

AMITY SCHOOL OF ENGINEERING & TECHNOLOGY

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PROGRAMME STRUCTURES

2018

AMITY UNIVERSITY HARYANA

GURGAON

B.Tech.- Aerospace Engineering (Total Credits-195)

Programme Structure-2018

FIRST SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
ASE2113	Engineering Mathematics-I	3	1	-	4
ASE2115	Engineering Chemistry	2	-	-	2
ASE2105	Introduction to Computers & Programming in C	2	1	-	3
ASE2106	Electrical Science	2	1	-	3
ASE2114	Engineering Mechanics	2	1	-	3
ASE2110	Programming in C Lab	-	-	2	1
ASE2111	Electrical Science Lab	-	-	2	1
ASE2116	Engineering Mechanics Lab	-	-	2	1
ASE2117	Engineering Chemistry Lab	-	-	2	1
	Open Electives				5*
CSS2152	English-I*	1	-	-	1
BEH2151	Understanding Self for Effectiveness*	1	-	-	1
	Foreign Language – I*	3	-	-	3
LAN2170	French for Technology-I				
LAN2152	German-I				
LAN2153	Spanish-I				
LAN2154	Russian-I				
LAN2155	Chinese-I				
LAN2156	Portuguese-I				
LAN2157	Korean-I				
LAN2158	Japanese-I				
LAN2159	Hindi-I **				
	TOTAL				24

** Hindi as Foreign Language for Foreign National Students

SECOND SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
ASE2209	Engineering Mathematics-II	3	1	-	4
ASE2210	Engineering Physics	2	1	-	3
ASE2211	Elements of Mechanical Engineering	2	-	-	2
ASE2203	Object Oriented Programming using C ⁺⁺	2	1	-	3
ASE2207	Object Oriented Programming using C ⁺⁺ Lab	-	-	2	1
ASE2212	Engineering Graphics Lab	-	-	2	1
ASE2213	Elements of Mechanical Engineering Lab	-	-	2	1
ASE2214	Engineering Physics Lab	-	-	2	1
	Open Electives				9*
CSS2252	English-II*	1	-	-	1
BEH2251	Problem Solving and Creative Thinking*	1	-	-	1
ENV2252	Environmental Studies*	4	-	-	4
	Foreign Language-II*	3	-	-	3
LAN2270	French for Technology-II				
LAN2252	German-II				
LAN2253	Spanish-II				
LAN2254	Russian –II				
LAN2255	Chinese-II				
LAN2256	Portuguese-II				
LAN2257	Korean-II				
LAN2258	Japanese-II				
LAN2259	Hindi-II				
	TOTAL				25

THIRD SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
ASE2302	Electronics	2	-	-	2

ASE2313	Engineering Mathematics-III	3	1	-	4
ASE2314	Engineering Thermodynamics	2	-	-	2
ASE2315	Strength of Materials	2	-	-	2
ASE2316	Fluids Mechanics	3	1	-	4
ASE2308	Electronics Lab	-	-	2	1
ASE 2310	Mechanical Engineering Drawing Lab	-	-	2	1
ASE2317	Strength of Materials Lab	-	-	2	1
ASE2318	Fluids Mechanics Lab	-	-	2	1
	Concentration Electives				3
ASE2319	Aircraft Systems & Instrumentation	3	-	-	3
ASE2320	Value Engineering	3	-	-	3
ASE2351	Elements of Aerospace Engineering	3	-	-	3
	Open Electives				4*+3
CSS2151	Effective Listening	1	-	-	1
BEH2351	Group Dynamics and Team Building*	1	-	-	1
	Foreign Language-III*	2	-	-	2
LAN2370	French for Technology-III				
LAN2352	German-III				
LAN2353	Spanish-III				
LAN2354	Russian -III				
LAN2355	Chinese-III				
LAN2356	Portuguese-III				
LAN2357	Korean-III				
LAN2358	Japanese-III				
LAN2359	Hindi-III				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				28

FOURTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
ASE2401	Aerodynamics-I	2	-	-	2
ASE2402	Propulsion Systems-I	3	-	-	3
ASE2411	Aircraft Structures-I	3	-	-	3

ASE2412	Numerical Analysis and Programming	2	-	-	2
ASE2451	Elements of Space Engineering	3	-	-	3
ASE2405	Aerodynamics Lab-I	-	-	2	1
ASE2406	Propulsion Systems Lab-I	-	-	2	1
ASE2407	Machine Shop Lab	-	-	2	1
ASE2413	Programming Lab-I (Numerical Analysis)	-	-	2	1
	Concentration Electives				2
ASE2403	Electrical Machines	2	-	-	2
ASE2410	Composite Materials	2	-	-	2
ASE2414	Aeroelasticity	2	-	-	2
	Open Electives				4*+3
CSS2251	Presentation Skills	1	-	-	1
BEH2451	Stress and Coping Strategies*	1	-	-	1
	Foreign Language-IV*	2	-	-	2
LAN2470	French for Technology-IV				
LAN2452	German-IV				
LAN2453	Spanish-IV				
LAN2454	Russian –IV				
LAN2455	Chinese-IV				
LAN2456	Portuguese-IV				
LAN2457	Korean-IV				
LAN2458	Japanese-IV				
LAN2459	Hindi-IV				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				26

SUMMER INTERNSHIP-I

FIFTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
ASE2501	Propulsion System-II	3	-	-	3
ASE2502	Aerodynamics-II	3	-	-	3
ASE2503	Aircraft Structures-II	3	-	-	3
ASE2506	Programming Lab - II (MAT Lab)	-	-	2	1

ASE2508	Airplane Structures & FEM Lab	-	-	2	1
ASE2535	Summer Internship Evaluation-I	-	-	-	3
	Concentration Electives				3
ASE2507	Principles of Helicopter Engineering	3	-	-	3
ASE2509	Boundary Layer Theory	3	-	-	3
ASE2551	Aircraft Systems	3	-	-	3
	Open Electives				4*+3
CSS2351	Reading & Comprehension	1	-	-	1
BEH2552	Personality, Nationalism and Human Values*	1	-	-	1
	Foreign Language-V*	2	-	-	2
LAN2570	French for Technology-V				
LAN2552	German-V				
LAN2553	Spanish-V				
LAN2554	Russian -V				
LAN2555	Chinese-V				
LAN2556	Portuguese-V				
LAN2557	Korean-V				
LAN2558	Japanese-V				
LAN2559	Hindi-V				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				24

SIXTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
ASE2602	Aircraft Materials & Processes	3	-	-	3
ASE2609	Aircraft Maintenance & Quality Assurance	3	-	-	3
ASE2611	Computational Aerodynamics	3	-	-	3
ASE2651	Aircraft Stability & Control	3	-	-	3
ASE2605	Programming Lab-III (Advanced Auto CAD)	-	-	2	1
ASE2612	CFD Lab	-	-	2	1
	Concentration Electives				3
ASE2606	Sensors & Systems	3	-	-	3

ASE2607	Mechatronics	3	-	-	3
ASE2608	Space Flight Navigation and Guidance	3	-	-	3
	Open Electives				4*+3
CSS2451	Corporate Communication	1	-	-	1
BHE2652	Interpersonal Communication*	1	-	-	1
	Foreign Language – VI*	2	-	-	2
LAN2670	French for Technology-VI				
LAN2652	German-VI				
LAN2653	Spanish-VI				
LAN2654	Russian -VI				
LAN2655	Chinese-VI				
LAN2656	Portuguese-VI				
LAN2657	Korean-VI				
LAN2658	Japanese-VI				
LAN2659	Hindi-VI				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				24

SUMMER INTERNSHIP-II

SEVENTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
ASE2701	Introduction to Avionics	3	-	-	3
ASE2702	Flight Dynamics	3	-	-	3
ASE2709	Aircraft Design	3	-	-	3
ASE2710	Aircraft Performance	3	-	-	3
ASE2735	Summer Internship Evaluation-II	-	-	-	3
	Concentration Electives				2
ASE2711	Independent Study	2	-	-	2
ASE2731	Term Paper	2	-	-	2
ASE2732	Project	2	-	-	2
	Open Electives				4*+3
CSS2551	Employability Skills	1	-	-	1
BHE2751	Relationship Management*	1	-	-	1
	Foreign Language-VII*				

LAN2770	French for Technology-VII	2	-	-	2
LAN2752	German-VII				
LAN2753	Spanish-VII				
LAN2754	Russian -VII				
LAN2755	Chinese-VII				
LAN2756	Portuguese-VII				
LAN2757	Korean-VII				
LAN2758	Japanese-VII				
LAN2759	Hindi-VII				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				24

EIGHTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
ASE2809	Vibration Engineering	3	-	-	3
ASE2810	Vibration Engineering Lab	-	-	2	1
ASE2837	Project (Dissertation)	-	-	-	8
	Concentration Electives				3
ASE2851	Introduction to Automatic Flight Control	3	-	-	3
ASE2803	Rockets & Missiles	3	-	-	3
ASE2805	Heat Transfer	3	-	-	3
	Open Electives				2*+3
CSS2651	Workplace Communication	1	-	-	1
BHE2851	Personal & Professional Excellence*	1	-	-	1
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				20

*Compulsory

B.Tech.- Civil Engineering (Total Credits-195)

Programme Structure-2018

FIRST SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
CIV2113	Engineering Mathematics-I	3	1	-	4
CIV2114	Engineering Chemistry	2	-	-	2
CIV2104	Elements of Mechanical Engineering	2	-	-	2
CIV2105	Introduction to Computers & Programming in C	2	1	-	3
CIV2106	Electrical Science	2	1	-	3
CIV2109	Elements of Mechanical Engineering Lab	-	-	2	1
CIV2110	Programming in C Lab	-	-	2	1
CIV2111	Electrical Science Lab	-	-	2	1
CIV2112	Engineering Graphics Lab	-	-	2	1
CIV2115	Engineering Chemistry Lab	-	-	2	1
Open Electives					5*
CSS2152	English-I *	1	-	-	1
BEH2151	Understanding Self for Effectiveness*	1	-	-	1
	Foreign Language-I*	3	-	-	3
LAN2170	French for Technology-I				
LAN2152	German-I				
LAN2153	Spanish-I				
LAN2154	Russian-I				
LAN2155	Chinese-I				
LAN2156	Portuguese-I				
LAN2157	Korean-I				
LAN2158	Japanese-I				
LAN2159	Hindi-I **				
TOTAL					24

** Hindi as Foreign Language for Foreign National Students

SECOND SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
CIV2208	Engineering Mathematics-II	3	1	-	4
CIV2209	Engineering Physics	2	1	-	3
CIV2203	Object Oriented Programming in C++	2	-	-	2

CIV2204	Engineering Mechanics	2	1	-	3
CIV2206	Object Oriented Programming in C++ Lab	-	-	2	1
CIV2207	Engineering Mechanics Lab	-	-	2	1
CIV2210	Engineering Physics Lab	-	-	2	1
	Open Electives				9*
CSS2252	English-II*	1	-	-	1
BEH2251	Problem Solving and Creative Thinking*	1	-	-	1
ENV2252	Environmental Studies	4	-	-	4
	Foreign Language-II*	3	-	-	3
LAN2270	French for Technology-II				
LAN2252	German-II				
LAN2253	Spanish-II				
LAN2254	Russian-II				
LAN2255	Chinese-II				
LAN2256	Portuguese-II				
LAN2257	Korean-II				
LAN2258	Japanese-II				
LAN2259	Hindi-II				
	TOTAL				24

THIRD SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
CIV2304	Building Technology	2	-	-	2
CIV2305	Surveying-I	2	-	-	2
CIV2311	Engineering Mathematics-III	3	1	-	4
CIV2312	Strength of Materials	3	1	-	4
CIV2313	Concrete Technology	3	-	-	3
CIV2307	Civil Engineering Drawing Lab & CAD Lab	-	-	2	1
CIV2314	Strength of Materials Lab	-	-	2	1
	Concentration Electives				3
CIV2315	Basics of Natural Resources Management	3	-	-	3
CIV2316	Disaster Management & Mitigation	3	-	-	3
CIV2317	Engineering Economics & Management	3	-	-	3
	Open Electives				4*+3
CSS2151	Effective Listening*	1	-	-	1
BEH2351	Group Dynamics and Team Building*	1	-	-	1
	Foreign Language-III*	2	-	-	2
LAN2370	French for Technology-III				
LAN2352	German-III				
LAN2353	Spanish-III				
LAN2354	Russian-III				

LAN2355	Chinese-III				
LAN2356	Portuguese-III				
LAN2357	Korean-III				
LAN2358	Japanese-III				
LAN2359	Hindi-III				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				27

FOURTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
CIV2401	Numerical Analysis & Programming	3	-	-	3
CIV2402	Structural Analysis-I	3	1	-	4
CIV2404	Transportation Engineering-I	3	-	-	3
CIV2411	Surveying-II	2	-	-	2
CIV2412	Fluid Mechanics	3	1	-	4
CIV2405	Numerical Analysis and Programming Lab	-	-	2	1
CIV2407	Surveying Practical	-	-	2	1
CIV2413	Fluid Mechanics Lab	-	-	2	1
	Concentration Electives				3
CIV2414	Fluid Machinery	3	-	-	3
CIV2415	Hydrology & Flood Control	3	-	-	3
CIV2416	Remote Sensing & Geographic Information Systems	3	-	-	3
	Open Electives				4*+3
CSS2251	Presentation Skills*	1	-	-	1
BEH2451	Stress and Coping Strategies*	1	-	-	1
	Foreign Language-IV*	2			2
LAN2470	French for Technology-IV				
LAN2452	German-IV				
LAN2453	Spanish-IV				
LAN2454	Russian-IV				
LAN2455	Chinese-IV				
LAN2456	Portuguese-IV				
LAN2457	Korean-IV				
LAN2458	Japanese-IV				
LAN2459	Hindi-IV				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				29

SUMMER INTERNSHIP-I

FIFTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
CIV2501	Structural Analysis-II	2	1	-	3
CIV2502	Principles of Structural Design	3	-	-	3
CIV2503	Transportation Engineering-II	3	-	-	3
CIV2551	Geotechnical Engineering-I	3	-	-	3
CIV2504	Material Testing Lab	-	-	2	1
CIV2509	Transportation Engineering Lab	-	-	2	1
CIV2535	Summer Internship Evaluation-I	-	-	-	3
Concentration Electives					3
CIV2510	Sustainable Development in Civil Engineering	3	-	-	3
CIV2511	Air and Water Pollution & Control	3	-	-	3
CIV2512	Computer Application in Hydro Engineering	3	-	-	3
Open Electives					4*+3
CSS2351	Reading & Comprehension*	1	-	-	1
BEH2552	Personality, Nationalism and Human Values*	1	-	-	1
	Foreign Language-V*	2	-	-	2
LAN2570	French for Technology-V				
LAN2552	German-V				
LAN2553	Spanish-V				
LAN2554	Russian-V				
LAN2555	Chinese-V				
LAN2556	Portuguese-V				
LAN2557	Korean-V				
LAN2558	Japanese-V				
LAN2559	Hindi-V				
	Minor Track Course (Flexi)	-	-	-	3
TOTAL					27

SIXTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
CIV2601	Environmental Engineering-I	3	-	-	3
CIV2602	Structural Concrete Design	3	-	-	3
CIV2610	Water Resource Engineering-I	3	-	-	3
CIV2651	Geotechnical Engineering-II	3	-	-	3
CIV2605	Geotechnical Engineering Lab	-	-	2	1
Concentration Electives					3
CIV2607	Prestressed Concrete	3	-	-	3

CIV2608	Traffic Engineering & Management	3	-	-	3
CIV2611	Basics of Optimization Techniques & Mathematical Modeling	3	-	-	3
Open Electives					4*+3
CSS2451	Corporate Communication*	1	-	-	1
BEH2652	Interpersonal Communication*	1	-	-	1
	Foreign Language-VI*	2	-	-	2
LAN2670	French for Technology-VI				
LAN2652	German-VI				
LAN2653	Spanish-VI				
LAN2654	Russian-VI				
LAN2655	Chinese-VI				
LAN2656	Portuguese-VI				
LAN2657	Korean-VI				
LAN2658	Japanese-VI				
LAN2659	Hindi-VI				
	Minor Track Course (Flexi)	-	-	-	3
TOTAL					23

SUMMER INTERNSHIP-II

SEVENTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
CIV2701	Structural Steel Design	3	-	-	3
CIV2702	Environmental Engineering-II	3	-	-	3
CIV2711	Water Resource Engineering-II	3	-	-	3
CIV2704	Environmental Engineering Lab	-	-	2	1
CIV2735	Summer Internship Evaluation-II	-	-	-	3
Concentration Electives					2
CIV2712	Independent Study	-	-	-	2
CIV2731	Term Paper	-	-	-	2
CIV2732	Project (With Presentation & Evaluation)	-	-	-	2
Open Electives					4*+3
CSS2551	Employability Skills*	1	-	-	1
BEH2751	Relationship Management*	1	-	-	1
	Foreign Language-VII*	2	-	-	2
LAN2770	French for Technology-VII				
LAN2752	German-VII				
LAN2753	Spanish-VII				
LAN2754	Russian-VII				
LAN2755	Chinese-VII				
LAN2756	Portuguese-VII				
LAN2757	Korean-VII				
LAN2758	Japanese-VII				
LAN2759	Hindi-VII				

	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				22

EIGHTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
CIV2801	Construction Management & Quantity Surveying	3	-	-	3
CIV2837	Dissertation	-	-	-	8
	Concentration Electives				3
CIV2803	Industrial Waste Engineering	3	-	-	3
CIV2808	Solid Waste Management & Recycling	3	-	-	3
CIV2809	Basics of Finite Element Method	3	-	-	3
	Open Electives				2*+3
CSS2651	Workplace Communication*	1	-	-	1
BEH2851	Personal & Professional Excellence*	1	-	-	1
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				19

*Compulsory

B.Tech.- Computer Science Engg. (Total Credits-195)

Programme Structure-2018

FIRST SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
CSE2110	Engineering Mathematics-I	3	1	-	4
CSE2111	Engineering Physics	2	1	-	3
CSE2103	Engineering Mechanics	2	1	-	3
CSE2104	Introduction to Computers & Programming in C	2	1	-	3
CSE2107	Programming in C Lab	-	-	2	1
CSE2109	Engineering Mechanics Lab	-	-	2	1
CSE2112	Engineering Physics Lab	-	-	2	1
CSE2113	Engineering Graphics Lab	-	-	2	1
Open Electives					9*
CSS2152	English-I *	1	-	-	1
BEH2151	Understanding Self for Effectiveness*	1	-	-	1
ENV2152	Environmental Studies	4	-	-	4
	Foreign Language-I*	3	-	-	3
LAN2170	French for Technology-I				
LAN2152	German-I				
LAN2153	Spanish-I				
LAN2154	Russian-I				
LAN2155	Chinese-I				
LAN2156	Portuguese-I				
LAN2157	Korean-I				
LAN2158	Japanese-I				
LAN2159	Hindi-I **				
TOTAL					26

** Hindi as Foreign Language for Foreign National Students

SECOND SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
CSE2211	Engineering Mathematics-II	3	1	-	4
CSE2212	Engineering Chemistry	2	-	-	2
CSE2213	Electrical Science	2	1	-	3
CSE2204	Object Oriented Programming using C++	2	1	-	3
CSE2205	Elements of Mechanical Engineering	2	-	-	2

CSE2208	Object Oriented Programming using C++ Lab	-	-	2	1
CSE2209	Elements of Mechanical Engineering Lab	-	-	2	1
CSE2214	Electrical Science Lab	-	-	2	1
CSE2215	Engineering Chemistry Lab	-	-	2	1
	Open Electives				5*
CSS2252	English-II*	1	-	-	1
BEH2251	Problem Solving and Creative Thinking*	1	-	-	1
	Foreign Language-II*	3	-	-	3
LAN2270	French for Technology-II				
LAN2252	German-II				
LAN2253	Spanish-II				
LAN2254	Russian-II				
LAN2255	Chinese-II				
LAN2256	Portuguese-II				
LAN2257	Korean-II				
LAN2258	Japanese-II				
LAN2259	Hindi-II				
	TOTAL				23

THIRD SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
CSE2301	Data Communication & Computer Networks	3	-	-	3
CSE2302	Database Management Systems	3	1	-	4
CSE2303	Operating Systems	3	-	-	3
CSE2304	Data Structures using C	3	1	-	4
CSE2305	Data Structures Using C Lab	-	-	2	1
CSE2306	Data Communication & Computer Networks Lab	-	-	2	1
CSE2307	Database Management Systems Lab	-	-	2	1
CSE2308	UNIX Programming Lab	-	-	2	1
	Concentration Electives				3
CSE2310	Electronic Devices & Circuits	2	-	-	2
CSE2311	Electronic Devices & Circuits Lab	-	-	2	1
CSE2312	E-Commerce & ERP	3	-	-	3
CSE2313	Introduction to IOT	3	-	-	3
	Open Electives				4*+3
CSS2151	Effective Listening*	1	-	-	1
BEH2351	Group Dynamics and Team Building*	1	-	-	1
	Foreign Language-III*	2	-	-	2
LAN2370	French for Technology-III				
LAN2352	German-III				

LAN2353	Spanish-III				
LAN2354	Russian-III				
LAN2355	Chinese-III				
LAN2356	Portuguese-III				
LAN2357	Korean-III				
LAN2358	Japanese-III				
LAN2359	Hindi-III				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				28

FOURTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
CSE2401	Theory of Automata & Computation	3	1	-	4
CSE2402	Digital Electronics	2	-	-	2
CSE2403	Discrete Mathematics	3	1	-	4
CSE2412	Artificial Intelligence	3	-	-	3
CSE2405	Digital Electronics Lab	-	-	2	1
CSE2413	Artificial Intelligence Lab	-	-	2	1
	Concentration Electives				3
CSE2414	Communication Systems	2	-	-	2
CSE2415	Communication Systems Lab	-	-	2	1
CSE2416	Introduction to OST (PHP & MySQL)	2		-	2
CSE2417	Introduction to OST (PHP & MySQL) Lab	-	-	2	1
CSE2410	Artificial Neural Network	2	-	-	2
CSE2411	Artificial Neural Network Lab	-	-	2	1
	Open Electives				4*+3
CSS2251	Presentation Skills*	1	-	-	1
BEH2451	Stress and Coping Strategies*	1	-	-	1
	Foreign Language – IV*	2	-		2
LAN2470	French for Technology-IV				
LAN2452	German-IV				
LAN2453	Spanish-IV				
LAN2454	Russian-IV				
LAN2455	Chinese-IV				
LAN2456	Portuguese-IV				
LAN2457	Korean-IV				
LAN2458	Japanese-IV				
LAN2459	Hindi-IV				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				25

SUMMER INTERNSHIP-I

FIFTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
CSE2501	Software Engineering	3	-	-	3
CSE2502	Computer Architecture	3	1	-	4
CSE2503	Java Programming	3	-	-	3
CSE2504	Software Engineering Lab	-	-	2	1
CSE2505	Java Programming Lab	-	-	2	1
CSE2511	Analysis & Design of Algorithm	3	-	-	3
CSE2512	Analysis & Design of Algorithm Lab	-	-	2	1
CSE2535	Summer Internship Evaluation-I	-	-	-	3
Concentration Electives (Select any one)					3
CSE2506	VHDL Programming	2	-	-	2
CSE2507	VHDL Programming Lab	-	-	2	1
CSE2513	Distributed Operating System	3	-	-	3
CSE2514	Fuzzy Logic & Genetic Algorithm	3	-	-	3
Open Electives					4*+3
CSS2351	Reading & Comprehension*	1	-	-	1
BEH2552	Personality, Nationalism and Human Values*	1	-	-	1
	Foreign Language-V*	2	-	-	2
LAN2570	French for Technology-V				
LAN2552	German-V				
LAN2553	Spanish-V				
LAN2554	Russian-V				
LAN2555	Chinese-V				
LAN2556	Portuguese-V				
LAN2557	Korean-V				
LAN2558	Japanese-V				
LAN2559	Hindi-V				
	Minor Track Course (Flexi)	-	-	-	3
TOTAL					29

SIXTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
CSE2601	Microprocessor	2	1	-	3
CSE2602	System Programming and Compiler	3	-	-	3

	Construction				
CSE2604	Advanced Java Programming	3	-	-	3
CSE2605	Microprocessor Lab	-	-	2	1
CSE2606	System Programming and Compiler Construction Lab	-	-	2	1
CSE2608	Advanced Java Programming Lab	-	-	2	1
	Concentration Electives (Select any one)				3
CSE2603	Cryptography and Network Security	2	1	-	3
CSE2612	Software Testing & Quality Assurance	3	-	-	3
CSE2610	VLSI Design	2	-	-	2
CSE2611	VLSI Design Lab	-	-	2	1
	Open Electives				4*+3
CSS2451	Corporate Communication*	1	-	-	1
BEH2652	Interpersonal Communication*	1	-	-	1
	Foreign Language-VI*	2	-	-	2
LAN2670	French for Technology-VI				
LAN2652	German-VI				
LAN2653	Spanish-VI				
LAN2654	Russian-VI				
LAN2655	Chinese-VI				
LAN2656	Portuguese-VI				
LAN2657	Korean-VI				
LAN2658	Japanese-VI				
LAN2659	Hindi-VI				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				22

SUMMER INTERNSHIP-II

SEVENTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
CSE2701	Data Warehousing and Data Mining	2	1	-	3
CSE2710	Computer Graphics	3	-	-	3
CSE2711	Advanced Computer Architecture	3	-	-	3
CSE2704	Data Warehousing and Data Mining Lab	-	-	2	1
CSE2712	Computer Graphics Lab	-	-	2	1
CSE2735	Summer Internship Evaluation-II	-	-	-	3
	Concentration Electives-I (Select any one)				3
CSE2751	Soft Computing	3	-	-	3
CSE2707	Mobile Computing	3	-	-	3
CSE2709	Grid Computing	3	-	-	3
	Concentration Electives-II (Select any one)				2
CSE2731	Term Paper	-	-	-	2

CSE2732	Project	-	-	-	2
CSE2733	Workshop / Independent Study	-	-	-	2
Open Electives					4*+3
CSS2551	Employability Skills*	1	-	-	1
BEH2751	Relationship Management*	1	-	-	1
	Foreign Language-VII*	2	-	-	2
LAN2770	French for Technology-VII				
LAN2752	German-VII				
LAN2753	Spanish-VII				
LAN2754	Russian-VII				
LAN2755	Chinese-VII				
LAN2756	Portuguese-VII				
LAN2757	Korean-VII				
LAN2758	Japanese-VII				
LAN2759	Hindi-VII				
	Minor Track Course (Flexi)	-	-	-	3
TOTAL					26

EIGHTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
CSE2837	Project-Dissertation	-	-	-	8
Concentration Electives					3
CSE2803	Digital Image Processing	2	-	-	2
CSE2805	Digital Image Processing Lab	-	-	2	1
CSE2804	Dot Net Programming	2	-	-	2
CSE2806	Dot Net Programming Lab	-	-	2	1
CSE2807	Simulation & Modeling	2	-	-	2
CSE2811	Simulation & Modeling Lab	-	-	2	1
Open Electives					2*+3
CSS2651	Workplace Communication*	1	-	-	1
BEH2851	Personal & Professional Excellence*	1	-	-	1
	Minor Track Course (Flexi)	-	-	-	3
TOTAL					16

*Compulsory

B.Tech.- Electronics & Communication Engineering (Total Credits-195)

Programme Structure-2018

FIRST SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
ECE2112	Engineering Mathematics-I	3	1	-	4
ECE2113	Engineering Physics	2	1	-	3
ECE2114	Engineering Chemistry	2	-	-	2
ECE2104	Element of Mechanical Engineering	2	-	-	2
ECE2105	Introduction to Computers & Programming in C	2	1	-	3
ECE2106	Electrical Science	2	1	-	3
ECE2115	Engineering Physics Lab	-	-	2	1
ECE2116	Engineering Chemistry Lab	-	-	2	1
ECE2109	Elements of Mechanical Engineering Lab	-	-	2	1
ECE2110	Programming in C Lab	-	-	2	1
ECE2111	Electrical Science Lab	-	-	2	1
Open Electives					5*
CSS2152	English-I *	1			1
BEH2151	Understanding Self for Effectiveness*	1			1
	Foreign Language-I*	3			3
LAN2170	French for Technology-I				
LAN2152	German-I				
LAN2153	Spanish-I				
LAN2154	Russian-I				
LAN2155	Chinese-I				
LAN2156	Portuguese-I				
LAN2157	Korean-I				
LAN2158	Japanese-I				
LAN2159	Hindi-I **				
	TOTAL				27

** Hindi as Foreign Language for Foreign National Students

SECOND SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
ECE2209	Engineering Mathematics-II	3	1	-	4
ECE2203	Object Oriented Programming using C++	2	1	-	3

ECE2204	Engineering Mechanics	2	1	-	3
ECE2206	Object Oriented Programming using C++ Lab	-	-	2	1
ECE2207	Engineering Mechanics Lab	-	-	2	1
ECE2208	Engineering Graphics Lab	-	-	2	1
	Open Electives				9*
CSS2252	English-II *	1	-	-	1
BEH2251	Problem Solving and Creative Thinking*	1	-	-	1
ENV2252	Environmental Studies*	4	-	-	4
	Foreign Language-II*	3	-	-	3
LAN2270	French for Technology-II				
LAN2252	German-II				
LAN2253	Spanish-II				
LAN2254	Russian-II				
LAN2255	Chinese-II				
LAN2256	Portuguese-II				
LAN2257	Korean-II				
LAN2258	Japanese-II				
LAN2259	Hindi-II				
	TOTAL				22

THIRD SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
ECE2302	Analog Electronics-I	3	-	-	3
ECE2303	Circuits & Systems	2	1	-	3
ECE2304	Java Programming	3	-	-	3
ECE2305	Analog Electronics- I Lab	-	-	2	1
ECE2306	Circuits & Systems Lab	-	-	2	1
ECE2307	Java Programming Lab	-	-	2	1
ECE2309	Signals & Systems	2	1	-	3
ECE2310	Engineering Mathematics-III	3	1	-	4
	Concentration Electives				3
ECE2311	Data Structure using C	2	-	-	2
ECE2312	Data Structure using C Lab	-	-	2	1
ECE2313	Virtual Instrumentation	2	-	-	2
ECE2314	Virtual Instrumentation Lab	-	-	2	1
	Open Electives				*4+3
CSS2151	Effective Listening*	1	-	-	1
BEH2351	Group Dynamics and Team Building*	1	-	-	1
	Foreign Language-III*	2	-	-	2
LAN2370	French for Technology-III				
LAN2352	German-III				
LAN2353	Spanish-III				
LAN2354	Russian-III				
LAN2355	Chinese-III				

LAN2356	Portuguese-III				
LAN2357	Korean-III				
LAN2358	Japanese-III				
LAN2359	Hindi-III				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				29

FOURTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
ECE2402	Communication Systems	3	-	-	3
ECE2403	Analog Electronics-II	3	-	-	3
ECE2404	Electromagnetic Field Theory	3	-	-	3
ECE2411	Digital Electronics	2	-	-	2
ECE2406	Communication Systems Lab	-	-	2	1
ECE2407	Analog Electronics- II Lab	-	-	2	1
ECE2412	Digital Electronics Lab	-	-	2	1
	Concentration Electives				3
ECE2413	ORCAD Lab	-	-	2	1
ECE2414	PCB Fabrications	2	-	-	2
ECE2415	Database Management Systems	2	-	-	2
ECE2416	Database Management Systems Lab	-	-	2	1
	Open Electives				*4+3
CSS2251	Presentation Skills*	1	-	-	1
BEH2451	Stress and Coping Strategies*	1	-	-	1
	Foreign Language – IV*	2	-	-	2
LAN2470	French for Technology-IV				
LAN2452	German-IV				
LAN2453	Spanish-IV				
LAN2454	Russian-IV				
LAN2455	Chinese-IV				
LAN2456	Portuguese-IV				
LAN2457	Korean-IV				
LAN2458	Japanese-IV				
LAN2459	Hindi-IV				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				24

SUMMER INTERNSHIP-I

FIFTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
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ECE2501	Digital Circuits & Systems	3	-	-	3
ECE2502	Digital Communications	2	-	-	2
ECE2503	Control Systems	2	1	-	3
ECE2509	Microprocessor Systems	3	-	-	3
ECE2504	Digital Circuits & Systems Lab	-	-	2	1
ECE2505	Microprocessor Systems Lab	-	-	2	1
ECE2506	Control Systems Lab	-	-	2	1
ECE2535	Summer Internship Evaluation-I	-	-	-	3
Concentration Electives					3
ECE2551	Biomedical Instrumentation	3	-	-	3
ECE2507	Operating System	3	-	-	3
ECE2508	Computer Architecture	3	-	-	3
ECE2510	Fuzzy Logic & Neural Networks	2	-	-	2
ECE2511	Fuzzy Logic & Neural Networks Lab	-	-	2	1
Open Electives					*4+3
CSS2351	Reading & Comprehension*	1	-	-	1
BEH2552	Personality, Nationalism and Human Values*	1	-	-	1
	Foreign Language-V*	2	-	-	2
LAN2570	French for Technology-V				
LAN2552	German-V				
LAN2553	Spanish-V				
LAN2554	Russian-V				
LAN2555	Chinese-V				
LAN2556	Portuguese-V				
LAN2557	Korean-V				
LAN2558	Japanese-V				
LAN2559	Hindi-V				
	Minor Track Course (Flexi)	-	-	-	3
TOTAL					27

SIXTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
ECE2601	VLSI Design	3	-	-	3
ECE2602	Digital Signal Processing	2	1	-	3
ECE2603	Antenna & Wave Propagation	3	-	-	3
ECE2611	Radar & Satellite Communications	3	-	-	3
ECE2605	VLSI Design Lab	-	-	2	1
ECE2609	Digital Signal Processing Lab	-	-	2	1
ECE2612	Radar & Satellite Communications Lab	-	-	2	1
Concentration Electives					3
ECE2607	Advanced Java Programming	2	-	-	2
ECE2610	Advanced Java Programming Lab	-	-	2	1
ECE2608	Information Storage & Management	3	-	-	3
ECE2613	Embedded System	2	-	-	2

ECE2614	Embedded System Lab	-	-	2	1
	Open Electives				*4+3
CSS2451	Corporate Communication*	1	-	-	1
BEH2652	Interpersonal Communication*	1	-	-	1
	Foreign Language-VI*	2	-	-	2
LAN2670	French for Technology-VI				
LAN2652	German-VI				
LAN2653	Spanish-VI				
LAN2654	Russian-VI				
LAN2655	Chinese-VI				
LAN2656	Portuguese-VI				
LAN2657	Korean-VI				
LAN2658	Japanese-VI				
LAN2659	Hindi-VI				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				25

SUMMER INTERNSHIP-II

SEVENTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
ECE2703	Microwave Engineering	3	-	-	3
ECE2708	Mobile Communications	2	-	-	2
ECE2714	Measurement & Measuring Instruments	2	1	-	3
ECE2705	Microwave Engineering Lab	-	-	2	1
ECE2715	Measurement & Measuring Instruments Lab	-	-	2	1
ECE2735	Summer Internship Evaluation-II	-	-	-	3
	Concentration Electives-I				3
ECE2706	Optical Communications	2	-	-	2
ECE2716	Optical Communications Lab	-	-	2	1
ECE2707	Software Engineering	3	-	-	3
ECE2712	Digital Image Processing	2	-	-	2
ECE2713	Digital Image Processing Lab	-	-	2	1
ECE2717	Computer Networks	3	-	-	3
	Concentration Electives-II				2
ECE2718	Independent Study	2	-	-	2
ECE2731	Term Paper	2	-	-	2
ECE2732	Project (With Presentation & Evaluation)	2	-	-	2
	Open Electives				*4+3
CSS2551	Employability Skills*	1	-	-	1
BEH2751	Relationship Management*	1	-	-	1
	Foreign Language-VII*	2	-	-	2
LAN2770	French for Technology-VII				
LAN2752	German-VII				

LAN2753	Spanish-VII				
LAN2754	Russian-VII				
LAN2755	Chinese-VII				
LAN2756	Portuguese-VII				
LAN2757	Korean-VII				
LAN2758	Japanese-VII				
LAN2759	Hindi-VII				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				25

EIGHTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
ECE2837	Project (Dissertation)	-	-	-	8
	Concentration Electives				3
ECE2803	Instrumentation	3	-	-	3
ECE2805	RTOS Programming	3	-	-	3
ECE2806	Verilog Programming	2	-	-	2
ECE2813	Verilog Programming Lab	-	-	2	1
ECE2807	Advanced Networking	3	-	-	3
ECE2812	Advanced VLSI Design	3	-	-	3
ECE2814	Power Electronics	3	-	-	3
	Open Electives				*2+3
CSS2651	Workplace Communication*	1	-	-	1
BEH2851	Personal & Professional Excellence*	1	-	-	1
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				16

* Compulsory

B.Tech.- Biomedical Engineering (Total Credits-195)

Programme Structure-2018

FIRST SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
BME2112	Engineering Mathematics-I	3	1	-	4
BME2113	Engineering Physics	2	1	-	3
BME2114	Engineering Chemistry	2	-	-	2
BME2104	Introduction to Computers & Programming in C	2	1	-	3
BME2105	Electrical Science	2	1	-	3
BME2106	Element of Mechanical Engineering	2	-	-	2
BME2109	Programming in C Lab	-	-	2	1
BME2110	Electrical Science Lab	-	-	2	1
BME2111	Element of Mechanical Engineering lab	-	-	2	1
BME2115	Engineering Physics Lab	-	-	2	1
BME2116	Engineering Chemistry Lab	-	-	2	1
	Open Electives				5*
CSS2152	English-I *	1	-	-	1
BEH2151	Understanding Self for Effectiveness*	1	-	-	1
	Foreign Language-I*	3	-	-	3
LAN2170	French for Technology-I				
LAN2152	German-I				
LAN2153	Spanish-I				
LAN2154	Russian-I				
LAN2155	Chinese-I				
LAN2156	Portuguese-I				
LAN2157	Korean-I				
LAN2158	Japanese-I				
LAN2159	Hindi-I **				

	TOTAL				27
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** Hindi as Foreign Language for Foreign National Students

SECOND SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
BME2210	Engineering Mathematics-II	3	1	-	4
BME2203	Engineering Mechanics	3	-	-	3
BME2204	Biology for Engineers	2	-	-	2
BME2205	Object Oriented Programming using C++	2	1	-	3
BME2207	Engineering Mechanics Lab	-	-	2	1
BME2208	Engineering Graphics Lab	-	-	2	1
BME2209	Object Oriented Programming using C++ Lab	-	-	2	1
	Open Electives				9*
CSS2252	English-II *	1	-	-	1
BEH2251	Problem Solving and Creative Thinking*	1	-	-	1
ENV2252	Environmental Studies*	4	-	-	4
	Foreign Language-II*	3	-	-	3
LAN2270	French for Technology-II				
LAN2252	German-II				
LAN2253	Spanish-II				
LAN2254	Russian-II				
LAN2255	Chinese-II				
LAN2256	Portuguese-II				
LAN2257	Korean-II				
LAN2258	Japanese-II				
LAN2259	Hindi-II				
	TOTAL				24

THIRD SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
BME2302	Analog Electronics-I	3	-	-	3
BME2304	Signals and Systems	2	1	-	3
BME2305	Medical Imaging Techniques	3	-	-	3
BME2310	Engineering Mathematics-III	3	-	-	3
BME2351	Human Anatomy and Physiology-I	3	-	-	3
BME2306	Analog Electronics Lab-I	-	-	2	1
BME2308	Signals and Systems Lab	-	-	2	1
	Concentration Electives				3
BME2303	Circuits & Systems	2	1	-	3
BME2311	Diagnostic & Therapeutic Equipments	3	-	-	3
BME2312	Neural Network & Fuzzy Logic	2	-	-	2
BME2313	Neural Network & Fuzzy Logic Lab	-	-	2	1
	Open Electives				4*+3
CSS2151	Effective Listening*	1	-	-	1
BEH2351	Group Dynamics and Team Building*	1	-	-	1
	Foreign Language-III*	2	-	-	2
LAN2370	French for Technology-III				
LAN2352	German-III				
LAN2353	Spanish-III				
LAN2354	Russian-III				
LAN2355	Chinese-III				
LAN2356	Portuguese-III				
LAN2357	Korean-III				
LAN2358	Japanese-III				
LAN2359	Hindi-III				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				27

FOURTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
BME2401	Human Anatomy and Physiology-II	3	1	-	4
BME2408	Digital Electronics	2	-	-	2
BME2451	Bio-Instrumentation	3	-	-	3
BME2403	Bio-instrumentation Lab	-	-	2	1
BME2409	Digital Electronics Lab	-	-	2	1
	Concentration Electives				3
BME2406	Fundamentals of Internet	2	-	-	2
BME2410	Fundamentals of Internet Lab	-	-	2	1
BME2407	Analog Electronics-II	3	-	-	3
BME2411	Laser Systems	3	-	-	3
	Open Electives				4*+3
CSS2251	Presentation Skills*	1	-	-	1
BEH2451	Stress and Coping Strategies*	1	-	-	1
	Foreign Language-IV*	2	-		2
LAN2470	French for Technology-IV				
LAN2452	German-IV				
LAN2453	Spanish-IV				
LAN2454	Russian-IV				
LAN2455	Chinese-IV				
LAN2456	Portuguese-IV				
LAN2457	Korean-IV				
LAN2458	Japanese-IV				
LAN2459	Hindi-IV				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				21

SUMMER INTERNSHIP –I

FIFTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
BME2501	Microprocessor Systems	3	1	-	4
BME2510	Clinical Electrical Safety & Hazards	2	-	-	2
BME2511	Clinical Science & Devices	2	-	-	2
BME2551	Tissue Engineering	3	-	-	3
BME2504	Microprocessor Systems Lab	-	-	2	1
BME2505	Tissue Engineering Lab	-	-	2	1
BME2535	Summer Internship Evaluation-I	-	-	-	3
	Concentration Electives				4
BME2506	Java Programming	3	-	-	3
BME2508	Java Programming Lab	-	-	2	1
BME2507	Digital Circuits and Systems-II	3	-	-	3
BME2509	Digital Circuits and Systems Lab	-	-	2	1
BME2503	Control Systems	2	1	-	3
BME2512	Control Systems Lab	-	-	2	1
	Open Electives				4*+3
CSS2351	Reading & Comprehension*	1	-	-	1
BEH2552	Personality, Nationalism and Human Values*	1	-	-	1
	Foreign Language-V*	2	-	-	2
LAN2570	French for Technology-V				
LAN2552	German-V				
LAN2553	Spanish-V				
LAN2554	Russian-V				
LAN2555	Chinese-V				
LAN2556	Portuguese-V				
LAN2557	Korean-V				
LAN2558	Japanese-V				
LAN2559	Hindi-V				
	Minor Track Course (Flexi)	-	-	-	3

	TOTAL				27
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SIXTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
BME2601	Microcontroller and its Biomedical Applications	3	1	-	4
BME2602	Artificial Organs and Rehabilitation Engineering	3	1	-	4
BME2603	Physiology Control System and Simulation Modeling	3	1	-	4
BME2604	Hospital visit + Clinical Need Assessment-I	2	-	-	2
BME2651	Biomechanics	3	-	-	3
BME2605	Biomechanics Lab	-	-	2	1
	Concentration Electives				3
BME2606	Basic Pathology and Microbiology	3	-	-	3
BME2607	Hospital Management System	3	-	-	3
	Open Electives				4*+3
CSS2451	Corporate Communication*	1	-	-	1
BEH2652	Interpersonal Communication*	1	-	-	1
	Foreign Language-VI*	2	-	-	2
LAN2670	French for Technology-VI				
LAN2652	German-VI				
LAN2653	Spanish-VI				
LAN2654	Russian-VI				
LAN2655	Chinese-VI				
LAN2656	Portuguese-VI				
LAN2657	Korean-VI				
LAN2658	Japanese-VI				
LAN2659	Hindi-VI				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				28

SUMMER INTERNSHIP –II

SEVENTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
BME2751	Medical Image Processing	3	-	-	3
BME2701	Biotransport Phenomenon and Biofluids	3	1	-	4
BME2702	Hospital visit + Clinical need Assessment-II	2	-	-	2
BME2703	Medical Image Processing Lab	-	-	2	1
BME2735	Summer Internship Evaluation-II	-	-	-	3
Concentration Electives-I					3
BME2707	Telemedicine	3	-	-	3
BME2708	Soft Computing	3	-	-	3
Concentration Electives-II					2
BME2709	Independent Study	2	-	-	2
BME2731	Term Paper	2	-	-	2
BME2732	Project	2	-	-	2
Open Electives					4*+3
CSS2551	Employability Skills*	1	-	-	1
BEH2751	Relationship Management*	1	-	-	1
	Foreign Language-VII*	2	-	-	2
LAN2770	French for Technology-VII				
LAN2752	German-VII				
LAN2753	Spanish-VII				
LAN2754	Russian-VII				
LAN2755	Chinese-VII				
LAN2756	Portuguese-VII				
LAN2757	Korean-VII				
LAN2758	Japanese-VII				
LAN2759	Hindi-VII				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				25

EIGHTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
BME2837	Project / Dissertation	-	-	-	8
	Concentration Electives				3
BME2802	Introduction to Medical Physics	3	-	-	3
BME2803	Medical Informatics	3	-	-	3
	Open Electives				2*+3
CSS2651	Workplace Communication*	1	-	-	1
BEH2851	Personal & Professional Excellence*	1	-	-	1
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				16

***Compulsory**

B.Tech.-Mechanical Engineering (Total Credits-195)

Programme Structure-2018

FIRST SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
MAE2112	Engineering Mathematics-I	3	1	-	4
MAE2113	Engineering Chemistry	2	-	-	2
MAE2104	Elements of Mechanical Engineering	2	-	-	2
MAE2105	Introduction to Computers & Programming in C	2	1	-	3
MAE2106	Electrical Science	2	1	-	3
MAE2109	Elements of Mechanical Engineering Lab	-	-	2	1
MAE2110	Programming in C Lab	-	-	2	1
MAE2111	Electrical Science Lab	-	-	2	1
MAE2114	Engineering Chemistry Lab	-	-	2	1
	Open Electives				5*
CSS2152	English-I *	1	-	-	1
BEH2151	Understanding Self for Effectiveness*	1	-	-	1
	Foreign Language-I*	3	-	-	3
LAN2170	French for Technology-I				
LAN2152	German-I				
LAN2153	Spanish-I				
LAN2154	Russian-I				
LAN2155	Chinese-I				
LAN2156	Portuguese-I				
LAN2157	Korean-I				
LAN2158	Japanese-I				
LAN2159	Hindi-I **				
	TOTAL				23

** Hindi as Foreign Language for Foreign National Students

SECOND SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
MAE2209	Engineering Mathematics-II	3	1	-	4
MAE2210	Engineering Physics	2	1	-	3
MAE2203	Object Oriented Programming using C++	2	1	-	3
MAE2204	Engineering Mechanics	2	1	-	3
MAE2206	Object Oriented Programming using C++ Lab	-	-	2	1
MAE2207	Engineering Mechanics Lab	-	-	2	1
MAE2208	Engineering Graphics Lab	-	-	2	1
MAE2211	Engineering Physics Lab	-	-	2	1
	Open Electives				9*
CSS2252	English-II *	1	-	-	1
BEH2251	Problem Solving and Creative Thinking*	1	-	-	1
ENV2252	Environmental Studies*	4	-	-	4
	Foreign Language – II*	3	-	-	3
LAN2270	French for Technology-II				
LAN2252	German-II				
LAN2253	Spanish-II				
LAN2254	Russian-II				
LAN2255	Chinese-II				
LAN2256	Portuguese-II				
LAN2257	Korean-II				
LAN2258	Japanese-II				
LAN2259	Hindi-II				
	TOTAL				26

THIRD SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
MAE2301	Kinematics of Machines	3	1	-	4
MAE2303	Material Science & Metallurgy	3	-	-	3
MAE2311	Applied Thermodynamics	2	1	-	3

MAE2312	Strength of Materials-I	3	1	-	4
MAE2306	Machine Drawing Lab	-	-	2	1
MAE2307	Kinematics of Machines Lab	-	-	2	1
MAE2313	Strength of Materials Lab-I	-	-	2	1
Concentration Electives					3
MAE2314	Renewable Energy & Energy Management	3	-	-	3
MAE2315	Ergonomics	3	-	-	3
MAE2316	Solar Energy	3	-	-	3
Open Electives					4*+3
CSS2151	Effective Listening*	1	-	-	1
BEH2351	Group Dynamics and Team Building*	1	-	-	1
	Foreign Language-III*	2	-	-	2
LAN2370	French for Technology-III				
LAN2352	German-III				
LAN2353	Spanish-III				
LAN2354	Russian-III				
LAN2355	Chinese-III				
LAN2356	Portuguese-III				
LAN2357	Korean-III				
LAN2358	Japanese-III				
LAN2359	Hindi-III				
	Minor Track Course (Flexi)	-	-	-	3
TOTAL					27

FOURTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
MAE2401	Dynamics of Machines	3	1	-	4
MAE2403	Theory of Metal Forming	3	-	-	3
MAE2411	Manufacturing Processes	3	-	-	3
MAE2412	Strength of Materials-II	3	1	-	4
MAE2413	Fluid Mechanics	3	1	-	4
MAE2405	Dynamics of Machines Lab	-	-	2	1
MAE2414	Manufacturing Processes Lab	-	-	2	1
MAE2415	Fluid Mechanics Lab	-	-	2	1
Concentration Electives					3

MAE2408	Numerical Analysis & Programming	2	-	-	2
MAE2409	Numerical Analysis & Programming Lab	-	-	2	1
MAE2416	Gas Turbines	3	-	-	3
MAE2417	Electrical Machine	2	-	-	2
MAE2418	Electrical Machine Lab	-	-	2	1
	Open Electives				4*+3
CSS2251	Presentation Skills*	1	-	-	1
BEH2451	Stress and Coping Strategies*	1	-	-	1
	Foreign Language-IV*	2	-	-	2
LAN2470	French for Technology-IV				
LAN2452	German-IV				
LAN2453	Spanish-IV				
LAN2454	Russian-IV				
LAN2455	Chinese-IV				
LAN2456	Portuguese-IV				
LAN2457	Korean-IV				
LAN2458	Japanese-IV				
LAN2459	Hindi-IV				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				31

SUMMER INTERNSHIP-I

FIFTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
MAE2501	Machine Design-I	3	-	-	3
MAE2502	Heat & Mass Transfer	3	1	-	4
MAE2551	Metrology	3	-	-	3
MAE2504	Machine Design Lab-I	-	-	2	1
MAE2505	Metrology Lab	-	-	2	1
MAE2507	Heat & Mass Transfer Lab	-	-	2	1
MAE2535	Summer Internship Evaluation-I	-	-	-	3
	Concentration Electives				3
MAE2508	Optimization Techniques	3	-	-	3
MAE2511	Operations Research	3	-	-	3
MAE2512	Advanced Thermodynamics	3	-	-	3
	Open Electives				4*+3

CSS2351	Reading & Comprehension*	1	-	-	1
BEH2552	Personality, Nationalism and Human Values*	1	-	-	1
	Foreign Language-V*	2	-	-	2
LAN2570	French for Technology-V				
LAN2552	German-V				
LAN2553	Spanish-V				
LAN2554	Russian-V				
LAN2555	Chinese-V				
LAN2556	Portuguese-V				
LAN2557	Korean-V				
LAN2558	Japanese-V				
LAN2559	Hindi-V				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				26

SIXTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
MAE2602	Machine Design-II	3	-	-	3
MAE2611	Fluid Machines	2	1	-	3
MAE2612	Internal Combustion Engines	3	-	-	3
MAE2604	Machine Design Lab-II	-	-	2	1
MAE2613	Fluid Machines Lab	-	-	2	1
MAE2614	Internal Combustion Engines Lab	-	-	2	1
	Concentration Electives				3
MAE2615	Vibration Engineering	2	-	-	2
MAE2616	Vibration Engineering Lab	-	-	2	1
MAE2608	Computer Integrated Manufacturing System	2	-	-	2
MAE2617	Computer Integrated Manufacturing System Lab	-	-	2	1
MAE2618	Computer Aided Designing	2	-	-	2
MAE2619	Computer Aided Designing Lab	-	-	2	1
	Open Electives				4*+3
CSS2451	Corporate Communication*	1	-	-	1
BEH2652	Interpersonal Communication*	1	-	-	1
	Foreign Language-VI*	2	-	-	2
LAN2670	French for Technology-VI				

LAN2652	German-VI				
LAN2653	Spanish-VI				
LAN2654	Russian-VI				
LAN2655	Chinese-VI				
LAN2656	Portuguese-VI				
LAN2657	Korean-VI				
LAN2658	Japanese-VI				
LAN2659	Hindi-VI				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				22

SUMMER INTERNSHIP –II

SEVENTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
MAE2701	Computer Aided Manufacturing	3	-	-	3
MAE2707	Automotive Engineering	3	-	-	3
MAE2703	Computer Aided Manufacturing Lab	-	-	2	1
MAE2708	Automotive Engineering Lab	-	-	2	1
MAE2735	Summer Internship Evaluation-II	-	-	-	3
	Concentration Electives				2
MAE2712	Independent Study	-	-	-	2
MAE2731	Term Paper	-	-	-	2
MAE2732	Project	-	-	-	2
	Open Electives				4*+3
CSS2551	Employability Skills*	1	-	-	1
BEH2751	Relationship Management*	1	-	-	1
	Foreign Language-VII*	2	-	-	2
LAN2770	French for Technology-VII				
LAN2752	German-VII				
LAN2753	Spanish-VII				
LAN2754	Russian-VII				
LAN2755	Chinese-VII				
LAN2756	Portuguese-VII				
LAN2757	Korean-VII				
LAN2758	Japanese-VII				

LAN2759	Hindi-VII				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				20

EIGHTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
MAE2801	Refrigeration & Air-conditioning	3	-	-	3
MAE2802	Refrigeration & Air-conditioning Lab	-	-	2	1
MAE2837	Project (Dissertation)	-	-	-	8
	Concentration Electives				3
MAE2805	Artificial Intelligence & Robotics	2	-	-	2
MAE2808	Artificial Intelligence & Robotics Lab	-	-	2	1
MAE2809	Computational Fluid Dynamics	2	-	-	2
MAE2810	Computational Fluid Dynamics Lab	-	-	2	1
MAE2811	Power Plant Practices	3	-	-	3
	Open Electives				2*+3
CSS2651	Workplace Communication*	1	-	-	1
BEH2851	Personal & Professional Excellence*	1	-	-	1
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				20

* Compulsory

B.Tech.-Electrical and Electronics Engineering (Total Credits-195)

Programme Structure-2018

FIRST SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
EEE2112	Engineering Mathematics-I	3	1	-	4
EEE2113	Engineering Physics	2	1	-	3
EEE2114	Engineering Chemistry	2	-	-	2
EEE2104	Elements of Mechanical Engineering	2	-	-	2
EEE2105	Introduction to Computers & Programming in C	2	1	-	3
EEE2106	Electrical Science	2	1	-	3
EEE2108	Element of Mechanical Engineering Lab	-	-	2	1
EEE2110	Programming in C Lab	-	-	2	1
EEE2111	Electrical Science Lab	-	-	2	1
EEE2115	Engineering Physics Lab	-	-	2	1
EEE2116	Engineering Chemistry Lab	-	-	2	1
Open Electives					5*
CSS2152	English-I *	1	-	-	1
BEH2151	Understanding Self for Effectiveness*	1	-	-	1
	Foreign Language-I*	3	-	-	3
LAN2170	French for Technology-I				
LAN2152	German-I				
LAN2153	Spanish-I				
LAN2154	Russian-I				
LAN2155	Chinese-I				
LAN2156	Portuguese-I				
LAN2157	Korean-I				
LAN2158	Japanese-I				
LAN2159	Hindi-I **				
	TOTAL				27

** Hindi as Foreign Language for Foreign National Students

SECOND SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
EEE2209	Engineering Mathematics-II	3	1	-	4
EEE2203	Object Oriented Programming using C++	2	1	-	3
EEE2204	Engineering Mechanics	2	1	-	3
EEE2206	Object Oriented Programming using C++ Lab	-	-	2	1
EEE2207	Engineering Mechanics Lab	-	-	2	1
EEE2208	Engineering Graphics Lab	-	-	2	1
	Open Electives				9*
CSS2252	English-II *	1	-	-	1
BEH2251	Problem Solving and Creative Thinking*	1	-	-	1
ENV2252	Environmental Studies*	4	-	-	4
	Foreign Language-II*	3	-	-	3
LAN2270	French for Technology-II				
LAN2252	German-II				
LAN2253	Spanish-II				
LAN2254	Russian-II				
LAN2255	Chinese-II				
LAN2256	Portuguese-II				
LAN2257	Korean-II				
LAN2258	Japanese-II				
LAN2259	Hindi-II				
	TOTAL				22

THIRD SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
EEE2308	Engineering Mathematics-III	3	1	-	4
EEE2302	Analog Electronics-I	3	-	-	3

EEE2303	Circuits & Systems	2	1	-	3
EEE2304	Signals & Systems	2	1	-	3
EEE2305	Analog Electronics - I Lab	-	-	2	1
EEE2306	Circuits & Systems Lab	-	-	2	1
	Concentration Electives				3
EEE2309	Data Structure using C	2	-	-	2
EEE2310	Data Structure using C Lab	-	-	2	1
EEE2311	Virtual Instrumentation	2	-	-	2
EEE2312	Virtual Instrumentation Lab	-	-	2	1
	Open Electives				*4+3
CSS2151	Effective Listening*	1	-	-	1
BEH2351	Group Dynamics and Team Building*	1	-	-	1
	Foreign Language-III*	2	-	-	2
LAN2370	French for Technology-III				
LAN2352	German-III				
LAN2353	Spanish-III				
LAN2354	Russian-III				
LAN2355	Chinese-III				
LAN2356	Portuguese-III				
LAN2357	Korean-III				
LAN2358	Japanese-III				
LAN2359	Hindi-III				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				25

FOURTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
EEE2402	Electric Machine-I	2	1	-	3
EEE2403	Electromagnetic Field Theory	3	-	-	3
EEE2408	Analog Electronics-II	3	-	-	3
EEE2412	Digital Electronics	2	-	-	2
EEE2406	Electric Machine Lab-I	-	-	2	1
EEE2409	Analog Electronics Lab-II	-	-	2	1
EEE2413	Digital Electronics Lab	-	-	2	1
	Concentration Electives				3
EEE2411	Power Plant Practices	3	-	-	3
EEE2414	Database Management Systems	2	-	-	2

EEE2415	Database Management Systems Lab	-	-	2	1
	Open Electives				*4+3
CSS2251	Presentation Skills*	1	-	-	1
BEH2451	Stress and Coping Strategies*	1	-	-	1
	Foreign Language-IV*	2	-	-	2
LAN2470	French for Technology-IV				
LAN2452	German-IV				
LAN2453	Spanish-IV				
LAN2454	Russian-IV				
LAN2455	Chinese-IV				
LAN2456	Portuguese-IV				
LAN2457	Korean-IV				
LAN2458	Japanese-IV				
LAN2459	Hindi-IV				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				24

SUMMER INTERNSHIP-I

FIFTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
EEE2501	Digital Circuits & Systems	3	-	-	3
EEE2502	Microprocessor Systems	3	-	-	3
EEE2503	Power System-I	2	1	-	3
EEE2509	Control System	2	1	-	3
EEE2505	Digital Circuits & Systems Lab	-	-	2	1
EEE2506	Microprocessor Systems Lab	-	-	2	1
EEE2510	Control System Lab	-	-	2	1
EEE2535	Summer Internship Evaluation-I	-	-	-	3
	Concentration Electives				3
EEE2507	Biomedical Instrumentation	3	-	-	3
EEE2508	Fuzzy Logic & Neural Networks	2	-	-	2
EEE2511	Fuzzy Logic & Neural Networks Lab	-	-	2	1
	Open Electives				*4+3
CSS2351	Reading & Comprehension*	1	-	-	1
BEH2552	Personality, Nationalism and Human Values*	1	-	-	1

	Foreign Language-V*	2	-	-	2
LAN2570	French for Technology-V				
LAN2552	German-V				
LAN2553	Spanish-V				
LAN2554	Russian-V				
LAN2555	Chinese-V				
LAN2556	Portuguese-V				
LAN2557	Korean-V				
LAN2558	Japanese-V				
LAN2559	Hindi-V				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				28

SIXTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
EEE2601	Power System-II	3	1	-	4
EEE2602	Electric Machine-II	3	1	-	4
EEE2603	Electric Power Generation, Transmission & Distribution-I	3	1	-	4
EEE2608	Modern & Digital Control Engineering	3	-	-	3
EEE2604	Power System Lab	-	-	2	1
EEE2605	Electric Machine-II Lab	-	-	2	1
	Concentration Electives				3
EEE2606	Utilization of Electric Energy	2	1	-	3
EEE2607	Substation Engineering	3	-	-	3
	Open Electives				*4+3
CSS2451	Corporate Communication*	1	-	-	1
BEH2652	Interpersonal Communication*	1	-	-	1
	Foreign Language-VI*	2	-	-	2
LAN2670	French for Technology-VI				
LAN2652	German-VI				
LAN2653	Spanish-VI				
LAN2654	Russian-VI				
LAN2655	Chinese-VI				
LAN2656	Portuguese-VI				
LAN2657	Korean-VI				
LAN2658	Japanese-VI				

LAN2659	Hindi-VI				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				27

SUMMER INTERNSHIP- II

SEVENTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
EEE2701	Electric Power Transmission & Distribution-II	3	1	-	4
EEE2702	Measurement & Measuring Instruments	2	1	-	3
EEE2703	Measurement & Measuring Instruments Lab	-	-	2	1
EEE2735	Summer Internship Evaluation-II	-	-	-	3
	Concentration Electives				3
EEE2704	Software Engineering	2	-	-	2
EEE2708	Software Engineering Lab	-	-	2	1
EEE2705	Digital Signal Processing	2	-	-	2
EEE2709	Digital Signal Processing Lab	-	-	2	1
EEE2706	Robotics & Mechatronics	2	-	-	2
EEE2710	Robotics & Mechatronics Lab	-	-	2	1
EEE2707	C based Embedded System Design	2	-	-	2
EEE2711	C based Embedded System Design Lab	-	-	2	1
	Concentration Electives				2
EEE2712	Independent Study	-	-	-	2
EEE2731	Term Paper	-	-	-	2
EEE2732	Project (With Presentation & Evaluation)	-	-	-	2
	Open Electives				*4+3
CSS2551	Employability Skills*	1	-	-	1
BEH2751	Relationship Management*	1	-	-	1
	Foreign Language-VII*	2	-	-	2
LAN2770	French for Technology-VII				
LAN2752	German-VII				
LAN2753	Spanish-VII				
LAN2754	Russian-VII				
LAN2755	Chinese-VII				
LAN2756	Portuguese-VII				

LAN2757	Korean-VII				
LAN2758	Japanese-VII				
LAN2759	Hindi-VII				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				23

EIGHTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
EEE2801	Power Electronics	3	-	-	3
EEE2837	Project (Dissertation)	-	-	-	8
	Concentration Electives				3
EEE2802	High Voltage Engineering	3	-	-	3
EEE2803	Nuclear Power Engineering	3	-	-	3
EEE2804	Thermal Power Engineering	3	-	-	3
EEE2805	Hydro Power Engineering	3	-	-	3
EEE2806	Solar Engineering	3	-	-	3
EEE2807	Process & Machine Technology	3	-	-	3
	Open Electives				*2+3
CSS2651	Workplace Communication*	1	-	-	1
BEH2851	Personal & Professional Excellence*	1	-	-	1
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				19

***Compulsory**

B.Tech.- Internet of Things (Total Credits-195)

Programme Structure-2018

FIRST SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
ITE2101	Engineering Mathematics-I	3	1	-	4
ITE2102	Engineering Physics	2	1	-	3
ITE2103	Engineering Mechanics	2	1	-	3
ITE2104	Introduction to Computers & Programming in C	2	1	-	3
ITE2105	Engineering Physics Lab	-	-	2	1
ITE2106	Programming in C Lab	-	-	2	1
ITE2107	Engineering Mechanics Lab	-	-	2	1
ITE2108	Engineering Graphics Lab	-	-	2	1
Open Electives					9
CSS2152	English-I	1	-	-	1
BEH2151	Understanding Self for Effectiveness	1	-	-	1
ENV2152	Environmental Studies	4	-	-	4
	Foreign Language-I	3	-	-	3
LAN2170	French for Technology-I				
LAN2152	German-I				
LAN2153	Spanish-I				
LAN2154	Russian-I				
LAN2155	Chinese-I				
LAN2156	Portuguese-I				
LAN2157	Korean-I				
LAN2158	Japanese-I				
LAN2159	Hindi-I **				
TOTAL					26

** Hindi as Foreign Language for Foreign National Students

SECOND SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
ITE2201	Engineering Mathematics-II	3	1	-	4
ITE2202	Engineering Chemistry	2	-	-	2
ITE2203	Electrical Science	2	1	-	3
ITE2204	Object Oriented Programming using C++	2	1	-	3
ITE2205	Elements of Mechanical Engineering	2	-	-	2
ITE2206	Electrical Science Lab	-	-	2	1
ITE2207	Engineering Chemistry Lab	-	-	2	1
ITE2208	Object Oriented Programming using C++ Lab	-	-	2	1
ITE2209	Elements of Mechanical Engineering Lab	-	-	2	1
	Open Electives				5
CSS2252	English-II	1	-	-	1
BEH2251	Problem Solving and Creative Thinking	1	-	-	1
	Foreign Language-II	3	-	-	3
LAN2270	French for Technology-II				
LAN2252	German-II				
LAN2253	Spanish-II				
LAN2254	Russian-II				
LAN2255	Chinese-II				
LAN2256	Portuguese-II				
LAN2257	Korean-II				
LAN2258	Japanese-II				
LAN2259	Hindi-II				
	TOTAL				23

THIRD SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
ITE2301	Data Communication & Computer Networks	3	-	-	3
ITE2302	Database Management Systems	3	1	-	4
ITE2303	Operating Systems	3	-	-	3
ITE2304	Data Structures using C	3	1	-	4
ITE2305	Data Structures using C Lab	-	-	2	1
ITE2306	Data Communication & Computer Networks Lab	-	-	2	1
ITE2307	Database Management System Lab	-	-	2	1
ITE2308	UNIX Programming Lab	-	-	2	1
	Concentration Electives (Any one set / subject)				3
ITE2309	Introduction to Cloud Computing	2	1	-	3
ITE2310	E-Commerce & ERP	3	-	-	3
ITE2311	Electronic Devices and Circuits	2	-	-	2
ITE2312	Electronic Devices and Circuits Lab	-	-	2	1
	Open Electives				*4+3
CSS2151	Effective Listening	1	-	-	1
BEH2351	Group Dynamics and Team Building	1	-	-	1
	Foreign Language-III	2	-	-	2
LAN2370	French for Technology-III				
LAN2352	German-III				
LAN2353	Spanish-III				
LAN2354	Russian-III				
LAN2355	Chinese-III				
LAN2356	Portuguese-III				
LAN2357	Korean-III				
LAN2358	Japanese-III				
LAN2359	Hindi-III				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				28

FOURTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
ITE2401	Theory of Automata & Computation	3	1	-	4
ITE2402	Digital Electronics	2	-	-	2
ITE2403	Discrete Mathematics	3	1	-	4
ITE2404	Introduction to IOT	3	-	-	3
ITE2405	Digital Electronics Lab	-	-	2	1
	Concentration Electives (Any one set / subject)				3
ITE2406	Communication Systems	2	-	-	2
ITE2407	Communication Systems Lab	-	-	2	1
ITE2408	Computer Graphics	2	1	-	3
ITE2409	Artificial Neural Network	2	-	-	2
ITE2410	Artificial Neural Network Lab	-	-	2	1
	Open Electives				*4+3
CSS2251	Presentation Skills	1	-	-	1
BEH2451	Stress and Coping Strategies	1	-	-	1
	Foreign Language-IV	2	-	-	2
LAN2470	French for Technology -IV				
LAN2452	German-IV				
LAN2453	Spanish-IV				
LAN2454	Russian-IV				
LAN2455	Chinese-IV				
LAN2456	Portuguese-IV				
LAN2457	Korean-IV				
LAN2458	Japanese-IV				
LAN2459	Hindi-IV				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				24

SUMMER INTERNSHIP-I

FIFTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
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ITE2501	Microprocessor	2	1	-	3
ITE2502	Introduction to Open Source Technologies (PHP, MySql)	3	-	-	3
ITE2503	Design and Analysis of Algorithm	3	-	-	3
ITE2504	Java Programming	3	-	-	3
ITE2505	Microprocessor Lab	-	-	2	1
ITE2506	Introduction to Open Source Technologies Lab (PHP, Mysql)	-	-	2	1
ITE2507	Design and Analysis of Algorithm Lab	-	-	2	1
ITE2508	Java Programming Lab	-	-	2	1
ITE2535	Summer Internship Evaluation-I	-	-	-	3
	Concentration Electives (Any one set / subject)				3
ITE2509	Fuzzy Logic & Genetic Algorithm	3	-	-	3
ITE2510	Wireless Sensor Networks	2	1	-	3
ITE2511	Distributed Operating System	3	-	-	3
	Open Electives				*4+3
CSS2351	Reading & Comprehension	1	-	-	1
BEH2552	Personality, Nationalism and Human Values	1	-	-	1
	Foreign Language-V	2	-	-	2
LAN2570	French for Technology-V				
LAN2552	German-V				
LAN2553	Spanish-V				
LAN2554	Russian-V				
LAN2555	Chinese-V				
LAN2556	Portuguese-V				
LAN2557	Korean-V				
LAN2558	Japanese-V				
LAN2559	Hindi-V				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				29

SIXTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
ITE2601	Artificial Intelligence	3	-	-	3
ITE2602	Microcontroller	2	1	-	3
ITE2603	Advanced Java Programming	3	-	-	3

ITE2604	Artificial Intelligence Lab	-	-	2	1
ITE2605	Microcontroller Lab	-	-	2	1
ITE2606	Advanced Java Programming Lab	-	-	2	1
	Concentration Electives (Any one set / subject)				3
ITE2607	Cryptography and Network Security	2	1	-	3
ITE2608	Big Data Analytics	2	1	-	3
ITE2609	Mobile Computing	3	-	-	3
	Open Electives				*4+3
CSS2451	Corporate Communication	1	-	-	1
BEH2652	Interpersonal Communication	1	-	-	1
	Foreign Language-VI	2	-	-	2
LAN2670	French for Technology-VI				
LAN2652	German-VI				
LAN2653	Spanish-VI				
LAN2654	Russian-VI				
LAN2655	Chinese-VI				
LAN2656	Portuguese-VI				
LAN2657	Korean-VI				
LAN2658	Japanese-VI				
LAN2659	Hindi-VI				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				22

SUMMER INTERNSHIP-II

SEVENTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
ITE2701	Mobile Application Development	3	1	-	4
ITE2702	IOT Platforms and System Design	3	-	-	3
ITE2703	Introduction to Raspberry Pi and Arduino	2	1	-	3
ITE2704	Mobile Application Development Lab	-	-	2	1
ITE2705	Introduction to Raspberry Pi and Arduino Lab	-	-	2	1
ITE2735	Summer Internship Evaluation-II	-	-	-	3
	Concentration Electives-I (Any one set / subject)				3
ITE2706	Software Engineering	3	-	-	3
ITE2707	Robotics and Mechatronics	3	-	-	3
ITE2708	Grid Computing	3	-	-	3

	Concentration Electives-II (Any one set / subject)				2
ITE2709	Independent Study	-	-	-	2
ITE2731	Term Paper	-	-	-	2
ITE2732	Project (With Presentation & Evaluation)	-	-	-	2
	Open Electives				*4+3
CSS2551	Employability Skills	1	-	-	1
BEH2751	Relationship Management	1	-	-	1
	Foreign Language-VII	2	-	-	2
LAN2770	French for Technology-VII				
LAN2752	German-VII				
LAN2753	Spanish-VII				
LAN2754	Russian-VII				
LAN2755	Chinese-VII				
LAN2756	Portuguese-VII				
LAN2757	Korean-VII				
LAN2758	Japanese-VII				
LAN2759	Hindi-VII				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				27

EIGHTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
ITE2837	Project (Dissertation)	-	-	-	8
	Concentration Electives (Any one set / subject)				3
ITE2801	Digital Image Processing	2	-	-	2
ITE2802	Digital Image Processing Lab	-	-	2	1
ITE2803	Dot Net Programming	2	-	-	2
ITE2804	Dot Net Programming Lab	-	-	2	1
ITE2805	Simulation & Modelling	2	-	-	2
ITE2806	Simulation & Modelling Lab	-	-	2	1
	Open Electives				*2+3
CSS2651	Workplace Communication	1	-	-	1
BEH2851	Personal & Professional Excellence	1	-	-	1
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				16

B.Tech. + M.Tech. Artificial Intelligence & Robotics (Integrated) (Total Credits-260)

Programme Structure-2018

FIRST SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
AIE6101	Engineering Mathematics-I	3	1	-	4
AIE6102	Engineering Physics	2	1	-	3
AIE6103	Engineering Mechanics	2	1	-	3
AIE6104	Introduction to Computers & Programming in C	2	1	-	3
AIE6105	Engineering Physics Lab	-	-	2	1
AIE6106	Programming in C Lab	-	-	2	1
AIE6107	Engineering Mechanics Lab	-	-	2	1
AIE6108	Engineering Graphics Lab	-	-	2	1
	Open Electives				9
CSS2152	English-I	1	-	-	1
BEH2151	Understanding Self for Effectiveness	1	-	-	1
ENV2152	Environmental Studies	4	-	-	4
	Foreign Language-I	3	-	-	3
LAN2170	French for Technology-I				
LAN2152	German-I				
LAN2153	Spanish-I				
LAN2154	Russian-I				
LAN2155	Chinese-I				
LAN2156	Portuguese-I				
LAN2157	Korean-I				
LAN2158	Japanese-I				
LAN2159	Hindi-I **				
	TOTAL				26

** Hindi as Foreign Language for Foreign National Students

SECOND SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
AIE6201	Engineering Mathematics-II	3	1	-	4
AIE6202	Engineering Chemistry	2	-	-	2
AIE6203	Electrical Science	2	1	-	3
AIE6204	Object Oriented Programming using C++	2	1	-	3
AIE6205	Elements of Mechanical Engineering	2	-	-	2
AIE6206	Electrical Science Lab	-	-	2	1
AIE6207	Engineering Chemistry Lab	-	-	2	1
AIE6208	Object Oriented Programming using C++ Lab	-	-	2	1
AIE6209	Elements of Mechanical Engineering Lab	-	-	2	1
Open Electives					5
CSS2252	English-II	1	-	-	1
BEH2251	Problem Solving and Creative Thinking	1	-	-	1
	Foreign Language-II	3	-	-	3
LAN2270	French for Technology-II				
LAN2252	German-II				
LAN2253	Spanish-II				
LAN2254	Russian-II				
LAN2255	Chinese-II				
LAN2256	Portuguese-II				
LAN2257	Korean-II				
LAN2258	Japanese-II				
LAN2259	Hindi-II				
	TOTAL				23

THIRD SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
AIE6301	Data Communication & Computer Networks	3	-	-	3
AIE6302	Database Management Systems	3	1	-	4
AIE6303	Operating Systems	3	-	-	3
AIE6304	Data Structures using C	3	1	-	4
AIE6305	Data Structures using C Lab	-	-	2	1
AIE6306	Data Communication & Computer Networks Lab	-	-	2	1
AIE6307	Database Management System Lab	-	-	2	1
AIE6308	UNIX Programming Lab	-	-	2	1
Concentration Electives (Any one set / subject)					3
AIE6309	Introduction to IOT	3	-	-	3
AIE6310	E-Commerce & ERP	3	-	-	3
AIE6311	Electronic Devices and Circuits	2	-	-	2
AIE6312	Electronic Devices and Circuits Lab	-	-	2	1
Open Electives					4
CSS2151	Effective Listening	1	-	-	1
BEH2351	Group Dynamics and Team Building	1	-	-	1
	Foreign Language-III	2	-	-	2
LAN2370	French for Technology-III				
LAN2352	German-III				
LAN2353	Spanish-III				
LAN2354	Russian-III				
LAN2355	Chinese-III				
LAN2356	Portuguese-III				
LAN2357	Korean-III				
LAN2358	Japanese-III				
LAN2359	Hindi-III				
	TOTAL				25

FOURTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
AIE6401	Theory of Automata & Computation	3	1	-	4
AIE6402	Digital Electronics	2	-	-	2
AIE6403	Discrete Mathematics	3	1	-	4
AIE6404	Artificial Intelligence	3	-	-	3
AIE6405	Digital Electronics Lab	-	-	2	1
AIE6406	Artificial Intelligence Lab	-	-	2	1
	Concentration Electives (Any one set / subject)				3
AIE6407	Communication Systems	2	-	-	2
AIE6408	Communication Systems Lab	-	-	2	1
AIE6409	Introduction to OST (PHP & MySQL)	2	-	-	2
AIE6410	Introduction to OST (PHP & MySQL) Lab	-	-	2	1
AIE6411	Artificial Neural Network	2	-	-	2
AIE6412	Artificial Neural Network Lab	-	-	2	1
	Open Electives				4
CSS2251	Presentation Skills	1	-	-	1
BEH2451	Stress and Coping Strategies	1	-	-	1
	Foreign Language-IV	2	-	-	2
LAN2470	French for Technology -IV				
LAN2452	German-IV				
LAN2453	Spanish-IV				
LAN2454	Russian-IV				
LAN2455	Chinese-IV				
LAN2456	Portuguese-IV				
LAN2457	Korean-IV				
LAN2458	Japanese-IV				
LAN2459	Hindi-IV				
	TOTAL				22

SUMMER INTERNSHIP

FIFTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
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AIE6501	Software Engineering	3	-	-	3
AIE6502	Computer Architecture	3	1	-	4
AIE6503	Java Programming	3	-	-	3
AIE6504	Advance Data Structures & Algorithm	3	-	-	3
AIE6505	Analysis & Design of Algorithm	3	-	-	3
AIE6506	Software Engineering Lab	-	-	2	1
AIE6507	Java Programming Lab	-	-	2	1
AIE6508	Python Programming Lab	-	-	2	1
AIE6509	Advance Data Structures & Algorithm Lab	-	-	2	1
AIE6510	Analysis & Design of Algorithm Lab	-	-	2	1
AIE6535	Summer Internship Evaluation-I	-	-	-	3
	Concentration Electives (Any one set / subject)				3
AIE6511	Fuzzy Logic & Genetic Algorithm	3	-	-	3
AIE6512	VHDL Programming	2	-	-	2
AIE6513	VHDL Programming Lab	-	-	2	1
AIE6514	Distributed Operating System	3	-	-	3
	Open Electives				4
CSS2351	Reading & Comprehension	1	-	-	1
BEH2552	Personality, Nationalism and Human Values	1	-	-	1
	Foreign Language-V	2	-	-	2
LAN2570	French for Technology-V				
LAN2552	German-V				
LAN2553	Spanish-V				
LAN2554	Russian-V				
LAN2555	Chinese-V				
LAN2556	Portuguese-V				
LAN2557	Korean-V				
LAN2558	Japanese-V				
LAN2559	Hindi-V				
	TOTAL				31

SIXTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
AIE6601	Microprocessor	2	1	-	3
AIE6602	System Programming & Compiler	3	-	-	3
AIE6603	Advanced Java Programming	3	-	-	3

AIE6604	Advance Database Management System	3	-	-	3
AIE6605	Digital Computer Organization	3	-	-	3
AIE6606	Microprocessor Lab	-	-	2	1
AIE6607	System Programming & Compiler Construction Lab	-	-	2	1
AIE6608	Advanced Java Programming Lab	-	-	2	1
AIE6609	Advance Database Management System Lab	-	-	2	1
	Concentration Electives (Any one set / subject)				3
AIE6610	Cryptography and Network Security	2	1	-	3
AIE6611	Software Testing & Quality Assurance	3	-	-	3
AIE6612	VLSI Design	2	-	-	2
AIE6613	VLSI Design Lab	-	-	2	1
	Open Electives				4
CSS2451	Corporate Communication	1	-	-	1
BEH2652	Interpersonal Communication	1	-	-	1
	Foreign Language-VI	2	-	-	2
LAN2670	French for Technology-VI				
LAN2652	German-VI				
LAN2653	Spanish-VI				
LAN2654	Russian-VI				
LAN2655	Chinese-VI				
LAN2656	Portuguese-VI				
LAN2657	Korean-VI				
LAN2658	Japanese-VI				
LAN2659	Hindi-VI				
	TOTAL				26

SUMMER INTERNSHIP SEVENTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
AIE6701	Data Warehousing and Data Mining	2	1	-	3
AIE6702	Computer Graphics	3	-	-	3
AIE6703	Advanced Computer Architecture	3	-	-	3
AIE6704	Advanced Computer Networks	3	-	-	3
AIE6705	Data Warehousing and Data Mining Lab	-	-	2	1

AIE6706	Computer Graphics Lab	-	-	2	1
AIE6707	Advanced Computer Networks Lab	-	-	2	1
AIE6708	MATLAB	-	-	4	2
AIE6735	Summer Internship Evaluation-II	-	-	-	3
	Concentration Electives-I				3
AIE6709	Soft Computing	3	-	-	3
AIE6710	Mobile Computing	3	-	-	3
AIE6711	Grid Computing	3	-	-	3
	Concentration Electives-II				2
AIE6712	Independent Study	-	-	-	2
AIE6731	Term Paper	-	-	-	2
AIE6732	Project (With Presentation & Evaluation)	-	-	-	2
AIE6733	Workshop	-	-	-	2
	Open Electives				4
CSS2551	Employability Skills	1	-	-	1
BEH2751	Relationship Management	1	-	-	1
	Foreign Language-VII	2	-	-	2
LAN2770	French for Technology-VII				
LAN2752	German-VII				
LAN2753	Spanish-VII				
LAN2754	Russian-VII				
LAN2755	Chinese-VII				
LAN2756	Portuguese-VII				
LAN2757	Korean-VII				
LAN2758	Japanese-VII				
LAN2759	Hindi-VII				
	TOTAL				29

EIGHTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
AIE6801	Fundamental of Robotics System & Robot Programming	3	-	-	3
AIE6802	Advanced Control Systems & Drives for Robots	3	-	-	3
AIE6803	Microprocessor and Interfacing	3	-	-	3
AIE6804	Kinematics & Dynamics of Robots	3	-	-	3
AIE6805	Advanced Applied Mathematics for Engineering	3	-	-	3

AIE6806	Fundamental of Robotics System & Robot Programming Lab	-	-	2	1
AIE6807	Advanced Control Systems & Drives for Robots Lab	-	-	2	1
AIE6808	Microprocessor and Interfacing Lab	-	-	2	1
AIE6809	Research Methodology & Technical Report Writing	2	-	-	2
AIE6837	Minor Project	-	-	-	8
	Electives (Any One)				3
AIE6810	Fundamentals of Artificial Intelligence for Robotics	3	-	-	3
AIE6811	Robotic Simulation & Simultaneous Localization Mapping	3	-	-	3
	Open Electives				2
CSS2651	Workplace Communication	1	-	-	1
BEH2851	Personal & Professional Excellence	1	-	-	1
	TOTAL				33

SUMMER INTERNSHIP NINTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
AIE6901	Automation in Manufacturing Systems	3	-	-	3
AIE6902	Robotic Sensors, Vision and Hardware Implementation	3	-	-	3
AIE6903	Pattern Recognition & Image Processing	3	-	-	3
AIE6904	Robotic Sensors, Vision and Hardware Implementation Lab	-	-	4	2
AIE6905	Pattern Recognition & Image Processing Lab	-	-	2	1
AIE6935	Summer Internship Evaluation-III	-	-	-	6
AIE6937	Project-Dissertation-I	-	-	-	5
	Electives-I (Any One)				3
AIE6906	Optimization Techniques	3	-	-	3
AIE6907	CNC Machines & Adaptive Control	3	-	-	3
	Electives-II (Any One)				4
AIE6908	Neural Network and Fuzzy Logic	3	-	-	3
AIE6909	Neural Network and Fuzzy Logic Lab	-	-	2	1
AIE6910	Decision Making Systems	3	-	-	3
AIE6911	Decision Making Systems Lab	-	-	2	1

	TOTAL				30
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TENTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
AIE6037	Project-Dissertation-II	-	-	-	15
	TOTAL				15

M.Tech.- Computer Science Engg. (Total Credits-100)

Programme Structure-2018

FIRST SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
CSE4102	Digital Computer Organization	3	-	-	3
CSE4103	Object Oriented Software Engineering	3	-	-	3
CSE4105	Software Project Planning & Management	3	-	-	3
CSE4111	Advanced Data Structure & Algorithm Design	3	-	-	3
CSE4112	Advanced Computer Networks	3	-	-	3
CSE4107	Digital Computer Organization Lab	-	-	2	1
CSE4109	Software Project Planning & Management Lab	-	-	2	1
CSE4113	Advanced Data Structure & Algorithm Design Lab	-	-	2	1
CSE4114	Advanced Computer Networks Lab	-	-	2	1
	Open Electives				5
CSS4151	Basics of Communication	1	-	-	1
BEH4151	Self Development and Interpersonal Skills	1	-	-	1
	Foreign Business Language-I	3	-	-	3
LAN4151	French-I				
LAN4152	German-I				
LAN4153	Spanish-I				
LAN4154	Russian-I				
LAN4155	Chinese-I				
LAN4156	Portuguese-I				
LAN4157	Korean-I				
LAN4158	Japanese-I				
LAN4159	Hindi-I **				
	TOTAL				24

** Hindi as Foreign Language for Foreign National Students

SECOND SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
CSE4201	Compiler Design	3	-	-	3
CSE4202	Enterprise Java Application using J2EE	3	-	-	3
CSE4203	Soft Computing	3	1	-	4
CSE4212	Distributed Operating System	3	1	-	4
CSE4206	Compiler Design Lab	-	-	2	1
CSE4207	Enterprise Java Application using J2EE Lab	-	-	2	1
CSE4213	Research Methodology & Technical Report Writing	2	-	-	2
Electives (Select any one)					4
CSE4208	System Software	3	1	-	4
CSE4209	Advanced Computer Organization	3	1	-	4
CSE4210	System Simulation & Modeling	3	1	-	4
CSE4211	Advanced DBMS	3	1	-	4
Open Electives					5
CSS4251	Corporate Communication	1	-	-	1
BEH4251	Behavioral Communication & Relationship Management	1	-	-	1
	Foreign Business Language-II				
LAN4251	French-II	3	-	-	3
LAN4252	German-II				
LAN4253	Spanish-II				
LAN4254	Russian-II				
LAN4255	Chinese-II				
LAN4256	Portuguese-II				
LAN4257	Korean-II				
LAN4258	Japanese-II				
LAN4259	Hindi-II				
TOTAL					27

SUMMER INTERNSHIP

THIRD SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
CSE4301	Data Warehousing & Data Mining	3	-	-	3
CSE4302	Software Testing & Quality Assurance	3	-	-	3
CSE4303	Network Security & Management	3	1	-	4
CSE4304	Data Warehousing & Data Mining Lab	-	-	2	1

CSE4305	Software Testing & Quality Assurance Lab	-	-	2	1
CSE4335	Summer Internship Evaluation	-	-	-	6
CSE4337	Project Dissertation-I	-	-	-	5
	Elective-I (With Lab) (Select one from each group)				4
CSE4306	Software Requirement Elicitation & Estimation	3	-	-	3
CSE4307	Pattern Recognition & Image Processing				
CSE4308	ASP. NET				
CSE4309	Software Requirement Elicitation & Estimation Lab	-	-	2	1
CSE4310	Pattern Recognition & Image Processing Lab				
CSE4311	ASP. NET Lab				
	Elective-II (Without Lab) Select any one				3
CSE4312	Real Time Operating System	3	-	-	3
CSE4313	Mobile Computing				
CSE4314	Neural Network & Fuzzy Logic				
CSE4315	Ad Hoc & Wireless Sensor Network				
	Open Electives				4
CSS4351	Interpersonal Communication	1	-	-	1
BEH4351	Leading Through Teams	1	-	-	1
	Foreign Business Language-III	2	-	-	2
LAN4351	French-III				
LAN4352	German-III				
LAN4353	Spanish-III				
LAN4354	Russian-III				
LAN4355	Chinese-III				
LAN4356	Portuguese-III				
LAN4357	Korean-III				
LAN4358	Japanese-III				
LAN4359	Hindi-III				
	TOTAL				34

FOURTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
CSE4437	Project Dissertation-II	-	-	-	15
	TOTAL				15

M.Tech.- Electronics & Communication Engg. (Total Credits-100)

Programme Structure-2018

FIRST SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
ECE4101	Low Power VLSI Design	3	-	-	3
ECE4102	Advanced Digital Communication Systems	3	-	-	3
ECE4103	Stochastic Methods	3	-	-	3
ECE4104	Advanced Control Systems	3	1	-	4
ECE4105	Digital Signal Processing	3	1	-	4
ECE4106	Low Power VLSI Design Lab	-	-	2	1
ECE4107	Advanced Digital Communication Systems Lab	-	-	2	1
ECE4108	Digital Signal Processing Lab	-	-	2	1
Open Electives					5
CSS4151	Basics of Communication	1	-	-	1
BEH4151	Self Development and Interpersonal Skills	1	-	-	1
	Foreign Business Language-I	3	-	-	3
LAN4151	French-I				
LAN4152	German-I				
LAN4153	Spanish-I				
LAN4154	Russian-I				
LAN4155	Chinese-I				
LAN4156	Portuguese-I				
LAN4157	Korean-I				
LAN4158	Japanese-I				
LAN4159	Hindi-I **				
TOTAL					25

** Hindi as Foreign Language for Foreign National Students

SECOND SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
ECE4201	Information Theory & Coding	3	-	-	3
ECE4202	Advanced Computer Networks	3	-	-	3
ECE4203	Advanced Microwave Engineering	3	-	-	3

ECE4204	Advanced Optical Communication	3	1	-	4
ECE4205	Advanced Computer Networks Lab	-	-	2	1
ECE4206	Device Modeling & Simulation Lab	-	-	2	1
ECE4207	Advanced Optical Communication Lab	-	-	2	1
ECE4214	Research Methodology & Technical Report Writing	2	-	-	2
	Electives (without Lab)				3
ECE4208	Satellite Communication	3	-	-	3
ECE4209	Bluetooth Technology	3	-	-	3
ECE4210	Cluster & Grid Computing	3	-	-	3
ECE4211	Real Time Systems & Software	3	-	-	3
ECE4212	MEMS & IC Integration	3	-	-	3
	Open Electives				5
CSS4251	Corporate Communication	1	-	-	1
BEH4251	Behavioural Communication & Relationship Management	1	-	-	1
	Foreign Business Language-II	3	-	-	3
LAN4251	French-II				
LAN4252	German-II				
LAN4253	Spanish-II				
LAN4254	Russian-II				
LAN4255	Chinese-II				
LAN4256	Portuguese-II				
LAN4257	Korean-II				
LAN4258	Japanese-II				
LAN4259	Hindi-II				
	TOTAL				26

SUMMER INTERNSHIP

THIRD SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
ECE4301	Advanced Instrumentation	3	-	-	3
ECE4302	Nano Science & Technology	3	-	-	3
ECE4303	Advanced Image Processing	3	1	-	4
ECE4304	Microprocessor Engineering & Application	3	-	-	3
ECE4305	Advanced Instrumentation Lab	-	-	2	1
ECE4306	Advanced Image Processing Lab	-	-	2	1

ECE4307	Microprocessor Engineering & Application Lab	-	-	2	1
ECE4335	Summer Internship Evaluation	-	-	-	6
ECE4337	Project-Dissertation-I	-	-	-	5
Electives (without Lab)					3
ECE4308	Mobile Computing	3	-	-	3
ECE4309	Optimization Techniques	3	-	-	3
ECE4310	Advanced Power Electronics	3	-	-	3
ECE4311	Radar Systems	3	-	-	3
ECE4312	Reliability Engineering	3	-	-	3
Open Electives					4
CSS4351	Interpersonal Communication	1	-	-	1
BEH4351	Leading Through Teams	1	-	-	1
	Foreign Business Language-III	2	-	-	2
LAN4351	French-III				
LAN4352	German-III				
LAN4353	Spanish-III				
LAN4354	Russian-III				
LAN4355	Chinese-III				
LAN4356	Portuguese-III				
LAN4357	Korean-III				
LAN4358	Japanese-III				
LAN4359	Hindi-III				
TOTAL					34

FOURTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
ECE4437	Project-Dissertation-II	-	-	-	15
TOTAL					15

M.Tech. - Thermal Engineering (Total Credits-100)

Programme Structure-2018

FIRST SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
THE4101	Advanced Solid Mechanics	3	1	-	4
THE4102	Applied Numerical Methods	3	-	-	3
THE4103	Advanced Fluid Mechanics	3	1	-	4
THE4104	Advanced Manufacturing Science	3	-	-	3
THE4105	Computer Integrated Manufacturing	3	-	-	3
THE4106	Advanced Fluid Mechanics Lab	-	-	2	1
THE4107	Advanced Manufacturing Science Lab	-	-	2	1
THE4108	Computer Integrated Manufacturing Lab	-	-	2	1
Open Electives					5
CSS4151	Basics of Communication	1	-	-	1
BEH4151	Self Development and Interpersonal Skills	1	-	-	1
	Foreign Business Language-I	3	-	-	3
LAN4151	French-I				
LAN4152	German-I				
LAN4153	Spanish-I				
LAN4154	Russian-I				
LAN4155	Chinese-I				
LAN4156	Portuguese-I				
LAN4157	Korean-I				
LAN4158	Japanese-I				
LAN4159	Hindi-I **				
	TOTAL				25

** Hindi as Foreign Language for Foreign National Students

SECOND SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
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THE4201	Optimization Techniques	3	1	-	4
THE4202	Design of Experiments	3	-	-	3
THE4203	Advanced Heat and Mass Transfer	3	1	-	4
THE4204	Advanced Internal Combustion Engine	3	1	-	4
THE4205	Renewable Energy & Energy Management	3	1	-	4
THE4206	Advanced Heat and Mass Transfer Lab	-	-	2	1
THE4207	Design of Experiments Lab	-	-	2	1
THE4208	Optimization Techniques Lab	-	-	2	1
THE4210	Research Methodology & Technical Report Writing	2	-	-	2
	Open Electives				5
CSS4251	Corporate Communication	1	-	-	1
BEH4251	Behavioural Communication and Relationship Management	1	-	-	1
	Foreign Business Language-II	3	-	-	3
LAN4251	French-II				
LAN4252	German-II				
LAN4253	Spanish-II				
LAN4254	Russian-II				
LAN4255	Chinese-II				
LAN4256	Portuguese-II				
LAN4257	Korean-II				
LAN4258	Japanese-II				
LAN4259	Hindi-II				
	TOTAL				29

SUMMER INTERNSHIP

THIRD SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
THE4301	Total Quality Management & Quality Assurance	3	-	-	3
THE4302	Computational Fluid Dynamics	3	1	-	4
THE4303	Refrigeration Engineering	3	1	-	4
THE4307	Computational Fluid Dynamics Lab	-	-	2	1
THE4308	Refrigeration Engineering Lab	-	-	2	1
THE4335	Summer Internship Evaluation	-	-	-	6
THE4337	Project-Dissertation-I	-	-	-	5

	Concentration Elective (Select Any one)				3
THE4304	Cryogenics	3	-	-	3
THE4305	Air Conditioning				
THE4306	Gas Turbine & Jet Propulsion				
	Open Electives				4
CSS4351	Interpersonal Communication	1	-	-	1
BEH4351	Leading through Teams	1	-	-	1
	Foreign Business Language-III	2	-	-	2
LAN4351	French-III				
LAN4352	German-III				
LAN4353	Spanish-III				
LAN4354	Russian-III				
LAN4355	Chinese-III				
LAN4356	Portuguese-III				
LAN4357	Korean-III				
LAN4358	Japanese-III				
LAN4359	Hindi-III				
	TOTAL				31

FOURTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
THE4437	Project-Dissertation-II	-	-		15
	TOTAL				15

M.Tech. - Construction Technology Management (Total Credits-100)

Programme Structure-2018

FIRST SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
CME4101	Construction Engineering Practices	4	-	-	4
CME4102	Civil Engineering Materials	4	-	-	4
CME4103	Applied Numerical Methods	3	-	-	3
CME4104	Pre-Engineered Construction Technology	4	-	-	4
CME4109	Contract Laws & Regulations	4	-	-	4
CME4105	Construction Engineering Practices Lab	-	-	2	1
CME4106	Civil Engineering Material Lab	-	-	2	1
Open Electives					5
CSS4151	Basics of Communication	1	-	-	1
BEH4151	Self Development and Interpersonal Skills	1	-	-	1
	Foreign Business Language-I	3	-	-	3
LAN4151	French-I				
LAN4152	German-I				
LAN4153	Spanish-I				
LAN4154	Russian-I				
LAN4155	Chinese-I				
LAN4156	Portuguese-I				
LAN4157	Korean-I				
LAN4158	Japanese-I				
LAN4159	Hindi-I **				
	TOTAL				26

** Hindi as Foreign Language for Foreign National Students

SECOND SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
CME4201	Construction Methods & Equipment	3	1	-	4
CME4202	Construction Quality & Safety Management	3	1	-	4
CME4210	Research Methodology & Technical Report Writing	2	-	-	2
	Elective-I (Select any one subject)				4
CME4203	Building Services & Maintenance Management	3	1	-	4
CME4204	Systems Design and Value Analysis				
	Elective-II (Select any one subject)				4
CME4205	Structural Optimization	3	1	-	4
CME4206	Construction Planning and Management				
	Elective-III (Select any one subject)				4
CME4207	Reliability Analysis in Construction Management	3	1	-	4
CME4208	Sustainable Constructions				
	Open Electives				5
CSS4251	Corporate Communication	1	-	-	1
BEH4251	Behavioural Communication and Relationship Management	1	-	-	1
	Foreign Business Language-II	3	-	-	3
LAN4251	French-II				
LAN4252	German-II				
LAN4253	Spanish-II				
LAN4254	Russian-II				
LAN4255	Chinese-II				
LAN4256	Portuguese-II				
LAN4257	Korean-II				
LAN4258	Japanese-II				
LAN4259	Hindi-II				
	TOTAL				27

SUMMER INTERNSHIP

THIRD SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
CME4301	Construction Economics and Finance	3	1	-	4
CME4335	Summer Internship Evaluation	-	-	-	6
CME4337	Project-Dissertation-I	-	-	-	5
	Elective-I with Lab (Select any one subject)				5
CME4302	Highway Construction and Maintenance	3	1	-	4
CME4303	Highway Construction and Maintenance Lab	-	-	2	1
CME4304	Construction Methods in Geotechnical Engineering				
CME4305	Geotechnical Engineering Lab				
	Elective-II (Select any one subject)				4
CME4306	Disaster Mitigation and Management	3	1	-	4
CME4307	GIS in Construction Engineering				
	Elective-III (Select any one subject)				4
CME4308	Operations Strategy	3	1	-	4
CME4309	Process Analysis & Theory of Constraints				
	Open Electives				4
CSS4351	Interpersonal Communication	1	-	-	1
BEH4351	Leading Through Teams	1	-	-	1
	Foreign Business Language-III	2	-	-	2
LAN4351	French-III				
LAN4352	German-III				
LAN4353	Spanish-III				
LAN4354	Russian-III				
LAN4355	Chinese-III				
LAN4356	Portuguese-III				
LAN4357	Korean-III				
LAN4358	Japanese-III				
LAN4359	Hindi-III				
	TOTAL				32

FOURTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
CME4437	Project-Dissertation-II	-	-	-	15
	TOTAL				15

M.Tech. - Structural Engineering (Total Credits-100)

Programme Structure-2018

FIRST SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
STE4101	Applied Numerical Methods	3	-	-	3
STE4102	Advanced Structural Analysis	3	1	-	4
STE4103	Advanced Concrete Design	4	-	-	4
STE4104	Finite Element Method	3	1	-	4
STE4108	Offshore Structures	4	-	-	4
STE4106	Structural Engineering Lab	-	-	4	2
Open Electives					5
CSS4151	Basics of Communication	1	-	-	1
BEH4151	Self Development and Interpersonal Skills	1	-	-	1
	Foreign Business Language-I	3	-	-	3
LAN4151	French-I				
LAN4152	German-I				
LAN4153	Spanish-I				
LAN4154	Russian-I				
LAN4155	Chinese-I				
LAN4156	Portuguese-I				
LAN4157	Korean-I				
LAN4158	Japanese-I				
LAN4159	Hindi-I **				
	TOTAL				26

** Hindi as Foreign Language for Foreign National Students

SECOND SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
STE4201	Structural Dynamics	3	1	-	4
STE4202	Advanced Steel Design	4	-	-	4
STE4210	Research Methodology & Technical Report Writing	2	-	-	2

	Elective-I (Select any one subject)				4
STE4203	Theory of Plates	3	1	-	4
STE4204	Design of Industrial Structures				
	Elective-II (Select any one subject)				4
STE4205	Structural Optimization	3	1	-	4
STE4206	Construction Planning and Management				
	Elective-III (Select any one subject)				4
STE4207	Pre-stressed Concrete Design	3	1	-	4
STE4208	Advanced Bridge Design				
	Open Electives				5
CSS4251	Corporate Communication	1	-	-	1
BEH4251	Behavioural Communication and Relationship Management	1	-	-	1
	Foreign Business Language-II	3	-	-	3
LAN4251	French-II				
LAN4252	German-II				
LAN4253	Spanish-II				
LAN4254	Russian-II				
LAN4255	Chinese-II				
LAN4256	Portuguese-II				
LAN4257	Korean-II				
LAN4258	Japanese-II				
LAN4259	Hindi-II				
	TOTAL				

SUMMER INTERNSHIP

THIRD SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
STE4301	Earthquake Resistant Design of Structures	3	1	-	4
STE4335	Summer Internship Evaluation	-	-	-	6
STE4337	Project-Dissertation-I	-	-	-	5
	Elective-I with Lab (Select any one subject)				5
STE4302	Advanced Concrete Technology	3	1	-	4
STE4303	Advanced Concrete Technology Lab	-	-	2	1
STE4304	Advanced Construction Materials				
STE4305	Advanced Construction Materials Lab				
	Elective-II (Select any one subject)				4

STE4306	Disaster Mitigation and Management	3	1	-	4
STE4307	Soil Structure Interaction				
	Elective-III (Select any one subject)				4
STE4308	Design of Tall Buildings	3	1	-	4
STE4309	Advanced Steel and Concrete Composite Structures				
	Open Electives				4
CSS4351	Interpersonal Communication	1	-	-	1
BEH4351	Leading through Teams	1	-	-	1
	Foreign Business Language-III	2	-	-	2
LAN4351	French-III				
LAN4352	German-III				
LAN4353	Spanish-III				
LAN4354	Russian-III				
LAN4355	Chinese-III				
LAN4356	Portuguese-III				
LAN4357	Korean-III				
LAN4358	Japanese-III				
LAN4359	Hindi-III				
	TOTAL				32

FOURTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
STE4437	Project-Dissertation-II	-	-	-	15
	TOTAL				15

M.Tech. - Industrial & Production Engg. (Total Credits-100)

Programme Structure-2018

FIRST SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
IPE4101	Advanced Solid Mechanics	3	1	-	4
IPE4102	Applied Numerical Methods	3	-	-	3
IPE4103	Advanced Fluid Mechanics	3	1	-	4
IPE4104	Advanced Manufacturing Science	3	-	-	3
IPE4105	Computer Integrated Manufacturing	3	-	-	3
IPE4106	Advanced Fluid Mechanics Lab	-	-	2	1
IPE4107	Advanced Manufacturing Science Lab	-	-	2	1
IPE4108	Computer Integrated Manufacturing Lab	-	-	2	1
Open Electives					5
CSS4151	Basics of Communication	1	-	-	1
BEH4151	Self Development and Interpersonal Skills	1	-	-	1
	Foreign Business Language-I	3	-	-	3
LAN4151	French-I				
LAN4152	German-I				
LAN4153	Spanish-I				
LAN4154	Russian-I				
LAN4155	Chinese-I				
LAN4156	Portuguese-I				
LAN4157	Korean-I				
LAN4158	Japanese-I				
LAN4159	Hindi-I				
TOTAL					25

** Hindi as Foreign Language for Foreign National Students

SECOND SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
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IPE4201	Optimization Techniques	3	1	-	4
IPE4202	Design of Experiments	3	-	-	3
IPE4211	Advanced Computer Aided Manufacturing	3	1	-	4
IPE4204	Mechatronics	3	1	-	4
IPE4205	Welding and Aided Manufacturing	3	1	-	4
IPE4212	Advanced Computer Aided Manufacturing Lab	-	-	2	1
IPE4207	Design of Experiments Lab	-	-	2	1
IPE4208	Optimization Techniques Lab	-	-	2	1
IPE4210	Research Methodology & Technical Report Writing	2	-	-	2
	Open Electives				5
CSS4251	Corporate Communication	1	-	-	1
BEH4251	Behavioural Communication and Relationship Management	1	-	-	1
	Foreign Business Language-II	3	-	-	3
LAN4251	French-II				
LAN4252	German-II				
LAN4253	Spanish-II				
LAN4254	Russian-II				
LAN4255	Chinese-II				
LAN4256	Portuguese-II				
LAN4257	Korean-II				
LAN4258	Japanese-II				
LAN4259	Hindi-II				
	TOTAL				29

SUMMER INTERNSHIP

THIRD SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
IPE4301	Total Quality Management & Quality Assurance	3	-	-	3
IPE4302	Metrology and Computer Aided Inspection	3	1	-	4
IPE4303	Metal Cutting & Tool Design	3	1	-	4
IPE4307	Metrology and Computer Aided Inspection Lab	-	-	2	1
IPE4308	Metal Cutting & Tool Design Lab	-	-	2	1
IPE4335	Summer Internship Evaluation	-	-	-	6

IPE4337	Project-Dissertation-I	-	-	-	5
	Concentration Electives (Select Any one)				3
IPE4304	Production Planning and Control	3	-	-	3
IPE4305	Non Conventional Machining				
IPE4306	Quality and Reliability Management				
	Open Electives				4
CSS4351	Interpersonal Communication	1	-	-	1
BEH4351	Leading through Teams	1	-	-	1
	Foreign Business Language-III	2	-	-	2
LAN4351	French-III				
LAN4352	German-III				
LAN4353	Spanish-III				
LAN4354	Russian-III				
LAN4355	Chinese-III				
LAN4356	Portuguese-III				
LAN4357	Korean-III				
LAN4358	Japanese-III				
LAN4359	Hindi-III				
	TOTAL				31

FOURTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
IPE4437	Project-Dissertation-II	-	-	-	15
	TOTAL				15

M.Tech. - Machine Design Engineering (Total Credits-100)

Programme Structure-2018

FIRST SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
MDE4101	Advanced Solid Mechanics	3	1	-	4
MDE4102	Applied Numerical Methods	3	-	-	3
MDE4103	Advanced Fluid Mechanics	3	1	-	4
MDE4104	Advanced Manufacturing Science	3	-	-	3
MDE4105	Computer Integrated Manufacturing	3	-	-	3
MDE4106	Advanced Fluid Mechanics Lab	-	-	2	1
MDE4107	Advanced Manufacturing Science Lab	-	-	2	1
MDE4108	Computer Integrated Manufacturing Lab	-	-	2	1
	Open Electives				5
CSS4151	Basics of Communication	1	-	-	1
BEH4151	Self Development and Interpersonal Skills	1	-	-	1
	Foreign Business Language-I	3	-	-	3
LAN4151	French-I				
LAN4152	German-I				
LAN4153	Spanish-I				
LAN4154	Russian-I				
LAN4155	Chinese-I				
LAN4156	Portuguese-I				
LAN4157	Korean-I				
LAN4158	Japanese-I				
LAN4159	Hindi-I **				
	TOTAL				25

** Hindi as Foreign Language for Foreign National Students

SECOND SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
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MDE4201	Optimization Techniques	3	1	-	4
MDE4202	Design of Experiments	3	-	-	3
MDE4203	Computer Aided Design	3	1	-	4
MDE4204	Advanced Tribology	3	1	-	4
MDE4205	Industrial Robotics	3	1	-	4
MDE4206	Computer Aided Design Lab	-	-	2	1
MDE4207	Design of Experiments Lab	-	-	2	1
MDE4208	Optimization Techniques Lab	-	-	2	1
MDE4210	Research Methodology & Technical Report Writing	2	-	-	2
	Open Electives				5
CSS4251	Corporate Communication	1	-	-	1
BEH4251	Behavioural Communication and Relationship Management	1	-	-	1
	Foreign Business Language-II	3	-	-	3
LAN4251	French-II				
LAN4252	German-II				
LAN4253	Spanish-II				
LAN4254	Russian-II				
LAN4255	Chinese-II				
LAN4256	Portuguese-II				
LAN4257	Korean-II				
LAN4258	Japanese-II				
LAN4259	Hindi-II				
	TOTAL				29

SUMMER INTERNSHIP

THIRD SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
MDE4301	Total Quality Management & Quality Assurance	3	-	-	3
MDE4302	Advanced Mechanical Vibrations	3	1	-	4
MDE4303	Finite Elements Method	3	1	-	4
MDE4307	Advanced Mechanical Vibrations Lab	-	-	2	1
MDE4308	Finite Elements Method Lab	-	-	2	1
MDE4335	Summer Internship Evaluation	-	-	-	6
MDE4337	Project-Dissertation-I	-	-	-	5
	Concentration Elective (Select Any one)				3
MDE4304	Experimental Stress Analysis	3	-	-	3

MDE4305	Computer Aided Engineering				
MDE4306	Design of Mechanisms				
	Open Electives				4
CSS4351	Interpersonal Communication	1	-	-	1
BEH4351	Leading through Teams	1	-	-	1
	Foreign Business Language-III	2	-	-	2
LAN4351	French-III				
LAN4352	German-III				
LAN4353	Spanish-III				
LAN4354	Russian-III				
LAN4355	Chinese-III				
LAN4356	Portuguese-III				
LAN4357	Korean-III				
LAN4358	Japanese-III				
LAN4359	Hindi-III				
	TOTAL				31

FOURTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
MDE4437	Project-Dissertation-II	-	-	-	15
	TOTAL				15

M.Tech.- Data Science (Total Credits-100)

Programme Structure-2018

FIRST SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
DSE4101	Advanced Data Structure & Algorithms	3	-	-	3
DSE4102	Advanced Database Management Systems	3	-	-	3
DSE4103	Digital Computer Organization	3	-	-	3
DSE4104	Advanced Computer Networks	3	-	-	3
DSE4105	Advanced Data Structure & Algorithms Lab	-	-	2	1
DSE4106	Advanced Database Management Systems Lab	-	-	2	1
DSE4107	Advanced Computer Networks Lab	-	-	2	1
DSE4108	MATLAB	-	-	4	2
DSE4109	Python Programming Lab	-	-	2	1
Open Electives					5
CSS4151	Basics of Communication	1	-	-	1
BEH4151	Self Development and Interpersonal Skills	1	-	-	1
	Foreign Business Language-I	3	-	-	3
LAN4151	French-I				
LAN4152	German-I				
LAN4153	Spanish-I				
LAN4154	Russian-I				
LAN4155	Chinese-I				
LAN4156	Portuguese-I				
LAN4157	Korean-I				
LAN4158	Japanese-I				
LAN4159	Hindi-I **				
TOTAL					23

** Hindi as Foreign Language for Foreign National Students

SECOND SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
DSE4201	Applied Statistical Analysis	3	-	-	3
DSE4202	Data Mining & Predictive Analytics	3	-	-	3
DSE4203	Data Warehousing & Multi-dimensional Modeling	3	-	-	3
DSE4204	Database & Knowledge Base Systems	3	-	-	3
DSE4205	Big Data Technologies	3	-	-	3
DSE4206	Research Methodology & Technical Report Writing	2	-	-	2
DSE4207	Applied Statistical Analysis Lab	-	-	2	1
DSE4208	Data Mining & Predictive Analytics Lab	-	-	2	1
DSE4209	Data Warehousing & Multi-dimensional Modeling Lab	-	-	2	1
Electives (Select any one)					3
DSE4210	Information Management System	3	-	-	3
DSE4211	Information System Security	3	-	-	3
Open Electives					5
CSS4251	Corporate Communication	1	-	-	1
BEH4251	Behavioral Communication & Relationship Management	1	-	-	1
	Foreign Business Language-II				
LAN4251	French-II	3	-	-	3
LAN4252	German-II				
LAN4253	Spanish-II				
LAN4254	Russian-II				
LAN4255	Chinese-II				
LAN4256	Portuguese-II				
LAN4257	Korean-II				
LAN4258	Japanese-II				
LAN4259	Hindi-II				
TOTAL					28

SUMMER INTERNSHIP

THIRD SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
DSE4301	Descriptive Analysis	3	-	-	3
DSE4302	Learning and Reasoning with Bayesian Networks	3	1	-	4

DSE4303	Social Network Data Analytics	3	-	-	3
DSE4304	R-Programming Lab	-	-	2	1
DSE4305	Hadoop Lab	-	-	4	2
DSE4335	Summer Internship Evaluation	-	-	-	6
DSE4337	Project Dissertation-I	-	-	-	5
	Electives-I				3
DSE4306	Web Technology	3	-	-	3
DSE4307	Service Oriented Architecture	3	-	-	3
	Electives-II				3
DSE4308	Natural Language Processing	3	-	-	3
DSE4309	Agent Based Intelligent Systems	3	-	-	3
	Open Electives				4
CSS4351	Interpersonal Communication	1	-	-	1
BEH4351	Leading Through Teams	1	-	-	1
	Foreign Business Language-III	2	-	-	2
LAN4351	French-III				
LAN4352	German-III				
LAN4353	Spanish-III				
LAN4354	Russian-III				
LAN4355	Chinese-III				
LAN4356	Portuguese-III				
LAN4357	Korean-III				
LAN4358	Japanese-III				
LAN4359	Hindi-III				
	TOTAL				34

FOURTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
DSE4437	Project Dissertation-II	-	-	-	15
	TOTAL				15

M.Tech.-Artificial Intelligence & Robotics (Total Credits-100)

Programme Structure-2018

FIRST SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
AIE4101	Advanced Data Structure & Algorithms	3	-	-	3
AIE4102	Advanced Database Management Systems	3	-	-	3
AIE4103	Digital Computer Organization	3	-	-	3
AIE4104	Advanced Computer Networks	3	-	-	3
AIE4105	Advanced Data Structure & Algorithms Lab	-	-	2	1
AIE4106	Advanced Database Management Systems Lab	-	-	2	1
AIE4107	Advanced Computer Networks Lab	-	-	2	1
AIE4108	MATLAB	-	-	4	2
AIE4109	Python Programming Lab	-	-	2	1
Open Electives					5
CSS4151	Basics of Communication	1	-	-	1
BEH4151	Self Development and Interpersonal Skills	1	-	-	1
	Foreign Business Language-I	3	-	-	3
LAN4151	French-I				
LAN4152	German-I				
LAN4153	Spanish-I				
LAN4154	Russian-I				
LAN4155	Chinese-I				
LAN4156	Portuguese-I				
LAN4157	Korean-I				
LAN4158	Japanese-I				
LAN4159	Hindi-I **				
TOTAL					23

** Hindi as Foreign Language for Foreign National Students

SECOND SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
AIE4201	Fundamental of Robotics System & Robot Programming	3	-	-	3
AIE4202	Advanced Control Systems and Drives for Robots	3	-	-	3
AIE4203	Microprocessor and Interfacing	3	-	-	3
AIE4204	Kinematics & Dynamics of Robots	3	-	-	3
AIE4205	Advanced Applied Mathematics for Engineering	3	-	-	3
AIE4206	Research Methodology & Technical Report Writing	2	-	-	2
AIE4207	Fundamental of Robotics System & Robot Programming Lab	-	-	2	1
AIE4208	Advanced Control Systems & Drives for Robots Lab	-	-	2	1
AIE4209	Microprocessor and Interfacing Lab	-	-	2	1
Electives (Select any one)					3
AIE4210	Fundamentals of Artificial Intelligence for Robotics	3	-	-	3
AIE4211	Robotic Simulation & Simultaneous Localization Mapping	3	-	-	3
Open Electives					5
CSS4251	Corporate Communication	1	-	-	1
BEH4251	Behavioral Communication & Relationship Management	1	-	-	1
	Foreign Business Language-II				
LAN4251	French-II	3	-	-	3
LAN4252	German-II				
LAN4253	Spanish-II				
LAN4254	Russian-II				
LAN4255	Chinese-II				
LAN4256	Portuguese-II				
LAN4257	Korean-II				
LAN4258	Japanese-II				
LAN4259	Hindi-II				
TOTAL					28

SUMMER INTERNSHIP

THIRD SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
AIE4301	Automation in Manufacturing Systems	3	-	-	3
AIE4302	Robotic Sensors, Vision and Hardware Implementation	3	-	-	3
AIE4303	Pattern Recognition & Image Processing	3	-	-	3
AIE4304	Robotic Sensors, Vision and Hardware Implementation Lab	-	-	4	2
AIE4305	Pattern Recognition & Image Processing Lab	-	-	2	1
AIE4335	Summer Internship Evaluation	-	-	-	6
AIE4337	Project Dissertation-I	-	-	-	5
	Electives-I				3
AIE4306	Optimization Techniques	3	-	-	3
AIE4307	CNC Machines & Adaptive Control	3	-	-	3
	Electives-II				4
AIE4308	Neural Network and Fuzzy Logic	3	-	-	3
AIE4309	Neural Network and Fuzzy Logic Lab	-	-	2	1
AIE4310	Decision Making Systems	3	-	-	3
AIE4311	Decision Making Systems Lab	-	-	2	1
	Open Electives				4
CSS4351	Interpersonal Communication	1	-	-	1
BEH4351	Leading Through Teams	1	-	-	1
	Foreign Business Language-III	2	-	-	2
LAN4351	French-III				
LAN4352	German-III				
LAN4353	Spanish-III				
LAN4354	Russian-III				
LAN4355	Chinese-III				
LAN4356	Portuguese-III				
LAN4357	Korean-III				
LAN4358	Japanese-III				
LAN4359	Hindi-III				
	TOTAL				34

FOURTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
AIE4437	Project Dissertation-II	-	-	-	15
	TOTAL				15

M.Tech.- Network and Cyber Security (Total Credits-100)

Programme Structure-2018

FIRST SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
NCE4101	Advanced Data Structure & Algorithms	3	-	-	3
NCE4102	Advanced Database Management Systems	3	-	-	3
NCE4103	Digital Computer Organization	3	-	-	3
NCE4104	Advanced Computer Networks	3	-	-	3
NCE4105	Advanced Data Structure & Algorithms Lab	-	-	2	1
NCE4106	Advanced Database Management Systems Lab	-	-	2	1
NCE4107	Advanced Computer Networks Lab	-	-	2	1
NCE4108	MATLAB	-	-	4	2
NCE4109	Python Programming Lab	-	-	2	1
Open Electives					5
CSS4151	Basics of Communication	1	-	-	1
BEH4151	Self Development and Interpersonal Skills	1	-	-	1
	Foreign Business Language-I	3	-	-	3
LAN4151	French-I				
LAN4152	German-I				
LAN4153	Spanish-I				
LAN4154	Russian-I				
LAN4155	Chinese-I				
LAN4156	Portuguese-I				
LAN4157	Korean-I				
LAN4158	Japanese-I				
LAN4159	Hindi-I **				
TOTAL					23

** Hindi as Foreign Language for Foreign National Students

SECOND SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
NCE4201	Mathematical Foundation for Cyber Security	3	-	-	3
NCE4202	Network and Wireless Security	3	-	-	3
NCE4203	Cyber Crime and IT Law	3	-	-	3
NCE4204	Cyber Crime Investigation & Forensics	3	-	-	3
NCE4205	Intrusion Detection & Prevention System	3	-	-	3
NCE4206	Research Methodology & Technical Report Writing	2	-	-	2
NCE4207	Cryptography Foundation Lab	-	-	2	1
NCE4208	Web Security Lab	-	-	2	1
NCE4209	Network Security Lab	-	-	2	1
Electives (Select any one)					3
NCE4210	Big Data Systems	3	-	-	3
NCE4211	Distributed System Security	3	-	-	3
Open Electives					5
CSS4251	Corporate Communication	1	-	-	1
BEH4251	Behavioral Communication & Relationship Management	1	-	-	1
	Foreign Business Language-II				
LAN4251	French-II	3	-	-	3
LAN4252	German-II				
LAN4253	Spanish-II				
LAN4254	Russian-II				
LAN4255	Chinese-II				
LAN4256	Portuguese-II				
LAN4257	Korean-II				
LAN4258	Japanese-II				
LAN4259	Hindi-II				
TOTAL					28

SUMMER INTERNSHIP

THIRD SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
NCE4301	Biometric Systems & Biometric Image Processing	3	-	-	3
NCE4302	Software Vulnerability Analysis	3	1	-	4

NCE4303	Applied Cryptography	3	-	-	3
NCE4304	Biometric Image Processing Lab	-	-	2	1
NCE4305	Applied Cryptography Lab	-	-	4	2
NCE4335	Summer Internship Evaluation	-	-	-	6
NCE4337	Project Dissertation-I	-	-	-	5
	Electives-I				3
NCE4306	Web Application & Penetration Testing	3	-	-	3
NCE4307	Malware Analysis in Network Security	3	-	-	3
	Electives-II				3
NCE4308	Web Security	3	-	-	3
NCE4309	Digital Watermarking & Stagenography	3	-	-	3
	Open Electives				4
CSS4351	Interpersonal Communication	1	-	-	1
BEH4351	Leading Through Teams	1	-	-	1
	Foreign Business Language-III	2	-	-	2
LAN4351	French-III				
LAN4352	German-III				
LAN4353	Spanish-III				
LAN4354	Russian-III				
LAN4355	Chinese-III				
LAN4356	Portuguese-III				
LAN4357	Korean-III				
LAN4358	Japanese-III				
LAN4359	Hindi-III				
	TOTAL				34

FOURTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
NCE4437	Project Dissertation-II	-	-	-	15
	TOTAL				15

M.Tech.- Transportation Engineering (Total Credits-100)

Programme Structure-2018

FIRST SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
TRE4101	Design of Rigid & Flexible Pavement	3	1	-	4
TRE4102	Traffic Engineering & Modelling	3	1	-	4
TRE4103	Geometric Design of Highway	3	1	-	4
TRE4104	Ground Improvement Techniques	3	-	-	3
TRE4105	Applied Numerical Methods	3	-	-	3
TRE4106	Traffic Engineering Lab	-	-	2	1
TRE4107	Road Design using MX-Road Lab	-	-	2	1
Open Electives					5
CSS4151	Basics of Communication	1	-	-	1
BEH4151	Self Development and Interpersonal Skills	1	-	-	1
	Foreign Business Language-I	3	-	-	3
LAN4151	French-I				
LAN4152	German-I				
LAN4153	Spanish-I				
LAN4154	Russian-I				
LAN4155	Chinese-I				
LAN4156	Portuguese-I				
LAN4157	Korean-I				
LAN4158	Japanese-I				
LAN4159	Hindi-I **				
TOTAL					25

** Hindi as Foreign Language for Foreign National Students

SECOND SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
TRE4201	Transportation Planning	3	1	-	4
TRE4202	Pavement Material	4	-	-	4
TRE4203	Pavement Material Evaluation Lab	-	-	2	1
TRE4204	Research Methodology & Technical Report Writing	2	-	-	2
	Elective-I (Select any one)				4
TRE4205	Construction Project Management & BOT System	3	1	-	4
TRE4206	Independent Study	-	-	-	4
	Elective-II (Select any one)				4
TRE4207	Transportation Safety	4	-	-	4
TRE4208	Land Use & Regional Transportation Planning	4	-	-	4
	Elective-III (Select any one)				4
TRE4209	Environment Impact & Risk Assessment	4	-	-	4
TRE4210	Transportation Economics & Finance	4	-	-	4
	Open Electives				5
CSS4251	Corporate Communication	1	-	-	1
BEH4251	Behavioral Communication & Relationship Management	1	-	-	1
	Foreign Business Language-II				
LAN4251	French-II	3	-	-	3
LAN4252	German-II				
LAN4253	Spanish-II				
LAN4254	Russian-II				
LAN4255	Chinese-II				
LAN4256	Portuguese-II				
LAN4257	Korean-II				
LAN4258	Japanese-II				
LAN4259	Hindi-II				
	TOTAL				28

SUMMER INTERNSHIP

THIRD SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
TRE4301	GIS & Its Application in Transportation Engineering	4	-	-	4
TRE4302	GIS & Its Application in Transportation	-	-	2	1

	Engineering Lab				
TRE4335	Summer Internship Evaluation	-	-	-	6
TRE4337	Project Dissertation-I	-	-	-	5
	Elective-I (Any One)				4
TRE4303	Public Transportation System	4	-	-	4
TRE4304	Optimization & Quantitative Methods in Transportation Engineering	4	-	-	4
	Elective-II (Any One)				4
TRE4305	Transportation & Traffic Infrastructure Design	4	-	-	4
TRE4306	Airport Infrastructure, Planning & Design	4	-	-	4
	Elective-III (Any One)				4
TRE4307	Intelligent Transportation System	4	-	-	4
TRE4308	Railway Infrastructure, Planning & Design	4	-	-	4
	Open Electives				4
CSS4351	Interpersonal Communication	1	-	-	1
BEH4351	Leading Through Teams	1	-	-	1
	Foreign Business Language-III	2	-	-	2
LAN4351	French-III				
LAN4352	German-III				
LAN4353	Spanish-III				
LAN4354	Russian-III				
LAN4355	Chinese-III				
LAN4356	Portuguese-III				
LAN4357	Korean-III				
LAN4358	Japanese-III				
LAN4359	Hindi-III				
	TOTAL				32

FOURTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
TRE4437	Project-Dissertation-II	-	-	-	15
	TOTAL				15

B.Sc.-Information Technology (Total Credits-150)

Programme Structure-2018

FIRST SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
IFT2109	Mathematics	2	1	-	3
IFT2112	Digital Electronics	3	-	-	3
IFT2114	Computer Fundamentals & Tools	3	-	-	3
IFT2115	Computer Fundamentals & Tools Lab	-	-	2	1
IFT2116	Computer Programming with C Language	3	-	-	3
IFT2118	Computer Programming with C Language Lab	-	-	2	1
Open Electives					9*+3
CSS2151	Effective Listening*	1	-	-	1
ENV2152	Environmental Studies*	4	-	-	4
BEH2151	Understanding Self for Effectiveness*	1	-	-	1
LAN2151	Foreign Language-I*	3	-	-	3
LAN2152	French-I				
LAN2153	German-I				
LAN2154	Spanish-I				
LAN2155	Russian-I				
LAN2156	Chinese-I				
LAN2157	Portuguese-I				
LAN2158	Korean-I				
LAN2159	Japanese-I				
	Hindi-I				
	Minor Track Course (Flexi)	-	-	-	3
TOTAL					26

** Hindi as Foreign Language for Foreign National Students

SECOND SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
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IFT2202	Introduction to Database Management System	3	-	-	3
IFT2211	Data Structure Through C Language	3	-	-	3
IFT2216	Data Structures Using C++ Language Lab	-	-	2	1
IFT2217	Web Technologies	3	-	-	3
IFT2219	Computer Organization & Architecture	3	-	-	3
IFT2220	Web Technologies Lab	-	-	2	1
IFT2222	Discrete Mathematics Structures with Application to CS	2	1	-	3
IFT2223	Introduction to Database Management System Lab	-	-	2	1
Open Electives					5*+3
CSS2251	Presentation Skills*	1	-	-	1
BEH2251	Problem Solving & Creative Thinking*	1	-	-	1
LAN2251 LAN2252 LAN2253 LAN2254 LAN2255 LAN2256 LAN2257 LAN2258 LAN2259	Foreign Language-II* French-II German-II Spanish-II Russian-II Chinese-II Portuguese-II Korean-II Japanese-II Hindi-II	3	-	-	3
	Minor Track Course (Flexi)	-	-	-	3
TOTAL					26

SUMMER INTERNSHIP-I

THIRD SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
IFT2312	Introduction to Object Oriented Programming with C++	3	-	-	3
IFT2314	Operating System	3	-	-	3
IFT2315	Object Oriented Programming with C++ Lab	-	-	2	1
IFT2319	Software Engineering	3	-	-	3
IFT2320	Operating System Lab	-	-	2	1
IFT2321	Fuzzy Logic	3	-	-	3
IFT2323	Accounting & Financial Management	3	-	-	3
IFT2335	Summer Internship Evaluation-I	-	-	-	3

	Open Electives				4*+3
CSS2351	Reading & Comprehension*	1	-	-	1
BEH2351	Group Dynamics and Team Building*	1	-	-	1
LAN2351	Foreign Language-III*	2	-	-	2
LAN2352	French-III				
LAN2353	German-III				
LAN2354	Spanish-III				
LAN2355	Russian-III				
LAN2356	Chinese-III				
LAN2357	Portuguese-III				
LAN2358	Korean-III				
LAN2359	Japanese-III				
	Hindi-III				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				27

FOURTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
IFT2413	Design & Analysis of Algorithm	3	-	-	3
IFT2417	Theory of Computation	3	1	-	4
IFT2418	Data Communication & Computer Networks	3	-	-	3
IFT2420	Data Communication & Computer Networks Lab	-	-	2	1
IFT2421	Design & Analysis of Algorithm Lab	-	-	2	1
IFT2422	Computer Graphics	3	-	-	3
IFT2423	Computer Graphics Lab	-	-	2	1
	Open Electives				4*+3
CSS2451	Corporate Communication *	1	-	-	1
BEH2451	Stress and Coping Strategies*	1	-	-	1
LAN2451	Foreign Language-IV*	2	-	-	2
LAN2452	French-IV				
LAN2453	German-IV				
LAN2454	Spanish-IV				
LAN2455	Russian-IV				
LAN2456	Chinese-IV				
LAN2457	Portuguese-IV				
LAN2458	Korean-IV				
LAN2459	Japanese-IV				
	Hindi-IV				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				23

SUMMER INTERNSHIP-II

FIFTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
IFT2510	Java Programming	3	-	-	3
IFT2511	Java Programming Lab	-	-	2	1
IFT2517	Computer Oriented Numerical Methods	3	-	-	3
IFT2521	Compiler Designing	3	-	-	3
IFT2522	Linux	2	-	-	2
IFT2523	Linux Lab	-	-	2	1
IFT2535	Summer Internship Evaluation-II	-	-	-	3
	Open Electives				4*+3
CSS2551	Employability Skills*	1	-	-	1
BEH2551	Individual Society and Nations*	1	-	-	1
LAN2551	Foreign Language-V*	2	-	-	2
LAN2552	French-V				
LAN2553	German-V				
LAN2554	Spanish-V				
LAN2555	Russian-V				
LAN2556	Chinese-V				
LAN2557	Portuguese-V				
LAN2558	Korean-V				
LAN2559	Japanese-V				
	Hindi-V				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				23

SIXTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
IFT2608	Multimedia & Its Applications	3	-	-	3
IFT2610	Multimedia & Its Applications Lab	-	-	2	1
IFT2616	Computer Oriented Statistical & Optimization Methods	3	-	-	3
IFT2618	Introduction to Open Source Technologies (PHP, MySQL)	3	-	-	3
IFT2620	Introduction to Open Source Technologies (PHP, MySQL) Lab	-	-	2	1
IFT2637	Major Project / Dissertation	-	-	-	6
Concentration Electives					3
IFT2604	Data Warehousing & Data Mining	3	-	-	3
IFT2611	Mobile Computing	3	-	-	3
IFT2619	E-Commerce	3	-	-	3
IFT2621	Cryptography & Network Security	3	-	-	3
Open Electives					2*+3
CSS2651	Workplace Communication*	1	-	-	1
BEH2651	Interpersonal Communication and Relationship Management*	1	-	-	1
	Minor Track Course (Flexi)	-	-	-	3
TOTAL					25

*Compulsory

Bachelor of Computer Applications (Total Credits-150)

Programme Structure-2018

FIRST SEMESTER

Course Code	Course Title	Lectures (L) Hours Per week	Tutorials (T) Hours Per week	Practical (P) Hours Per week	Total Credits
IFT2109	Mathematics-I	2	1	-	3
IFT2111	Computer Fundamentals	3	-	-	3
IFT2112	Digital Electronics	3	-	-	3
IFT2116	Computer Programming with C Language	3	-	-	3
IFT2117	Computer Fundamentals Lab	-	-	2	1
IFT2118	Computer Programming with C Language Lab	-	-	2	1
Open Electives					9*+3
ENV2152	Environmental Studies*	4	-	-	4
CSS2151	Effective Listening*	1	-	-	1
BEH2151	Understanding Self for Effectiveness*	1	-	-	1
LAN2151	Foreign Language-I*	3	-	-	3
LAN2152	French-I				
LAN2153	German-I				
LAN2154	Spanish-I				
LAN2155	Russian-I				
LAN2156	Chinese-I				
LAN2157	Portuguese-I				
LAN2158	Korean-I				
LAN2159	Japanese-I				
LAN2159	Hindi-I **				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				26

** Hindi as Foreign Language for Foreign National Students

SECOND SEMESTER

Course Code	Course Title	Lectures (L) Hours Per week	Tutorials (T) Hours Per week	Practical (P) Hours Per week	Total Credits
IFT2210	Mathematics-II	2	1	-	3
IFT2211	Data & File Structure using C	3	-	-	3

IFT2216	Data & File Structures using C Lab	-	-	2	1
IFT2217	Web Technologies	3	-	-	3
IFT2218	Database Management System	3	-	-	3
IFT2219	Computer Organization & Architecture	3	-	-	3
IFT2220	Web Technologies Lab	-	-	2	1
IFT2221	Database Management System Lab	-	-	2	1
Open Electives					5*+3
CSS2251	Presentation Skills*	1	-	-	1
BEH2251	Problem Solving & Creative Thinking*	1	-	-	1
LAN2251	Foreign Language-II*	3	-	-	3
LAN2252	French-II				
LAN2253	German-II				
LAN2254	Spanish-II				
LAN2255	Russian-II				
LAN2256	Chinese-II				
LAN2257	Portuguese-II				
LAN2258	Korean-II				
LAN2259	Japanese-II				
	Hindi-II				
	Minor Track Course (Flexi)	-	-	-	3
TOTAL					26

SUMMER INTERNSHIP-I THIRD SEMESTER

Course Code	Course Title	Lectures (L) Hours Per week	Tutorials (T) Hours Per week	Practical (P) Hours Per week	Total Credits
IFT2312	Object Oriented Programming with C++	3	-	-	3
IFT2314	Operating System	3	-	-	3
IFT2315	Object Oriented Programming with C++ Lab	-	-	2	1
IFT2317	Discrete Mathematical Structure with Applications to CS	3	-	-	3
IFT2318	Management Information System	3	-	-	3
IFT2319	Fundamentals of Software Engineering	3	-	-	3
IFT2320	Operating System Lab	-	-	2	1
IFT2335	Summer Internship Evaluation-I	-	-	-	3
Open Electives					4*+3
CSS2351	Reading & Comprehension*	1	-	-	1
BEH2351	Group Dynamics and Team Building*	1	-	-	1

LAN2351	Foreign Language-III*	2	-	-	2
LAN2352	French-III				
LAN2353	German-III				
LAN2354	Spanish-III				
LAN2355	Russian-III				
LAN2356	Chinese-III				
LAN2357	Portuguese-III				
LAN2358	Korean-III				
LAN2359	Japanese-III				
LAN2359	Hindi-III				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				27

FOURTH SEMESTER

Course Code	Course Title	Lectures (L) Hours Per week	Tutorials (T) Hours Per week	Practical (P) Hours Per week	Total Credits
IFT2413	Basics of Algorithm	3	-	-	3
IFT2417	Theory of Computation	3	1	-	4
IFT2418	Computer Network	3	-	-	3
IFT2419	Principles of Management	3	-	-	3
IFT2420	Computer Network Lab	-	-	2	1
IFT2421	Basics of Algorithm Lab	-	-	2	1
Open Electives					4*+3
CSS2451	Corporate Communication *	1	-	-	1
BEH2451	Stress and Coping Strategies*	1	-	-	1
LAN2451	Foreign Language-IV*	2	-	-	2
LAN2452	French-IV				
LAN2453	German-IV				
LAN2454	Spanish-IV				
LAN2455	Russian-IV				
LAN2456	Chinese-IV				
LAN2457	Portuguese-IV				
LAN2458	Korean-IV				
LAN2459	Japanese-IV				
LAN2459	Hindi-IV				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				22

SUMMER INTERNSHIP-II

FIFTH SEMESTER

Course Code	Course Title	Lectures (L) Hours Per week	Tutorials (T) Hours Per week	Practical (P) Hours Per week	Total Credits
IFT2510	Core Java Programming	3	-	-	3
IFT2511	Core Java Programming Lab	-	-	2	1

IFT2517	Computer Oriented Numerical Methods	3	-	-	3
IFT2518	Accounting & Financial Management	3	-	-	3
IFT2519	Basics of Computer Graphics	3	-	-	3
IFT2520	Basics of Computer Graphics Lab	-	-	2	1
IFT2535	Summer Internship Evaluation-II	-	-	-	3
Open Electives					4*+3
CSS2551	Employability Skills*	1	-	-	1
BEH2551	Individual Society and Nations*	1	-	-	1
LAN2551	Foreign Language-V*	2	-	-	2
LAN2552	French-V				
LAN2553	German-V				
LAN2554	Spanish-V				
LAN2555	Russian-V				
LAN2556	Chinese-V				
LAN2557	Portuguese-V				
LAN2558	Korean-V				
LAN2559	Japanese-V				
	Hindi-V				
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				24

SIXTH SEMESTER

Course Code	Course Title	Lectures (L) Hours Per week	Tutorials (T) Hours Per week	Practical (P) Hours Per week	Total Credits
IFT2608	Multimedia & Its Applications	3	-	-	3
IFT2610	Multimedia & Its Applications Lab	-	-	2	1
IFT2616	Computer Oriented Statistical & Optimization Methods	3	-	-	3
IFT2618	Introduction to Open Source Technologies (PHP, MySQL)	3	-	-	3
IFT2620	Introduction to Open Source Technologies Lab	-	-	2	1
IFT2637	Major Project / Dissertation	-	-	-	6
Concentration Electives					3
IFT2604	Data Warehousing & Data Mining	3	-	-	3
IFT2611	Mobile Computing	3	-	-	3
IFT2614	Network Security	3	-	-	3
IFT2619	E-Commerce	3	-	-	3
Open Electives					2*+3
CSS2651	Workspace Communication*	1	-	-	1
BEH2651	Interpersonal Communication and Relationship Management*	1	-	-	1
	Minor Track Course (Flexi)	-	-	-	3
	TOTAL				25

M.Sc.-Network Technology & Management (Total Credits-100)

Programme Structure-2018

FIRST SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
NTM4101	Computer Programming in C Language	3	-	-	3
NTM4103	Operating Systems	3	-	-	3
NTM4105	Network Fundamentals	3	-	-	3
NTM4106	Mobile Computing	3	-	-	3
NTM4109	Wireless Networking Technologies	3	-	-	3
NTM4110	Data Communication & Computer Networks	3	-	-	3
NTM4107	Network Fundamentals Lab	-	-	2	1
NTM4108	Computer Programming in C Language Lab	-	-	2	1
	Open Electives				5
CSS4151	Basics of Communication	1	-	-	1
BEH4151	Self Development and Interpersonal Skills	1	-	-	1
	Foreign Business Language-I	3	-	-	3
LAN4151	French-I				
LAN4152	German-I				
LAN4153	Spanish-I				
LAN4154	Russian-I				
LAN4155	Chinese-I				
LAN4156	Portuguese-I				
LAN4157	Korean-I				
LAN4158	Japanese-I				
LAN4159	Hindi-I **				
	TOTAL				25

** Hindi as Foreign Language for Foreign National Students

SECOND SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
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NTM4201	LAN Switching	3	-	-	3
NTM4202	Routing Protocols and Concepts	3	-	-	3
NTM4205	Networking Management	3	-	-	3
NTM4210	Distributed Systems	3	-	-	3
NTM4211	Wireless Ad Hoc Networks	3	-	-	3
NTM4212	Seminar	-	-	-	3
NTM4208	Routing Protocols and Concepts Lab	-	-	2	1
NTM4209	LAN Switching Lab	-	-	2	1
NTM4213	Wireless Ad Hoc Networks Lab	-	-	2	1
	Open Electives				5
CSS4251	Corporate Communication	1	-	-	1
BEH4251	Behavioural Communication and Relationship Management	1	-	-	1
	Foreign Business Language-II	3	-	-	3
LAN4251	French-II				
LAN4252	German-II				
LAN4253	Spanish-II				
LAN4254	Russian-II				
LAN4255	Chinese-II				
LAN4256	Portuguese-II				
LAN4257	Korean-II				
LAN4258	Japanese-II				
LAN4259	Hindi-II				
	TOTAL				26

SUMMER INTERNSHIP THIRD SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
NTM4304	Accessing WAN	3	-	-	3
NTM4307	System Administration (Linux)	3	-	-	3
NTM4308	Network Security & Cryptography	3	-	-	3
NTM4309	High Performance Networks	3	-	-	3
NTM4310	IT Enabled Services	3	-	-	3
NTM4306	Accessing WAN Lab	-	-	2	1
NTM4311	System Administration Lab (Linux)	-	-	2	1
NTM4335	Summer Project Evaluation	-	-	-	6
	Open Electives				4
CSS4351	Interpersonal Communication	1	-	-	1
BEH4351	Leading Through Teams	1	-	-	1
	Foreign Business Language-III	2	-	-	2
LAN4351	French-III				

LAN4352	German-III				
LAN4353	Spanish-III				
LAN4354	Russian-III				
LAN4355	Chinese-III				
LAN4356	Portuguese-III				
LAN4357	Korean-III				
LAN4358	Japanese-III				
LAN4359	Hindi-III				
	TOTAL				27

FOURTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per week	Total Credits
NTM4403	Internet of Things	3	-	-	3
NTM4404	Cloud Computing	3	-	-	3
NTM4405	Internet of Things Lab	-	-	2	1
NTM4437	Major Project / Industrial Training	-	-	-	15
	TOTAL				22

BCA+MCA (Dual Degree) (Total Credits-280)

Programme Structure-2018

FIRST SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
IFT6101	Mathematics-I	2	1	-	3
IFT6103	Computer Fundamentals	3	-	-	3
IFT6104	Digital Electronics	3	-	-	3
IFT6108	Computer Programming with C Language	3	-	-	3
IFT6109	Computer Fundamentals Lab	-	-	2	1
IFT6110	Computer Programming with C Language Lab	-	-	2	1
Open Electives*					9*
ENV2152	Environmental Studies *	4	-	-	4
CSS2152	English-I*	1	-	-	1
BEH2151	Understanding Self for Effectives*	1	-	-	1
Foreign Language – I*		3	-	-	3
LAN2151	French-I				
LAN2152	German-I				
LAN2153	Spanish-I				
LAN2154	Russian-I				
LAN2155	Chinese-I				
LAN2156	Portuguese-I				
LAN2157	Korean-I				
LAN2158	Japanese-I				
LAN2159	Hindi-I **				
TOTAL					23

** Hindi as Foreign Language for Foreign National Students

SECOND SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
IFT6201	Mathematics-II	2	1	-	3
IFT6202	Data & File Structures using C	3	-	-	3
IFT6208	Data & File Structures using C Lab	-	-	2	1
IFT6210	Web Technologies	3	-	-	3
IFT6211	Database Management System	3	-	-	3
IFT6212	Computer Organization & Architecture	3	-	-	3
IFT6213	Web Technologies Lab	-	-	2	1
IFT6214	Database Management System Lab	-	-	2	1

IFT6215	Enterprise Resource Planning	2	-	-	2
	Open Electives*				5*
CSS2252	English-II*	1	-	-	1
BEH2251	Problem Solving & Creative Thinking*	1	-	-	1
	Foreign Language-II	3	-	-	3
LAN2251	French-II				
LAN2252	German-II				
LAN2253	Spanish-II				
LAN2254	Russian-II				
LAN2255	Chinese-II				
LAN2256	Portuguese-II				
LAN2257	Korean-II				
LAN2258	Japanese-II				
LAN2259	Hindi-II				
	TOTAL				25

SUMMER INTERNSHIP-I

THIRD SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
IFT6302	Object Oriented Programming with C++	3	-	-	3
IFT6304	Operating System	3	-	-	3
IFT6306	Object Oriented Programming with C++ Lab	-	-	2	1
IFT6311	Discrete Mathematical Structure with Application to CS	3	-	-	3
IFT6312	Management Information System	3	-	-	3
IFT6313	Fundamentals of Software Engineering	3	-	-	3
IFT6314	Operating System Lab	-	-	2	1
IFT6315	Fuzzy Logic	3	-	-	3
IFT6335	Summer Internship Evaluation-I	-	-	-	3
	Open Electives*				4*
CSS2151	Effective Listening*	1	-	-	1
BEH2351	Group Dynamics & Team Building*	1	-	-	1
	Foreign Language-III	2	-	-	2
LAN2351	French-III				
LAN2352	German-III				
LAN2353	Spanish-III				
LAN2354	Russian-III				
LAN2355	Chinese-III				
LAN2356	Portuguese-III				

LAN2357	Korean-III				
LAN2358	Japanese-III				
LAN2359	Hindi-III				
	TOTAL				27

FOURTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
IFT6404	Basics of Algorithm	3	-	-	3
IFT6410	Theory of Computation	3	1	-	4
IFT6411	Computer Network	3	-	-	3
IFT6412	Principles of Management	3	-	-	3
IFT6413	Computer Network Lab	-	-	2	1
IFT6414	Basics of Algorithm Lab	-	-	2	1
IFT6431	Term Paper	-	-	-	3
	Open Electives*				4*
CSS2251	Presentation Skills*	1	-	-	1
BEH2451	Stress & Coping Strategies*	1	-	-	1
	Foreign Language-IV	2	-	-	2
LAN2451	French-IV				
LAN2452	German-IV				
LAN2453	Spanish-IV				
LAN2454	Russian-IV				
LAN2455	Chinese-IV				
LAN2456	Portuguese-IV				
LAN2457	Korean-IV				
LAN2458	Japanese-IV				
LAN2459	Hindi-IV				
	TOTAL				22

SUMMER INTERNSHIP-II

FIFTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
IFT6501	Core Java Programming	3	-	-	3
IFT6505	Core Java Programming Lab	-	-	2	1
IFT6511	Computer Oriented Numerical Methods	3	-	-	3
IFT6512	Accounting & Financial Management	3	-	-	3

IFT6513	Basics of Computer Graphics	3	-	-	3
IFT6514	Basics of Computer Graphics Lab	-	-	2	1
IFT6515	System Programming	3	-	-	3
IFT6535	Summer Internship Evaluation-II	-	-	-	3
	Open Electives*				4*
CSS2351	Reading and Comprehension*	1	-	-	1
BEH2551	Individual Society & Nations*	1	-	-	1
	Foreign Language-V	2	-	-	2
LAN2551	French-V				
LAN2552	German-V				
LAN2553	Spanish-V				
LAN2554	Russian-V				
LAN2555	Chinese-V				
LAN2556	Portuguese-V				
LAN2557	Korean-V				
LAN2558	Japanese-V				
LAN2559	Hindi-V				
	TOTAL				24

SIXTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
IFT6601	Multimedia & Its Applications	3	-	-	3
IFT6605	Multimedia & Its Applications Lab	-	-	2	1
IFT6609	Computer Oriented Statistical & Optimization Methods	3	-	-	3
IFT6610	High Performance Computing	3	-	-	3
IFT6611	Introduction to Open Source Technologies (PHP, MySQL)	3	-	-	3
IFT6612	E-Commerce	3	-	-	3
IFT6613	Introduction to Open Source Technologies (PHP, MySQL) Lab	-	-	2	1
IFT6637	Major Project	-	-	-	6
	Open Electives *				4*
CSS2451	Corporate Communication*	1	-	-	1
BEH2651	Interpersonal Communication & Relationship Management*	1	-	-	1
	Foreign Language-VI	2	-	-	2
LAN2651	French-VI				
LAN2652	German-VI				
LAN2653	Spanish-VI				
LAN2654	Russian-VI				
LAN2655	Chinese-VI				
LAN2656	Portuguese-VI				
LAN2657	Korean-VI				
LAN2658	Japanese-VI				

LAN2659	Hindi-VI				
	TOTAL				27

SUMMER INTERNSHIP-III SEVENTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
IFT6711	Programming with Java	3	-	-	3
IFT6712	Software Engineering	3	-	-	3
IFT6713	Computer Graphics & Multimedia Systems	3	-	-	3
IFT6714	Business Management - Framework & Implementation	3	-	-	3
IFT6715	Data Communication & Computer Networks	3	-	-	3
IFT6716	Programming with Java Lab	-	-	4	2
IFT6717	Software Engineering Lab	-	-	2	1
IFT6718	Computer Graphics & Multimedia Systems Lab	-	-	2	1
IFT6719	Data Communication & Computer Networks Lab	-	-	2	1
IFT6720	Design & Analysis of Algorithm	3	1	-	4
IFT6721	Design & Analysis of Algorithm Lab	-	-	2	1
IFT6735	Summer Internship Evaluation-III	-	-	-	5
	Open Electives *				4*
CSS2551	Employability Skills*	1	-	-	1
BEH4151	Self-Development & Interpersonal Skills*	1	-	-	1
	Foreign Language-VII	2	-	-	2
LAN2751	French-VII				
LAN2752	German-VII				
LAN2753	Spanish-VII				
LAN2754	Russian-VII				
LAN2755	Chinese-VII				
LAN2756	Portuguese-VII				
LAN2757	Korean-VII				
LAN2758	Japanese-VII				
LAN2759	Hindi-VII				
	TOTAL				34

EIGHTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
IFT6810	Programming with C#.NET	3	1	-	4
IFT6811	Software Project Management	3	1	-	4
IFT6812	Artificial Intelligence	3	1	-	4
IFT6813	Mobile Computing	3	-	-	3
IFT6814	Programming with C#.NET Lab	-	-	4	2
IFT6815	Software Project Management Lab	-	-	2	1

IFT6816	Artificial Intelligence Lab	-	-	2	1
IFT6831	Term Paper	-	-	-	3
	Electives (Any One Set / Subject)				4
IFT6817	Android Programming	3	-	-	3
IFT6818	Android Programming Lab	-	-	2	1
IFT6819	Python Programming	3	-	-	3
IFT6820	Python Programming Lab	-	-	2	1
IFT6821	Digital Image Processing	3	-	-	3
IFT6822	Digital Image Processing Lab	-	-	2	1
	Open Electives *				*4
CSS2651	Workplace Communication*	1	-	-	1
BEH4451	Professional Excellence*	1	-	-	1
	Foreign Language-VIII				
LAN2851	French-VIII	2	-	-	2
LAN2852	German-VIII				
LAN2853	Spanish-VIII				
LAN2854	Russian-VIII				
LAN2855	Chinese-VIII				
LAN2856	Portuguese-VIII				
LAN2857	Korean-VIII				
LAN2858	Japanese-VIII				
LAN2859	Hindi-VIII				
	TOTAL				

SUMMER INTERNSHIP-IV

NINTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
IFT6909	Web Development with ASP.NET	3	-	-	3
IFT6910	Network Security & Cryptography	3	1	-	4
IFT6911	Soft Computing	3	1	-	4
IFT6912	Cloud Computing	3	-	-	3
IFT6913	Data Warehousing & Data Mining	3	1	-	4
IFT6914	Web Development with ASP.NET Lab	-	-	4	2
IFT6915	Soft Computing Lab	-	-	2	1
IFT6916	Data Warehousing & Data Mining Lab	-	-	2	1
IFT6922	Seminar	-	-	-	3
IFT6935	Summer Internship Evaluation-IV	-	-	-	5
Electives (Any One)					4
IFT6917	Distributed Operating System	4	-	-	4
IFT6918	Advance Database System	3	-	-	3
IFT6919	Advance Database System Lab	-	-	2	1
IFT6920	Big Data	3	-	-	3
IFT6921	Big Data Lab	-	-	2	1
Open Electives *					*4
CSS4351	Interpersonal Communication*	1	-	-	1
BEH4351	Leading Through Teams*	1	-	-	1
Foreign Language-IX					

LAN2951	French-IX	2	-	-	2
LAN2952	German-IX				
LAN2953	Spanish-IX				
LAN2954	Russian-IX				
LAN2955	Chinese-IX				
LAN2956	Portuguese-IX				
LAN2957	Korean-IX				
LAN2958	Japanese-IX				
LAN2959	Hindi-IX				
	TOTAL				38

TENTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
IFT6037	Major Project / Dissertation	-	-	-	30
	TOTAL				30