



श्री VENKATESHWARA UNIVERSITY

Online B.Tech in Computer Science and Engineering

SYLLABUS

Semester III

SEMESTER-III											
S. No.	Subject Code	Subject	Periods	Evaluation Scheme				End Semester		Total	Credits
			L-T-P	CT	TA	Total	PS	TE	PE		
1	IEC-301	Digital Electronics	3-1-0	20	10	30		70		100	4
2	ICS-302	Data Structures and Algorithms	3-1-0	20	10	30		70		100	4
3	ICS-303	Object Oriented Programming	3-0-0	20	10	30		70		100	3
4	IBS-304	Mathematics-III (Numerical Methods)	3-1-0	20	10	30		70		100	4
5	IEM-305	Engineering Economics and Management	3-0-0	20	10	30		70		100	3
1	IEC-331	Digital Electronics Lab	0-0-2				25		25	50	1
2	ICS-332	Data Structures and Algorithms Lab	0-0-2				25		25	50	1
3	ICS-333	Object Oriented Programming Lab	0-0-2				25		25	50	1
Total			15-3-6							650	21

Semester IV

SEMESTER-IV											
S. No.	Subject Code	Subject	Periods	Evaluation Scheme				End Semester		Total	Credits
			L-T-P	CT	TA	Total	PS	TE	PE		
1	ICS-401	Operating System	3-0-0	20	10	30		70		100	3
2	ICS-402	Data Base Management System	3-0-0	20	10	30		70		100	3
3	ICS-403	Java Programming	3-1-0	20	10	30		70		100	4
4	ICS-404	Design and Analysis of Algorithms	3-1-0	20	10	30		70		100	4
5	ICS-405	Computer Architecture and Organisation	3-0-0	20	10	30		70		100	3
1	ICS-441	Operating System Lab	0-0-2				25		25	50	1
2	ICS-442	Data Base Management System Lab	0-0-2				25		25	50	1
3	ICS-443	Java Programming Lab	0-0-2				25		25	50	1
Total			15-2-6							650	20

Semester V

SEMESTER-V											
S. No.	Subject Code	Subject	Periods	Evaluation Scheme				End Semester		Total	Credits
			L-T-P	CT	TA	Total	PS	TE	PE		
1	IEC-501	Microprocessors and Controller	3-0-0	20	10	30		70		100	3
2	ICS-502	Python Programming	3-1-0	20	10	30		70		100	4
3	ICS-503	Machine Learning	3-0-0	20	10	30		70		100	3
4	ICS-504	Software Engineering	3-0-0	20	10	30		70		100	3
5	ICS-505	Formal Language and Automata Theory	3-1-0	20	10	30		70		100	4
1	IEC-551	Microprocessors and Controller Lab	0-0-2				25		25	50	1
2	ICS-552	Python Programming Lab	0-0-2				25		25	50	1
3	ICS-553	Machine Learning Lab	0-0-2				25		25	50	1
Total			15-2-6							650	20

Semester VI

SEMESTER-VI											
S. No.	Subject Code	Subject	Periods	Evaluation Scheme				End Semester		Total	Credits
			L-T-P	CT	TA	Total	PS	TE	PE		
1	ICS-601	Neural Networks	3-1-0	20	10	30		70		100	4
2	ICS-602	Cloud Computing	3-1-0	20	10	30		70		100	4
3	ICS-603	Internet of Things	3-0-0	20	10	30		70		100	3
4	ICS-604	Information Security Fundamentals	3-0-0	20	10	30		70		100	3
5	ICS-605	Computer Network	3-0-0	20	10	30		70		100	3
1	ICS-661	Neural Networks Lab	0-0-2				25		25	50	1
2	ICS-662	Cloud Computing Lab	0-0-2				25		25	50	1
3	ICS-663	Internet of Things Lab	0-0-2				25		25	50	1
Total			15-2-6							650	20

Semester VII

SEMESTER-VII											
S. No.	Subject Code	Subject	Periods	Evaluation Scheme				End Semester		Total	Credits
			L-T-P	CT	TA	Total	PS	TE	PE		
1	ICS-701	Deep Learning	3-0-0	20	10	30		70		100	3
2	ICS-702	Pattern Recognition	3-1-0	20	10	30		70		100	4
3	ICS-703	R Programming	3-0-0	20	10	30		70		100	3
4	ICS-704	Cryptography and Network Security	3-0-0	20	10	30		70		100	3
5	ICS-705	Artificial Intelligence	3-0-0	20	10	30		70		100	3
1	ICS-771	Deep Learning Lab	0-0-2				25		25	50	1
2	ICS-772	Pattern Recognition Lab	0-0-2				25		25	50	1
1	ICS-773	Seminar	0-0-4				100			100	2
Total			15-1-8							700	20

Semester VIII

SEMESTER-VIII											
S. No.	Subject Code	Subject	Periods	Evaluation Scheme				End Semester		Total	Credits
			L-T-P	CT	TA	Total	PS	TE	PE		
1	ICS-801	Data Science using Python	3-1-0	20	10	30		70		100	4
2	ICS-802	Statistical Analysis using R	3-0-0	20	10	30		70		100	3
3	ICS-803	Speech and Natural Language Processing	3-0-0	20	10	30		70		100	3
4	ICS-804	Data Handling and Visualisation	3-0-0	20	10	30		70		100	3
5	ICS-805	Computing and Optimization of Data	3-0-0	20	10	30		70		100	3
1	ICS-881	Data Science using Python Lab	0-0-2				25		25	50	1
2	ICS-882	Project Phase-I	0-0-8				50		100	150	4
Total			15-1-10							700	21

Semester IX

SEMESTER-IX											
S. No.	Subject Code	Subject	Periods	Evaluation Scheme				End Semester		Total	Credits
			L-T-P	CT	TA	Total	PS	TE	PE		
1	ICS-991	Project Phase-II	0-0-32				150		200	350	16
2	ICS-992	Viva-Voce	0-0-4				70		30	100	2
Total			0-0-36							450	18