

**Course Structure Summary**

S.No.	Category	AICTE	APSCHE	Proposed
1	Humanities & Social Science including Management Courses	13	12	12
2	Basic Science Courses	25	24	20
3	Engineering Science courses	24	29.5	15
4	Professional Core Courses	48	47.5	74
5	Professional Elective Courses	18	15	21
6	Open Elective Courses	18	15	6
7	Project work, seminar and internship in industry or elsewhere	15	13	12
8	Industry Internship			2
9	MOOCs			2
8	Mandatory Courses			(non-credit courses)
	Total :-			164

**Course Structure Summary**

Semester	Credits
Semester I	17
Semester II	21
Semester III	20
Semester IV	21
Semester V	23
Semester VI	21
Semester VII	21
Semester VIII	20
Total	164

**SCHEME OF INSTRUCTION & EXAMINATION (Semester System)**

First Year B.Tech., (SEMESTER I)

For

*Information Technology*

With Effective From 2018-2019 Academic Year

Code No.	Subject	Scheme of Instruction (Periods per week)				Scheme of Examination (Maximum marks)			No. of Credits
		Lec	Tut	Pra	Total	CIE	SEE	Total	
18MA001	Linear Algebra and Ordinary Differential Equations	4	0	0	4	50	50	100	3
18CY001	Engineering Chemistry	4	0	0	4	50	50	100	3
18CE001	Environmental Studies	3	0	0	3	50	50	100	2
18EE001	Basic Electrical & Electronics Engineering	4	0	0	4	50	50	100	3
18MEL01	Engineering Graphics	1	0	4	5	50	50	100	3
18CYL01	Chemistry Lab	0	0	3	3	50	50	100	1
18MEL02	Workshop	0	0	3	3	50	50	100	1
18EEL01	Basic Electrical & Electronics Engineering Lab	0	0	3	3	50	50	100	1
	<b>TOTAL</b>	<b>16</b>	<b>0</b>	<b>13</b>	<b>29</b>	<b>400</b>	<b>400</b>	<b>800</b>	<b>17</b>

**CIE:** Continuous Internal Evaluation**SEE:** Semester End Examination**Lec :**Lecture**Tut :** Tutorial**Pra :** Practical

**SCHEME OF INSTRUCTION & EXAMINATION (Semester System)**

First Year B.Tech., (SEMESTER II)

For

*Information Technology*

With Effective From 2018-2019 Academic Year

Code No.	Subject	Scheme of Instruction (Periods per week)				Scheme of Examination (Maximum marks)			No. of Credits
		Lec	Tut	Pra	Total	CIE	SEE	Total	
18MA002	Numerical Methods And Advanced Calculus	4	0	0	4	50	50	100	3
18PH001	Semiconductor Physics	4	1	0	5	50	50	100	4
18IT203	Professional Ethics & Human Values	3	0	0	3	50	50	100	3
18IT204	Digital Logic Design	3	1	0	4	50	50	100	3
18EL001	Communicative English	3	0	0	3	50	50	100	2
18CS001	Problem Solving with Programming	4	0	0	4	50	50	100	3
18PHL01	Semiconductor Physics Lab	0	0	3	3	50	50	100	1
18ELL01	Communicative English Lab	0	0	3	3	50	50	100	1
18CSL01	Problem Solving with Programming Lab	0	0	3	3	50	50	100	1
	<b>TOTAL</b>	<b>21</b>	<b>2</b>	<b>9</b>	<b>32</b>	<b>450</b>	<b>450</b>	<b>900</b>	<b>21</b>

**CIE:** Continuous Internal Evaluation**SEE:** Semester End Examination**Lec :** Lecture**Tut :** Tutorial**Pra :** Practical

**SCHEME OF INSTRUCTION & EXAMINATION (Semester System)**

Second Year B.Tech., (SEMESTER III)

For

*Information Technology*

With Effective From 2018-2019 Academic Year

Code No.	Subject	Scheme of Instruction (Periods per week)				Scheme of Examination (Maximum marks)			No. of Credits
		Lec	Tut	Pra	Total	CIE	SEE	Total	
18IT301	Computer Organization & Architecture	3	1	0	4	50	50	100	3
18IT302	Data Structures	3	1	0	4	50	50	100	3
18IT303	Discrete Mathematics	3	1	0	4	50	50	100	3
18IT304	Object Oriented Programming	3	1	0	4	50	50	100	3
18IT305	Operating Systems	4	0	0	4	50	50	100	3
18EL002	Technical English	3	0	0	3	50	50	100	2
18ITL31	Data Structures Lab	0	0	3	3	50	50	100	1
18ITL32	Object Oriented Programming Lab	0	0	3	3	50	50	100	1
18ITL33	Operating system Lab	0	0	3	3	50	50	100	1
	<b>TOTAL</b>	<b>19</b>	<b>4</b>	<b>9</b>	<b>32</b>	<b>450</b>	<b>450</b>	<b>900</b>	<b>20</b>

**CIE:** Continuous Internal Evaluation **SEE:** Semester End Examination**Lec :**Lecture**Tut :** Tutorial**Pra :** Practical

**SCHEME OF INSTRUCTION & EXAMINATION (Semester System)**

Second Year B.Tech., (SEMESTER IV)

For

*Information Technology*

With Effective From 2018-2019 Academic Year

Code No.	Subject	Scheme of Instruction (Periods per week)				Scheme of Examination (Maximum marks)			No. of Credits
		Lec	Tut	Pra	Total	CIE	SEE	Total	
18MA003	Probability & Statistics	3	0	2	5	50	50	100	3
18IT402	Web Technologies	3	1	0	4	50	50	100	3
18IT403	Database Management Systems	3	1	0	4	40	50	100	3
18IT404	Script Programming	3	1	0	4	50	50	100	3
18IT405	Computer Networks	3	0	2	5	50	50	100	3
18IT406	Design & Analysis of Algorithms	3	1	0	4	50	50	100	3
18ITL41	Web Technologies Lab	0	0	3	3	50	50	100	1
18ITL42	RDBMS Lab	0	0	3	3	50	50	100	1
18ITL43	Script Programming Lab	0	0	3	3	50	50	100	1
	<b>TOTAL</b>	<b>18</b>	<b>4</b>	<b>13</b>	<b>35</b>	<b>450</b>	<b>450</b>	<b>900</b>	<b>21</b>

**CIE:** Continuous Internal Evaluation **SEE:** Semester End Examination**Lec :**Lecture**Tut :** Tutorial**Pra :** Practical

**SCHEME OF INSTRUCTION & EXAMINATION (Semester System)**

Third Year B.Tech., (SEMESTER V)

For

*Information Technology*

With Effective From 2018-2019 Academic Year

Code No.	Subject	Scheme of Instruction (Periods per week)				Scheme of Examination (Maximum marks)			No. of Credits
		Lec	Tut	Pra	Total	CIE	SEE	Total	
18IT501	Software Engineering	4	0	0	4	50	50	100	3
18IT502	Automata & Compiler Design	3	1	0	4	50	50	100	3
18IT503	Enterprise Programming	4	0	0	4	50	50	100	3
18IT504	Signals & Systems	3	0	2	5	50	50	100	3
18IT505	Machine Learning	3	1	0	4	50	50	100	3
18ITD1	Elective -I	4	0	0	4	50	50	100	3
18ITL51	Enterprise Programming Lab	0	0	3	3	50	50	100	1
18ITL52	Machine Learning Lab	0	0	3	3	50	50	100	1
18ITDL53	Elective - I Lab	0	0	3	3	50	50	100	1
18ITM01	MOOC								2
	<b>TOTAL</b>	<b>21</b>	<b>2</b>	<b>11</b>	<b>34</b>	<b>450</b>	<b>450</b>	<b>900</b>	<b>23</b>

**CIE:** Continuous Internal Evaluation **SEE:** Semester End Examination**Lec :**Lecture**Tut :** Tutorial**Pra :** Practical**Elective-I****18ITD11** Parallel Computing**18ITD12** Distributed Databases**18ITD13** Artificial Intelligence**18ITD14** Computer Graphics

**SCHEME OF INSTRUCTION & EXAMINATION (Semester System)**

Third Year B.Tech., (SEMESTER VI)

For

*Information Technology*

Code No.	Subject	Scheme of Instruction (Periods per week)				Scheme of Examination (Maximum marks)			No. of Credits
		Lec	Tut	Pra	Total	CIE	SEE	Total	
18IT601	Human Computer Interaction	4	0	0	4	50	50	100	3
18IT602	Deep Learning	4	0	0	4	50	50	100	3
18IT603	Cryptography & Network Security	4	0	0	4	50	50	100	3
18IT604	Internet of Things	3	0	2	5	50	50	100	3
18ITD2	Elective -II	4	0	0	4	50	50	100	3
18ITD3	Elective -III	4	0	0	4	50	50	100	3
18ELL02	Soft Skills Lab	0	0	3	3	50	50	100	1
18ITL62	Deep Learning Lab	0	0	3	3	50	50	100	1
18ITDL63	Elective II & III lab	0	0	3	3	50	50	100	1
	<b>TOTAL</b>	<b>23</b>	<b>0</b>	<b>11</b>	<b>34</b>	<b>450</b>	<b>450</b>	<b>900</b>	<b>21</b>

**CIE:** Continuous Internal Evaluation **SEE:** Semester End Examination**Lec :**Lecture**Tut :** Tutorial**Pra :** Practical**Elective-II****18ITD21** Software Testing Methodologies**18ITD22** Mobile Computing**18ITD23** Big Data Analytics**18ITD24** Natural Language Processing**Elective-III****18ITD31** Software Design Patterns**18ITD32** Game Theory**18ITD33** Digital Image Processing**18ITD34** Distributed Computing

**SCHEME OF INSTRUCTION & EXAMINATION (Semester System)**

Third Year B.Tech., (SEMESTER VII)

For

Information Technology

With Effective From 2018-2019 Academic Year

Code No.	Subject	Scheme of Instruction (Periods per week)				Scheme of Examination (Maximum marks)			No. of Credits
		Lec	Tut	Pra	Total	CIE	SEE	Total	
18IT701	Cloud Computing	4	0	0	4	50	50	100	3
18IT702	Digital Forensics	4	0	0	4	50	50	100	3
18ITD4	Elective -IV	4	0	0	4	50	50	100	3
18ITI01	Institutional Elective -I	4	0	0	4	50	50	100	3
18ITD5	Elective -V	4	0	0	4	50	50	100	3
18HU001	Constitution of India	3	0	0	3	50	50	100	0
18ITL71	Cloud Computing Lab	0	0	3	3	50	50	100	1
18ITL72	Digital Forensics Lab	0	0	3	3	50	50	100	1
18ITP01	Project-I	0	0	6	6	50	50	100	2
18ITIT1	Internship					100		100	2
	<b>TOTAL</b>	<b>23</b>	<b>0</b>	<b>12</b>	<b>35</b>	<b>550</b>	<b>450</b>	<b>1000</b>	<b>21</b>

**CIE:** Continuous Internal Evaluation **SEE:** Semester End Examination**Lec :**Lecture**Tut :** Tutorial**Pra :** Practical**Elective -IV:****18ITD41** Software Project Management**18ITD42** Adhoc & Sensor Networks**18ITD43** Database Security**18ITD44** Pattern Recognition**\* Refer appendix for the list of Open Elective courses****Elective -V:****18ITD51** Healthcare Informatics**18ITD52** Block Chain Technology**18ITD53** Bio-Informatics**18ITD54** Information Retrieval



**SCHEME OF INSTRUCTION & EXAMINATION (Semester System)**

Final Year B.Tech., (SEMESTER VIII)

For

*Information Technology*

With Effective From 2018-2019 Academic Year

Code No.	Subject	Scheme of Instruction (Periods per week)				Scheme of Examination (Maximum marks)			No. of Credits
		Lec	Tut	Pra	Total	CIE	SEE	Total	
18ME002	Industrial Management & Entrepreneurship Development	4	0	0	4	50	50	100	3
18ITI02	Institutional Elective -II	4	0	0	4	50	50	100	3
18ITD6	Elective -VI	4	0	0	4	50	50	100	3
18ITL81	Elective VI Lab	0	0	3	3	50	50	100	1
18ITP02	Project-II	0	0	16	16	50	50	100	10
	<b>TOTAL</b>	<b>12</b>	<b>0</b>	<b>19</b>	<b>31</b>	<b>250</b>	<b>250</b>	<b>500</b>	<b>20</b>

**CIE:** Continuous Internal Evaluation **SEE:** Semester End Examination**Lec :**Lecture**Tut :** Tutorial**Pra :** Practical**Elective- VI:****18ITD61** Mobile App Development**18ITD62** Computer Animation**18ITD63** Object Oriented Analysis and Design**18ITD64** Game Design

**List of Institutional Electives offered by IT Department**

<b>Code No</b>	<b>Title</b>	<b>Offered In</b>
18ITI01	Data Analytics	VII Sem.
18ITI02	Cyber Security	VII Sem.
18ITI03	Mobile Application Development	VIII Sem.
18ITI04	Web Technologies	VIII Sem.

**Institutional Electives offered to IT students by other departments**

<b>Code No</b>	<b>Title</b>	<b>Offered In</b>
18CEI01	Air Pollution & Control	VII Sem
18CEI02	Sustainable Water and Sanitation	VII Sem
18CSI01	Java Programming	VII Sem
18CSI02	Database Management Systems	VII Sem
18ECI01	Consumer Electronics	VII Sem
18ECI02	Embedded Systems	VII Sem
18EEI01	Application of Wavelets to Engineering Problems	VII Sem
18EEI02	Industrial Electrical Systems	VII Sem
18EII01	Principles & Applications of MEMS	VII Sem
18EII02	Power System Instrumentation	VII Sem
18MEI01	Fluid Power and Control Systems	VII Sem
18MEI02	Project Management	VII Sem
18MAI01	Linear Algebra	VII Sem
18PHI01	Nano-Materials and Technology	VII Sem
18PHI02	Fiber Optic Communication	VII Sem
18HUI01	System Thinking	VII Sem
18ELI01	English for Competitive Examinations	VII Sem
18ELI02	Professional Communication	VII Sem

**Institutional Electives offered to IT students by other departments**

<b>Code No</b>	<b>Title</b>	<b>Offered In</b>
18CEI03	Disaster Management	VIII Sem
18CEI04	Remote sensing & GIS	VIII Sem
18CSI03	Python Programming	VIII Sem
18CSI04	Computer Networks	VIII Sem
18ECI03	Artificial Neural Network	VIII Sem
18ECI04	Internet of Things (IoT)	VIII Sem
18EEI03	High Voltage Engineering	VIII Sem
18EEI04	Energy Auditing and Conservation	VIII Sem
18EII03	Robotics and Automation	VIII Sem
18EII04	Advanced Computer Control Systems	VIII Sem
18MEI03	Non-Conventional Energy Sources	VIII Sem
18MEI04	Automobile Engineering	VIII Sem
18MAI02	Graph Theory	VIII Sem
18PHI03	Advanced Materials	VIII Sem
18PHI04	Optical Electronics	VIII Sem
18HUI02	Organizational Psychology	VIII Sem
18HUI03	Telugu Modern Literature	VIII Sem
18ELI03	English Through Media	VIII Sem