

SECOND YEAR: INFORMATION TECHNOLOGY

SCHEME OF INSTRUCTION AND EXAMINATION

(RC 2019-20)

SEMESTER – III

Course Code	Nomenclature of the Course	Scheme of Instruction Hrs/Week			Scheme of Examination						
		L	T	P	Duration (Hrs)	Marks					Credits
						Th	IA	TW**	P	Total	
IT310	Mathematics –III	3	1	--	3	100	25	25	--	150	4
IT320	Integrated Electronics	3	--	--	3	100	25	--	--	125	3
IT330	Computer Networks	3	--	--	3	100	25	--	--	125	3
IT340	Data Structures and Algorithms with C++	3	1	--	3	100	25	25	--	150	4
IT350	Software Engineering	3	--	--	3	100	25	--	--	125	3
IT360	Computer Hardware Lab	--	--	4	--	--	--	25	50	75	2
IT370	Computer Software Lab	--	--	4	--	--	--	25	50	75	2
HM001	Technical Communication	2	--	--	--	--	--	75	--	75	2
AC390	Mathematics I & II (*Bridge Course)	2	--	--	--	--	--	--	--	--	0
	TOTAL	19	2	8	--	500	125	175	100	900	23

*Applicable to direct second year /lateral entry students

**Term Work marks are to be awarded through continuous evaluation

LEGEND

Abbreviation	Description
L	Lecture
T	Tutorial
P	Practical
O	Oral
Th	Theory
TW	Term Work
IA	Internal Assessment

SECOND YEAR: INFORMATION TECHNOLOGY

SCHEME OF INSTRUCTION AND EXAMINATION

(RC 2019-20)

SEMESTER – IV

Course Code	Nomenclature of the Course	Scheme of Instruction Hrs/Week			Scheme of Examination						
		L	T	P	Duration (Hrs)	Marks					Credits
						Th	IA	TW**	P	Total	
IT410	Computational Techniques	3	1	--	3	100	25	25	--	150	4
IT420	Embedded Systems	3	--	--	3	100	25	25	--	150	3
IT430	Object Oriented Programming using Java	3	--	--	3	100	25	--	--	125	3
IT440	Operating System	3	--	--	3	100	25	--	--	125	3
IT450	Design and Analysis of Algorithm	3	1	--	3	100	25	--	--	125	4
IT460	Algorithms & Programming Lab	--	--	4	--	--	--	25	50	75	2
IT470	Software Systems Lab	--	--	4	--	--	--	25	50	75	2
HM004	Management & Organizational Behaviour	3	--	--	3	100	25	--	--	125	3
	TOTAL	18	2	8	--	600	150	100	100	950	24

**Term Work marks are to be awarded through continuous evaluation

LEGEND

Abbreviation	Description
L	Lecture
T	Tutorial
P	Practical
O	Oral
Th	Theory
TW	Term Work
IA	Internal Assessment

THIRD YEAR: INFORMATION TECHNOLOGY

SCHEME OF INSTRUCTION AND EXAMINATION

(RC 2019-20)

SEMESTER – V

Course Code	Nomenclature of the Course	Scheme of Instruction Hrs/Week			Scheme of Examination						
		L	T	P	Duration (Hrs)	Marks					Credits
						Th	IA	TW*	P	Total	
IT510	Database Management System	3	--	--	3	100	25	--	--	125	3
IT520	Theory of Computation	3	--	--	3	100	25	--	--	125	3
IT531	Cloud Computing	3	--	--	3	100	25	--	--	125	3
IT532	Software Testing & Quality Assurance										
IT533	Digital Signal Processing										
IT534	Internet of Things										
IT541	Computer Graphics	3	--	--	3	100	25	--	--	125	3
IT542	Statistical Models for Information Science										
IT543	Advanced Computer Architecture										
IT544	Graph Theory										
IT550	Database Application Lab	--	--	4	--	--	--	25	50	75	2
IT560	Modelling & Computing Lab	--	--	4	--	--	--	25	50	75	2
**	Open Elective	3	--	--	3	100	25	--	--	125	3
HM002	Technical English & Report Writing	3	--	--	3	100	25	--	--	125	3
	TOTAL	18	0	8	--	600	150	50	100	900	22

*Term Work marks are to be awarded through continuous evaluation

** Student will have to enter the course code that he/she takes as part of the open elective

LEGEND

L	T	P	O	Th	TW	IA
Lecture	Tutorial	Practical	Oral	Theory	Term Work	Internal Assessment

THIRD YEAR: INFORMATION TECHNOLOGY

SCHEME OF INSTRUCTION AND EXAMINATION

(RC 2019-20)

SEMESTER – VI

Course Code	Nomenclature of the Course	Scheme of Instruction Hrs/Week			Scheme of Examination						
		L	T	P	Duration (Hrs)	Marks					Credits
						Th	IA	TW*	P	Total	
IT610	Principles of Compilers	3	--	--	3	100	25	--	--	125	3
IT620	Web Technology	3	--	--	3	100	25	--	--	125	3
IT631	Natural Language Processing	3	--	--	3	100	25	--	--	125	3
IT632	Artificial Intelligence and Fuzzy Logic										
IT633	Distributed System										
IT634	Queuing theory and modelling										
IT641	Java Programming	3	--	--	3	100	25	--	--	125	3
IT642	Open Source s/w development										
IT643	Computer Forensics and Cyber Security										
IT644	E Commerce										
IT650	Web Development Lab	--	--	4	--	--	--	25	50	75	2
IT660	Software Applications Lab	--	--	4	--	--	--	25	50	75	2
**	Open Elective	3	--	--	3	100	25	--	--	125	3
HM009	Ethics & Entrepreneurship	3	--	--	3	100	25	--	--	125	3
	TOTAL	18	0	8	--	600	150	50	100	900	22

*Term Work marks are to be awarded through continuous evaluation

** Student will have to enter the course code that he/she takes as part of the open elective.

LEGEND

L	T	P	O	Th	TW	IA
Lecture	Tutorial	Practical	Oral	Theory	Term Work	Internal Assessment

FOURTH YEAR: INFORMATION TECHNOLOGY

SCHEME OF INSTRUCTION AND EXAMINATION

(RC 2019-20)

SEMESTER – VII

Course Code	Nomenclature of the Course	Scheme of Instruction Hrs/Week			Scheme of Examination						
		L	T	P	Duration (Hrs)	Marks					Credits
						Th	IA	TW*	O	Total	
IT710	Image Processing	3	--	--	3	100	25	--	--	125	3
IT721	Professional Elective V Data Analytics	3	--	--	3	100	25	--	--	125	3
IT722	Wireless Sensor Networks										
IT723	Genetic Algorithms										
IT724	Ad hoc and sensor networks										
IT730	Advanced Computing Lab	--	--	4	--	--	--	25	50	75	2
**	Open Elective III	3	--	--	3	100	25	--	--	125	3
IT740	Internship	--	--	6	--	--	--	50	50	100	3
IT750	Project Work -I	--	--	6	--	--	--	50	75	125	3
	<u>TOTAL</u>	<u>9</u>	<u>0</u>	<u>16</u>	--	300	75	125	175	675	17

*Term Work marks are to be awarded through continuous evaluation

** Student will have to enter the course code that he/she takes as part of the open elective.

LEGEND

Abbreviation	Description
L	Lecture
T	Tutorial
P	Practical
O	Oral
Th	Theory
TW	Term Work
IA	Internal Assessment

FOURTH YEAR: INFORMATION TECHNOLOGY

SCHEME OF INSTRUCTION AND EXAMINATION

(RC 2019-20)

SEMESTER – VIII

Course Code	Nomenclature of the Course	Scheme of Instruction Hrs/Week			Scheme of Examination						
		L	T	P	Duration (Hrs)	Marks					Credits
						Th	IA	TW*	O	Total	
IT810	Cryptography and Network Security	3	--	--	3	100	25	--	--	125	3
IT821	Computer Vision	3	--	--	3	100	25	--	--	125	3
IT822	Mobile Computing										
IT823	Advanced Data Structures										
IT824	Social Networking										
	Elect (nptel/mooc/swayam) student can take this on-line course between 6 to 8 sem. grades will be awarded in 8th sem.	3	--	--	--	--	--	50	50	100	3
IT840	Project Work -II	--	--	18	--	--	--	200	200	400	9
	<u>TOTAL</u>	<u>9</u>	<u>0</u>	<u>18</u>	--	200	50	250	250	750	18

*Term Work marks are to be awarded through continuous evaluation

LEGEND

Abbreviation	Description
L	Lecture
T	Tutorial
P	Practical
O	Oral
Th	Theory
TW	Term Work
IA	Internal Assessment