	2023 BATC	H CURRICULUM	
Semester 1	B.Tech. Credits = 31	Dual Degree Credits = 0	Total Credits = 31
Course Code	Course Name	Category	Credits
CS 101	Computer programming	Engineering Sciences and skills	6
CS 105	Discrete Structures	Basic Sciences and Mathematics	6
GC 101	Gender sensitization course	Non - Credited compulsory Courses	0
HSS/IDC/ENT	Introduction to HASMED	HASMED Core	8
ИА 105	Calculus	Basic Sciences and Mathematics	8
NOCS 01	NCC/NSS/NSO	Non - Credited compulsory Courses	0
PH 117	Physics lab	Basic Sciences and Mathematics	3
Semester 2	B.Tech. Credits = 31	Dual Degree Credits = 0	Total Credits = 31
Course Code	Course Name	Category	Credits
BB 101	Biology	Basic Sciences and Mathematics	6
CH 117	Chemistry lab	Basic Sciences and Mathematics	3
CS 108	Software Systems Lab	Department Core	6
MA 110	Linear Algebra and Differential Equations	Basic Sciences and Mathematics	8
MS 101	Makerspace	Engineering Sciences and skills	8
NOCS 02	NCC/NSS/NSO	Non - Credited compulsory Courses	0
Semester 3	B.Tech. Credits = 36	Dual Degree Credits = 0	Total Credits = 36
Course Code	Course Name	Category	Credits
CS 228	Logic for Computer Science	Department Core	6
CS 213	Data Structures and Algorithms	Department Core	6
CS 293	Data Structures and Algorithms Lab	Department Lab and SLP/PT/Works Visit	3
CS 230	Digital Logic Design and Computer Architecture		6
CS 231	Digital Logic and Computer Architecture Lab	Department Lab and SLP/PT/Works Visit	3
CS 215	Data Analysis and Interpretation	Engineering Sciences and skills	6
EC 101	Economics	HASMED Core	6
Semester 4	B.Tech. Credits = 36	Dual Degree Credits = 0	Total Credits = 36
Course Code	Course Name	Category	Credits
CS 219	Operating Systems	Department Core	6
	Operating Systems Lab	Department Lab and SLP/PT/Works Visit	3
CS 236	Artificial Intelligence and Machine Learning	Department Core	6
CS 236 CS 217		i .	
	Artificial Intelligence and Machine Learning Lab	Department Lab and SLP/PT/Works Visit	3
CS 217 CS 240		Department Lab and SLP/PT/Works Visit Department Core	3 6
CS 217	Artificial Intelligence and Machine Learning Lab		
CS 217 CS 240 CS 218	Artificial Intelligence and Machine Learning Lab Design and Analysis of Algorithms	Department Core	6
CS 217 CS 240 CS 218	Artificial Intelligence and Machine Learning Lab Design and Analysis of Algorithms	Department Core HASMED Core	6

Semester 5	B.Tech. Credits = 30	Dual Degree Credits = 6	Total Credits = 36
Course Code	Course Name	Category	Credits
CS348	Computer Networks	Department Core	6
CS 378	Computer Networks Lab	Department Lab and SLP/PT/Works Visit	3
CS 339	Abstractions and Paradigms for Programming	Department Core	6
CS 355	Programming Paradigms Laboratory	Department Lab and SLP/PT/Works Visit	3
CS 310	Automata Theory	Department Core	6
		HASMED Elective	6
		Honors	6
Semester 6	B.Tech. Credits = 30	Dual Degree Credits = 6	Total Credits = 36
Course Code	Course Name	Category	Credits
CS 320	Implementation of Programming Languages	Department Core	6
CS 306	Implementation of Programming Languages Lat	Department Lab and SLP/PT/Works Visit	3
CS 317	Database and Information Systems	Department Core	6
CS 349	Database and Information Systems Lab	Department Lab and SLP/PT/Works Visit	3
		Department Electives	6
		HASMED Elective	6
		Honors	6
Somostor 7	P Toch Crodits - 26	Dual Dograe Credite = 6	Total Credits = 42
	B.Tech. Credits = 36	Dual Degree Credits = 6	Total Credits = 42
Course Code	B.Tech. Credits = 36  Course Name	Category	Credits
Course Code		Category BTP/Equivalent Elective courses	Credits 6
Course Code		Category BTP/Equivalent Elective courses Flexible Elective	Credits 6 6
Course Code		Category BTP/Equivalent Elective courses Flexible Elective Flexible Elective	6 6 6
Course Code		Category BTP/Equivalent Elective courses Flexible Elective Flexible Elective STEM Elective	6 6 6 6
Course Code		Category BTP/Equivalent Elective courses Flexible Elective Flexible Elective STEM Elective STEM Elective	6 6 6 6 6
Course Code		Category  BTP/Equivalent Elective courses  Flexible Elective  Flexible Elective  STEM Elective  STEM Elective  Department Electives	6 6 6 6 6 6 6
Course Code		Category BTP/Equivalent Elective courses Flexible Elective Flexible Elective STEM Elective STEM Elective	6 6 6 6 6
Semester 7 Course Code CS 492/ CS XXX		Category  BTP/Equivalent Elective courses  Flexible Elective  Flexible Elective  STEM Elective  STEM Elective  Department Electives	6 6 6 6 6 6 6
Course Code SS 492/ CS XXX	Course Name	Category  BTP/Equivalent Elective courses  Flexible Elective  Flexible Elective  STEM Elective  STEM Elective  Department Electives  Honors	6 6 6 6 6 6 6
Semester 8	B.Tech. Credits = 36	Category  BTP/Equivalent Elective courses  Flexible Elective  Flexible Elective  STEM Elective  STEM Elective  Department Electives  Honors  Dual Degree Credits = 6	6 6 6 6 6 6 6 Total Credits = 42
Semester 8 Course Code	Course Name	Category  BTP/Equivalent Elective courses  Flexible Elective  Flexible Elective  STEM Elective  STEM Elective  Department Electives  Honors  Dual Degree Credits = 6  Category	Credits  6  6  6  6  6  6  6  7  6  7  Total Credits = 42  Credits
Semester 8 Course Code	B.Tech. Credits = 36	Category  BTP/Equivalent Elective courses  Flexible Elective  Flexible Elective  STEM Elective  STEM Elective  Department Electives  Honors  Dual Degree Credits = 6  Category  BTP/Equivalent Elective courses	Credits  6  6  6  6  6  6  6  6  7  Credits = 42  Credits  12
Course Code	B.Tech. Credits = 36	Category  BTP/Equivalent Elective courses  Flexible Elective  Flexible Elective  STEM Elective  STEM Elective  Department Electives  Honors  Dual Degree Credits = 6  Category  BTP/Equivalent Elective courses  Flexible Elective	Credits  6  6  6  6  6  6  6  6  7  6  Credits = 42  Credits  12  6
Semester 8 Course Code	B.Tech. Credits = 36	Category  BTP/Equivalent Elective courses  Flexible Elective  Flexible Elective  STEM Elective  STEM Elective  Department Electives  Honors  Dual Degree Credits = 6  Category  BTP/Equivalent Elective courses  Flexible Elective  Flexible Elective	Credits  6  6  6  6  6  6  6  6  7  6  Credits = 42  Credits  12  6  6
Semester 8 Course Code	B.Tech. Credits = 36	Category  BTP/Equivalent Elective courses  Flexible Elective  Flexible Elective  STEM Elective  STEM Elective  Department Electives  Honors  Dual Degree Credits = 6  Category  BTP/Equivalent Elective courses  Flexible Elective  Flexible Elective  Flexible Elective	Credits  6  6  6  6  6  6  6  6  7  6  Credits = 42  Credits  12  6  6  6  6
Semester 8 Course Code	B.Tech. Credits = 36	Category  BTP/Equivalent Elective courses  Flexible Elective  Flexible Elective  STEM Elective  STEM Elective  Department Electives  Honors  Dual Degree Credits = 6  Category  BTP/Equivalent Elective courses  Flexible Elective  Flexible Elective	Credits  6 6 6 6 6 6 6 6 7 6 7 6 7 6 7 7 7 7 7

Semester 9	B.Tech. Credits = 0	Dual Degree Credits = 54	Total Credits = 54
Course Code	Course Name	Category	Credits
		PG Electives	6
		PG Electives	6
		Dual Degree Project	36
		PG Electives	6
Semester 10	B.Tech. Credits = 0	Dual Degree Credits = 42	Total Credits = 42
Semester 10 Course Code	B.Tech. Credits = 0 Course Name	Category	Credits
		Category PG Electives	Credits 6
		Category	Credits
		Category PG Electives	Credits 6
		Category PG Electives	Credits 6
		Category PG Electives	Credits 6
		Category PG Electives	Credits 6
		Category PG Electives	Credits 6
		Category PG Electives	Credits 6

B.Tech. Degree Requirements	
Category of Courses	SUM of Credits
Basic Sciences and Mathematics	34
BTP/Equivalent Elective courses	18
Department Core	72
Department Electives	18
Department Lab and SLP/PT/Works Visit	24
Engineering Sciences and skills	20
Flexible Elective	30
HASMED Core	20
HASMED Elective	12
HS 250 and ES 250	6
Non - Credited compulsory Courses	0
STEM Elective	12
Grand Total	266
December 1 December 1 October 1	Overall credits are
Prescribed Range of Credits for a	in the prescribed
	m the procession
UG programme is 252 to 276	rango
UG programme is 252 to 276	range
UG programme is 252 to 276	range
UG programme is 252 to 276	range
	range
Additional Credits for Dual Degree	range
Additional Credits for Dual Degree Requirement	
Additional Credits for Dual Degree Requirement Category of Courses	SUM of Credits
Additional Credits for Dual Degree Requirement Category of Courses Dual Degree Project	SUM of Credits 72
Additional Credits for Dual Degree Requirement Category of Courses Dual Degree Project Honors	SUM of Credits 72 24
Additional Credits for Dual Degree Requirement Category of Courses Dual Degree Project Honors PG Electives	SUM of Credits 72 24 24
Additional Credits for Dual Degree Requirement Category of Courses Dual Degree Project Honors	SUM of Credits 72 24
Additional Credits for Dual Degree Requirement Category of Courses Dual Degree Project Honors PG Electives Grand Total	SUM of Credits 72 24 24 120
Additional Credits for Dual Degree Requirement Category of Courses Dual Degree Project Honors PG Electives Grand Total  Prescribed Range of Additional	SUM of Credits 72 24 24 120  Overall credits are
Additional Credits for Dual Degree Requirement Category of Courses Dual Degree Project Honors PG Electives Grand Total	SUM of Credits 72 24 24 120
Additional Credits for Dual Degree Requirement Category of Courses Dual Degree Project Honors PG Electives Grand Total  Prescribed Range of Additional	SUM of Credits 72 24 24 120  Overall credits are
Additional Credits for Dual Degree Requirement Category of Courses Dual Degree Project Honors PG Electives Grand Total  Prescribed Range of Additional Credits for Dual Degree	SUM of Credits 72 24 24 120  Overall credits are in the prescribed
Additional Credits for Dual Degree Requirement Category of Courses Dual Degree Project Honors PG Electives Grand Total  Prescribed Range of Additional Credits for Dual Degree	SUM of Credits 72 24 24 120  Overall credits are in the prescribed
Additional Credits for Dual Degree Requirement Category of Courses Dual Degree Project Honors PG Electives Grand Total  Prescribed Range of Additional Credits for Dual Degree	SUM of Credits 72 24 24 120  Overall credits are in the prescribed