



Swaminarayan University

Teaching & Examination Scheme
Course – Faculty of Engineering (Degree)
Branch – Information Technology
Semester – 1st

Subject Code	Subject Name	Category	L	T	P	Total Credit	E	M	I	V	Total Marks
BE100101	Mathematics - 1	Basic Science	3	2	0	5	60	40	0	0	100
BE100112	Engineering Graphics & Design	Engineering Science	2	0	4	4	60	40	20	30	150
BE100104	Basic Electrical Engineering	Engineering Science	3	0	2	4	60	40	20	30	150
BE100109	Programming for Problem Solving	Engineering Science	3	0	2	4	60	40	20	30	150
BE100115	Physics (Group - 2)	Basic Science (Elective)	3	0	2	4	60	40	20	30	150
BE100114	Chemistry	Basic Science (Elective)	3	0	2	4	60	40	20	30	150
BE100113	Induction Program	Mandatory	0	0	0	0	0	0	0	0	0
	Total		14	2	10	21					

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Teaching & Examination Scheme
 Course – Faculty of Engineering (Degree)
 Branch – Information Technology
 Semester – 2nd

Subject Code	Subject Name	Category	L	T	P	Total Credit	E	M	I	V	Total Marks
BE100108	Mathematics - 2	Basic Science	3	2	0	5	60	40	0	0	100
BE100102	Basic Mechanical Engineering	Engineering Science	3	0	2	4	60	40	20	30	150
BE100106	English	Humanities and Social Science	2	0	2	3	60	40	20	30	150
BE100105	Basic Electronics	Engineering Science	3	0	2	4	60	40	20	30	150
BE100110	Engineering Workshop	Engineering Science	0	0	4	2	0	0	20	80	100
BE100111	Environmental Science	Mandatory	2	2	0	0	60	40	0	0	100
	Total		13	4	10	18					

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Semester – 3rd

Subject Code	Subject Name	Category	L	T	P	Total Credit	E	M	I	V	Total Marks
BE100301	Technical Writing & Communication Skills	Humanities and Social Science	2	0	2	3	60	40	20	30	150
BE100302	Indian Constitution	Mandatory	2	0	0	0	50	0	0	0	50
BE100304	Probability and Statistics	Basic Science	3	2	0	5	60	40	0	0	100
BE103301	Digital Fundamentals	Engineering Science	3	0	2	4	60	40	20	30	150
BE103302	Data Structures	Professional Core	3	0	4	5	60	40	20	30	150
BE103303	Database Management Systems	Professional Core	4	0	2	5	60	40	20	30	150
	Total		17	2	10	22					

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Semester – 4th

Subject Code	Subject Name	Category	L	T	P	Total Credit	E	M	I	V	Total Marks
BE103401	Discrete Mathematics	Basic Science	3	2	0	5	60	40	0	0	100
BE103402	Principles of Economics and Management	Humanities and Social Science	3	0	0	3	60	40	0	0	100
BE104401	Operating System and Virtualization	Professional Core	4	0	2	5	60	40	20	30	150
BE103404	Object Oriented Programming - 1	Professional Core	4	0	2	5	60	40	20	30	150
BE103405	Computer Organization & Architecture	Professional Core	3	0	2	4	60	40	20	30	150
	Total		17	2	6	22					

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Semester – 5th

Subject Code	Subject Name	Category	L	T	P	Total Credit	E	M	I	V	Total Marks
BE100501	Contributor Personality Development Program	Personality Development (Elective)	2	0	0	2	60	40	20	30	150
BE100502	Integrated Personality Development Course		2	0	0	2	60	40	20	30	150
BE103502	Professional ethics	Humanities and Social Science	3	0	0	3	60	40	0	0	100
BE103503	Analysis and Design of Algorithms	Professional Core	4	0	2	5	60	40	20	30	150
BE103504	Computer Networks	Professional Core	4	0	2	5	60	40	20	30	150
BE104501	Object Oriented Analysis and Design	Professional Elective - 1	3	0	2	4	60	40	20	30	150
BE104502	Web Development		3	0	2	4	60	40	20	30	150
BE104503	Computer Graphics and Visualization		3	0	2	4	60	40	20	30	150
BE104504	Data Science	Open Elective - 1	2	0	2	3	60	40	20	30	150
BE103508	Cyber Security		2	0	2	3	60	40	20	30	150
	Total		18	0	8	22					

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Semester – 6th

Subject Code	Subject Name	Category	L	T	P	Total Credit	E	M	I	V	Total Marks
BE100601	Contributor Personality Development Program	Personality Development (Elective)	2	0	0	2	60	40	20	30	150
BE100602	Integrated Personality Development Course		2	0	0	2	60	40	20	30	150
BE104601	Software Engineering	Professional Core	4	0	2	5	60	40	20	30	150
BE104602	Cryptography and Network security	Professional Core	3	0	2	4	60	40	20	30	150
BE104603	Image Processing	Professional Elective - 2	3	0	2	4	60	40	20	30	150
BE104604	Big Data Analytics		3	0	2	4	60	40	20	30	150
BE104605	Artificial Intelligence		3	0	2	4	60	40	20	30	150
BE104606	Enterprise Application Development	Professional Elective - 3	3	0	2	4	60	40	20	30	150
BE104607	Data Warehousing and Mining		3	0	2	4	60	40	20	30	150
BE104608	Advanced Web Programming		3	0	2	4	60	40	20	30	150
BE104609	Mobile Application Development	Open elective - 2	2	0	2	3	60	40	20	30	150
BE104610	Data Analysis and Visualization		2	0	2	3	60	40	20	30	150
	Total		17	0	10	22					

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Semester – 7th

Subject Code	Subject Name	Category	L	T	P	Total Credit	E	M	I	V	Total Marks
BE100701	Summer Internship	Project	0	0	0	2	00	00	20	80	100
BE104701	Wireless Communications	Professional Core	3	0	2	4	60	40	20	30	150
BE104702	Software Project Management	Professional Core	3	0	2	4	60	40	20	30	150
BE104703	Agile Development and UI/UX design	Professional Elective -4	3	0	0	3	60	40	00	00	100
BE103705	Modern Information Retrieval		3	0	0	3	60	40	00	00	100
BE104704	Graph Theory and Combinatorics		3	0	0	3	60	40	00	00	100
BE104705	Virtual and Augment Reality	Professional Elective -5	3	0	2	4	60	40	20	30	150
BE104706	Pattern Recognition		3	0	2	4	60	40	20	30	150
BE104707	Computer Vision		3	0	2	4	60	40	20	30	150
BE104708	Data Compression Methods	Professional Elective - 6	3	0	2	4	60	40	20	30	150
BE104709	Internetwork Security and Web Analytics		3	0	2	4	60	40	20	30	150
BE103711	Introduction to Machine Learning		3	0	2	4	60	40	20	30	150
BE100704	Blockchain Technology	Open Elective – 3	2	0	2	3	60	40	20	30	150
BE105712	Fundamentals of IoT		2	0	2	3	60	40	20	30	150
	Total		17	00	10	20					

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Semester – 8th

Subject Code	Subject Name	Category	L	T	P	Total Credit	E	M	I	V	Total Marks
BE104701	Internship/Project	Project Work	0	0	24	12	0	0	100	100	200
	Total		0	0	12	12					

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