

BT

Semesters →	1	2	3	4	5	6	7	8
	MTH-1 (11)	SCHEME ELC10X (6-9)	SCHEME-2 EME (9-11)	SCHEME-3 HSS (11)	SCHEME-4 HSS-2 (9)	SCHEME-5 HSS-2 (9)	SCHEME-6 HSS-2 (9)	DE-8 (9)
	PHY-2 (11)	MTH-2 (11)	ESC201 (14)	CS220 (13)	CS330 (13)	DE-2 (9-13)	DE-5 (9)	OE-4 (9)
	CHM Lab(3)	PHY-1 (11)	ESO207 (12)	CS253 (12)	CS340 (9)	DE-3 (9)	DE-6 (9)	OE-5 (9)
	ESC101(7)	PHY Lab-1 (3)	CS201 (10)	CS202 (5)	CS345 (9)	DE-4 (9)	DE-7 (9)	OE-6 (9)
	ESC102(7)	TA101 (9)	ESO-2 (9-11)	CS203 (5)	DE-1 (9)	OE-1 (9)	OE-3 (9)	OE-7 (9)
	LIF101 (6)	CHM102 (4)				OE-2 (5-9)		
	Ethics(0)	CHM103 (4)						
	PE102 (3)	PE101 (3)						
	48	51-54	54-58	46	49	50-58	45	45
	Total Credits: 388-403							
	MINIMUM CREDIT REQUIREMENT FOR GRADUATION:							
	Institute Compulsory (IC)			107			UGP List:	BASKET-A
	Department Compulsory (DC)			76			UGP-1: CS496	CS335 (13)
	Department Elective (DE)			72			UGP-2: CS497	CS315 (9)
	Open Elective (OE)			59			UGP-3: CS498	CS350 (9)
	*SO (ESO)			21			UGP-4: CS499	CS360 (9)
	SCHEME			53				CS771 (9)
								CS422 (9)
	Total			388				CS425 (9)
								CS433 (9)
								CS455 (9)
								CS423 (9)
	Remarks:							
	1) ESO/SO courses are available in 6-14 credits each. ESO207A is compulsory for CSE students.							
	2) Students can take upto 4 UGPs, but only atmost 3 UGPs (27 credits) can be counted towards graduation requirements.							
	3) At least 2 DEs must be selected from Basket – A.							
	4) All the four UGPs are optional.							
	5) Upto 36 OE credits may be waived from the minimum requirements for students opting for either Dual Degree or Double Major programme							
	6) In 3rd and 4th Semester, EME and HSS-2 can be interchnaged.							
	8) PHY-1 and PHY-2 can be completed by the courses PHY113 and PHY114.							
	9) MTH-1 and MTH-2 refer to modular courses MTH111-M1/M2 and MTH112-M1/M2 as specified by the institute.							

BTM

Semesters →	1	2	3	4	5	6	7	8
	MTH-1(11)	SCHEME ELC10X (6-9)	SCHEME-2 EME (9-11)	SCHEME-3 HSS (11)	SCHEME-4 HSS-2 (9)	SCHEME-5 HSS-2 (9)	SCHEME-6 HSS-2 (9)	OE-1 (9)
	PHY-2 (11)	MTH-2(11)	ESC201 (14)	CS220 (13)	CS330 (13)	DE-2 (9-13)	DE-4 (9)	OE-2 (9)
	CHM Lab(3)	PHY-1 (11)	ESO207 (12)	CS253 (12)	CS340 (9)	DE-3 (9)	DE-5 (9)	OE-3 (9)
	ESC101(7)	PHY Lab-1 (3)	CS201 (10)	CS202 (5)	CS345 (9)	MTB-1 (9)	MTB-3 (9)	MTB-5 (9)
	ESC102(7)	TA101 (9)	ESO-2 (9-11)	CS203 (5)	DE-1 (9)	MTB-2 (9)	MTB-4 (9)	MTB-6 (9)
	LIF101 (6)	CHM102 (4)				OE-2 (5-9)		
	Ethics(0)	CHM103 (4)						
	PE102 (3)	PE101 (3)						
	48	51-54	54-58	46	49	50-58	45	45
	Total Credits: 388-403							
	MINIMUM CREDIT REQUIREMENT FOR GRADUATION:							
	Institute Compulsory (IC)			107			UGP List:	BASKET-A
	Department Compulsory (DC)			76			UGP-1: CS496	CS335 (13)
	Department Elective (DE)			99			UGP-2: CS497	CS315 (9)
	Open Elective (OE)			32			UGP-3: CS498	CS350 (9)
	*SO (ESO)			21			UGP-4: CS499	CS360 (9)
	SCHEME			53				CS771 (9)
								CS422 (9)
	Total			388				CS425 (9)
								CS433 (9)
								CS455 (9)
								CS423 (9)
	Remarks:							
	1) ESO/SO courses are available in 6-14 credits each. ESO207A is compulsory for CSE students.							
	2) Students can take upto 4 UGPs, but UGPs (27 credits) can be counted towards graduation requirements.							
	3) At least 2 DEs must be selected from Basket – A.							
	4) All the four UGPs are optional.							
	5) Upto 36 OE credits may be waived from the minimum requirements for students opting for either Dual Degree or Double Major programme							
	6) In 3rd and 4th Semester, EME and SCHEME-2 can be interchnaged.							
	7) PHY-1 and PHY-2 can be completed by the courses PHY113 and PHY114.							
	8) MTH-1 and MTH-2 refer to modular courses MTH111-M1/M2 and MTH112-M1/M2 as specified by the institute.							

BTH

Semesters →	1	2	3	4	5	6	7	8
	MTH-1 (11)	SCHEME ELC10X (6-9)	SCHEME-2 EME (9-11)	SCHEME-3 HSS (11)	SCHEME-4 HSS-2 (9)	SCHEME-5 HSS-2 (9)	SCHEME-6 HSS-2 (9)	DE-8 (9)
	PHY-2 (11)	MTH-2 (11)	ESC201 (14)	CS220 (13)	CS330 (13)	DE-2 (9-13)	DE-5 (9)	OE-3 (9)
	CHM Lab(3)	PHY-1 (11)	ESO207 (12)	CS253 (12)	CS340 (9)	DE-3 (9)	DE-6 (9)	OE-4 (9)
	ESC101(7)	PHY Lab-1 (3)	CS201 (10)	CS202 (5)	CS345 (9)	DE-4 (9)	DE-7 (9)	OE-5 (9)
	ESC102(7)	TA101 (9)	ESO-2 (9-11)	CS203 (5)	DE-1 (9)	OE-1 (9)	OE-2 (9)	OE-6 (9)
	LIF101 (6)	CHM102 (4)		DEH-1 (9)	DEH-2 (9)	OE-2 (5-9)	DEH-3 (9)	
	Ethics(0)	CHM103 (4)						
	PE102 (3)	PE101 (3)						
	48	51-54	54-58	55	58	50-58	55	45
	Total Credits:	415-430						
	MINIMUM CREDIT REQUIREMENT FOR GRADUATION:							
	Institute Compulsory (IC)			107				BASKET- A
	Department Compulsory (DC)			76				CS335 (13)
	Department Elective (DE + DEH)			99				CS315 (9)
	Open Elective (OE)			59				CS350 (9)
	*SO (ESO)			21				CS360 (9)
	SCHEME			53				CS771 (9)
								CS422 (9)
	Total			415				CS425 (9)
								CS433 (9)
								CS455 (9)
								CS423 (9)
	Remarks:							
	1) ESO/SO courses are available in 6-14 credits each. ESO207A is compulsory for CSE students in the 3rd semester.							
	2) At least 2 UGPs are compulsory (DE).							
	3) At least 2 DEs must be selected from Basket – A.							
	4) Students can take upto 4 UGPs, but only atmost 3 UGPs (27 credits) can be counted towards graduation requirements.							
	5) Upto 36 OE credits may be waived from the minimum requirements for students opting for either Dual Degree or Double Major programme							
	6) In 3rd and 4th Semester, EME and HSS-2 can be interchnaged.							
	7) Atleast 27 credits of DE should be completed by taking CS6XX and CS7XX level courses,							
	8) PHY-1 and PHY-2 can be completed by the courses PHY113 and PHY114.							
	9) MTH-1 and MTH-2 refer to modular courses MTH111-M1/M2 and MTH112-M1/M2 as specified by the institute.							
	10) 27 credits from CS6XX/CS7XX level courses must be taken as DEHs.							
	11) The student must have a CPI above 8.5.							

Double Major

Odd Semester	Even Semester
CS330A (13)	CS202A+ CS203A (10)
CS340A (9)	CS220A (13)
CS345A (9)	CS253A (12)
CS DE-1 (9)	CS DE-2 (9-13)
CS DE-3 (9)	CS DE-4 (9)
49	53-57

TOTAL MANDATORY CREDITS FOR SECOND MAJOR IN COMPUTER SCIENCE: 102* Credits

Course and credit Waiver policy: Following waivers will be granted automatically:
 Course and credits to be waived If the student has done

CS340A	MTH401A
CS202A	MTH302A
CS203A	MSO201A or HSO201A

To clarify, if a student gets waiver for all the three courses above he will need to do only 102-19=83 credits to finish his/her CSE second major requirement. If a student gets a waiver for CS202A only, he will need to do 102-5=97 credits to finish his/her CSE second major requirement. The table above may be extended in future if other courses similar to those in CSE major template are added/discovered in the other departments. Any other course waivers (without credit waivers) may be recommended by CSE DUGC based on its discretion.

REMARKS:

- 1) Two DEs should be selected from Basket-A (Details of Basket-A are available in CSE B.Tech. template).
- 2) Total CSE-DE credits should be at least 36.
- 3) Upto 36 OE credits may be waived from the parent department BT/BS graduation requirements when they are used to fulfill requirements for the double major.
- 4) *ESO207 is a compulsory course to be done, but its credits will be counted against the ESO requirement of the first major.

Minors

MINOR			
ALGORITHMS	COMPUTER SYSTEMS	THEORETICAL COMPUTER SCIENCE	MACHINE LEARNING
COMPULSORY COURSE(S):	COMPULSORY COURSE(S):	COMPULSORY COURSE(S):	COMPULSORY COURSE(S):
ESO207	ESO207	ESO207	ESO207
CS345 (9)		CS340 (9)	CS771 (9)
And, ONE from:	And, TWO from:	And, ONE from:	And, ONE from:
CS635	CS220 (12)	CS640	CS360
CS645	CS315 (9)	CS641	CS365 (9)
CS646	CS330 (12)	CS642	CS616
CS647	CS335 (12)	CS643	CS657
CS648	CS350 (9)	CS644	CS660
CS651	CS422 (9)	CS649	CS671
CS655B (9)	CS425 (9)	CS650	CS672
CS656 (9)	CS433 (9)	CS680	CS673
CS663	CS455 (9)	CS681	CS674
CS664	CS610 (9)	CS682	CS676
CS684	CS614 (9)	CS687	CS677
CS711 (9)	CS615	CS688	CS678
CS712 (9)	CS617	CS740	CS685
CS718	CS618	CS741	CS686
CS719	CS619	CS744	CS690
CS742	CS621	CS745	CS771
CS743	CS622	CS746	CS772
CS785	CS623	CS747	CS773
	CS624	CS748	CS774
	CS625	CS749	CS775
	CS626	CS750	CS776
	CS627		CS777
	CS628		CS779 (9)
	CS629		CS781
	CS630 (9)		CS782
	CS631		CS783 (9)
	CS632		CS784
	CS633 (9)		CS786
	CS634		CS789
	CS636		
	CS637		
	CS638 (9)		
	CS639		
	CS652 (9)		

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		CS653		
		CS654		
		CS659		
		CS665		
		CS720		
		CS725		
		CS726		
		CS727		
		CS728		
		CS730 (9)		
		CS731 (9)		
		CS738		
		CS755		
	REMARKS:			
		1) For each minor stream, the minimum total credit requirement is 30		
		2) In each minor stream, any related course(s), if not mentioned in the list of optional courses, may be taken as optional with the permission of the CSE DUGC		
		3) The course ESO207 can be waived if if the student has done an equivalent course. CSE DUGC convener can give more information about it.		

BTMT

	Semesters →	1	2	3	4	5	6	7	8	SUMMER	9	10	
								SCHEME-6 HSS-2 (9)	DE PG-1 (9)	M.Tech. Thesis (9)	DE PG-4 (9)	DE PG-6 (9)	
								DE-5 (9)	DE PG-2 (9)		DE PG-5 (9)	M.Tech. Thesis (36)	
		Semester 1-6 is same as BT curriculum						OE-2 (9)	DE PG-3 (9)		M.Tech. Thesis (27)		
								DE-6 (9)	M.Tech. Thesis (9)				
								DE-7 (9)					
								DE-8 (9)					
		48	51-54	54-58	46	49	50-58	54	36	9	45	45	
		MINIMUM CREDIT REQUIREMEN PG Comp: 54 Credits Thesis Co: 81 Credits											
		REMARKS: 1) Upto 36 OE credits may be used from the BT minimum requirements to fulfil requirements for the BT-MT dual degree programme. These will be waived from the BT programme and counted towards PG requirements. All other minimum BT credit requirements need to be fulfilled, including those that are slotted in the 7th and 8th semester of the BT template.											