

KUMARAGURU COLLEGE OF TECHNOLOGY

B.E COMPUTER SCIENCE AND ENGINEERING

CURRICULUM (Regulation 2018)

Semester I										Pre-requisite
S.No	Course code	Course Title	Course Mode	CT	L	T	P	J	C	
1	U18MAI1201	Linear Algebra and Calculus	Embedded - Theory & Lab	BS	3	0	2	0	4	Nil
2	U18ENI1201	Fundamentals of Communication -I	Embedded - Theory & Lab	HS	2	0	2	0	3	Nil
3	U18PHI1201	Engineering Physics	Embedded - Theory & Lab	BS	3	0	2	0	4	Nil
4	U18CSII1201	Structured Programming using C	Embedded - Theory & Lab	ES	3	0	2	0	4	Nil
5	U18EEI1201	Basic Electrical and Electronics Engineering	Embedded - Theory & Lab	ES	3	0	2	0	4	Nil
6	U18INI1300	Engineering Clinics-I	Embedded-Theory & Project	ES	1	0	0	4	3	Nil
Total Credits									22	
Total Contact Hours/week									29	

Semester II										Pre-requisite
S.No	Course code	Course Title	Course Mode	CT	L	T	P	J	C	
1	U18MAI2201	Advanced Calculus and Laplace Transform	Embedded - Theory & Lab	BS	3	0	2	0	4	U18MAI1201
2	U18ENI2201	Fundamentals of Communication-II	Embedded - Theory & Lab	HS	2	0	2	0	3	Nil
3	U18BTI2201	Computational Biology	Embedded - Theory & Lab	BS	3	0	2	0	4	Nil
4	U18CSI2201	Problem Solving and Programming using Python	Embedded - Theory & Lab	ES	2	0	2	0	3	Nil
5	U18CSI2202	Digital and Microprocessor Systems	Embedded - Theory & Lab	PC	3	0	2	0	4	U18EEI1201
6	U18INI2300	Engineering Clinics-II	Embedded-Theory & Project	ES	1	0	0	4	3	Nil
Total Credits									21	
Total Contact Hours/week									28	

Semester III										Pre-requisite
S.No	Course code	Course Title	Course Mode	CT	L	T	P	J	C	
1	U18MAT3102	Discrete Mathematics	Theory	BS	3	1	0	0	4	Nil
2	U18CSI3201	Data Structures	Embedded - Theory & Lab	PC	3	0	2	0	4	Nil
3	U18CSI3202	Object Oriented Programming	Embedded - Theory & Lab	PC	3	0	2	0	4	Nil
4	U18CST3003	Computer Architecture	Theory	PC	3	0	0	0	3	Nil
5	U18CSI3204	Database Management Systems	Embedded - Theory & Lab	PC	3	0	2	0	4	Nil
6	U18INI3300	Engineering Clinics-III	Embedded-Theory & Project	ES	1	0	0	4	3	Nil
Total Credits									22	
Total Contact Hours/week									27	

Semester IV										Pre-requisite
S.No	Course code	Course Title	Course Mode	CT	L	T	P	J	C	
1	U18MAI4201	Probability and Statistics	Embedded - Theory & Lab	BS	3	0	2	0	4	Nil
2	U18CST4001	Design and Analysis of Algorithms	Theory	PC	3	0	0	0	3	U18CSI3201
3	U18CSI4202	Operating Systems	Embedded - Theory & Lab	PC	3	0	2	0	4	U18CSI3003
4	U18CSI4203	Software Engineering	Embedded - Theory & Lab	PC	3	0	2	0	4	U18CSI3204
5	U18CST4004	Theory of Computation	Theory	PC	3	0	0	0	3	U18MAT3102
6	U18INI4300	Engineering Clinics-IV	Embedded-Theory & Project	ES	1	0	0	4	3	Nil
Total Credits									21	
Total Contact Hours/week									26	

Semester V										Pre-requisite
S.No	Course code	Course Title	Course Mode	CT	L	T	P	J	C	
1	U18CSI5201	Computer Networks	Embedded - Theory & Lab	PC	3	0	2	0	4	Nil
2	U18CST5002	Agile Software Development	Theory	PC	3	0	0	0	3	U18CST4203
3	U18CSI5203	No SQL Databases	Embedded - Theory & Lab	PC	3	0	2	0	4	U18CSI3204
4	U18CST5004	Social Media Marketing	Theory	HS	3	0	0	0	3	Nil
5	U18INI5300	Engineering Clinics-V	Embedded-Theory & Project	ES	1	0	0	4	3	Nil
6	U18CSE----	Programme Elective I	Theory	PE	3	0	0	0	3	
Total Credits									20	
Total Contact Hours/week									24	

Semester VI										Pre-requisite
S.No	Course code	Course Title	Course Mode	CT	L	T	P	J	C	
1	U18CSI6201	Internet and web programming	Embedded - Theory & Lab	PC	3	0	2	0	4	U18CSI5201
2	U18CST6002	Wireless Networks and Mobile Systems	Theory	PC	3	0	0	0	3	U18CSI5201
3	U18CSI6203	Data Warehousing and Data Mining	Embedded - Theory & Lab	PC	3	0	2	0	4	U18CSI5203
4	U18OE-----	Open Elective	Theory	OE	3	0	0	0	3	Nil
5	U18CSE----	Programme Elective II	Theory	PE	3	0	0	0	3	Nil
6	U18CSE----	Programme Elective III	Theory	PE	3	0	0	0	3	Nil
Total Credits									20	
Total Contact Hours/week									22	

Semester VII										Pre-requisite
S.No	Course code	Course Title	Course Mode	CT	L	T	P	J	C	
1	U18CSI7201	Cloud Computing	Embedded - Theory & Lab	PC	3	0	2	0	4	U18CST6003
2	U18CST7002	Machine Learning Techniques	Theory	PC	3	0	0	0	3	U18CSI6204
3	U18CST7003	Software Testing	Theory	PC	3	0	0	0	3	U18CST5002
4	U18CSE----	Professional Communication	Theory	PE	3	0	0	0	3	
5	U18CSP7704	Engineering Project Phase-I	Project only Course	PW	0	0	0	6	3	
Total Credits									16	
Total Contact Hours/week									20	

Semester VIII										Pre-requisite
S.No	Course code	Course Title	Course Mode	CT	L	T	P	J	C	
1	U18CSP8701	Engineering Project Phase-II	Project only Course	PW	0	0	0	24	12	
Total Credits									12	
Total Contact Hours/week									24	

Total Credits									154
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List of mandatory courses

S.No	Couse Code	Course Title	Course Mode	CT	Sem
1	U18VEP1501	Human Excellence - Personal Values	Lab	HS	1
2	U18VEP2502	Human Excellence- Inter Personal values	Lab	HS	2
3	U18VEP3503	Human Excellence- Family Values	Lab	HS	3
4	U18CHT3000	Environmental Science and Engineering	Theory	MC	4
5	U18VEP4504	Human Excellence- Professional Values	Lab	HS	4
6	U18IST4000	Indian Constitution	Theory	MC	5
7	U18VEP5505	Human Excellence- Social Values	Lab	HS	5
8	U18VEP6506	Human Excellence- National Values	Lab	HS	6
9	U18VEP7507	Human Excellence- Global Values	Lab	HS	7

Programme Electives									
S.No	Course code	Course Title	Course Mode	CT	L	T	P	J	C
Data Analytics									
1.	U18CSE0001	Big Data Analytics	Theory	PE	3	0	0	0	3
2.	U18CSE0002	Data Visualization	Theory	PE	3	0	0	0	3
3.	U18CSE0003	Artificial Intelligence	Theory	PE	3	0	0	0	3
Networking									
1.	U18CSE0004	IoT Architecture and Protocols	Theory	PE	3	0	0	0	3
2.	U18CSE0005	Adhoc and Sensor Networks	Theory	PE	3	0	0	0	3
3.	U18CSE0006	Software Defined Networks	Theory	PE	3	0	0	0	3
General									
1.	U18CSE0007	Cryptography and Network Security	Theory	PE	3	0	0	0	3
2.	U18CSE0008	Principles of Compiler Design	Theory	PE	3	0	0	0	3
3.	U18CSE0009	Graphics and Multimedia	Theory	PE	3	0	0	0	3
4.	U18CSE0010	Information security	Theory	PE	3	0	0	0	3