List of minor specialization offered by CSE department

Minor Specialization-1: Data Analytics								
S. No.	**Course Code**	**Semester**	**Title of Course**	**L**	**T**	**P**	**Contact Hours**	**Credits**
1	18B11CI916	III	Statistical Methods and Data Analysis	3	0	0	3	3
2	18B17CI976	III	Statistical Methods and Data Analysis Lab	0	0	2	2	1
	18B11CI918	IV	Machine Learning	3	0	0	3	3
	18B17CI998	IV	Applied Machine Learning Lab	0	0	2	2	Audit
3	18B11CI917	V	Data Analytics Systems and Algorithms	3	0	0	3	3
4	18B17CI977	V	Data Analytics Lab	0	0	2	2	1
6	18B11CI919	VI	Information Retrieval	3	0	0	3	3
7	18B17CI979	VI	Information Retrieval Lab	0	0	2	2	1
8	18B11CI920	VII	Big Data Processing	3	0	0	3	3
9	18B17CI980	VII	Big Data Processing Lab	0	0	2	2	1
10	18B17CI978	VII	Data Security Lab	0	0	2	2	1
				Total			**25**	**20**

Minor Specialization-2: Artificial Intelligence and Machine Learning (HCI)								
S. No.	**Course Code**	**Semester**	**Title of Course**	**L**	**T**	**P**	**Contact Hours**	**Credits**
1	18B11CI916	III	Statistical Methods and Data Analysis	3	0	0	3	3
2	18B17CI976	III	Statistical Methods and Data Analysis Lab	0	0	2	2	1
3	18B17CI996	IV	Machine Learning Lab	0	0	2	2	1
4	18B11CI918	IV	Machine Learning	3	0	0	3	3
3	18B11CI932	V	Neural Networks	3	0	0	3	3
6	18B11CI933	V	Deep Learning	3	0	0	3	3
7	18B11CI934	VI	Soft Intelligence	3	0	0	3	3
				Total			**22**	**20**

Minor Specialization-3: Internet of Robotics Things Offered by ECE department with CSE department (for ECE and CSE Student)								
S. No.	**Course Code**	**Semester**	**Title of Course**	**L**	**T**	**P**	**Contact Hours**	**Credits**
1	18B11CI916	III	Statistical Methods and Data Analysis	3	0	0	3	3
2	18B17CI976	III	Statistical Methods and Data Analysis Lab	0	0	2	2	1
3	18B11EC911	III	Sensors, Actuators & Signal Processing	3	0	0	3	3
4	18B11EC919	IV	Measurement & Instrumentation (for CSE) Digital Control System (for ECE)	3	0	0	3	3
5	18B11CI918	IV	Machine Learning	3	0	0	3	3
6	18B17CI996	VI	Machine Learning Lab	0	0	2	2	Audit
7	18B11EC913	VII/VIII	Robotics & Machine Vision	3	0	0	3	3
8	18B17EC973	VII/VIII	Robotics Programming Lab	0	0	2	2	1
9	18B17CI997	VII/VIII	Internet of Things Lab	0	0	2	2	1
10	18B11CI937	VII/VIII	Internet of Things Technology and Applications	2	0	0	2	2
				Total			**22**	**20**

Minor Specialization-4: Digital Marketilng (Offered by HSS)

S. No.	Course Code	Semester	Title of Course	L	T	P	Credits
1	18B11HS925	3	Consumer behaviour	3	0	0	3
2		4	Ethics, IPR and Cyber laws	3	0	0	3
3		5	Digital Marketing research	3	0	0	3
4		6	Introduction to Social Media Marketing	3	0	0	3
5		7	Digital Marketing	3	0	0	3
6		8	Digital Marketing Analytics	3	0	0	3
7		8	Minor Project				2

Minor Specialization-5: Human Resource Management (Offered by HSS)							
S. No.	**Course Code**	**Semester**	**Title of Course**	**L**	**T**	**P**	**Credits**
1		3	Human Resource Management	3	0	0	3
2		4	Team Building and Leadership	3	0	0	3
3		5	Performance Management	3	0	0	3
4		6	Training & Development	3	0	0	3
5		7	Organizational Change	3	0	0	3
6		8	Negotiation & Counselling	3	0	0	3
7		8	Minor Project				2

Minor Specialization-6: Cloud Computing								
S. No.	**Course Code**	**Deptt.**	**Title of Course**	**L**	**T**	**P**	**Contact Hours**	**Credits**
1	18B11CI911	CSE	Grid Computing	3	0	0	3	3
2	18B17CI971	CSE	Grid Computing Lab	0	0	2	2	1
3	18B11CI912	CSE	Distributed Systems and Cloud Computing	3	0	0	3	3
4	18B17CI972	CSE	Distributed Systems and Cloud Computing Lab	0	0	2	2	1
5	18B11CI913	CSE	Cloud Computing Applications	3	0	0	3	3
6	18B17CI973	CSE	VMware vSphere Lab	0	0	2	2	1
7	18B11CI914	CSE	Cloud Networking	3	0	0	3	3
8	18B17CI974	CSE	Virtualization Lab	0	0	2	2	1
9	18B11CI915	CSE	Cloud Security	3	0	0	3	3
10	18B17CI975	CSE	Cloud Security Lab	0	0	2	2	1
				Total			**25**	**20**

Minor Specialization-7: System and Network Administration								
S. No.	**Course Code**	**Deptt.**	**Title of Course**	**L**	**T**	**P**	**Contact Hours**	**Credits**
1	18B11CI921	CSE	Networks Architecture	3	0	0	3	3
2	18B17CI981	CSE	Network Architecture Lab	0	0	2	2	1
3	18B17CI982	CSE	Network Hardware Lab	0	0	2	2	1
4	18B11CI923	CSE	System & Network Communication	3	0	0	3	3
5	18B17CI983	CSE	SNC Lab	0	0	2	2	1
6	18B11CI924	CSE	OS Administration	3	0	0	3	3
7	18B17CI984	CSE	OS Administration Lab	0	0	2	2	1
8	18B11CI925	CSE	Wireless Networks	3	0	0	3	3
9	18B17CI985	CSE	Wireless Networks Lab	0	0	2	2	1
10	18B11CI922	CSE	Mobile Networks	3	0	0	3	3
				Total			**25**	**20**