			Semester-wise Pattern for Students Admitted to B.E. Chemical Programme					
Year			**First Semester**	**U**			**Second Semester**	**U**
I	BIO	F110	Biology Laboratory	1	MATH	F112	Mathematics II	3
	BIO	F111	General Biology	3	ME	F110	Workshop Practice	2
	CHEM	F110	Chemistry Laboratory	1	CS	F111	Computer Programming	4
	CHEM	F111	General Chemistry	3	EEE	F111	Electrical Sciences	3
	MATH	F111	Mathematics I	3	BITS	F112	Technical Report Writing	2
	PHY	F110	Physics Laboratory	1	MATH	F113	Probability and Statistics	3
	PHY	F111	Mechanics, Oscillations and Waves	3	BITS	F111	Thermodynamics	3
	BITS	F110	Engineering Graphics	2				
				17				**20**
II	MATH	F211	Mathematics III	3	ECON	F211	Principles of Economics	3
			Humanities Electives	3(min)			or	or
	CHE	F211	Chemical Process		MGTS	F211	Principles of Management	3
			Calculations	3			Humanities Electives	3(min)
	CHE	F214	Engineering Chemistry	3	CHE	F241	Heat Transfer	3
	CHE	F213	Chemical Engineering		CHE	F242	Numerical Methods for	
			Thermodynamics	3			Chemical Engineers	3
	CHE	F212	Fluid Mechanics	3	CHE	F243	Material Science &	
	BITS	F225	Environmental Studies	3			Engineering	3
					CHE	F244	Separation Processes I	3
				21 (min)				**18(min)**
Summer			BITS F221 Practice School – I (for PS Option Only)					
III			Open/Humanities Electives	3to6			Open/Humanities Electives	3 to 6
	CHE	F312	Chemical Engineering Laboratory I	3	CHE	F341	Chemical Engineering Laboratory II	3
	CHE	F313	Separation Processes II	3	CHE	F342	Process Dynamics &	3
	CHE	F311	Kinetics & Reactor Design	3			Control	
	CHE	F314	Process Design Principles I	3	CHE	F343	Process Design	
			Discipline Electives	3			Principles II	3
							Discipline Electives	6
				18/21				**18/21**
IV			Open Electives	5 to 11	BITS	F412	Practice School-II	20
			Discipline Electives	6			or	or
					BITS	F421T	Thesis	16
							or	
							Thesis (9) and Electives (6 to 9)	15 to 18
				11/17				**15/20**

Discipline Core - 45 Units (15 Courses)
Discipline Electives - 15 Units (5 Courses)

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise Pattern for Students Admitted to B.E. Civil Programme							
Year	First Semester			U	Second Semester		U
I	BIO	F110	Biology Laboratory	1	MATH F112	Mathematics II	3
	BIO	F111	General Biology	3	ME F110	Workshop Practice	2
	CHEM	F110	Chemistry Laboratory	1	CS F111	Computer Programming	4
	CHEM	F111	General Chemistry	3	EEE F111	Electrical Sciences	3
	MATH	F111	Mathematics I	3	BITS F112	Technical Report Writing	2
	PHY	F110	Physics Laboratory	1	MATH F113	Probability and Statistics	3
	PHY	F111	Mechanics, Oscillations and Waves	3	BITS F111	Thermodynamics	3
	BITS	F110	Engineering Graphics	2			
				17			**20**
II	MATH	F211	Mathematics III	3	ECON F211	Principles of Economics	3
			Humanities Electives	3 (min)		or	or
	CE	F211	Mechanics of Solids	3	MGTS F211	Principles of Management	3
	CE	F212	Transport Phenomena	3		Humanities Electives	3 (min)
	CE	F213	Surveying	4	CE F241	Analysis of Structures	3
	CE	F214	Construction Materials	3	CE F242	Construction Planning & Technology	3
					CE F243	Soil Mechanics	4
					CE F244	Highway Engineering	4
					BITS F225	Environmental Studies	3
				19 (min)			**20(min)**
Summer	BITS F221 Practice School – I (for PS Option Only)						
III			Open/Humanities Electives	1 to 4		Open/Humanities Electives	2 to 5
	CE	F311	Design of Concrete Structures	4	CE F342	Water & Waste Water Treatment	4
	CE	F312	Hydraulic Engineering	4	CE F341	Hydrology & Water Resources Engineering	3
	CE	F313	Foundation Engineering	3	CE F343	Design of Steel Structures	3
			Discipline Electives	6		Discipline Electives	6
				18/21			**18/21**
IV			Open Electives	8to14	BITS F412	Practice School-II	20
						or	or
					BITS F421T	Thesis	16
						or	
						Thesis (9) and Electives (6 to 9)	15to18
				8/14			**15/20**

Discipline Core - 48 Units (14 Courses)

Discipline Electives - 12 Units (4 Courses)

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise Pattern for Students Admitted to B. E. Computer Science Programme							
Year		First Semester		U		Second Semester	U
I	BIO	F110 Biology Laboratory		1	MATH F112	Mathematics II	3
	BIO	F111 General Biology		3	ME F110	Workshop Practice	2
	CHEM	F110 Chemistry Laboratory		1	CS F111	Computer Programming	4
	CHEM	F111 General Chemistry		3	EEE F111	Electrical Sciences	3
	MATH	F111 Mathematics I		3	BITS F112	Technical Report Writing	2
	PHY	F110 Physics Laboratory		1	MATH F113	Probability and Statistics	3
	PHY	F111 Mechanics, Oscillations and Waves		3	BITS F111	Thermodynamics	3
	BITS	F110 Engineering Graphics		2			
				17			**20**
II	MATH	F211 Mathematics III		3	ECON F211	Principles of Economics	3
		Humanities Electives		3(min)		or	or
	CS	F214 Logic in Computer Science		3	MGTS F211	Principles of Management	3
	CS	F222 Discrete Structures for Computer Science		3		Humanities Electives	3(min)
	CS	F213 Object Oriented Programming		4	CS F211	Data Structures & Algorithms	4
	CS	F215 Digital Design		4	CS F241	Microprocessors & Interfacing	4
					CS F212	Database Systems	4
					BITS F225	Environmental Studies	3
				20(min)			**21(min)**
Summer		BITS F221 Practice School – I	(for PS Option Only)				
III		Open/Humanities Electives		3to6		Open/Humanities Electives	2to5
	CS	F351 Theory of Computation		3			
	CS	F372 Operating Systems		3	CS F363	Compiler Construction	3
	CS	F301 Principles of Programming Languages		2	CS F364	Design & Analysis of Algorithms	3
	CS	F342 Computer Architecture		4	CS F303	Computer Networks	4
		Discipline Electives		3(min)		Discipline Electives	6(min)
				18/21			**18/21**
IV		Open Electives		6to12	BITS F412	Practice School-II	20
		Discipline Electives		3(min)		or	or
					BITS F421T	Thesis	16
						or	
						Thesis (9) and Electives (6 to 9)	15to18
				9/15			**15/20**

Discipline Core - 48 Units (14 Courses)

Discipline Electives - 12 Units (4 Courses)

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

			Semester-wise Pattern for Students Admitted to B.E. Electrical & Electronics Programme						
Year			First Semester	U			Second Semester		U
I	BIO	F110	Biology Laboratory	1	MATH	F112	Mathematics II		3
	BIO	F111	General Biology	3	ME	F110	Workshop Practice		2
	CHEM	F110	Chemistry Laboratory	1	CS	F111	Computer Programming		4
	CHEM	F111	General Chemistry	3	EEE	F111	Electrical Sciences		3
	MATH	F111	Mathematics I	3	BITS	F112	Technical Report Writing		2
	PHY	F110	Physics Laboratory	1	MATH	F113	Probability and Statistics		3
	PHY	F111	Mechanics, Oscillations and Waves	3	BITS	F111	Thermodynamics		3
	BITS	F110	Engineering Graphics	2					
				17					20
II	MATH	F211	Mathematics III	3	ECON	F211	Principles of Economics		3
			Humanities Electives	3(min)			or		or
	EEE	F211	Electrical Machines	4	MGTS	F211	Principles of Management		3
	EEE	F212	Electromagnetic Theory	3			Humanities Electives		3(min)
	EEE	F215	Digital Design	4	EEE	F241	Microprocessors & Interfacin		4
	EEE	F214	Electronic Devices	3	EEE	F242	Control Systems		3
					EEE	F243	Signals & Systems		3
					EEE	F244	Microelectronic Circuits		3
					BITS	F225	Environmental Studies		3
				20(min)					22(min)
Summer			BITS F221 Practice School – I (for PS Option Only)						
III			Open/Humanities Electives	4to6			Open/Humanities Electives		3to6
	EEE	F311	Communication Systems	4	EEE	F341	Analog Electronics		4
	MATH	F212	Optimization	3	EEE	F342	Power Electronics		4
			or		EEE	F312	Power Systems		3
	ME	F344	Engineering Optimization	2			Discipline Electives		4(min)
	EEE	F313	Analog & Digital VLSI Design	3					
			Discipline Electives	5(min)					
				18/21					18/21
IV			Open Electives	5to11	BITS	F412	Practice School-II		20
			Discipline Electives	3(min)			or		or
					BITS	F421T	Thesis		16
							or		
							Thesis (9) and Electives		
							(6 to 9)		15to18
				8/14					15/20

Discipline Core - 47 or 48 Units (14 Courses)

Discipline Electives - 12 Units (4 Courses)

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Year	First Semester			U	Second Semester			U
	Semester-wise Pattern for Students Admitted to B.E. Electronics & Communication Programme							
I	BIO	F110	Biology Laboratory	1	MATH	F112	Mathematics II	3
	BIO	F111	General Biology	3	ME	F110	Workshop Practice	2
	CHEM	F110	Chemistry Laboratory	1	CS	F111	Computer Programming	4
	CHEM	F111	General Chemistry	3	EEE	F111	Electrical Sciences	3
	MATH	F111	Mathematics I	3	BITS	F112	Technical Report Writing	2
	PHY	F110	Physics Laboratory	1	MATH	F113	Probability and Statistics	3
	PHY	F111	Mechanics, Oscillations and Waves	3	BITS	F111	Thermodynamics	3
	BITS	F110	Engineering Graphics	2				
				17				**20**
II	MATH	F211	Mathematics III	3	ECON	F211	Principles of Economics	3
			Humanities Electives	3(min)			or	or
	ECE	F211	Electrical Machines	4	MGTS	F211	Principles of Management	3
	ECE	F212	Electromagnetic Theory	3			Humanities Electives	3(min)
	ECE	F215	Digital Design	4	ECE	F241	Microprocessors and Interfacing	4
	ECE	F214	Electronic Devices	3	ECE	F242	Control Systems	3
					ECE	F243	Signals & Systems	3
					ECE	F244	Microelectronic Circuits	3
					BITS	F225	Environmental Studies	3
				20(min)				**22(min)**
Summer					BITS F221 Practice School – I (for PS Option Only)			
III			Open/Humanities Electives	3 to 6			Open/Humanities Electives	3 to 6
	ECE	F311	Communication Systems	4	ECE	F341	Analog Electronics	4
	ECE	F314	Electromagnetic Fields & Microwave Engineering	3	ECE	F343	Communication Networks	3
	ECE	F434	Digital Signal Processing	4	ECE	F344	Information Theory & Coding	3
			Discipline Electives	4(min)			Discipline Electives	5(min)
				18/21				**18/21**
IV			Open Electives	5 to 11	BITS	F412	Practice School-II	20
			Discipline Electives	3			or	or
					BITS	F421T	Thesis	16
							or	
							Thesis (9) and Electives (6 to 9)	15 to 18
				8/14				**15/20**

Discipline Core - 48 Units (14 Courses)

Discipline Electives - 12 Units (4 Courses)

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise Pattern for Students Admitted to B.E. Electronics and Instrumentation Programme					
Year	First Semester	U	Second Semester		U
I	BIO F110 Biology Laboratory	1	MATH F112 Mathematics II		3
	BIO F111 General Biology	3	ME F110 Workshop Practice		2
	CHEM F110 Chemistry Laboratory	1	CS F111 Computer Programming		4
	CHEM F111 General Chemistry	3	EEE F111 Electrical Sciences		3
	MATH F111 Mathematics I	3	BITS F112 Technical Report Writing		2
	PHY F110 Physics Laboratory	1	MATH F113 Probability and Statistics		3
	PHY F111 Mechanics, Oscillations and Waves	3	BITS F111 Thermodynamics		3
	BITS F110 Engineering Graphics	2			
		17			**20**
II	MATH F211 Mathematics III	3	ECON F211 Principles of Economics		3
	Humanities Electives	3(min)	or		or
	INSTR F211 Electrical Machines	4	MGTS F211 Principles of Management		3
	INSTR F212 Electromagnetic Theory	3	Humanities Electives		3(min)
	INSTR F215 Digital Design	4	INSTR F241 Microprocessors & Interfacing		4
	INSTR F214 Electronic Devices	3	INSTR F242 Control Systems		3
			INSTR F243 Signals & Systems		3
			INSTR F244 Microelectronic Circuits		3
			BITS F225 Environmental Studies		3
		20(min)			**22(min)**
Summer	BITS F221 Practice School – I (for PS Option Only)				
III	Open/Humanities Electives	3to6	Open/Humanities Electives		3to6
	INSTR F311 Electronic Instruments & Instrumentation Technology	4	INSTR F341 Analog Electronics		4
			INSTR F342 Power Electronics		4
	INSTR F312 Transducers & Measurement Systems	3	INSTR F343 Industrial Instrumentation & Control		3
	INSTR F313 Analog & Digital VLSI Design	3	Discipline Electives		4(min)
	Discipline Electives	5(min)			
		18/21			**18/21**
IV	Open Electives	5to11	BITS F412 Practice School-II		20
	Discipline Electives	3	or		or
			BITS F421T Thesis		16
			or		
			Thesis (9) and Electives (6 to 9)		15to18
		8/14			**15/20**

Discipline Core - 48 Units (14 Courses)

Discipline Electives - 12 Units (4 Courses)

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

			Semester-wise Pattern for Students Admitted to B.E. Mechanical Programme						
Year			**First Semester**	**U**			**Second Semester**		**U**
I	BIO	F110	Biology Laboratory	1	MATH	F112	Mathematics II		3
	BIO	F111	General Biology	3	ME	F110	Workshop Practice		2
	CHEM	F110	Chemistry Laboratory	1	CS	F111	Computer Programming		4
	CHEM	F111	General Chemistry	3	EEE	F111	Electrical Sciences		3
	MATH	F111	Mathematics I	3	BITS	F112	Technical Report Writing		2
	PHY	F110	Physics Laboratory	1	MATH	F113	Probability and Statistics		3
	PHY	F111	Mechanics, Oscillations and Waves	3	BITS	F111	Thermodynamics		3
	BITS	F110	Engineering Graphics	2					
				17					**20**
II	MATH	F211	Mathematics III	3	ECON	F211	Principles of Economics		3
			Humanities Electives	3(min)			or		or
	ME	F213	Materials Science &		MGTS	F211	Principles of Management		3
			Engineering	2			Humanities Electives		3(min)
	ME	F212	Fluid Mechanics	3	ME	F241	Machine Design & Drawing		4
	ME	F211	Mechanics of Solids	3	ME	F242	IC Engines		2
	ME	F214	Applied Thermodynamics	3	ME	F243	Production Techniques I		3
	ME	F215	Mechanical Engineering Laboratory	2	ME	F244	Kinematics & Dynamics of Machinery		3
					BITS	F225	Environmental Studies		3
				19(min)					**21(min)**
Summer			**BITS F221 Practice School – I (for PS Option Only)**						
III			Open/Humanities Electives	1 to 4			Open/Humanities Electives		3 to 6
	ME	F311	Heat Transfer	4	ME	F341	Prime Movers & Fluid Machines		3
	ME	F312	Advanced Mechanics of Solids	3	ME	F343	Mechanical Vibrations		3
	ME	F313	Production Techniques II	4	ME	F342	Computer Aided Design		4
			Discipline Electives	6(min)	ME	F344	Engineering Optimization		2
							Discipline Electives		3(min)
				18/21					**18/21**
IV			Open Electives	7to13	BITS	F412	Practice School-II		20
			Discipline Electives	3(min)			or		or
					BITS	F421T	Thesis		16
							or		
							Thesis (9) and Electives (6 to 9)		15 to 18
				10/16					**15/20**

Discipline Core   - 48 Units (16 Courses)

Discipline Electives - 12 Units (4 Courses)

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise Pattern for Students Admitted to B.E. Manufacturing Programme								
Year			**First Semester**	**U**			**Second Semester**	**U**
I	BIO	F110	Biology Laboratory	1	MATH	F112	Mathematics II	3
	BIO	F111	General Biology	3	ME	F110	Workshop Practice	2
	CHEM	F110	Chemistry Laboratory	1	CS	F111	Computer Programming	4
	CHEM	F111	General Chemistry	3	EEE	F111	Electrical Sciences	3
	MATH	F111	Mathematics I	3	BITS	F112	Technical Report Writing	2
	PHY	F110	Physics Laboratory	1	MATH	F113	Probability and Statistics	3
	PHY	F111	Mechanics, Oscillations and Waves	3	BITS	F111	Thermodynamics	3
	BITS	F110	Engineering Graphics	2				
				17				**20**
II	MATH	F211	Mathematics III	3	ECON	F211	Principles of Economics	3
			/Humanities Electives	3(min)			or	or
	MF	F213	Materials Science & Engineering	2	MGTS	F211	Principles of Management	3
							Humanities Electives	3(min)
	MF	F212	Fluid Mechanics	3	MF	F241	Machine Design & Drawing	4
	MF	F211	Mechanics of Solids	3	MF	F242	Manufacturing Management	2
	MF	F214	Applied Thermodynamics	3	MF	F243	Manufacturing Processes	3
	MF	F215	Mechanical Engineering Laboratory	2	MF	F244	Kinematics & Dynamics of Machinery	3
					BITS	F225	Environmental Studies	3
				19(min)				**21(min)**
Summer			BITS F221 Practice School – I (for PS Option Only)					
III			Open/Humanities Electives	2 to 5			Open/Humanities Electives	2 to 5
	MF	F311	Mechatronics & Automation	3	MF	F341	Design of Machine Tools	3
	MF	F312	Tool & Fixture Design	3	MF	F343	Casting & Welding	4
	MF	F313	Metal Forming & Machining	4	MF	F342	Computer Aided Design	4
			Discipline Electives	6(min)	MF	F344	Engineering Optimization	2
							Discipline Electives	3(min)
				18/21				**18/21**
IV			Open Electives	7 to 13	BITS	F412	Practice School-II	20
			Discipline Electives	3(min)			or	or
					BITS	F421T	Thesis	16
							or	
							Thesis (9) and Electives	
							(6 to 9)	15 to18
				10/16				**15/20**

Discipline Core - 48 Units (16 Courses)

Discipline Electives   - 12 Units (4 Courses)

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

			Semester-wise Pattern for Students Admitted to B. Pharm. Programme						
Year			**First Semester**	**U**			**Second Semester**		**U**
I	BIO	F110	Biology Laboratory	1	MATH	F112	Mathematics II		3
	BIO	F111	General Biology	3	ME	F110	Workshop Practice		2
	CHEM	F110	Chemistry Laboratory	1	CS	F111	Computer Programming		4
	CHEM	F111	General Chemistry	3	EEE	F111	Electrical Sciences		3
	MATH	F111	Mathematics I	3	BITS	F112	Technical Report Writing		2
	PHY	F110	Physics Laboratory	1	MATH	F113	Probability and Statistics		3
	PHY	F111	Mechanics, Oscillations and Waves	3	BITS	F111	Thermodynamics		3
	BITS	F110	Engineering Graphics	2					
				17					**20**
II	MATH	F211	Mathematics III	3	ECON	F211	Principles of Economics		3
			Humanities Electives	3(min)			or		or
	PHA	F211	Pharmaceutical Analysis	3	MGTS	F211	Principles of Management		3
	PHA	F214	Anatomy, Physiology & Hygiene	3			Humanities Electives		3(min)
					PHA	F241	Pharmaceutical Chemistry		3
	PHA	F212	Dispensing Pharmacy	3	PHA	F242	Biological Chemistry		3
	PHA	F213	Microbiology	3	PHA	F243	Industrial Pharmacy		3
	BITS	F225	Environmental Studies	3	PHA	F244	Physical Pharmacy		3
				21(min)					**18(min)**
Summer			**BITS F221 Practice School – I**		**(for PS Option Only)**				
III			Open/Humanities Electives	2 to 5			Open/Humanities Electives		4 to 6
	PHA	F311	Pharmacology I	3	PHA	F341	Pharmacology II		3
	PHA	F312	Medicinal Chemistry I	3	PHA	F342	Medicinal Chemistry II		3
	PHA	F313	Instrumental Methods of Analysis	4	PHA	F343	Forensic Pharmacy		2
	PHA	F314	Pharmaceutical Formulations & Biopharmaceutics	3	PHA	F344	Natural Drugs		3
			Discipline Electives	3(min)			Discipline Electives		3(min)
				18/21					**18/20**
IV			Open Electives	6 to 11	BITS	F412	Practice School-II		20
			Discipline Electives	6(min)			or		or
					BITS	F421T	Thesis		16
							or		
							Thesis (9) and Electives (6 to 9)		15 to 18
				12/17					**15/20**

Discipline Core - 48 Units (16 Courses)

Discipline Electives - 12 Units (4 Courses)

Note: This is operative pattern for the students who are admitted during 2011-2013 as approved by the Senate-appointed committee, subject to change if the situation warrants.

| Semester-wise Pattern for Students Admitted to B. Pharm. Programme |

Year	First Semester		U	Second Semester		U
I	BIO F110	Biology Laboratory	1	BITS F114	General Mathematics II*	3
	BIO F111	General Biology	3	OR		
	CHEM F110	Chemistry Laboratory	1	MATH F112	Mathematics II	
	CHEM F111	General Chemistry	3	ME F110	Workshop Practice	2
	BITS F113	General Mathematics I*	3	CS F111	Computer Programming	4
	OR			PHA F214	Anatomy, Physiology, &	3
	MATH F111	Mathematics I			Hygiene	
	PHY F110	Physics Laboratory	1	PHA F212	Dispensing Pharmacy	3
	PHY F112	General Physics	3	BITS F112	Technical Report Writing	2
	OR			MGTS F211	Principles of Management	
	PHY F111	Mechanics, Oscillations and		OR		3
	Waves			ECON F211	Principles of Economics	
	BITS F110	Engineering Graphics	2			
			17			**20**
II	Humanities Electives		3	Humanities Electives		3
	BITS F218	General Mathematics III*	3	BITS F111	Thermodynamics	3
	OR			PHA F241	Pharmaceutical Chemistry	3
	MATH F211	Mathematics III		MATH F113	Probability and Statistics	3
	PHA F211	Pharmaceutical Analysis	3	PHA F215	Introduction to Molecular	
	BITS F219	Process Engineering	3		Biology and Immunology	3
	PHA F242	Biological Chemistry	3	PHA F244	Physical Pharmacy	3
	PHA F213	Microbiology	3			
	BITS F225	Environmental Studies	3			
			21			**18**
Summer	BITS F221 Practice School I (5 Units) Only for PS Option
III	Open/Humanities Electives		2 to 5	Open/Humanities electives		4 to 6
	PHA F311	Pharmacology I	3	PHA F341	Pharmacology II	3
	PHA F312	Medicinal Chemistry I	3	PHA F342	Medicinal Chemistry II	3
	PHA F313	Instrumental Methods of	4	PHA F343	Forensic Pharmacy	2
		Analysis		PHA F344	Natural Drugs	3
	PHA F314	Pharm. Formulations &	3	Discipline Electives		3(min)
		Biopharmaceutics				
	Discipline Electives		3 (min)			
			18 /21			**18 /20**
IV	Open electives		6 to 11	BITS F412 Practice School II		20
	Discipline Electives		6 (min)	OR		
				BITS F421T Thesis (16)		16 or 15
				or Thesis (9) and Electives (6 to 9)		to 18
			12/17			**15/20**

Discipline Core - 48 Units (16 Courses)

Discipline Electives - 12 Units (4 Courses)

* A student must pursue all three courses in one sequence only (i.e. either Mathematics I, Mathematics II, and Mathematics III, or General Mathematics, General Mathematics II, and General Mathematics III).

Note: This is operative pattern for the students who are admitted from August 2014 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise Pattern for Students Admitted to M.Sc. Biological Sciences Programme									
Year		First Semester		U			Second Semester		U
I	BIO	F110	Biology Laboratory	1	MATH	F112	Mathematics II		3
	BIO	F111	General Biology	3	ME	F110	Workshop Practice		2
	CHEM	F110	Chemistry Laboratory	1	CS	F111	Computer Programming		4
	CHEM	F111	General Chemistry	3	EEE	F111	Electrical Sciences		3
	MATH	F111	Mathematics I	3	BITS	F112	Technical Report Writing		2
	PHY	F110	Physics Laboratory	1	MATH	F113	Probability and Statistics		3
	PHY	F111	Mechanics, Oscillations and Waves	3	BITS	F111	Thermodynamics		3
	BITS	F110	Engineering Graphics	2					
				17					**20**
II	MATH	F211	Mathematics III	3	ECON	F211	Principles of Economics		3
			Humanities Electives	3(min)			or		or
	BIO	F211	Biological Chemistry	3	MGTS	F211	Principles of Management		3
	BIO	F213	Cell Biology	3			Humanities Electives		3(min)
	BIO	F212	Microbiology	4	BIO	F241	Ecology & Environmental Science		3
	BIO	F214	Integrated Biology	3	BIO	F242	Introduction to Bioinformatics		3
	BITS	F225	Environmental Studies	3	BIO	F243	Genetics		3
					BIO	F244	Instrumental Methods of Analysis		4
				22(min)					**19(min)**
Summer		BITS F221 Practice School – I (for PS Option Only)							
III			Open/Humanities Electives	3 to 6			Open/Humanities Electives		0 to 3
	BIO	F311	Recombinant DNA Technology	3	BIO	F341	Developmental Biology		3
					BIO	F342	Immunology		3
	BIO	F312	Plant Physiology	3	BIO	F215	Biophysics		3
	BIO	F313	Animal Physiology	3			Discipline Electives		9(min)
			Discipline Electives	6(min)					
				18/21					**18/21**
IV			Open Electives	8 to14	BITS	F412	Practice School-II		20
							or		or
					BITS	F421T	Thesis		16
							or		
							Thesis (9) and Electives (6 to 9)		15 to18
				8/14					**15/20**

Discipline Core - 44 Units (14 Courses)

Discipline Electives - 15 Units (5 Courses)

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise Pattern for Students Admitted to M.Sc. Chemistry Programme									
Year		First Semester			U		Second Semester		U
I	BIO	F110	Biology Laboratory		1	MATH	F112	Mathematics II	3
	BIO	F111	General Biology		3	ME	F110	Workshop Practice	2
	CHEM	F110	Chemistry Laboratory		1	CS	F111	Computer Programming	4
	CHEM	F111	General Chemistry		3	EEE	F111	Electrical Sciences	3
	MATH	F111	Mathematics I		3	BITS	F112	Technical Report Writing	2
	PHY	F110	Physics Laboratory		1	MATH	F113	Probability and Statistics	3
	PHY	F111	Mechanics, Oscillations and Waves		3	BITS	F111	Thermodynamics	3
	BITS	F110	Engineering Graphics		2				
					17				**20**
II	MATH	F211	Mathematics III		3	ECON	F211	Principles of Economics	3
			Humanities Electives		3(min)			or	or
	CHEM	F211	Physical Chemistry I		3	MGTS	F211	Principles of Management	3
	CHEM	F212	Organic Chemistry I		3			Humanities Electives	3(min)
	CHEM	F213	Physical Chemistry II		3	CHEM	F241	Inorganic Chemistry II	
	PHY	F212	Electromagnetic Theory I		3	CHEM	F242	Chemical Experimentation I	3
	CHEM	F214	Inorganic Chemistry I		3	CHEM	F243	Organic Chemistry II	3
						CHEM	F244	Physical Chemistry III	3
						BITS	F225	Environmental Studies	3
					21(min)				**21(min)**
Summer		BITS F221 Practice School – I (for PS Option Only)							
III			Open/Humanities Electives		2 to 5			Open/Humanities Electives	2 to 5
	CHEM	F313	Instrumental Methods of Analysis		4	CHEM	F341	Chemical Experimentation II	4
	CHEM	F311	Organic Chemistry III		3	CHEM	F342	Organic Chemistry IV	3
	CHEM	F312	Physical Chemistry IV		3	CHEM	F343	Inorganic Chemistry III	3
			Discipline Electives		6(min)			Discipline Electives	6(min)
					18/21				**18/21**
IV			Open Electives		7 to13	BITS	F412	Practice School-II	20
								or	or
						BITS	F421T	Thesis	16
								or	
								Thesis (9) and Electives (6 to 9)	15 to18
					7/13				**15/20**

Discipline Core - 47 Units (15 Courses)

Discipline Electives - 12 Units (4 Courses)

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

			Semester-wise Pattern for Students Admitted to M. Sc. Economics Programme						
Year			**First Semester**	**U**			**Second Semester**		**U**
I	BIO	F110	Biology Laboratory	1	MATH	F112	Mathematics II		3
	BIO	F111	General Biology	3	ME	F110	Workshop Practice		2
	CHEM	F110	Chemistry Laboratory	1	CS	F111	Computer Programming		4
	CHEM	F111	General Chemistry	3	EEE	F111	Electrical Sciences		3
	MATH	F111	Mathematics I	3	BITS	F112	Technical Report Writing		2
	PHY	F110	Physics Laboratory	1	MATH	F113	Probability and Statistics		3
	PHY	F111	Mechanics, Oscillations and Waves	3	BITS	F111	Thermodynamics		3
	BITS	F110	Engineering Graphics	2					
				17					**20**
II	MATH	F211	Mathematics III	3	MGTS	F211	Principles of Management		3
			Humanities Electives	3(min)			Humanities Electives		3(min)
	ECON	F211	Principles of Economics	3	ECON	F241	Econometric Methods		3
	ECON	F212	Fundamentals of Finance & Accounts	3	ECON	F242	Microeconomics		3
	ECON	F213	Mathematical & Statistical Methods	3	ECON	F243	Macroeconomics		3
	ECON	F214	Economic Environment of Business	3	ECON	F244	Economics of Growth & Development		3
	BITS	F225	Environmental Studies	3					
				21(min)					**18(min)**
Summer			**BITS F221 Practice School – I (for PS Option Only)**						
III			Open/Humanities Electives	3 to 6			Open/Humanities Electives		3 to 6
	ECON	F311	International Economics	3	ECON	F341	Public Finance Theory & Policy		3
	ECON	F312	Money Banking & Financial Markets	3	ECON	F342	Applied Econometrics		3
	ECON	F313	Issues in Economic Development	3	ECON	F343	Economic Analysis of Public Policy		3
			Discipline Electives	6(min)			Discipline Electives		6(min)
				18/21					**18/21**
IV			Open Electives	5 to 11	BITS	F412	Practice School-II		20
			Discipline Electives	6			or		or
					BITS	F421T	Thesis		16
							or		
							Thesis (9) and Electives (6 to 9)		15to18
				11/17					**15/20**

Discipline Core - 42 Units (14 Courses)

Discipline Electives   - 18 Units (6 Courses)

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise Pattern for Students Admitted to M.Sc. Mathematics Programme								
Year	First Semester			U	Second Semester			U
I	BIO	F110	Biology Laboratory	1	MATH	F112	Mathematics II	3
	BIO	F111	General Biology	3	ME	F110	Workshop Practice	2
	CHEM	F110	Chemistry Laboratory	1	CS	F111	Computer Programming	4
	CHEM	F111	General Chemistry	3	EEE	F111	Electrical Sciences	3
	MATH	F111	Mathematics I	3	BITS	F112	Technical Report Writing	2
	PHY	F110	Physics Laboratory	1	MATH	F113	Probability and Statistics	3
	PHY	F111	Mechanics, Oscillations and Waves	3	BITS	F111	Thermodynamics	3
	BITS	F110	Engineering Graphics	2				
				17				20
II	MATH	F211	Mathematics III	3	ECON	F211	Principles of Economics	3
			Humanities Electives	3(min)			or	or
	MATH	F212	Optimization	3	MGTS	F211	Principles of Management	3
	MATH	F213	Discrete Mathematics	3			Humanities Electives	3(min)
	MATH	F214	Elementary Real Analysis	3	MATH	F241	Mathematical Methods	3
	MATH	F215	Algebra I	3	MATH	F242	Operations Research	3
	BITS	F225	Environmental Studies	3	MATH	F243	Graphs & Networks	3
					MATH	F244	Measure & Integration	3
				21(min)				18(min)
Summer			BITS F221 Practice School – I	(for PS Option Only)				
III			Open/Humanities Electives	3 to 6			Open/Humanities	
	MATH	F311	Introduction to Topology	3			Electives	0 to 3
	MATH	F312	Ordinary Differential Equations	3	MATH	F341	Introduction to Functional Analysis	3
	MATH	F313	Numerical Analysis	3	MATH	F342	Differential Geometry	3
			Discipline Electives	6	MATH	F343	Partial Differential Equations	3
							Discipline Electives	9
				18/21				18/21
IV			Open Electives	8 to 14	BITS	F412	Practice School-II	20
							or	or
					BITS	F421T	Thesis	16
							or	
							Thesis (9) and Electives (6 to 9)	15 to 18
				8/14				15/20

Discipline Core - 42 Units (14 Courses)

Discipline Electives   - 15 Units (5 Courses)

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

			Semester-wise Pattern for Students Admitted to M. Sc. Physics Programme					
Year			**First Semester**	**U**			**Second Semester**	**U**
I	BIO	F110	Biology Laboratory	1	MATH	F112	Mathematics II	3
	BIO	F111	General Biology	3	ME	F110	Workshop Practice	2
	CHEM	F110	Chemistry Laboratory	1	CS	F111	Computer Programming	4
	CHEM	F111	General Chemistry	3	EEE	F111	Electrical Sciences	3
	MATH	F111	Mathematics I	3	BITS	F112	Technical Report Writing	2
	PHY	F110	Physics Laboratory	1	MATH	F113	Probability and Statistics	3
	PHY	F111	Mechanics, Oscillations and Waves	3	BITS	F111	Thermodynamics	3
	BITS	F110	Engineering Graphics	2				
				17				**20**
II	MATH	F211	Mathematics III	3	ECON	F211	Principles of Economics	3
			Humanities Electives	3(min)			or	or
	PHY	F211	Classical Mechanics	4	MGTS	F211	Principles of Management	3
	PHY	F212	Electromagnetic Theory I	3			Humanities Electives	3(min)
	PHY	F213	Optics	3	PHY	F241	Electromagnetic Theory II	4
	PHY	F214	Electricity, Magnetism & Optics Laboratory	2	PHY	F242	Quantum Mechanics I	3
					PHY	F243	Mathematical Methods of Physics	3
	BITS	F225	Environmental Studies	3	PHY	F244	Modern Physics Laboratory	2
				21(min)				**18(min)**
Summer			BITS F221 Practice School – I (for PS Option Only)					
III			Open/Humanities Electives	3 to 6			Open/Humanities Electives	3 to 6
	PHY	F311	Quantum Mechanics II	3	PHY	F341	Solid State Physics	3
	PHY	F312	Statistical Mechanics	3	PHY	F342	Atomic & Molecular Physics	3
	PHY	F313	Computational Physics	3	PHY	F343	Nuclear & Particle Physics	3
			Discipline Electives	6(min)				
					PHY	F344	Advanced Physics Laboratory	3
							Discipline Electives	3(min)
				18/21				**18/21**
IV			Open Electives	5 to 11	BITS	F412	Practice School-II	20
			Discipline Electives	6(min)			or	or
					BITS	F421T	Thesis	16
							or	
							Thesis (9) and Electives (6 to 9)	15 to 18
				11/17				**15/20**

Discipline Core - 45 Units (15 Courses)

Discipline Electives - 15 Units (5 Courses)

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

*Discipline Core - 45 Units (15 Courses) and *Discipline Electives - 15 Units (min)-(4 Courses (min))

Note: *This is operative pattern for the students who are admitted from August 2014 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise Pattern for Students Admitted to M.Sc. General Studies – Communication & Media Studies Stream								
Year	First Semester			U	Second Semester			U
I	BIO	F110	Biology Laboratory	1	MATH	F112	Mathematics II	3
	BIO	F111	General Biology	3	ME	F110	Workshop Practice	2
	CHEM	F110	Chemistry Laboratory	1	CS	F111	Computer Programming	4
	CHEM	F111	General Chemistry	3	EEE	F111	Electrical Sciences	3
	MATH	F111	Mathematics I	3	BITS	F112	Technical Report Writing	2
	PHY	F110	Physics Laboratory	1	MATH	F113	Probability and Statistics	3
	PHY	F111	Mechanics, Oscillations and Waves	3	BITS	F111	Thermodynamics	3
	BITS	F110	Engineering Graphics	2				
				17				**20**
II	MATH	F211	Mathematics III	3	ECON	F211	Principles of Economics or	3 or
			Humanities Electives	3(min)	MGTS	F211	Principles of Management	3
	GS	F221	Business Communication	3				
	GS	F222	Language Lab Practice	3			Humanities Electives	3(min)
	GS	F223	Introduction to Mass Communication	3	GS	F244	Reporting & Writing for Media	3
	GS	F224	Print & Audio Visual Advertising	3	GS	F241	Creative Writing	3
					GS	F245	Effective Public Speaking	3
	BITS	F225	Environmental Studies	3	GS	F243	Current Affairs	3
				21(min)				**18(min)**
Summer	BITS F221 Practice School – I (for PS Option Only)							
III			Open/Humanities Electives	3 to 6			Open/Humanities Electives	3 to 6
	GS	F321	Mass Media Content & Design	3	GS	F342	Computer Mediated Communication	3
	GS	F322	Critical Analysis of Literature & Cinema	3	GS	F343	Short Film & Video Production	3
			Discipline Electives	9(min)			Discipline Electives	9(min)
				18/21				**18/21**
IV			Open Electives	5 to 11	BITS	F412	Practice School-II or	20 or
			Discipline Electives	3(min)	BITS	F421T	Thesis or	16
							Thesis (9) and Electives (6 to 9)	15 to18
				8/14				**15/20**

Discipline Core - 36 Units (12 Courses)

Discipline Electives - 21 Units (7 Courses)

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise Pattern for Students Admitted to M.Sc. General Studies – Developmental Studies Stream								
Year			First Semester	U			Second Semester	U
I	BIO	F110	Biology Laboratory	1	MATH	F112	Mathematics II	3
	BIO	F111	General Biology	3	ME	F110	Workshop Practice	2
	CHEM	F110	Chemistry Laboratory	1	CS	F111	Computer Programming	4
	CHEM	F111	General Chemistry	3	EEE	F111	Electrical Sciences	3
	MATH	F111	Mathematics I	3	BITS	F112	Technical Report Writing	2
	PHY	F110	Physics Laboratory	1	MATH	F113	Probability and Statistics	3
	PHY	F111	Mechanics, Oscillations and Waves	3	BITS	F111	Thermodynamics	3
	BITS	F110	Engineering Graphics	2				
				17				**20**
II	MATH	F211	Mathematics III	3	MGTS	F211	Principles of Management	3
			Humanities Electives	3(min)			Humanities Electives	3(min)
	GS	F211	Modern Political Concepts	3	GS	F231	Dynamics of Social Change	3
	GS	F212	Environment, Development & Climate Change	3	GS	F232	Introductory Psychology	3
	GS	F213	Development Theories	3	GS	F233	Public Policy	3
	ECON	F211	Principles of Economics	3	GS	F234	Development Economics	3
	BITS	F225	Environmental Studies	3				
				21(min)				18(min)
Summer			BITS F221 Practice School – I (for PS Option Only)					
III			Open/Humanities Electives	3 to 6			Open/Humanities Electives	0 to 3
	GS	F311	Introduction to Conflict Management	3	GS	F331	Techniques in Social Research	3
	GS	F312	Applied Philosophy	3	GS	F332	Contemporary India	3
			Discipline Electives	9(min)	GS	F333	Public Administration	3
					GS	F334	Global Business Technology & Knowledge Sharing	3
							Discipline Electives	6(min)
				18/21				**18/21**
IV			Open Electives	8 to 14	BITS	F412	Practice School-II	20
							or	or
					BITS	F421T	Thesis	16
							or	
							Thesis (9) and Electives (6 to 9)	15 to 18
				8/14				**15/20**

Discipline Core   -   42 Units (14 Courses)

Discipline Electives -   15 Units   (5 Courses)

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Pattern 1   Semester-wise Pattern for Composite Dual Degree Programmes **(Option A: Duration 10 Sem.)**
Year	\multicolumn{2}{c}{**First Semester**}	**U**	\multicolumn{2}{c}{**Second Semester**}	**U**

Year	First Semester		U	Second Semester		U
I	BIO F110 Biology laboratory		1	MATH F112 Mathematics II		3
	BIO F111 General Biology		3	ME F110 Workshop Practice		2
	CHEM F110 Chemistry Laboratory		1	CS F111 Computer Programming		4
	CHEM F111 General Chemistry		3	EEE F111 Electrical Sciences		3
	MATH F111 Mathematics I		3	BITS F112 Technical Report Writing		2
	PHY F110 Physics Laboratory		1	MATH F113 Probability and Statistics		3
	PHY F111 Mechanics, Oscillations			BITS F111 Thermodynamics		3
	BITS F110 and Waves		3			
	Engineering Graphics		2			
			17			**20**
II	MATH F211 Mathematics III		3	ECON F211 Principles of Economics		3
	First Discipline Core			or		
	Courses		13 to 17	MGTS F211 Principles of Management		
	Electives		3 to 6	First Discipline Core		
				Courses		13 to 17
				Electives		3 to 6
			23/24			**23/24**
Summer	BITS F221 Practice School – I (for PS Option Only)	
III	Second Discipline Core courses		12 to 16	Second Discipline Core Courses		12 to 16
	First Discipline Courses-Core/Elective		7 to 11	First Discipline Courses – Core / Elective		7 to 11
			23/24			**23/24**
IV	First Discipline Elective Courses		3 to 10	First Discipline Elective Courses		3to10
	Second Discipline Courses – Core + Elective		14 to 18	Second Discipline Courses - Core + Elective		14 to 18
				Electives (0 to 6)		0 to 6
			23/24			**23/24**
V	Electives		5 to 9	BITS F412 Practice School-II		20
	BITS F423T Thesis		9	or		or
				BITS F421T Thesis		16

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Pattern 2			Semester-wise Pattern for Composite Dual Degree Programmes (Option B: Duration 10 Sem. and a Summer Term)				
Year			**First Semester**	**U**	**Second Semester**		**U**
I	BIO	F110	Biology laboratory	1	MATH F112 Mathematics II		3
	BIO	F111	General Biology	3	ME F110 Workshop Practice		2
	CHEM	F110	Chemistry Laboratory	1	CS F111 Computer Programming		4
	CHEM	F111	General Chemistry	3	EEE F111 Electrical Sciences		3
	MATH	F111	Mathematics I	3	BITS F112 Technical Report Writing		2
	PHY	F110	Physics Laboratory	1	MATH F113 Probability and Statistics		3
	PHY	F111	Mechanics, Oscillations and Waves	3	BITS F111 Thermodynamics		4
	BITS	F110	Engineering Graphics(2)	2			
				17			**20**
II	MATH	F211	Mathematics III	3	ECON F211 Principles of Economics		
					or		
			First Discipline Core Courses	13 to 17	MGTS F211 Principles of Management		3
			Electives	3 to 6	First Discipline Core Courses		13 to 17
					Electives		3 to 6
				23/24			**23/24**
Summer			BITS F221 Practice School – I (for PS Option Only)				
III			Second Discipline Core Courses	12 to 16	Second Discipline Core Courses		12 to 16
			First Discipline Courses - Core / Elective	7 to 11	First Discipline Courses - Core / Elective		7 to 11
				23/24			**23/24**
IV			First Discipline Elective Courses	3/10	First Discipline Elective Courses		3 to 10
			Second Discipline Courses – Core + Elective	14 to 18	Second Discipline Courses - Core + Elective		14 to 18
			Electives	0 to 6	Electives		0 to 6
				23/24			**23/24**
Summer			Electives	5/9			
V	BITS	F412	Practice School - II	20	BITS F413 Practice School - II		20
			or	or	or		or
	BITS	F421T	Thesis	16	BITS F422 Thesis		16

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Pattern 3		Semesterwise Pattern for Dual Degree (Duration 11 Sem.)				
Year	**First Semester**		**U**	**Second Semester**		**U**
I	BIO F110 Biology laboratory		1	MATH F112 Mathematics II		3
	BIO F111 General Biology		3	ME F110 Workshop Practice		2
	CHEM F110 Chemistry Laboratory		1	CS F111 Computer Programming		4
	CHEM F111 General Chemistry		3	EEE F111 Electrical Sciences		3
	MATH F111 Mathematics I		3	BITS F112 Technical Report Writing		2
	PHY F110 Physics Laboratory		1	MATH F113 Probability and Statistics		3
	PHY F111 Mechanics, Oscillations and Waves		3	BITS F111 Thermodynamics		3
	BITS F110 Engineering Graphics		2			
			17			**20**
II	MATH F211 Mathematics III		3	ECON F211 Principles of Economics or		13
	First Discipline Core Courses			MGTS F211 Principles of Management		
				First Discipline Core Courses		13 to 17
	Electives		3 to 6	Electives		3 to 6
			21/22			**21/22**
Summer		BITS F221 Practice School – I (for PS Option Only)				
III	Second Discipline Core courses		12 to 16	Second Discipline Core Courses		12 to 16
	First Discipline Courses - Core/Elective		7 to 10	First Discipline Courses – Core / Elective		7 to 11
			21/22			**21/22**
IV	First Discipline Elective Courses		3 to 10	First Discipline Elective Courses		3 to 10
	Second Discipline Courses – Core+Elective		14 to 18	Second Discipline Courses - Core + Elective		14 to 18
	Electives		0 to 6	Electives		0 to 6
			21/22			**21/22**
V	Electives		17 to 23	BITS F412 Practice School-II		20
				or		or
				BITS F421T Thesis		16
VI	BITS F413 Practice School-II		20			
	or		or			
	BITS F422T Thesis		16			

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Biological Sciences with B.E. Chemical)							
Year	**First Semester**			**U**	**Second Semester**		**U**
I	Same as First degree Programme				Same as First degree Programme		
	First Semester			**U**	**Second Semester**		**U**
II	MATH	F211	Mathematics III	3	ECON F211	Principles of Economics/ Principles of Management	3
	BIO	F211	Biological Chemistry	3			
	BIO	F213	Cell Biology	3	BIO F241	Ecology & Environmental Science	3
	BIO	F212	Microbiology	4	BIO F242	Introduction to Bioinformatics	3
	BIO	F214	Integrated Biology	3			
			Humanities Elective	3	BIO F243	Genetics	3
	BITS	F225	Environmental Studies	3	BIO F244	Instrumental Methods of Analysis	4
						Humanities Electives	5
				22			**21**
Summer	BITS F221 Practice School -1 (for PS Option Only) (5 Units)						
	First Semester			**U**	**Second Semester**		**U**
III	BIO	F311	Recombinant DNA Technology	3	BIO F341	Developmental Biology	3
					BIO F342	Immunology	3
	BIO	F312	Plant Physiology	3	BIO F215	Biophysics	3
	BIO	F313	Animal Physiology	3	CHE F241	Heat Transfer	3
	CHE	F211	Chemical Process Calculations	3	CHE F242	Numerical Methods for Chemical Engineers	3
	CHE	F212	Fluid Mechanics	3	CHE F243	Material Science & Engineering	3
	CHE	F214	Engineering Chemistry	3			
	CHE	F213	Chemical Engineering Thermodynamics	3	CHE F244	Separation Processes I	3
				21			**21**
	First Semester			**U**	**Second Semester**		**U**
IV	CHE	F311	Kinetics & Reactor Design	3	CHE F341	Chemical Engineering Laboratory II	3
	CHE	F312	Chemical Engineering Laboratory I	3	CHE F342	Process Dynamics & Control	3
	CHE	F313	Separation Processes II	3	CHE F343	Process Design Principles II	3
	CHE	F314	Process Design Principles I	3		First Discipline Electives	9
			First Discipline Electives	6		Second Discipline Electives	6
			Second Discipline Electives	3			
				21			**24**
	First Semester			**U**	**Second Semester**		**U**
V	Second Discipline Electives			6	BITS F412 Practice School - Ii		20
	BITS F423T Thesis			9			
				15			**20**

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Biological Sciences with B.E. Civil)					

Year	First Semester		U	Second Semester		U
I	Same as First degree Programme			Same as First degree Programme		

	First Semester		U	Second Semester		U
	MATH F211 Mathematics III		3	ECON F211 Principles of Economics		
	BIO F211 Biological Chemistry		3	or		
	BIO F213 Cell Biology		3	MGTS F211 Principles of Management		3
II	BIO F212 Microbiology		4	BIO F241 Ecology & Environmental Science		3
	BIO F214 Integrated Biology		3	BIO F242 Introduction to Bioinformatics		3
	Humanities Elective		3	BIO F243 Genetics		3
	BITS F225 Environmental Studies		3	BIO F244 Instrumental Methods of Analysis		4
				Humanities Electives		5
			22			21

Summer	BITS F221 Practice School -1 (for PS Option Only) (5 Units)					

	First Semester		U	Second Semester		U
	BIO F311 Recombinant DNA Technology		3	BIO F341 Developmental Biology		3
	BIO F312 Plant Physiology		3	BIO F342 Immunology		3
	BIO F313 Animal Physiology		3	BIO F215 Biophysics		3
III	CE F211 Mechanics of Solids		3	CE F241 Analysis of structures		3
	CE F212 Transport Phenomena		3	CE F242 Construction Planning & Technology		3
	CE F214 Construction Materials		3	CE F243 Soil Mechanics		4
	CE F213 Surveying		4	CE F244 Highway Engineering		4
			22			23

	First Semester		U	Second Semester		U
	CE F311 Design of Concrete Structures		4	CE F342 Water & Waste Water Treatment		4
	CE F312 Hydraulic Engineering		4	CE F341 Hydrology & Water Resources Engineering		3
IV	CE F313 Foundation Engineering		3	CE F343 Design of Steel Structures		3
	First Discipline Electives		6	First Discipline Electives		9
	Second Discipline Electives		6	Second Discipline Electives		3
			23			22

	First Semester	U	Second Semester	U
V	Second Discipline Electives	3	BITS F412 Practice School - II	20
	BITS F423T Thesis	9		

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Biological Sciences with B.E. Computer Science)					
Year	**First Semester**	**U**	**Second Semester**		**U**
I	Same as First degree Programme		Same as First degree Programme		
	First Semester	**U**	**Second Semester**		**U**
II	MATH F211 Mathematics III	3	ECON F211 Principles of Economics		
	BIO F211 Biological Chemistry	3	or		
	BIO F213 Cell Biology	3	MGTS F211 Principles of Management		3
	BIO F212 Microbiology	4	BIO F241 Ecology & Environmental Science		3
	BIO F214 Integrated Biology	3	BIO F242 Introduction to Bioinformatics		3
			BIO F243 Genetics		3
	Humanities Elective	3	BIO F244 Instrumental Methods of Analysis		4
	BITS F225 Environmental Studies	3	Humanities Electives		5
		22			**21**
Summer	**BITS F221 Practice School -1 (for PS Option Only) (5 Units)**				
	First Semester	**U**	**Second Semester**		**U**
III	BIO F311 Recombinant DNA Technology	3	BIO F341 Developmental Biology		3
	BIO F312 Plant Physiology	3	BIO F342 Immunology		3
	BIO F313 Animal Physiology	3	BIO F215 Biophysics		3
	CS F215 Digital Design	4	CS F241 Microprocessors & Interfacing		4
	CS F214 Logic in Computer Science	3	CS F212 Database Systems		4
	CS F222 Discrete Structures for Computer Science	3	CS F211 Data Structures & Algorithms		4
	CS F213 Object Oriented Programming	4			
		23			**21**
	First Semester	**U**	**Second Semester**		**U**
IV	CS F351 Theory of Computation	3	CS F363 Compiler Construction		3
	CS F372 Operating Systems	3	CS F364 Design and Analysis of Algorithms		3
	CS F342 Computer Architecture	4	CS F303 Computer Networks		4
	CS F301 Principles of Programming Languages	2	First Discipline Elective		9
	First Discipline Electives	6	Second Discipline Electives		3
	Second Discipline Electives	3			
		21			**22**
	First Semester	**U**	**Second Semester**		**U**
V	Second Discipline Electives	6	BITS F412 Practice School - II		20
	BITS F423T Thesis	9			

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Biological Sciences with B.E. Electrical & Electronics)							
Year	**First Semester**			**U**	**Second Semester**		**U**
I	Same as First degree Programme				Same as First degree Programme		
	First Semester			**U**	**Second Semester**		**U**
II	MATH	F211	Mathematics III	3	ECON	F211	Principles of Economics	3
	BIO	F211	Biological Chemistry	3			or	
	BIO	F213	Cell Biology	3	MGTS	F211	Principles of Management	3
	BIO	F212	Microbiology	4	BIO	F241	Ecology & Environmental Science	3
	BIO	F214	Integrated Biology	3	BIO	F242	Introduction to Bioinformatics	3
			Humanities Elective	3	BIO	F243	Genetics	3
	BITS	F225	Environmental Studies	3	BIO	F244	Instrumental Methods of Analysis	4
							Humanities Electives	`5
				22				**21**
Summer	BITS F221 Practice School -1 (for PS Option Only) (5 Units)							
	First Semester			**U**	**Second Semester**		**U**
III	BIO	F311	Recombinant DNA Technology	3	BIO	F341	Developmental Biology	3
	BIO	F312	Plant Physiology	3	BIO	F342	Immunology	3
	BIO	F313	Animal Physiology	3	BIO	F215	Biophysics	3
	EEE	F212	Electromagnetic Theory	3	EEE	F243	Signals and Systems	3
	EEE	F211	Electrical Machines	4	EEE	F244	Microelectronic Circuits	3
	EEE	F214	Electronic Devices	3	EEE	F241	Microprocessors & Interfacing	4
	EE	F215	Digital Design	4	EEE	F242	Control Systems	3
				23				**22**
	First Semester			**U**	**Second Semester**		**U**
IV	EEE	F311	Communication Systems	4	EEE	F341	Analog Electronics	4
	MATH	F212	Optimization	3	EEE	F342	Power Electronics	4
			or	or	EEE	F312	Power Systems	3
	ME	F344	Engineering Optimization	2			First Discipline Electives	6
	EEE	F313	Analog & Digital VLSI Design	3			Second Discipline Elective	4
			First Discipline Electives	3				
			Second Discipline Electives	8				
				20/21				**21**
	First Semester			**U**	**Second Semester**		**U**
V	First Discipline Electives			6	BITS F412 Practice School - II		20
	BTS F423T Thesis			9			

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

| Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Biological Sciences with B.E. Electronics & Communication) | | | |

Semester-wise pattern for composite Dual Degree Programmes
(M.Sc. Biological Sciences with B.E. Electronics & Communication)

Year	First Semester			U	Second Semester			U
I	Same as First degree Programme				Same as First degree Programme			
	First Semester			**U**	**Second Semester**			**U**
II	MATH	F211	Mathematics III	3	ECON	F211	Principles of Economics	3
	BIO	F211	Biological Chemistry	3			or	
	BIO	F213	Cell Biology	3	MGTS	F211	Principles of Management	3
	BIO	F212	Microbiology	4	BIO	F241	Ecology & Environmental Science	3
	BIO	F214	Integrated Biology	3	BIO	F242	Introduction to Bioinformatics	3
					BIO	F243	Genetics	3
			Humanities Elective	3	BIO	F244	Instrumentation of Analysis	4
	BITS	F225	Environmental Studies	3			Humanities Electives	5
				22				**21**
Summer	**BITS F221 Practice School -1 (for PS Option Only) (5 Units)**	
	First Semester			**U**	**Second Semester**			**U**
III	BIO	F311	Recombinant DNA Technology	3	BIO	F341	Developmental Biology	3
	BIO	F312	Plant Physiology	3	BIO	F342	Immunology	3
	BIO	F313	Animal Physiology	3	BIO	F215	Biophysics	3
	ECE	F212	Electromagnetic Theory	3	ECE	F241	Microprocessors & Interfacing	4
	ECE	F215	Digital Design	4	ECE	F242	Control Systems	3
	ECE	F211	Electrical Machines	4	ECE	F243	Signals and Systems	3
	ECE	F214	Electronic Devices	3	ECE	F244	Microelectronic Circuits	3
				23				**22**
	First Semester			**U**	**Second Semester**			**U**
IV	ECE	F311	Communication Systems	4	ECE	F341	Analog Electronics	4
	ECE	F315	Digital Signal Processing	4	ECE	F344	Information Theory & Coding	3
	ECE	F314	Electromagnetic Fields & Microwave Engineering	3	ECE	F343	Communication Networks	3
			First Discipline Electives	3			First Discipline Elective	6
			Second Discipline Electives	7			Second Discipline Electives	5
				21				**21**
	First Semester			**U**	**Second Semester**			**U**
V	First Discipline Electives			6	\multicolumn{3}{l}{BITS F412 Practice School - II}	20
	BTS F423T		Thesis	9				

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise pattern for composite Dual Degree Programmes						
(M.Sc. Biological Sciences with B.E. Electronics & Instrumentation)						
Year	First Semester			U	Second Semester		U
I	Same as First degree Programme				Same as First degree Programme		
	First Semester			U	Second Semester		U
II	MATH	F211	Mathematics III	3	ECON	F211	Principles of Economics	3
	BIO	F211	Biological Chemistry	3			or	
	BIO	F213	Cell Biology	3	MGTS	F211	Principles of Management	3
	BIO	F212	Microbiology	4	BIO	F241	Ecology & Environmental Science	3
	BIO	F214	Integrated Biology	3	BIO	F242	Introduction to Bioinformatics	3
			Humanities Elective	3	BIO	F243	Genetics	3
	BITS	F225	Environmental Studies	3	BIO	F244	Instrumental Methods of Analysis	4
							Humanities Electives	5
				22				21
Summer	BITS F221 Practice School -1 (for PS Option Only) (5 Units)						
	First Semester			U	Second Semester		U
III	BIO	F311	Recombinant DNA Technology	3	BIO	F341	Developmental Biology	3
	BIO	F312	Plant Physiology	3	BIO	F342	Immunology	3
	BIO	F313	Animal Physiology	3	BIO	F215	Biophysics	3
	INSTR	F212	Electromagnetic Theory	3	INSTR	F241	Microprocessors & Interfacing	4
	INSTR	F215	Digital Design	4	INSTR	F242	Control Systems	3
	INSTR	F211	Electrical Machines	4	INSTR	F243	Signals & Systems	3
	INSTR	F214	Electronic Devices	3	INSTR	F244	Microelectronic Circuits	3
				23				22
	First Semester			U	Second Semester		U
IV	INSTR	F311	Electronic Instruments & Instrumentation Technology	4	INSTR	F341	Analog Electronics	4
					INSTR	F342	Power Electronics	4
	INSTR	F312	Transducers and Measurement Systems	3	INSTR	F343	Industrial Instrumentation & Control	3
	INSTR	F313	Analog & Digital VLSI Design	3			First Discipline Electives	6
			First Discipline Electives	9			Second Discipline Electives	4
			Second Discipline Electives	3				
				22				21
	First Semester			U	Second Semester		U
V	First Discipline Electives			5	BITS F412 Practice School - II		20
	BTS F423T Thesis			9			

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Biological Sciences with B.E. Manufacturing)							
Year	First Semester			U	Second Semester			U

Year	First Semester			U	Second Semester			U
I	Same as First degree Programme				Same as First degree Programme			
	First Semester			U	**Second Semester**			U
II	MATH	F211	Mathematics III	3	ECON	F211	Principles of Economics	3
	BIO	F211	Biological Chemistry	3			or	
	BIO	F213	Cell Biology	3	MGTS	F211	Principles of Management	3
	BIO	F212	Microbiology	4	BIO	F241	Ecology & Environmental Science	3
	BIO	F214	Integrated Biology	3	BIO	F242	Introduction to Bioinformatics	3
			Humanities Elective	3	BIO	F243	Genetics	3
	BITS	F225	Environmental Studies	3	BIO	F244	Instrumental Methods of Analysis	4
							Humanities Electives	5
				22				**21**
Summer	BITS F221 Practice School -1 (for PS Option Only) (5 Units)							
	First Semester			U	**Second Semester**			U
III	BIO	F311	Recombinant DNA Technology	3	BIO	F341	Developmental Biology	3
	BIO	F312	Plant Physiology	3	BIO	F342	Immunology	3
	BIO	F313	Animal Physiology	3	BIO	F215	Biophysics	3
	MF	F212	Fluid Mechanics	3	MF	F243	Manufacturing Processes	3
	MF	F214	Applied Thermodynamics	3	MF	F241	Machine Design & Drawing	4
	MF	F215	Mechanical Engineering Laboratory	2	MF	F244	Kinetics & Dynamics of Machinery	3
	MF	F211	Mechanics of Solids	3	MF	F242	Manufacturing Management	2
	MF	F213	Materials Science & Engineering	2				
				22				**21**
	First Semester			U	**Second Semester**			U
IV	MF	F313	Metal Forming & Machining	4	MF	F341	Design of Machine Tools	3
	MF	F312	Tool & Fixture Design	3	MF	F343	Casting & Welding	4
	MF	F311	Mechatronics & Automation	3	MF	F342	Computer Aided Design	4
			First Discipline Electives	9	MF	F344	Engineering Optimization	2
			Second Discipline Elective	3			First Discipline Electives	6
							Second Discipline Elective	3
				22				**22**
	First Semester			U	**Second Semester**			U
V	Second Discipline Electives			6	BITS F412 Practice School - II			20
	BTS F423T Thesis			9				

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Biological Sciences with B.E. Mechanical)						
Year		First Semester	U		Second Semester	U
I		Same as First degree Programme			Same as First degree Programme	
		First Semester	**U**		**Second Semester**	**U**
	MATH F211	Mathematics III	3	ECON F211	Principles of Economics	3
	BIO F211	Biological Chemistry	3		or	
	BIO F213	Cell Biology	3	MGTS F211	Principles of Management	3
	BIO F212	Microbiology	4	BIO F241	Ecology & Environmental	
II	BIO F214	Integrated Biology	3		Science	3
				BIO F242	Introduction to Bioinformatics	3
		Humanities Elective	3	BIO F243	Genetics	3
	BITS F225	Environmental Studies	3	BIO F244	Instrumental Methods of Analysis	4
					Humanities Electives	5
			22			**21**
Summer		BITS F221 Practice School -1 (for PS Option Only) (5 Units)				
		First Semester	**U**		**Second Semester**	**U**
	BIO F311	Recombinant DNA Technology	3	BIO F341	Developmental Biology	3
	BIO F312	Plant Physiology	3	BIO F342	Immunology	3
	BIO F313	Animal Physiology	3	BIO F215	Biophysics	3
	ME F212	Fluid Mechanics	3	ME F242	IC Engines	2
III	ME F214	Applied Thermodynamics	3	ME F241	Machine Design & Drawing	4
	ME F215	Mechanical Engineering Lab	2	ME F244	Kinematics & Dynamics of Machinery	3
	ME F211	Mechanics of Solids	3	ME F243	Production Techniques I	3
	ME F213	Materials Science & Engineering	2			
			22			**21**
		First Semester	**U**		**Second Semester**	**U**
	ME F311	Heat Transfer	4	ME F341	Prime Movers and Fluid Machines	3
	ME F312	Advanced Mechanics of Solids	3	ME F343	Mechanical Vibrations	3
IV	ME F313	Production Techniques- II	4	ME F342	Computer Aided Design	4
		First Discipline Electives	9	ME F344	Engineering Optimization	2
		Second Discipline Electives	3		First Discipline Electives	6
					Second Discipline Electives	3
			23			**21**
		First Semester	**U**		**Second Semester**	**U**
V	Second Discipline Electives BTS F423T Thesis		6 9	BITS F412 Practice School - II		20

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Chemistry with B.E. Chemical)						
Year	**First Semester**		**U**	**Second Semester**		**U**
I	Same as First degree Programme			Same as First degree Programme		
	First Semester		**U**	**Second Semester**		**U**
	MATH F211 Mathematics III		3	ECON F211 Principles of Economics		3
	CHEM F211 Physical Chemistry I		3	or		
	CHEM F212 Organic Chemistry I		3	MGTS F211 Principles of Management		3
	CHEM F213 Physical Chemistry II		3	CHEM F241 Inorganic Chemistry II		3
II	CHEM F214 Inorganic Chemistry I		3	CHEM F242 Chemical Experimentation I		3
	PHY F212 Electromagnetic Theory I		3	CHEM F243 Organic Chemistry II		3
	Humanities Elective		3	CHEM F244 Physical Chemistry III		3
				Humanities Electives		5
				BITS F225 Environmental Studies		3
			21			**23**
Summer	BITS F221 Practice School -1 (for PS Option Only)					
	First Semester		**U**	**Second Semester**		**U**
	CHEM F313 Instrumental Methods of Analysis		4	CHEM F341 Chemical Experimentation II		4
				CHEM F342 Organic Chemistry IV		3
	CHEM F311 Organic Chemistry III		3	CHEM F343 Inorganic Chemistry III		3
	CHEM F312 Physical Chemistry IV		3	CHE F241 Heat Transfer		3
III	CHE F211 Chemical Process Calculations		3	CHE F242 Numerical Methods for Chemical Engineers		3
	CHE F212 Fluid Mechanics		3	CHE F243 Material Science & Engineering		3
	CHE F213 Chemical Engineering Thermodynamics		3	CHE F244 Separation Processes I		3
			19			**22**
	First Semester		**U**	**Second Semester**		**U**
	CHE F311 Kinetics & Reactor Design		3	CHE F341 Chemical Engineering		
	CHE F312 Chemical Engineering Laboratory I		3	Laboratory II		3
IV	CHE F313 Separation Processes II		3	CHE F342 Process Dynamics & Control		3
	CHE F314 Process Design Principles I		3	CHE F343 Process Design Principles II		3
	First Discipline Electives		6	First Discipline Electives		6
	Second Discipline Electives		3	Second Discipline Electives		6
			21			**21**
	First Semester		**U**	**Second Semester**		**U**
V	Second Discipline Electives		6	BITS F412 Practice School - II		20
	BTS F423T Thesis		9			

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Chemistry with B.E. Civil)					
Year	First Semester		U	Second Semester		U
I	Same as First degree Programme			Same as First degree Programme		
	First Semester		U	Second Semester		U
II	MATH F211 Mathematics III		3	ECON F211 Principles of Economics		3
	CHEM F211 Physical Chemistry I		3	or		
	CHEM F212 Organic Chemistry I		3	MGTS F211 Principles of Management		3
	CHEM F213 Physical Chemistry II		3	CHEM F241 Inorganic Chemistry II		3
	CHEM F214 Inorganic Chemistry I		3	CHEM F242 Chemical Experimentation I		3
	PHY F212 Electromagnetic Theory I		3	CHEM F243 Organic Chemistry II		3
	Humanities Elective		3	CHEM F244 Physical Chemistry III		3
				Humanities Electives		5
				BITS F225 Environmental Studies		3
			21			23
Summer	BITS F221 Practice School -1(for PS Option Only)					
	First Semester		U	Second Semester		U
III	CHEM F313 Instrumental Methods of Analysis		4	CHEM F341 Chemical Experimentation II		4
	CHEM F311 Organic Chemistry III		3	CHEM F342 Organic Chemistry IV		3
	CHEM F312 Physical Chemistry IV		3	CHEM F343 Inorganic Chemistry III		3
	CE F211 Mechanics of Solids		3	CE F241 Analysis of structures		3
	CE F212 Transport Phenomena		3	CE F242 Construction Planning & Technology		3
	CE F214 Construction Materials		3	CE F243 Soil Mechanics		4
	CE F213 Surveying		4	CE F244 Highway Engineering		4
			23			24
	First Semester		U	Second Semester		U
IV	CE F311 Design of Concrete Structures		4	CE F342 Water & Waste Water Treatment		4
	CE F312 Hydraulic Engineering		4	CE F341 Hydrology & Water Resources Engineering		3
	CE F313 Foundation Engineering		3	CE F343 Design of Steel Structures		3
	First Discipline Electives		6	First Discipline Electives		6
	Second Discipline Electives		3	Second Discipline Electives		6
			20			22
	First Semester		U	Second Semester		U
V	Second Discipline Electives		3	BITS F412 Practice School - II		20
	BTS F423T Thesis		9			

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Chemistry with B.E. Computer Science)						
Year	**First Semester**			**U**	**Second Semester**	**U**
I	Same as First degree Programme				Same as First degree Programme	

Year	First Semester			U	Second Semester			U
	First Semester			**U**	**Second Semester**			**U**
	MATH	F211	Mathematics III	3	ECON	F211	Principles of Economics	3
	CHEM	F211	Physical Chemistry I	3			or	
	CHEM	F212	Organic Chemistry I	3	MGTS	F211	Principles of Management	3
	CHEM	F213	Physical Chemistry II	3	CHEM	F241	Inorganic Chemistry II	3
II	CHEM	F214	Inorganic Chemistry I	3	CHEM	F242	Chemical Experimentation I	3
	PHY	F212	Electromagnetic Theory I	3	CHEM	F243	Organic Chemistry II	3
			Humanities Elective	3	CHEM	F244	Physical Chemistry III	3
							Humanities Electives	5
					BITS	F225	Environmental Studies	3
				21				**23**

Summer	BITS F221 Practice School -1 (for PS Option Only)

Year	First Semester			U	Second Semester			U
	First Semester			**U**	**Second Semester**			**U**
	CHEM	F313	Instrumental Methods of Analysis	4	CHEM	F341	Chemical Experimentation II	4
	CHEM	F311	Organic Chemistry III	3	CHEM	F342	Organic Chemistry IV	3
	CHEM	F312	Physical Chemistry IV	3	CHEM	F343	Inorganic Chemistry III	3
III	CS	F215	Digital Design	4	CS	F241	Microprocessors & Interfacing	4
	CS	F214	Logic in Computer Science	3	CS	F212	Database Systems	4
	CS	F222	Discrete Structures For Computer Science	3	CS	F211	Data Structures & Algorithms	4
	CS	F213	Object Oriented Programming	4				
				24				**22**

Year	First Semester			U	Second Semester			U
	First Semester			**U**	**Second Semester**			**U**
	CS	F351	Theory of Computation	3	CS	F363	Compiler Construction	3
	CS	F372	Operating Systems	3	CS	F364	Design and Analysis of	
	CS	F342	Computer Architecture	4			Algorithms	3
IV	CS	F301	Principles of		CS	F303	Computer Networks	4
			Programming Languages	2			First Discipline Electives	6
			First Discipline Electives	6			Second Discipline Electives	3
			Second Discipline Electives	3				
				21				**19**

Year	First Semester		U	Second Semester	U
	First Semester		**U**	**Second Semester**	**U**
V	Second Discipline Electives		6	BITS F412 Practice School - II	20
	BTS F423T	Thesis	9		

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

			Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Chemistry with B.E. Electrical & Electronics)					
Year		First Semester		U			Second Semester	U
I		Same as First degree Programme					Same as First degree Programme	
		First Semester		**U**			**Second Semester**	**U**
	MATH	F211	Mathematics III	3	ECON	F211	Principles of Economics	3
	CHEM	F211	Physical Chemistry I	3			or	
	CHEM	F212	Organic Chemistry I	3	MGTS	F211	Principles of Management	3
	CHEM	F213	Physical Chemistry II	3	CHEM	F241	Inorganic Chemistry II	3
II	CHEM	F214	Inorganic Chemistry I	3	CHEM	F242	Chemical Experimentation I	3
	PHY	F212	Electromagnetic Theory I	3		F243	Organic Chemistry II	3
			Humanities Elective	3	CHEM	F244	Physical Chemistry III	3
					CHEM		Humanities Electives	5
					BITS	F225	Environmental Studies	3
				21				**23**
Summer			BITS F221 Practice School -1 (for PS Option Only)					
			First Semester	**U**			**Second Semester**	**U**
	CHEM	F313	Instrumental Methods of Analysis	4	CHEM	F341	Chemical Experimentation II	4
	CHEM	F311	Organic Chemistry III	3	CHEM	F342	Organic Chemistry IV	3
	CHEM	F312	Physical Chemistry IV	3	CHEM	F343	Inorganic Chemistry III	3
III	EEE	F211	Electrical Machines	4	EEE	F243	Signals and Systems	3
	EEE	F214	Electronic Devices	3	EEE	F244	Microelectronic Circuits	3
	EEE	F215	Digital Design	4	EEE	F241	Microprocessors & Interfacing	4
					EEE	F242	Control Systems	3
				21				**23**
			First Semester	**U**			**Second Semester**	**U**
	EEE	F311	Communication Systems	4	EEE	F341	Analog Electronics	4
					EEE	F342	Power Electronics	4
	MATH	F212	Optimization	3	EEE	F312	Power Systems	3
			or				First Discipline Elective	6
IV	ME	F344	Engineering Optimization	2			Second Discipline Elective	4
	EEE	F313	Analog & Digital VLSI Design	3				
			First Discipline Electives	6				
			Second Discipline Electives	5				
				20/21				**21**
			First Semester	**U**			**Second Semester**	**U**
V	Second Discipline Electives			3	BITS F412 Practice School - II			20
	BTS F423T		Thesis	9				

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

	First Semester		U		Second Semester		U
Semester-wise pattern for composite Dual Degree Programmes **M.Sc. Chemistry with B.E. Electronics & Communication**						
Year		**First Semester**	**U**		**Second Semester**		**U**
I		Same as First degree Programme			Same as First degree Programme	
		**First Semester**	**U**		**Second Semester**		**U**
II	MATH	F211	Mathematics III	3	ECON	F211	Principles of Economics	3
	CHEM	F211	Physical Chemistry I	3			or	
	CHEM	F212	Organic Chemistry I	3	MGTS	F211	Principles of Management	3
	CHEM	F213	Physical Chemistry II	3	CHEM	F241	Inorganic Chemistry II	3
	CHEM	F214	Inorganic Chemistry I	3	CHEM	F242	Chemical Experimentation I	3
	PHY	F212	Electromagnetic Theory I	3	CHEM	F243	Organic Chemistry II	3
			Humanities Elective	3	CHEM	F244	Physical Chemistry III	3
							Humanities Electives	5
					BITS	F225	Environmental Studies	3
				21				**23**
Summer	**BITS F221 Practice School -1 (for PS Option Only)**						
		**First Semester**	**U**		**Second Semester**		**U**
III	CHEM	F313	Instrumental Methods of Analysis	4	CHEM	F341	Chemical Experimentation II	4
	CHEM	F311	Organic Chemistry III	3	CHEM	F342	Organic Chemistry IV	3
	CHEM	F312	Physical Chemistry IV	3	CHEM	F343	Inorganic Chemistry III	3
	ECE	F215	Digital Design	4	ECE	F241	Microprocessors &	
	ECE	F211	Electrical Machines	4			Interfacing	4
	ECE	F214	Electronic Devices	3	ECE	F242	Control Systems	3
					ECE	F243	Signals and Systems	3
					ECE	F244	Microelectronic Circuits	3
				21				**23**
		**First Semester**	**U**		**Second Semester**		**U**
IV	ECE	F311	Communication Systems	4	ECE	F341	Analog Electronics	4
	ECE	F315	Digital Signal Processing	4	ECE	F344	Information Theory & Coding	3
	ECE	F314	Electromagnetic Fields & Microwave Engineering	3	ECE	F343	Communication Networks	3
			First Discipline Electives	6			First Discipline Electives	6
			Second Discipline Electives	4			Second Discipline Electives	5
				21				**21**
		**First Semester**	**U**		**Second Semester**		**U**
V		Second Discipline Electives	3		BITS F412 Practice School - II		20
	BTS F423T	Thesis		9				

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise pattern for composite Dual Degree Programmes **(M.Sc. Chemistry with B.E. Electronics & Instrumentation)**

Year		First Semester	U		Second Semester	U
I		Same as First degree Programme			Same as First degree Programme	

Year			First Semester	U			Second Semester	U
II	MATH	F211	Mathematics III	3	ECON	F211	Principles of Economics	3
	CHEM	F211	Physical Chemistry I	3	MGTS	F211	or	
	CHEM	F212	Organic Chemistry I	3			Principles of Management	3
	CHEM	F213	Physical Chemistry II	3	CHEM	F241	Inorganic Chemistry II	3
	CHEM	F214	Inorganic Chemistry I	3	CHEM	F242	Chemical Experimentation I	3
	PHY	F212	Electromagnetic Theory I	3	CHEM	F243	Organic Chemistry II	3
			Humanities Elective	3	CHEM	F244	Physical Chemistry III	3
							Humanities Electives	5
					BITS	F225	Environmental Studies	3
				21				**23**

Summer	**BITS F221 Practice School -1(for PS Option Only)**

Year			First Semester	U			Second Semester	U
III	CHEM	F313	Instrumental Methods of Analysis	4	CHEM	F341	Chemical Experimentation II	4
	CHEM	F311	Organic Chemistry III	3	CHEM	F342	Organic Chemistry IV	3
	CHEM	F312	Physical Chemistry IV	3	CHEM	F343	Inorganic Chemistry III	3
	INSTR	F215	Digital Design	4	INSTR	F241	Microprocessors & Interfacing	4
	INSTR	F211	Electrical Machines	4	INSTR	F242	Control Systems	3
	INSTR	F214	Electronic Devices	3	INSTR	F243	Signals & Systems	3
					INSTR	F244	Microelectronic Circuits	3
				21				**23**

Year			First Semester	U			Second Semester	U
IV	INSTR	F311	Electronic Instruments & Instrumentation Technology	4	INSTR	F341	Analog Electronics	4
					INSTR	F342	Power Electronics	4
	INSTR	F312	Transducers and Measurement Systems	3	INSTR	F343	Industrial Instrumentation & Control	3
	INSTR	F313	Analog & Digital VLSI Design	3			First Discipline Electives	6
			First Discipline Electives	6			Second Discipline Electives	4
			Second Discipline Electives	5				
				21				**21**

Year		First Semester	U		Second Semester	U
V		Second Discipline Electives BTS F423T Thesis	3 9		BITS F412 Practice School - II	20

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Chemistry with B.E. Manufacturing)							
Year	**First Semester**			**U**	**Second Semester**			**U**
I	Same as First degree Programme				Same as First degree Programme			

	First Semester			**U**	**Second Semester**			**U**
	MATH	F211	Mathematics III	3	ECON	F211	Principles of Economics	3
	CHEM	F211	Physical Chemistry I	3			or	
	CHEM	F212	Organic Chemistry I	3	MGTS	F211	Principles of Management	3
	CHEM	F213	Physical Chemistry II	3	CHEM	F241	Inorganic Chemistry II	3
II	CHEM	F214	Inorganic Chemistry I	3	CHEM	F242	Chemical Experimentation I	3
	PHY	F212	Electromagnetic Theory I	3	CHEM	F243	Organic Chemistry II	3
			Humanities Elective	3	CHEM	F244	Physical Chemistry III	3
							Humanities Electives	5
					BITS	F225	Environmental Studies	3
				21				**23**

Summer	BITS F221 Practice School -1 (for PS Option Only)							

	First Semester			**U**	**Second Semester**			**U**
	CHEM	F313	Instrumental Methods of Analysis	4	CHEM	F341	Chemical Experimentation II	4
	CHEM	F311	Organic Chemistry III	3	CHEM	F342	Organic Chemistry IV	3
	CHEM	F312	Physical Chemistry IV	3	CHEM	F343	Inorganic Chemistry III	3
	MF	F212	Fluid Mechanics	3	MF	F243	Manufacturing Processes	3
III	MF	F214	Applied Thermodynamics	3	MF	F241	Machine Design & Drawing	4
	MF	F215	Mechanical Engineering Laboratory	2	MF	F244	Kinematics & Dynamics of Machinery	3
	MF	F211	Mechanics of Solids	3	MF	F242	Manufacturing Management	2
	MF	F213	Materials Science & Engineering	2				
				23				**22**

	First Semester			**U**	**Second Semester**			**U**
	MF	F313	Metal Forming & Machining	4	MF	F341	Design of Machine Tools	3
					MF	F343	Casting & Welding	4
IV	MF	F312	Tool & Fixture Design	3	MF	F342	Computer Aided Design	4
	MF	F311	Mechatronics & Automation	3	MF	F344	Engineering Optimization	2
			First Discipline Electives	6			First Discipline Electives	6
			Second Discipline Elective	6			Second Discipline Elective	3
				22				**22**

	First Semester			**U**	**Second Semester**			**U**
V	Second Discipline Electives			3	BITS F412 Practice School - II			20
	BTS F423T Thesis			9				

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Chemistry with B.E. Mechanical)					

Year	First Semester	U	Second Semester	U
I	Same as First degree Programme		Same as First degree Programme	

	First Semester		U	Second Semester			U
	First Semester		**U**	**Second Semester**			**U**
	MATH F211	Mathematics III	3	ECON	F211	Principles of Economics	3
	CHEM F211	Physical Chemistry I	3			or	
	CHEM F212	Organic Chemistry I	3	MGTS	F211	Principles of Management	3
	CHEM F213	Physical Chemistry II	3	CHEM	F241	Inorganic Chemistry II	3
II	CHEM F214	Inorganic Chemistry I	3	CHEM	F242	Chemical Experimentation I	3
	PHY F212	Electromagnetic Theory I	3	CHEM	F243	Organic Chemistry II	3
		Humanities Elective	3	CHEM	F244	Physical Chemistry III	3
						Humanities Electives	5
				BITS	F225	Environmental Studies	3
			21				**23**

Summer	BITS F221 Practice School -1(for PS Option Only)		

	First Semester			U	Second Semester			U
	First Semester			**U**	**Second Semester**			**U**
	CHEM	F313	Instrumental Methods of Analysis	4	CHEM	F341	Chemical Experimentation II	4
	CHEM	F311	Organic Chemistry III	3	CHEM	F342	Organic Chemistry IV	3
	CHEM	F312	Physical Chemistry IV	3	CHEM	F343	Inorganic Chemistry III	3
	ME	F212	Fluid Mechanics	3	ME	F242	IC Engines	2
III	ME	F214	Applied Thermodynamics	3	ME	F241	Machine Design & Drawing	4
	ME	F215	Mechanical Engineering Lab	2	ME	F244	Kinematics & Dynamics of Machinery	3
	ME	F211	Mechanics of Solids	3	ME	F243	Production Techniques I	3
	ME	F213	Materials Science & Engineering	2				
				23				**22**

	First Semester			U	Second Semester			U
	First Semester			**U**	**Second Semester**			**U**
	ME	F311	Heat Transfer	4	ME	F341	Prime Movers and Fluid	
	ME	F312	Advanced Mechanics of Solids	3			Machines	3
IV	ME	F313	Production Techniques-II	4	ME	F343	Mechanical Vibrations	3
			First Discipline Electives	6	ME	F342	Computer Aided Design	4
			Second Discipline Electives	3	ME	F344	Engineering Optimization	2
							First Discipline Electives	6
							Second Discipline Electives	3
				20				**21**

	First Semester	U	Second Semester	U
	First Semester	**U**	**Second Semester**	**U**
V	Second Discipline Electives	3	BITS F412 Practice School - II	20
	BTS F423T Thesis	9		

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Economics with B.E. Chemical)							
Year		**First Semester**		**U**	**Second Semester**		**U**
I		Same as First degree Programme			Same as First degree Programme		
		First Semester		**U**	**Second Semester**		**U**
	MATH	F211	Mathematics III	3	MGTS F211	Principles of Management	3
	ECON	F211	Principles of Economics	3	ECON F241	Econometric Methods	3
	ECON	F212	Fundamentals of Finance & Accounts	3	ECON F242	Microeconomics	3
II	ECON	F213	Mathematical & Statistical Methods	3	ECON F243	Macroeconomics	3
	ECON	F214	Economic Environment of Business	3	ECON F244	Economics of Growth & Development	3
			Humanities Elective	3		Humanities Electives	5
	BITS	F225	Environmental Studies	3			
				21			**20**
Summer		**BITS F221 Practice School -1(for PS Option Only)**					
		First Semester		**U**	**Second Semester**		**U**
	ECON	F311	International Economics	3	ECON F341	Public Finance Theory & Policy	3
	ECON	F312	Money Banking & Financial Markets	3	ECON F342	Applied Econometrics	3
	ECON	F313	Issues in Economic Development	3	ECON F343	Economic Analysis of Public Policy	3
			First Discipline Elective	3		First Discipline Elective	3
III	CHE	F211	Chemical Process Calculations	3	CHE F241	Heat Transfer	3
	CHE	F212	Fluid Mechanics	3	CHE F242	Numerical Methods for Chemical Engineers	3
	CHE	F214	Engineering Chemistry	3	CHE F243	Material Science & Engineering	3
	CHE	F213	Chemical Engineering Thermodynamics	3	CHE F244	Separation Processes I	3
				24			**24**
		First Semester		**U**	**Second Semester**		**U**
	CHE	F311	Kinetics & Reactor Design	3	CHE F341	Chemical Engineering Laboratory II	3
	CHE	F312	Chemical Engineering Laboratory I	3	CHE F342	Process Dynamics & Control	3
IV	CHE	F313	Separation Processes II	3	CHE F343	Process Design Principles II	3
	CHE	F314	Process Design Principles I	3		First Discipline Electives	6
			First Discipline Electives	6		Second Discipline Electives	6
			Second Discipline Electives	3			
				21			**21**
		First Semester		**U**	**Second Semester**		**U**
V	Second Discipline Electives			6	BITS F412 Practice School - II		20
	BTS F423T Thesis			9			

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Economics with B.E. Civil)							
Year		First Semester		U		Second Semester	U
I		Same as First degree Programme				Same as First degree Programme	
		First Semester		U		Second Semester	U
II	MATH	F211	Mathematics III	3	MGTS F211	Principles of Management	3
	ECON	F211	Principles of Economics	3	ECON F241	Econometric Methods	3
	ECON	F212	Fundamentals of Finance & Accounts	3	ECON F242	Microeconomics	3
	ECON	F213	Mathematical & Statistical Methods	3	ECON F243	Macroeconomics	3
	ECON	F214	Economic Environment of Business	3	ECON F244	Economics of Growth & Development	3
			Humanities Electives	3		Humanities Electives	5
	BITS	F225	Environmental Studies	3			
				21			20
Summer		BITS F221 Practice School -1(for PS Option Only)					
		First Semester		U		Second Semester	U
III	ECON	F311	International Economics	3	ECON F341	Public Finance Theory & Policy	3
	ECON	F312	Money Banking & Financial Markets	3	ECON F342	Applied Econometrics	3
	ECON	F313	Issues in Economic Development	3	ECON F343	Economic Analysis of Public Policy	3
	CE	F211	Mechanics of Solids	3	CE F241	Analysis of structures	3
	CE	F212	Transport Phenomena	3	CE F242	Construction Planning & Technology	3
	CE	F214	Construction Materials	3	CE F243	Soil Mechanics	4
	CE	F213	Surveying	4	CE F244	Highway Engineering	4
				22			23
		First Semester		U		Second Semester	U
IV	CE	F311	Design of Concrete Structures	4	CE F342	Water & Waste Water Treatment	4
	CE	F312	Hydraulic Engineering	4	CE F341	Hydrology & Water Resources Engineering	3
	CE	F313	Foundation Engineering	3	CE F343	Design of Steel Structures	3
			First Discipline Electives	9		First Discipline Electives	9
			Second Discipline Electives	3		Second Discipline Electives	3
				23			22
		First Semester		U		Second Semester	U
V	Second Discipline Electives			6	BITS F412 Practice School - II		20
	BTS F423T	Thesis		9			

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

			Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Economics with B.E. Computer Science)					
Year			**First Semester**	**U**			**Second Semester**	**U**
I			Same as First degree Programme				Same as First degree Programme	
			First Semester	**U**			**Second Semester**	**U**
	MATH	F211	Mathematics III	3	MGTS	F211	Principles of Management	3
	ECON	F211	Principles of Economics	3	ECON	F241	Econometric Methods	3
	ECON	F212	Fundamentals of Finance & Accounts	3	ECON	F242	Microeconomics	3
	ECON	F213	Mathematical & Statistical Methods	3	ECON	F243	Macroeconomics	3
II	ECON	F214	Economic Environment of Business	3	ECON	F244	Economics of Growth & Development	3
			Humanities Elective	3			Humanities Electives	5
	BITS	F225	Environmental Studies	3				
				21				**20**
Summer			**BITS F221 Practice School -1 (for PS Option Only)**					
			First Semester	**U**			**Second Semester**	**U**
	ECON	F311	International Economics	3	ECON	F341	Public Finance Theory & Policy	
	ECON	F312	Money Banking & Financial Markets	3	ECON	F342	Applied Econometrics	3
	ECON	F313	Issues in Economic Development	3	ECON	F343	Economic Analysis of Public Policy	3
III	CS	F215	Digital Design	4	CS	F241	Microprocessors & Interfacing	4
	CS	F214	Logic in Computer Science	3	CS	F212	Database Systems	4
	CS	F222	Discrete Structures for Computer Science	3	CS	F211	Data Structures & Algorithms	4
	CS	F213	Object Oriented Programming	4				
				23				**21**
			First Semester	**U**			**Second Semester**	**U**
	CS	F351	Theory of Computation	3	CS	F363	Compiler Construction	3
	CS	F372	Operating Systems	3	CS	F364	Design and Analysis of Algorithms	3
IV	CS	F342	Computer Architecture	4	CS	F303	Computer Networks	4
	CS	F301	Principles of Programming Languages	2			First Discipline Electives	6
			First Discipline Electives	6			Second Discipline Electives	6
			Second Discipline Electives	6				
				24				**22**
			First Semester	**U**			**Second Semester**	**U**
V	First Discipline Electives			6	BITS F412 Practice School - II			20
	BTS F423T		Thesis	9				

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Economics with B.E. Electrical & Electronics)					
Year	**First Semester**		**U**	**Second Semester**	**U**
I	Same as First degree Programme			Same as First degree Programme	
	First Semester		**U**	**Second Semester**	**U**
	MATH F211	Mathematics III	3	MGTS F211 Principles of Management	3
	ECON F211	Principles of Economics	3	ECON F241 Econometric Methods	3
	ECON F212	Fundamentals of Finance & Accounts	3	ECON F242 Microeconomics	3
II	ECON F213	Mathematical & Statistical Methods	3	ECON F243 Macroeconomics	3
	ECON F214	Economic Environment of Business	3	ECON F244 Economics of Growth & Development	3
		Humanities Electives	3	Humanities Electives	5
	BITS F225	Environmental Studies	3		
			21		**20**
Summer	BITS F221 Practice School -1 (for PS Option Only)				
	First Semester		**U**	**Second Semester**	**U**
	ECON F311	International Economics	3	ECON F341 Public Finance Theory & Policy	3
	ECON F312	Money Banking & Financial Markets	3	ECON F342 Applied Econometrics	3
	ECON F313	Issues in Economic Development	3	ECON F343 Economic Analysis of Public Policy	3
III	EEE F212	Electromagnetic Theory	3	EEE F243 Signals and Systems	3
	EEE F211	Electrical Machines	4	EEE F244 Microelectronic Circuits	3
	EEE F214	Electronic Devices	3	EEE F241 Microprocessors & Interfacing	4
	EEE F215	Digital Design	4	EEE F242 Control Systems	3
			23		**22**
	First Semester		**U**	**Second Semester**	**U**
	EEE F311	Communication Systems	4	EEE F341 Analog Electronics	4
	MATH F212	Optimization	3	EEE F342 Power Electronics	4
		or		EEE F312 Power Systems	3
IV	ME F344	Engineering Optimization	2	First Discipline Electives	6
	EEE F313	Analog & Digital VLSI Design	3	Second Discipline Elective	4
		First Discipline Electives	6		
		Second Discipline Electives	8		
			23/24		**21**
	First Semester		**U**	**Second Semester**	**U**
V	First Discipline Electives		6	BITS F412 Practice School - II	20
	BTS F423T Thesis		9		

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Economics with B.E. Electronics & Communication)						
Year	First Semester			U	Second Semester	U
I	Same as First degree Programme				Same as First degree Programme	
	First Semester			**U**	**Second Semester**	**U**
	MATH	F211	Mathematics III	3	MGTS F211 Principles of Management	3
	ECON	F211	Principles of Economics	3	ECON F241 Econometric Methods	3
	ECON	F212	Fundamentals of Finance & Accounts	3	ECON F242 Microeconomics	3
II	ECON	F213	Mathematical & Statistical Methods	3	ECON F243 Macroeconomics	3
	ECON	F214	Economic Environment of Business	3	ECON F244 Economics of Growth & Development	3
			Humanities Elective	3	Humanities Electives	5
	BITS	F225	Environmental Studies	3		
				21		20
Summer	BITS F221 Practice School -1 (for PS Option Only)					
	First Semester			**U**	**Second Semester**	**U**
	ECON	F311	International Economics	3	ECON F341 Public Finance Theory & Policy	3
	ECON	F312	Money Banking & Financial Markets	3	ECON F342 Applied Econometrics	3
	ECON	F313	Issues in Economic Development	3	ECON F343 Economic Analysis of Public Policy	3
III	ECE	F212	Electromagnetic Theory	3	ECE F241 Microprocessors & Interfacing	4
	ECE	F215	Digital Design	4	ECE F242 Control Systems	3
	ECE	F211	Electrical Machines	4	ECE F243 Signals and Systems	3
	ECE	F214	Electronic Devices	3	ECE F244 Microelectronic Circuits	3
				23		22
	First Semester			**U**	**Second Semester**	**U**
	ECE	F311	Communication Systems	4	ECE F341 Analog Electronics	4
	ECE	F315	Digital Signal Processing	4	ECE F344 Information Theory & Coding	3
IV	ECE	F314	Electromagnetic Fields & Microwave Engineering	3	ECE F343 Communication Networks	3
			First Discipline Electives	6	First Discipline Electives	6
			Second Discipline Electives	7	Second Discipline Electives	5
				24		21
	First Semester			**U**	**Second Semester**	**U**
V	First Discipline Electives BTS F423T Thesis			6 9	BITS F412 Practice School - II	20

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Economics with B.E. Electronics & Instrumentation)						
Year		First Semester	U		Second Semester	U
I		Same as First degree Programme			Same as First degree Programme	
		First Semester	U		Second Semester	U
II	MATH F211	Mathematics III	3	MGTS F211	Principles of Management	3
	ECON F211	Principles of Economics	3	ECON F241	Econometric Methods	3
	ECON F212	Fundamentals of Finance & Accounts	3	ECON F242	Microeconomics	3
	ECON F213	Mathematical & Statistical Methods	3	ECON F243	Macroeconomics	3
	ECON F214	Economic Environment of Business	3	ECON F244	Economics of Growth & Development	3
		Humanities Elective	3		Humanities Electives	5
	BITS F225	Environmental Studies	3			
			21			20
Summer		BITS F221 Practice School -1 (for PS Option Only)				
		First Semester	U		Second Semester	U
III	ECON F311	International Economics	3	ECON F341	Public Finance Theory & Policy	3
	ECON F312	Money Banking & Financial Markets	3	ECON F342	Applied Econometrics	3
	ECON F313	Issues in Economic Development	3	ECON F343	Economic Analysis of Public Policy	3
	INSTR F212	Electromagnetic Theory	3	INSTR F241	Microprocessors & Interfacing	4
	INSTR F215	Digital Design	4	INSTR F242	Control Systems	3
	INSTR F211	Electrical Machines	4	INSTR F243	Signals & Systems	3
	INSTR F214	Electronic Devices	3	INSTR F244	Microelectronic Circuits	3
			23			22
		First Semester	U		Second Semester	U
IV	INSTR F311	Electronic Instruments & Instrumentation Technology	4	INSTR F341	Analog Electronics	4
	INSTR F312	Transducers and Measurement Systems	3	INSTR F342	Power Electronics	4
	INSTR F313	Analog & Digital VLSI Design	3	INSTR F343	Industrial Instrumentation & Control	3
		First Discipline Electives	6		First Discipline Electives	6
		Second Discipline Electives	8		Second Discipline Electives	4
			24			21
		First Semester	U		Second Semester	U
V	First Discipline Electives		6	BITS F412 Practice School - II		20
	BTS F423T Thesis		9			

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise pattern for composite Dual Degree Programmes **(M.Sc. Economics with B.E. Manufacturing)**

Year	First Semester			U	Second Semester			U
I	\multicolumn{3}{l}{**Same as First degree Programme**}		\multicolumn{3}{l}{**Same as First degree Programme**}		
	\multicolumn{3}{c}{**First Semester**}	U	\multicolumn{3}{c}{**Second Semester**}	U
	MATH	F211	Mathematics III	3	MGTS	F211	Principles of Management	3
	ECON	F211	Principles of Economics	3	ECON	F241	Econometric Methods	3
	ECON	F212	Fundamentals of Finance & Accounts	3	ECON	F242	Microeconomics	3
II	ECON	F213	Mathematical & Statistical Methods	3	ECON	F243	Macroeconomics	3
	ECON	F214	Economic Environment of Business	3	ECON	F244	Economics of Growth & Development	3
			Humanities Elective	3			Humanities Electives	5
	BITS	F225	Environmental Studies	3				
				21				20

Summer	**BITS F221 Practice School -1 (for PS Option Only)**	

Year	First Semester			U	Second Semester			U
	\multicolumn{3}{c}{**First Semester**}	U	\multicolumn{3}{c}{**Second Semester**}	U
	ECON	F311	International Economics	3	ECON	F341	Public Finance Theory & Policy	3
	ECON	F312	Money Banking & Financial Markets	3	ECON	F342	Applied Econometrics	3
	ECON	F313	Issues in Economic Development	3	ECON	F343	Economic Analysis of Public Policy	3
III	MF	F212	Fluid Mechanics	3	MF	F243	Manufacturing Processes	3
	MF	F214	Applied Thermodynamics	3	MF	F241	Machine Design & Drawing	4
	MF	F215	Mechanical Engineering Laboratory	2	MF	F244	Kinetics & Dynamics of Machinery	3
	MF	F211	Mechanics of Solids	3	MF	F242	Manufacturing Management	2
	MF	F213	Materials Science & Engineering	2			First Discipline Elective	3
				22				24

Year	First Semester			U	Second Semester			U
	\multicolumn{3}{c}{**First Semester**}	U	\multicolumn{3}{c}{**Second Semester**}	U
	MF	F313	Metal Forming & Machining	4	MF	F341	Design of Machine Tools	3
	MF	F312	Tool & Fixture Design	3	MF	F343	Casting & Welding	4
	MF	F311	Mechatronics & Automation	3	MF	F342	Computer Aided Design	4
IV			First Discipline Electives	6	MF	F344	Engineering Optimization	2
			Second Discipline Electives	6			First Discipline Elective	3
							Second Discipline Electives	6
				22				22

Year	First Semester			U	Second Semester			U
	\multicolumn{3}{c}{**First Semester**}	U	\multicolumn{3}{c}{**Second Semester**}	U
V	\multicolumn{3}{l}{First Discipline Electives}	6	\multicolumn{3}{l}{BITS F412 Practice School - II}	20
	\multicolumn{3}{l}{BTS F423T Thesis}	9				

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

| **Semester-wise pattern for composite Dual Degree Programmes**
(M.Sc. Economics with B.E. Mechanical) |

Year	\multicolumn{3}{c}{**First Semester**}	**U**	\multicolumn{2}{c}{**Second Semester**}	**U**
I	\multicolumn{3}{c}{**Same as First degree Programme**}		\multicolumn{2}{c}{**Same as First degree Programme**}	

	\multicolumn{3}{c}{**First Semester**}	**U**	\multicolumn{2}{c}{**Second Semester**}	**U**
	MATH	F211	Mathematics III	3	MGTS F211 Principles of Management	3
	ECON	F211	Principles of Economics	3	ECON F241 Econometric Methods	3
	ECON	F212	Fundamentals of Finance & Accounts	3	ECON F242 Microeconomics	3
					ECON F243 Macroeconomics	3
II	ECON	F213	Mathematical & Statistical Methods	3	ECON F244 Economics of Growth & Development	3
	ECON	F214	Economic Environment of Business	3	Humanities Electives	5
			Humanities Electives	3		
	BITS	F225	Environmental Studies	3		
				21		**20**

| Summer | **BITS F221 Practice School -1 (for PS Option Only)** |

	\multicolumn{3}{c}{**First Semester**}	**U**	\multicolumn{2}{c}{**Second Semester**}	**U**
	ECON	F311	International Economics	3	ECON F341 Public Finance Theory & Policy	3
	ECON	F312	Money Banking & Financial Markets	3	ECON F342 Applied Econometrics	3
	ECON	F313	Issues in Economic Development	3	ECON F343 Economic Analysis of Public Policy	3
III	ME	F212	Fluid Mechanics	3	ME F242 IC Engines	2
	ME	F214	Applied Thermodynamics	3	ME F241 Machine Design & Drawing	4
	ME	F215	Mechanical Engineering Lab	2	ME F244 Kinematics & Dynamics of Machinery	3
	ME	F211	Mechanics of Solids	3	ME F243 Production Techniques I	3
	ME	F213	Materials Science & Engineering	2		
				22		**21**

	\multicolumn{3}{c}{**First Semester**}	**U**	\multicolumn{2}{c}{**Second Semester**}	**U**
	ME	F311	Heat Transfer	4	ME F341 Prime Movers and Fluid Machines	3
	ME	F312	Advanced Mechanics of Solids	3	ME F343 Mechanical Vibrations	3
IV	ME	F313	Production Techniques- II	4	ME F342 Computer Aided Design	4
			First Discipline Electives	6	ME F344 Engineering Optimization	2
			Second Discipline Electives	6	First Discipline Electives	6
					Second Discipline Electives	6
				23		**24**

	\multicolumn{3}{c}{**First Semester**}	**U**	\multicolumn{2}{c}{**Second Semester**}	**U**
V	\multicolumn{3}{l}{First Discipline Electives}	6	\multirow{2}{*}{BITS F412 Practice School - II}	20
	\multicolumn{3}{l}{BITS F423T Thesis}	9		

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

			Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Mathematics with B.E. Chemical)					
Year			**First Semester**	**U**			**Second Semester**	**U**
I			Same as First degree Programme				Same as First degree Programme	
			First Semester	**U**			**Second Semester**	**U**
	MATH	F211	Mathematics III	3	ECON	F211	Principles of Economics	3
	MATH	F212	Optimization	3			or	
	MATH	F213	Discrete Mathematics	3	MGTS	F211	Principles of Management	3
	MATH	F214	Elementary Real Analysis	3	MATH	F241	Mathematical Methods	3
II	MATH	F215	Algebra I	3	MATH	F242	Operations Research	3
			Humanities Elective	3	MATH	F243	Graphs & Networks	3
	BITS	F225	Environmental Studies	3	MATH	F244	Measure & Integration	3
							Humanities Electives	5
				21				**20**
Summer			BITS F221 Practice School -1 (for PS Option Only)					
			First Semester	**U**			**Second Semester**	**U**
	MATH	F311	Introduction to Topology	3	MATH	F341	Introduction to Functional Analysis	3
	MATH	F312	Ordinary Differential Equations	3	MATH	F342	Differential Geometry	3
	MATH	F313	Numerical Analysis	3	MATH	F343	Partial Differential Equations	3
	CHE	F211	Chemical Process Calculations	3	CHE	F241	Heat Transfer	3
III	CHE	F212	Fluid Mechanics	3	CHE	F242	Numerical Methods for Chemical Engineers	3
	CHE	F214	Engineering Chemistry	3	CHE	F243	Material Science & Engineering	3
	CHE	F213	Chemical Engineering Thermodynamics	3	CHE	F244	Separation Processes I	3
				21				**21**
			First Semester	**U**			**Second Semester**	**U**
	CHE	F311	Kinetics & Reactor Design	3	CHE	F341	Chemical Engineering Laboratory II	3
	CHE	F312	Chemical Engineering Laboratory I	3	CHE	F342	Process Dynamics & Control	3
IV	CHE	F313	Separation Processes II	3	CHE	F343	Process Design Principles II	3
	CHE	F314	Process Design Principles I	3			First Discipline Electives	9
			First Discipline Electives	6			Second Discipline Electives	6
			Second Discipline Electives	3				
				21				**24**
			First Semester	**U**			**Second Semester**	**U**
V	Second Discipline Electives			6	BITS F412 Practice School - II			20
	BTS F423T	Thesis		9				

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Mathematics with B.E. Civil Engineering)						
Year	**First Semester**		**U**	**Second Semester**		**U**
I	Same as First degree Programme			Same as First degree Programme		
	First Semester		**U**	**Second Semester**		**U**
	MATH F211 Mathematics III		3	ECON F211 Principles of Economics		3
	MATH F212 Optimization		3	or		
	MATH F213 Discrete Mathematics		3	MGTS F211 Principles of Management		3
	MATH F214 Elementary Real Analysis		3	MATH F241 Mathematical Methods		3
II	MATH F215 Algebra I		3	MATH F242 Operations Research		3
	Humanities Elective		3	MATH F243 Graphs & Networks		3
	BITS F225 Environmental Studies		3	MATH F244 Measure & Integration		3
				Humanities Electives		5
			21			**20**
Summer	BITS F221 Practice School -1 (for PS Option Only)					
	First Semester		**U**	**Second Semester**		**U**
	MATH F311 Introduction to Topology		3	MATH F341 Introduction to Functional Analysis		3
	MATH F312 Ordinary Differential Equations		3	MATH F342 Differential Geometry		3
	MATH F313 Numerical Analysis		3	MATH F343 Partial Differential Equations		3
	CE F211 Mechanics of Solids		3	CE F241 Analysis of structures		3
III	CE F212 Transport Phenomena		3	CE F242 Construction Planning & Technology		3
	CE F214 Construction Materials		3	CE F243 Soil Mechanics		4
	CE F213 Surveying		4	CE F244 Highway Engineering		4
			22			**23**
	First Semester		**U**	**Second Semester**		**U**
	CE F311 Design of Concrete Structures		4	CE F342 Water & Waste Water Treatment		4
	CE F312 Hydraulic Engineering		4	CE F341 Hydrology & Water Resources Engineering		3
IV	CE F313 Foundation Engineering		3	CE F343 Design of Steel Structures		3
	First Discipline Electives		6	First Discipline Electives		9
	Second Discipline Electives		3	Second Discipline Electives		3
			20			**22**
	First Semester		**U**	**Second Semester**		**U**
V	Second Discipline Electives		6	BITS F412 Practice School - II		20
	BTS F423T Thesis		9			

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

		Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Mathematics with B.E. Computer Science)				
Year		**First Semester**	**U**		**Second Semester**	**U**
I		**Same as First degree Programme**			**Same as First degree Programme**	
		First Semester	**U**		**Second Semester**	**U**
II	MATH F211	Mathematics III	3	ECON F211	Principles of Economics	3
	MATH F212	Optimization	3		or	
	MATH F213	Discrete Mathematics	3	MGTS F211	Principles of Management	3
	MATH F214	Elementary Real Analysis	3	MATH F241	Mathematical Methods	3
	MATH F215	Algebra I	3	MATH F242	Operations Research	3
		Humanities Elective	3	MATH F243	Graphs & Networks	3
	BITS F225	Environmental Studies	3	MATH F244	Measure & Integration	3
					Humanities Electives	5
			21			**20**
Summer		**BITS F221 Practice School -1 (for PS Option Only)**				
		First Semester	**U**		**Second Semester**	**U**
III	MATH F311	Introduction to Topology	3	MATH F341	Introduction to Functional Analysis	3
	MATH F312	Ordinary Differential Equations	3			
				MATH F342	Differential Geometry	3
	MATH F313	Numerical Analysis	3	MATH F343	Partial Differential Equations	3
	CS F215	Digital Design	4	CS F241	Microprocessors & Interfacing	4
	CS F214	Logic in Computer Science	3	CS F212	Database Systems	4
	CS F213	Object Oriented Programming	4	CS F211	Data Structures & Algorithms	4
			20			**21**
		First Semester	**U**		**Second Semester**	**U**
IV	CS F351	Theory of Computation	3	CS F363	Compiler Construction	3
	CS F372	Operating Systems	3	CS F364	Design and Analysis of Algorithms	3
	CS F342	Computer Architecture	4	CS F303	Computer Networks	4
	CS F301	Principles of Programming Languages	2		Fist Discipline Elective	6
		First Discipline Electives	3		Second Discipline Electives	6
		Second Discipline Electives	6			
			21			**22**
		First Semester	**U**		**Second Semester**	**U**
V	First Discipline Electives		6	BITS F412 Practice School - II		20
	BTS F423T	Thesis	9			

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Mathematics with B.E. Electrical & Electronics)					
Year	**First Semester**		**U**	**Second Semester**	**U**
I	**Same as First degree Programme**			**Same as First degree Programme**	
	First Semester		**U**	**Second Semester**	**U**
	MATH F211 Mathematics III		3	ECON F211 Principles of Economics	3
	MATH F212 Optimization		3	or	
	MATH F213 Discrete Mathematics		3	MGTS F211 Principles of Management	3
	MATH F214 Elementary Real Analysis		3	MATH F241 Mathematical Methods	3
II	MATH F215 Algebra I		3	MATH F242 Operations Research	3
				MATH F243 Graphs & Networks	3
	Humanities Elective		3	MATH F244 Measure & Integration	3
	BITS F225 Environmental Studies		3		
				Humanities Electives	5
			21		**20**
Summer	**BITS F221 Practice School -1 (for PS Option Only)**				
	First Semester		**U**	**Second Semester**	**U**
	MATH F311 Introduction to Topology		3	MATH F341 Introduction to Functional	
	MATH F312 Ordinary Differential Equations		3	Analysis	3
	MATH F313 Numerical Analysis		3	MATH F342 Differential Geometry	3
	EEE F212 Electromagnetic Theory		3	MATH F343 Partial Differential Equations	3
III	EEE F211 Electrical Machines		4	EEE F243 Signals and Systems	3
	EEE F214 Electronic Devices		3	EEE F244 Microelectronic Circuits	3
	EEE F215 Digital Design		4	EEE F241 Microprocessors & Interfacing	4
				EEE F242 Control Systems	3
			23		**22**
	First Semester		**U**	**Second Semester**	**U**
	EEE F311 Communication Systems		4	EEE F341 Analog Electronics	4
	EEE F313 Analog & Digital VLSI Design		3	EEE F342 Power Electronics	4
				EEE F312 Power Systems	3
IV	First Discipline Electives		6	Fist Discipline Elective	6
	Second Discipline Electives		8	Second Discipline Elective	4
			21		**21**
	First Semester		**U**	**Second Semester**	**U**
V	First Discipline Electives		3	BITS F412 Practice School - II	20
	BTS F423T Thesis		9		

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Mathematics with B.E. Electronics & Communication)							
Year	First Semester			U	Second Semester		U
I	Same as First degree Programme				Same as First degree Programme		
	First Semester			U	Second Semester		U
	MATH	F211	Mathematics III	3	ECON	F211	Principles of Economics	3
	MATH	F212	Optimization	3			or	
	MATH	F213	Discrete Mathematics	3	MGTS	F211	Principles of Management	3
	MATH	F214	Elementary Real Analysis	3	MATH	F241	Mathematical Methods	3
II	MATH	F215	Algebra I	3	MATH	F242	Operations Research	3
					MATH	F243	Graphs & Networks	3
			Humanities Elective	3	MATH	F244	Measure & Integration	3
	BITS	F225	Environmental Studies	3			Humanities Electives	5
				21				20
Summer	BITS F221 Practice School -1 (for PS Option Only)							
	First Semester			U	Second Semester		U
	MATH	F311	Introduction to Topology	3	MATH	F341	Introduction to Functional Analysis	3
	MATH	F312	Ordinary Differential Equations	3	MATH	F342	Differential Geometry	3
	MATH	F313	Numerical Analysis	3	MATH	F343	Partial Differential Equations	3
III	ECE	F212	Electromagnetic Theory	3	ECE	F241	Microprocessors & Interfacing	4
	ECE	F215	Digital Design	4	ECE	F242	Control Systems	3
	ECE	F211	Electrical Machines	4	ECE	F243	Signals and Systems	3
	ECE	F214	Electronic Devices	3	ECE	F244	Microelectronic Circuits	3
				23				22
	First Semester			U	Second Semester		U
	ECE	F311	Communication Systems	4	ECE	F341	Analog Electronics	4
	ECE	F315	Digital Signal Processing	4	ECE	F344	Information Theory & Coding	3
V	ECE	F314	Electromagnetic Fields & Microwave Engineering	3	ECE	F343	Communication Networks	3
			First Discipline Electives	3			First Discipline Electives	6
			Second Discipline Electives	7			Second Discipline Electives	5
				21				21
	First Semester			U	Second Semester		U
V	First Discipline Electives			6	BITS F412 Practice School - II		20
	BTS F423T	Thesis		9			

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Mathematics with B.E. Electronics & Instrumentation)						
Year	First Semester			U	Second Semester	U
I	Same as First degree Programme				Same as First degree Programme	
	First Semester			U	Second Semester	U
II	MATH	F211	Mathematics III	3	ECON F211 Principles of Economics	3
	MATH	F212	Optimization	3	or	
	MATH	F213	Discrete Mathematics	3	MGTS F211 Principles of Management	3
	MATH	F214	Elementary Real Analysis	3	MATH F241 Mathematical Methods	3
	MATH	F215	Algebra I	3	MATH F242 Operations Research	3
			Humanities Elective	3	MATH F243 Graphs & Networks	3
	BITS	F225	Environmental Studies	3	MATH F244 Measure & Integration	3
					Humanities Electives	5
				21		**20**
Summer	BITS F221 Practice School -1 (for PS Option Only)					
	First Semester			U	Second Semester	U
III	MATH	F311	Introduction to Topology	3	MATH F341 Introduction to Functional Analysis	3
	MATH	F312	Ordinary Differential Equations	3	MATH F342 Differential Geometry	3
	MATH	F313	Numerical Analysis	3	MATH F343 Partial Differential Equations	3
	INSTR	F212	Electromagnetic Theory	3	INSTR F241 Microprocessors & Interfacing	4
	INSTR	F215	Digital Design	4	INSTR F242 Control Systems	3
	INSTR	F211	Electrical Machines	4	INSTR F243 Signals & Systems	3
	INSTR	F214	Electronic Devices	3	INSTR F244 Microelectronic Circuits	3
				23		**22**
	First Semester			U	Second Semester	U
IV	INSTR	F311	Electronic Instruments & Instrumentation Technology	4	INSTR F341 Analog Electronics	4
	INSTR	F312	Transducers and Measurement Systems	3	INSTR F342 Power Electronics	4
	INSTR	F313	Analog & Digital VLSI Design	3	INSTR F343 Industrial Instrumentation & Control	3
			First Discipline Electives	3	Fist Discipline Elective	6
			Second Discipline Electives	8	Second Discipline Electives	4
				21		**21**
	First Semester			U	Second Semester	U
V	First Discipline Electives			6	BITS F412 Practice School - II	20
	BTS F423T Thesis			9		

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Mathematics with B.E. Manufacturing)					
Year	First Semester		U	Second Semester	U
I	Same as First degree Programme			Same as First degree Programme	
	First Semester		U	Second Semester	U
	MATH F211 Mathematics III		3	ECON F211 Principles of Economics	3
	MATH F212 Optimization		3	or	
	MATH F213 Discrete Mathematics		3	MGTS F211 Principles of Management	3
	MATH F214 Elementary Real Analysis		3	MATH F241 Mathematical Methods	3
II	MATH F215 Algebra I		3	MATH F242 Operations Research	3
	Humanities Elective		3	MATH F243 Graphs & Networks	3
	BITS F225 Environmental Studies		3	MATH F244 Measure & Integration	3
				Humanities Electives	5
			21		20
Summer	BITS F221 Practice School -1 (for PS Option Only)				
	First Semester		U	Second Semester	U
	MATH F311 Introduction to Topology		3	MATH F341 Introduction to Functional Analysis	3
	MATH F312 Ordinary Differential Equations		3	MATH F342 Differential Geometry	3
	MATH F313 Numerical Analysis		3	MATH F343 Partial Differential Equations	3
	MF F212 Fluid Mechanics		3	MF F243 Manufacturing Processes	3
III	MF F214 Applied Thermodynamics		3	MF F241 Machine Design & Drawing	4
	MF F215 Mechanical Engineering Laboratory		2	MF F244 Kinematics & Dynamics of Machinery	3
	MF F211 Mechanics of Solids		3	MF F242 Manufacturing Management	2
	MF F213 Materials Science & Engineering		2		
			22		21
	First Semester		U	Second Semester	U
	MF F313 Metal Forming & Machining		4	MF F341 Design of Machine Tools	3
	MF F312 Tool & Fixture Design		3	MF F343 Casting & Welding	4
IV	MF F311 Mechatronics & Automation		3	MF F342 Computer Aided Design	4
	First Discipline Electives		6	First Discipline Electives	3
	Second Discipline Elective		6	Second Discipline Elective	6
			22		20
	First Semester		U	Second Semester	U
V	First Discipline Electives		6	BITS F412 Practice School - II	20
	BTS F423T Thesis		9		

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

			Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Mathematics with B.E. Mechanical)					
Year			**First Semester**	**U**			**Second Semester**	**U**
I			Same as First degree Programme				Same as First degree Programme	
			First Semester	**U**			**Second Semester**	**U**
II	MATH	F211	Mathematics III	3	ECON	F211	Principles of Economics	3
	MATH	F212	Optimization	3			or	
	MATH	F213	Discrete Mathematics	3	MGTS	F211	Principles of Management	3
	MATH	F214	Elementary Real Analysis	3	MATH	F241	Mathematical Methods	3
	MATH	F215	Algebra I	3	MATH	F242	Operations Research	3
			Humanities Elective	3	MATH	F243	Graphs & Networks	3
	BITS	F225	Environmental Studies	3	MATH	F244	Measure & Integration	3
							Humanities Electives	5
				21				**20**
Summer			**BITS F221 Practice School -1 (for PS Option Only)**					
			First Semester	**U**			**Second Semester**	**U**
III	MATH	F311	Introduction to Topology	3	MATH	F341	Introduction to Functional Analysis	
	MATH	F312	Ordinary Differential Equations	3	MATH	F342	Differential Geometry	3
	MATH	F313	Numerical Analysis	3	MATH	F343	Partial Differential Equations	3
	ME	F212	Fluid Mechanics	3	ME	F242	IC Engines	2
	ME	F214	Applied Thermodynamics	3	ME	F241	Machine Design & Drawing	4
	ME	F215	Mechanical Engineering Lab	2	ME	F244	Kinematics & Dynamics of Machinery	3
	ME	F211	Mechanics of Solids	3	ME	F243	Production Techniques I	3
	ME	F213	Materials Science & Engineering	2				
				22				**21**
IV			**First Semester**	**U**			**Second Semester**	**U**
	ME	F311	Heat Transfer	4	ME	F341	Prime Movers and Fluid Machines	3
	ME	F312	Advanced Mechanics of Solids	3	ME	F343	Mechanical Vibrations	3
	ME	F313	Production Techniques-II	4	ME	F342	Computer Aided Design	4
			First Discipline Electives	6			First Discipline Electives	9
			Second Discipline Electives	3			Second Discipline Electives	3
				20				**22**
V			**First Semester**	**U**			**Second Semester**	**U**
			Second Discipline Electives	6			BITS F412 Practice School - II	20
	BTS F423T		Thesis	9				

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

| **Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Physics with B.E. Chemical)** |

Year	First Semester			U	Second Semester			U
I	\multicolumn{3}{l}{Same as First degree Programme}		\multicolumn{3}{l}{Same as First degree Programme}	
	\multicolumn{3}{l}{**First Semester**}	**U**	\multicolumn{3}{l}{**Second Semester**}	**U**
	MATH	F211	Mathematics III	3	ECON	F211	Principles of Economics	3
	PHY	F211	Classical Mechanics	4			or	
	PHY	F212	Electromagnetic Theory I	3	MGTS	F211	Principles of Management	3
	PHY	F213	Optics	3	PHY	F241	Electromagnetic Theory II	4
II	PHY	F214	Electricity, Magnetism & Optics Laboratory	2	PHY	F242	Quantum Mechanics I	3
			Humanities Elective	3	PHY	F243	Mathematical Methods of Physics	3
	BITS	F225	Environmental Studies	3	PHY	F244	Modern Physics Laboratory	2
							Humanities Electives	5
				21				**20**
Summer	**BITS F221 Practice School -1(for PS Option Only)**
	\multicolumn{3}{l}{**First Semester**}	**U**	\multicolumn{3}{l}{**Second Semester**}	**U**
	PHY	F311	Quantum Mechanics II	3	PHY	F341	Solid State Physics	3
	PHY	F312	Statistical Mechanics	3	PHY	F342	Atomic & Molecular Physics	3
	PHY	F313	Computational Physics	3	PHY	F343	Nuclear & Particle Physics	3
	CHE	F211	Chemical Process Calculations	3	PHY	F344	Advanced Physics Laboratory	3
III	CHE	F212	Fluid Mechanics	3	CHE	F241	Heat Transfer	3
	CHE	F214	Engineering Chemistry	3	CHE	F242	Numerical Methods for Chemical Engineers	3
	CHE	F213	Chemical Engineering Thermodynamics	3	CHE	F243	Material Science & Engineering	3
					CHE	F244	Separation Processes I	3
				21				**24**
	\multicolumn{3}{l}{**First Semester**}	**U**	\multicolumn{3}{l}{**Second Semester**}	**U**
	CHE	F311	Kinetics & Reactor Design	3	CHE	F341	Chemical Engineering Laboratory II	3
	CHE	F312	Chemical Engineering Laboratory I	3	CHE	F342	Process Dynamics & Control	3
IV	CHE	F313	Separation Processes II	3	CHE	F343	Process Design Principles II	3
	CHE	F314	Process Design Principles I	3			First Discipline Electives	9
			First Discipline Electives	6			Second Discipline Electives	6
			Second Discipline Electives	3				
				21				**24**
	\multicolumn{3}{l}{**First Semester**}	**U**	\multicolumn{3}{l}{**Second Semester**}	**U**
V	\multicolumn{3}{l}{Second Discipline Electives}	6	\multicolumn{3}{l}{BITS F412 Practice School - II}	20
	\multicolumn{3}{l}{BTS F423T Thesis}	9		

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Physics with B.E. Civil)						
Year	**First Semester**			**U**	**Second Semester**	**U**
I	Same as First degree Programme				Same as First degree Programme	

	First Semester			**U**	**Second Semester**			**U**
	MATH	F211	Mathematics III	3	ECON	F211	Principles of Economics	3
	PHY	F211	Classical Mechanics	4			or	
	PHY	F212	Electromagnetic Theory I	3	MGTS	F211	Principles of Management	3
	PHY	F213	Optics	3	PHY	F241	Electromagnetic Theory II	4
II	PHY	F214	Electricity, Magnetism & Optics Laboratory	2	PHY	F242	Quantum Mechanics I	3
			Humanities Elective	3	PHY	F243	Mathematical Methods of Physics	3
	BITS	F225	Environmental Studies	3	PHY	F244	Modern Physics Laboratory	2
							Humanities Electives	5
				21				**20**

Summer	BITS F221 Practice School -1(for PS Option Only)							
	First Semester			**U**	**Second Semester**			**U**
	PHY	F311	Quantum Mechanics II	3	PHY	F341	Solid State Physics	3
	PHY	F312	Statistical Mechanics	3	PHY	F342	Atomic & Molecular Physics	3
	PHY	F313	Computational Physics	3	PHY	F343	Nuclear & Particle Physics	3
	CE	F211	Mechanics of Solids	3	CE	F241	Analysis of structures	3
III	CE	F212	Transport Phenomena	3	CE	F242	Construction Planning & Technology	3
	CE	F214	Construction Materials	3	CE	F243	Soil Mechanics	4
	CE	F213	Surveying	4	CE	F244	Highway Engineering	4
				22				**23**

	First Semester			**U**	**Second Semester**			**U**
	CE	F311	Design of Concrete Structures	4	CE	F342	Water & Waste Water Treatment	4
	CE	F312	Hydraulic Engineering	4	CE	F341	Hydrology & Water	
	CE	F313	Foundation Engineering	3			Resources Engineering	3
IV			First Discipline Electives	9	CE	F343	Design of Steel Structures	3
			Second Discipline Electives	3	PHY	F344	Advanced Physics Laboratory	3
							First Discipline Electives	6
							Second Discipline Electives	3
				23				**22**

	First Semester	**U**	**Second Semester**	**U**
V	Second Discipline Electives	6	BITS F412 Practice School - II	20
	BTS F423T Thesis	9		

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

		Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Physics with B.E. Computer Science)					
Year		**First Semester**		**U**		**Second Semester**	**U**
I		Same as First degree Programme				Same as First degree Programme	
		First Semester		**U**		**Second Semester**	**U**
	MATH	F211	Mathematics III	3	ECON F211	Principles of Economics	3
	PHY	F211	Classical Mechanics	4		or	
	PHY	F212	Electromagnetic Theory I	3	MGTS F211	Principles of Management	3
	PHY	F213	Optics	3	PHY F241	Electromagnetic Theory II	4
II	PHY	F214	Electricity, Magnetism &		PHY F242	Quantum Mechanics I	3
			Optics Laboratory	2	PHY F243	Mathematical Methods of	
			Humanities Elective	3		Physics	3
	BITS	F225	Environmental Studies	3	PHY F244	Modern Physics Laboratory	2
						Humanities Electives	5
				21			**20**
Summer		BITS F221 Practice School -1 (for PS Option Only)					
		First Semester		**U**		**Second Semester**	**U**
	PHY	F311	Quantum Mechanics II	3	PHY F341	Solid State Physics	3
	PHY	F312	Statistical Mechanics	3	PHY F342	Atomic & Molecular Physics	3
	PHY	F313	Computational Physics	3	PHY F343	Nuclear & Particle Physics	3
	CS	F215	Digital Design	4	PHY F344	Advanced Physics	
III	CS	F214	Logic in Computer			Laboratory	3
			Science	3	CS F241	Microprocessors &	
	CS	F222	Discrete Structures For			Interfacing	4
			Computer Science	3	CS F212	Database Systems	4
	CS	F213	Object Oriented		CS F211	Data Structures & Algorithms	4
			Programming	4			
				23			**24**
		First Semester		**U**		**Second Semester**	**U**
	CS	F351	Theory of Computation	3	CS F363	Compiler Construction	3
	CS	F372	Operating Systems	3	CS F364	Design and Analysis of	
	CS	F342	Computer Architecture	4		Algorithms	3
IV	CS	F301	Principles of		CS F303	Computer Networks	4
			Programming Languages	2		First Discipline Electives	9
			First Discipline Electives	6		Second Discipline Electives	3
			Second Discipline Electives	3			
				21			**22**
		First Semester		**U**		**Second Semester**	**U**
V	Second Discipline Electives			6	BITS F412 Practice School - II		20
	BTS F423T		Thesis	9			

Note: This is operative pattern for the students who are admitted from August 2011 onwards as approved by the Senate-appointed committee, subject to change if the situation warrants.

	Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Physics with B.E. Electrical & Electronics)					
Year		First Semester	U		Second Semester	U
I		Same as First degree Programme			Same as First degree Programme	
		First Semester	**U**		**Second Semester**	**U**
	MATH F211	Mathematics III	3	ECON F211	Principles of Economics	3
	PHY F211	Classical Mechanics	4		or	
	PHY F212	Electromagnetic Theory I	3	MGTS F211	Principles of Management	3
	PHY F213	Optics	3	PHY F241	Electromagnetic Theory II	4
II	PHY F214	Electricity, Magnetism & Optics Laboratory	2	PHY F242	Quantum Mechanics I	3
		Humanities Elective	3	PHY F243	Mathematical Methods of Physics	3
	BITS F225	Environmental Studies	3	PHY F244	Modern Physics Laboratory	2
					Humanities Electives	5
			21			**20**
Summer			BITS F221 Practice School -1(for PS Option Only)			
		First Semester	**U**		**Second Semester**	**U**
	PHY F311	Quantum Mechanics II	3	PHY F341	Solid State Physics	3
	PHY F312	Statistical Mechanics	3	PHY F342	Atomic & Molecular Physics	3
	PHY F313	Computational Physics	3	PHY F343	Nuclear & Particle Physics	3
III	EEE F211	Electrical Machines	4	EEE F243	Signals and Systems	3
	EEE F214	Electronic Devices	3	EEE F244	Microelectronic Circuits	3
	EEE F215	Digital Design	4	EEE F241	Microprocessors & Interfacing	4
				EEE F242	Control Systems	3
			20			**22**
		First Semester	**U**		**Second Semester**	**U**
	EEE F311	Communication Systems	4	EEE F341	Analog Electronics	4
	MATH F212	Optimization	3	EEE F342	Power Electronics	4
		or		EEE F312	Power Systems	3
	ME F344	Engineering Optimization	2	PHY F344	Advanced Physics Laboratory	3
IV	EEE F313	Analog & Digital VLSI Design	3		First Discipline Electives	6
		First Discipline Electives	9		Second Discipline Electives	4
		Second Discipline Electives	5			
			23/24			**24**
		First Semester	**U**		**Second Semester**	**U**
V	Second Discipline Electives		3	BITS F412 Practice School - II		20
	BTS F423T Thesis		9			

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	Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Physics with B.E. Electronics & Communication)					
Year	**First Semester**		**U**	**Second Semester**		**U**
I	Same as First degree Programme			Same as First degree Programme		
	First Semester		**U**	**Second Semester**		**U**
	MATH F211 Mathematics III		3	ECON F211 Principles of Economics		3
	PHY F211 Classical Mechanics		4	or		
	PHY F212 Electromagnetic Theory I		3	MGTS F211 Principles of Management		3
	PHY F213 Optics		3	PHY F241 Electromagnetic Theory II		4
II	PHY F214 Electricity, Magnetism & Optics Laboratory		2	PHY F242 Quantum Mechanics I		3
	Humanities Elective		3	PHY F243 Mathematical Methods of Physics		3
	BITS F225 Environmental Studies		3	PHY F244 Modern Physics Laboratory		2
				Humanities Electives		5
			21			**20**
Summer	BITS F221 Practice School -1 (for PS Option Only)					
	First Semester		**U**	**Second Semester**		**U**
	PHY F311 Quantum Mechanics II		3	PHY F341 Solid State Physics		3
	PHY F312 Statistical Mechanics		3	PHY F342 Atomic & Molecular Physics		3
	PHY F313 Computational Physics		3	PHY F343 Nuclear & Particle Physics		3
III	ECE F215 Digital Design		4	ECE F241 Microprocessors & Interfacing		4
	ECE F211 Electrical Machines		4	ECE F242 Control Systems		3
	ECE F214 Electronic Devices		3	ECE F243 Signals and Systems		3
				ECE F244 Microelectronic Circuits		3
			20			**22**
	First Semester		**U**	**Second Semester**		**U**
	ECE F311 Communication Systems		4	ECE F341 Analog Electronics		4
	ECE F315 Digital Signal Processing		4	ECE F344 Information Theory & Coding		3
	ECE F314 Electromagnetic Fields & Microwave Engineering		3	ECE F343 Communication Networks		3
IV	First Discipline Electives		9	PHY F344 Advanced Physics Laboratory		3
	Second Discipline Electives		3	First Discipline Electives		6
				Second Discipline Electives		5
			23			**24**
	First Semester		**U**	**Second Semester**		**U**
V	Second Discipline Electives BTS F423T Thesis		4 9	BITS F412 Practice School - II		20

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			Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Physics with B.E. Electronics & Instrumentation)					
Year		**First Semester**		**U**		**Second Semester**		**U**
I		Same as First degree Programme				Same as First degree Programme		
		First Semester		**U**		**Second Semester**		**U**
II	MATH	F211	Mathematics III	3	ECON	F211	Principles of Economics or	3
	PHY	F211	Classical Mechanics	4				
	PHY	F212	Electromagnetic Theory I	3	MGTS	F211	Principles of Management	3
	PHY	F213	Optics	3	PHY	F241	Electromagnetic Theory II	4
	PHY	F214	Electricity, Magnetism & Optics Laboratory	2	PHY	F242	Quantum Mechanics I	3
			Humanities Elective	3	PHY	F243	Mathematical Methods of Physics	3
	BITS	F225	Environmental Studies	3	PHY	F244	Modern Physics Laboratory	2
							Humanities Electives	5
				21				**20**
Summer		BITS F221 Practice School -1(for PS Option Only)						
		First Semester		**U**		**Second Semester**		**U**
III	PHY	F311	Quantum Mechanics II	3	PHY	F341	Solid State Physics	3
	PHY	F312	Statistical Mechanics	3	PHY	F342	Atomic & Molecular Physics	3
	PHY	F313	Computational Physics	3	PHY	F343	Nuclear & Particle Physics	3
	INSTR	F215	Digital Design	4	INSTR	F241	Microprocessors & Interfacing	4
	INSTR	F211	Electrical Machines	4	INSTR	F242	Control Systems	3
	INSTR	F214	Electronic Devices	3	INSTR	F243	Signals & Systems	3
					INSTR	F244	Microelectronic Circuits	3
				20				**22**
		First Semester		**U**		**Second Semester**		**U**
IV	INSTR	F311	Electronic Instruments & Instrumentation Technology	4	INSTR	F341	Analog Electronics	4
	INSTR	F312	Transducers and Measurement Systems	3	INSTR	F342	Power Electronics	4
	INSTR	F313	Analog & Digital VLSI Design	3	INSTR	F343	Industrial Instrumentation & Control	3
			First Discipline Electives	9	PHY	F344	Advanced Physics Laboratory	3
			Second Discipline Electives	3			First Discipline Electives	6
							Second Discipline Electives	4
				22				**24**
		First Semester		**U**		**Second Semester**		**U**
V	Second Discipline Electives			5	BITS F412 Practice School - II			20
	BTS F423T Thesis			9				

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		Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Physics with B.E. Manufacturing)						
Year		**First Semester**		**U**		**Second Semester**		**U**
I		Same as First degree Programme				Same as First degree Programme		
		First Semester		**U**		**Second Semester**		**U**
	MATH	F211	Mathematics III	3	ECON	F211	Principles of Economics	3
	PHY	F211	Classical Mechanics	4			or	
	PHY	F212	Electromagnetic Theory I	3	MGTS	F211	Principles of Management	3
	PHY	F213	Optics	3	PHY	F241	Electromagnetic Theory II	4
II	PHY	F214	Electricity, Magnetism & Optics Laboratory	2	PHY	F242	Quantum Mechanics I	3
			Humanities Elective	3	PHY	F243	Mathematical Methods of Physics	3
	BITS	F225	Environmental Studies	3	PHY	F244	Modern Physics Laboratory	2
							Humanities Electives	5
				21				**20**
Summer		BITS F221 Practice School -1 (for PS Option Only)						
		First Semester		**U**		**Second Semester**		**U**
	PHY	F311	Quantum Mechanics II	3	PHY	F341	Solid State Physics	3
	PHY	F312	Statistical Mechanics	3	PHY	F342	Atomic & Molecular Physics	3
	PHY	F313	Computational Physics	3	PHY	F343	Nuclear & Particle Physics	3
	MF	F212	Fluid Mechanics	3	PHY	F344	Advanced Physics Laboratory	3
	MF	F214	Applied Thermodynamics	3	MF	F243	Manufacturing Processes	3
III	MF	F215	Mechanical Engineering Laboratory	2	MF	F241	Machine Design & Drawing	4
	MF	F211	Mechanics of Solids	3	MF	F244	Kinetics & Dynamics of Machinery	3
	MF	F213	Materials Science & Engineering	2	MF	F242	Manufacturing Management	2
				22				**24**
		First Semester		**U**		**Second Semester**		**U**
	MF	F313	Metal Forming & Machining	4	MF	F341	Design of Machine Tools	3
	MF	F312	Tool & Fixture Design	3	MF	F343	Casting & Welding	4
	MF	F311	Mechatronics & Automation	3	MF	F342	Computer Aided Design	4
IV			First Discipline Electives	9	MF	F344	Engineering Optimization	2
			Second Discipline Electives	3			First Discipline Electives	6
							Second Discipline Electives	4
				22				**23**
		First Semester		**U**		**Second Semester**		**U**
V	Second Discipline Electives			5	BITS F412 Practice School - II			20
	BTS F423T Thesis			9				

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Semester-wise pattern for composite Dual Degree Programmes (M.Sc. Physics with B.E. Mechanical)						
Year	First Semester		U	Second Semester		U
I	Same as First degree Programme			Same as First degree Programme		
	First Semester		U	Second Semester		U
	MATH F211 Mathematics III		3	ECON F211 Principles of Economics		3
	PHY F211 Classical Mechanics		4	or		
	PHY F212 Electromagnetic Theory I		3	MGTS F211 Principles of Management		3
	PHY F213 Optics		3	PHY F241 Electromagnetic Theory II		4
II	PHY F214 Electricity, Magnetism & Optics Laboratory		2	PHY F242 Quantum Mechanics I		3
	Humanities Elective		3	PHY F243 Mathematical Methods of Physics		3
	BITS F225 Environmental Studies		3	PHY F244 Modern Physics Laboratory		2
				Humanities Electives		5
			21			20
Summer	BITS F221 Practice School -1 (for PS Option Only)					
	First Semester		U	Second Semester		U
	PHY F311 Quantum Mechanics II		3	PHY F341 Solid State Physics		3
	PHY F312 Statistical Mechanics		3	PHY F342 Atomic & Molecular Physics		3
	PHY F313 Computational Physics		3	PHY F343 Nuclear & Particle Physics		3
	ME F212 Fluid Mechanics		3	PHY F344 Advanced Physics Laboratory		3
III	ME F214 Applied Thermodynamics		3	ME F242 IC Engines		2
	ME F215 Mechanical Engineering Lab		2	ME F241 Machine Design & Drawing		4
	ME F211 Mechanics of Solids		3	ME F244 Kinematics & Dynamics of Machinery		3
	ME F213 Materials Science & Engineering		2	ME F243 Production Techniques I		3
			22			24
	First Semester		U	Second Semester		U
	ME F311 Heat Transfer		4	ME F341 Prime Movers and Fluid Machines		3
	ME F312 Advanced Mechanics of Solids		3	ME F343 Mechanical Vibrations		3
IV	ME F313 Production Techniques- II		4	ME F342 Computer Aided Design		4
	First Discipline Electives		9	ME F344 Engineering Optimization		2
	Second Discipline Electives		3	First Discipline Electives		6
				Second Discipline Electives		3
			23			21
	First Semester		U	Second Semester		U
V	Second Discipline Electives		6	BITS F412 Practice School - II		20
	BTS F423T Thesis		9			

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