Lab		1	0	0	10	15	25
Total Required Credits				1	0	0	10	15	25
Generic Elective Courses Group									
TE7306	070123725	Biomedical Electronics		3	30	45	0	0	75
TE7317	070123726	Digital Control System		3	30	45	0	0	75
TE7342	070123727	Speech and Audio Signal Processing		3	30	45	0	0	75
TE7347	070123728	Wireless Communication		3	30	45	0	0	75
Total Required Credits				3	30	45	0	0	75
Generic Elective Courses Group									
TE7307	070123729	Biomedical Electronics Lab		1	0	0	10	15	25
TE7318	070123730	Digital Control System Lab		1	0	0	10	15	25
TE7343	070123731	Speech and Audio Signal Processing Lab		1	0	0	10	15	25
TE7348	070123732	Wireless Communication Lab		1	0	0	10	15	25
Total Required Credits				1	0	0	10	15	25
Generic Elective Courses Group									
TE7171	070123733	Introduction to Mathematical Modelling		3	30	45	0	0	75
TE7195	070123734	GIS Applications		3	30	45	0	0	75
TE7204	070123735	Intelligent Transportation Systems		3	30	45	0	0	75
TE7264	070123736	Introduction to BIGDATA		3	30	45	0	0	75
T7474	070123737	Basics of Database		3	30	45	0	0	75
T7616	070123738	Fundamentals of Automotive Technology		3	30	45	0	0	75
T7529	070123739	Machine Learning		3	30	45	0	0	75
T7509	070123740	Open Source Technologies		3	30	45	0	0	75
T7584	070123741	Printed Circuit Board (PCB) Design		3	30	45	0	0	75
T7650	070123742	Six sigma		3	30	45	0	0	75
T7394	070123743	Smart Materials		3	30	45	0	0	75
TE7334	070123744	Introduction to Mechatronics		3	30	45	0	0	75
TE7338	070123745	Principles of Modern Communication Systems		3	30	45	0	0	75



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Annexure A

Catalog Course Code	Course Code	Course Title	Specialization	Credits	Internal Marks	External Mark	Internal Practical Marks	External Practical Marks	Total Marks
TE7376	070123746	Introduction to Operations Research		3	30	45	0	0	75
TE7377	070123747	Introduction to Optimisation		3	30	45	0	0	75
Total Required Credits				3	30	45	0	0	75
Generic Elective Courses Group									
TE7429	070123748	Information Theory and Coding		2	20	30	0	0	50
TE7430	070123749	Computer Architecture		2	20	30	0	0	50
TE7431	070123750	Wireless Sensor Network		2	20	30	0	0	50
Total Required Credits				2	20	30	0	0	50
Generic Elective Courses Group									
TE7438	070123751	History of Science and Technology		2	50	0	0	0	50
T6004	070123752	Organizational Behavior		2	50	0	0	0	50
Total Required Credits				2	50	0	0	0	50
Semester : 8									
Generic Core Courses									
T7912	070123801	Internship		12	0	0	180	120	300
T7802	070123802	Seminar		2	0	0	50	0	50
Total				14	0	0	230	120	350



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Semester	Internal Credits	External Credits	Total Credits	Total Marks
Semester 1	5	16	21	525
Semester 2	5	14	19	475
Semester 3	6	14	20	500
Semester 4	7	17	24	600
Semester 5	8	16	24	600
Semester 6	12	13	25	625
Semester 7	6	17	23	575
Semester 8	2	12	14	350
Total	51	119	170	4250