B.E. (COMPUTER ENGINEERING) SCHEME 2016

SEMESTER-I

S.	CODE	TITLE	L	T	P	CR
NO.						
1	UMA003	MATHEMATICS-I	3	1	0	3.5
2.	UTA007	COMPUTER PROGRAMMING - I	3	0	2	4.0
3.	UCB008	APPLIED CHEMISTRY	3	1	2	4.5
4.	UEC001	ELECTRONIC ENGINEERING	3	1	2	4.5
5.	UES009	MECHANICS	2	1	2	2.5
6.	UEN002	ENERGY AND ENVIRONMENT	3	0	0	3.0
				29		22.0

SEMESTER-II

S.	CODE	TITLE	L	T	P	CR
NO.						
1.	UMA004	MATHEMATICS-II	3	1	0	3.5
2.	UTA009	COMPUTER PROGRAMMING-II *	3	0	2	4.0
3.	UPH004	APPLIED PHYSICS	3	1	2	4.5
4.	UEE001	ELECTRICAL ENGINEERING	3	1	2	4.5
5.	UHU003	PROFESSIONAL COMMUNICATION	2	0	2	3.0
6.	UTA008	ENGINEERING DRAWING	2	4	0	4.0
				31		23.5

SEMESTER-III

S.	CODE	TITLE	L	T	P	CR
NO.						
1.	UMA007	NUMERICAL ANALYSIS	3	1	2	4.5
2.	UES012	ENGINEERING MATERIALS	3	1	2	4.5
3.	UTA013	ENGINEERING DESIGN PROJECT-I (6 SELF	1	0	4	6.0
		EFFORT HOURS)	1	U	4	0.0
4.	UCS405	DISCRETE MATHEMATICAL STRUCTURES	3	1	0	3.5
5.	UCS303	OPERATING SYSTEMS	3	0	2	4.0
6.	UCS520	COMPUTER NETWORKS	3	0	2	4.0
7.	UCS310	DATABASE MANAGEMENT SYSTEM	3	0	2	2.0
				36		28.5

SEMESTER-IV

S.	CODE	TITLE	L	T	P	CR
NO.						
1.	UMA031	OPTIMIZATION TECHNIQUES	3	1	0	3.5
2.	UES010	SOLIDS AND STRUCTURES	3	1	2	4.5
3.	UES011	THERMO-FLUIDS	3	1	2	4.5
4.	UTA002	MANUFACTURING PROCESSES	2	0	3	3.5
5.	UCS406	DATA STRUCTURES & ALGORITHMS (4	3	0	2	6.0
		SELF EFFORT HOURS)	3	U		0.0
6.	UTA014	ENGINEERING DESIGN PROJECT-II (5 SELF				5.0
		EFFORT HOURS)	1	0	3	5.0
7.	UCS407	INVENTIONS & INNOVATIONS IN				2.0
		COMPUTING	2	0	0	∠.0
				32		29.0

SEMESTER-V

S.	CODE	TITLE	L	T	P	CR
NO.						
1.	UCS616	ADVANCED DATA STRUCTURES AND	3	0	2	4.0
		ALGORITHMS	3	U	2	4.0
2.	UCS503	SOFTWARE ENGINEERING	3	0	2	4.0
3.	UCS519	COMPUTER ARCHITECTURE AND	3	0	2	4.0
		ORGANIZATION	3	U	2	4.0
4.	UCS701	THEORY OF COMPUTATION	3	1	0	3.5
5.	UCS521	ARTIFICIAL INTELLIGENCE	3	1	0	3.5
6.		PROFESSIONAL PRACTICES#	0	1	2	1.5
7.		ELECTIVE I	3	0	2	4.0
				31		24.5

^{*}THE COURSE WOULD CONSIST OF TALKS BY WORKING PROFESSIONALS FROM INDUSTRY, GOVERNMENT, ACADEMIA AND RESEARCH ORGANISATION.

SEMESTER-VI

S.	CODE	TITLE	L	T	P	CR
NO.						
1.	UCS617	MICROPROCESSOR-BASED SYSTEMS	2	0	2	4.0
		DESIGN	3	U	2	4.0
2.	UCS614	EMBEDDED SYSTEMS DESIGN	3	0	2	4.0
3.	UCS615	IMAGE PROCESSING	3	0	2	4.0
4.		ELECTIVE II	3	0	2	4.0
5.		ELECTIVE III	3	0	2	4.0
6.	UTA012	INNOVATION AND ENTREPRENEURSHIP (5	1	0	2	4.5
		SELF EFFORT HOURS)	1	U	2	4.3
7.	UCS794	CAPSTONE PROJECT* (STARTS) SEH-6	0	0	2	-
				28		24.5

^{*} DESIGN / FABRICATION / IMPLEMENTATION WORK UNDER THE GUIDANCE OF A FACULTY MEMBER. PRIOR TO REGISTRATION, A DETAILED PLAN OF WORK SHOULD BE SUBMITTED BY THE STUDENT TO THE COURSE COORDINATOR FOR APPROVAL.

SEMESTER-VII

S.	CODE	TITLE	L	T	P	CR
NO.						
1.	UCS802	COMPILER CONSTRUCTION	3	0	2	4.0
2.		ELECTIVE IV	3	0	2	4.0
3.		INDEPENDENT STUDY ^{&}	0	2	0	1.0
4.	UHU005	HUMANITIES FOR ENGINEERS	2	0	2	3.0
5.	UCS794	CAPSTONE PROJECT (CONTINUED) SEH-14	0	0	2	12.0
6.				18		24.0
				10		

&OUTPUT IN FORM OF RESEARCH PAPER

SEMESTER-VIII

S.	CODE	TITLE	L	T	P	CR
NO.						
1.	UCS895	PROJECT SEMESTER/START-UP SEMESTER				20.0
2.		OR				
3.	UCS896	CAPSTONE PROJECT II (SELF EFFORT HOURS 20)	0	0	4	12.0
4.	UCS801	SOFTWARE PROJECT MANAGEMENT	3	0	2	4.0
5.	UCS806	ETHICAL HACKING	3	0	2	4.0

LIST OF ELECTIVES

ELECTIVE I

S.	CODE	TITLE	L	T	P	CR
NO.						
1	UCS608	PARALLEL & DISTRIBUTED COMPUTING	3	0	2	4.0
2.	UCS522	COMPUTER VISION	3	0	2	4.0
3.	UML501	MACHINE LEARNING	3	0	2	4.0
4.	UCS523	COMPUTER & NETWORK SECURITY	3	0	2	4.0
5.	UCS524	ENGINEERING SOFTWARE AS A SERVICE	3	0	2	4.0

ELECTIVE II

S.	CODE	TITLE	L	T	P	CR
NO.						
1	UCS631	GPU COMPUTING	3	0	2	4.0
2.	UCS632	3D MODELLING AND ANIMATION	3	0	2	4.0
3.	UCS633	DATA ANALYTICS & VISUALIZATION	3	0	2	4.0
4.	UCS634	SECURE CODING	3	0	2	4.0
5.	USE401	SOFTWARE METRICS AND QUALITY	2	0	2	4.0
		MANAGEMENT	J	U		4.0

ELECTIVE III

S.	CODE	TITLE	L	T	P	CR
NO.						
1	UCS641	CLOUD COMPUTING	3	0	2	4.0
2.	UCS642	AUGMENTED AND VIRTUAL REALITY	3	0	2	4.0
3.	UML602	NATURAL LANGUAGE PROCESSING	3	0	2	4.0
4.	UCS643	CYBER FORENSICS	3	0	2	4.0
5.	USE601	SOFTWARE VERIFICATION AND	2	0	2	4.0
		VALIDATION	3	U		4.0

ELECTIVE IV

S.	CODE	TITLE	L	T	P	CR
NO.						
1	UCS741	SIMULATION & MODELLING	3	0	2	4.0
2.	UCG731	GAME DESIGN & DEVELOPMENT	3	0	2	4.0
3.	UCS742	DEEP LEARNING	3	0	2	4.0
4.	UCS743	ADVANCED COMPUTER NETWORKS	3	0	2	4.0
5.	UCS709	ADVANCED TOPICS IN SOFTWARE	2	0	2	4.0
		ENGINEERING	3	U		4.0