

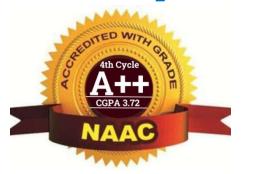
Professional Courses Admission Brochure(2024-25)

NO 1

Recognized for our environmental, ethical, academic, co-curricular performance & community engagements

- Accredited with Grade "A++" at CGPA 3.72 in the fourth cycle by NAAC, Bangalore
- College with potential for Excellence twice by UGC, New

Aided College In Haryana





Delhi(2010-2019)

- An ISO 9001-2015, 14001:2015, 50001:2018 Certified Institution(2022-2023)
- Swachh College Award by Municipal Council, Ambala Sadar
- State YRC Award for commendable work in human welfare activities twice by Hon'able Governor
- Best NSS Unit Award thrice by Kurukshetra University, Kurukshetra
- Recognition from MGNCR Education, MHRD,GOI for Community Development, Rural Upliftment & Best COVID Campaign
- District Green Champion Award by MGNCRE, Ministry of Education,GOI
- Exemplary Record of winning Overall Trophy in Kurukshetra University Zonal Youth Festival for 45 times in a row (Dance, Drama, Singing, Fine Arts, Literary)





message from the Principal



Dr. Rajinder Singh Principal, Sanatan Dharma College Ambala Cantt

Welcome to our esteemed college, a pioneer in delivering topnotch professional courses that shape the leaders and innovators of tomorrow. With a legacy of academic distinction and a commitment to holistic development, we take pride in offering industry-relevant programs that prepare students for dynamic careers in today's rapidly evolving landscape.

Ranked as the best college in Northern India, and distinguished as the first in Haryana and second nationwide to achieve the highest grade of **A++** with a stellar **CGPA of 3.72** in the fourth cycle, our college stands as a shining example of our dedication to academic excellence. This prestigious recognition highlights our commitment to providing students with a world-class education that empowers them to excel in their chosen fields.

Our professional undergraduate programs, including BCA, B.Voc Software Development, B.Sc IT, and BBA, are meticulously designed to equip students with the knowledge, skills, and practical experience needed to thrive in today's competitive job market. With a focus on industry relevance, hands-on learning, and experiential training, our programs ensure that graduates are not only work-ready but also possess the critical thinking, problem-solving, and leadership skills necessary for success in the digital age. Our entire curriculum is based on the National Education Policy (NEP) 2020, ensuring relevance and alignment with the latest industry trends and standards.

What sets us apart is our focus on multi-skill development, which forms the cornerstone of our educational philosophy. Alongside academic excellence, we prioritize the holistic development of our students, equipping them with a diverse range of skills and competencies that are essential for success in the modern world.

At our college, we believe in nurturing talent, fostering innovation, and empowering students to realize their full potential. Join us, and we'll provide you with the tools, support, and opportunities you need to be work-ready and life-ready.

Welcome to a place where excellence meets opportunity, and where your professional aspirations become a reality.

Jai Hind !

VISION:

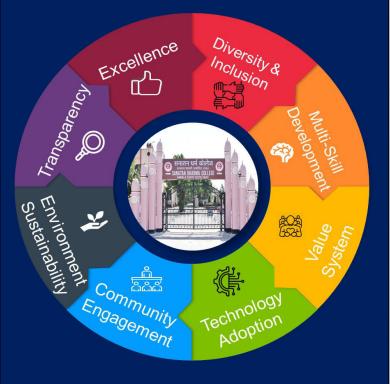
Fostering a harmonious blend of traditional values and modern education, College, envisions empowering individuals to become responsible global citizens. Upholding the principles of Sanatan Dharma, it strives to instill a deep sense of pride in Indian heritage while promoting excellence in education. Through its commitment to equity, inclusivity, and societal transformation, it aspires to emerge as a Center of Excellence, earning global recognition for its contributions to enlightenment and progress.

The Vision of the college '*Tamso Ma Jyotirgamay*' Lead Me from Darkness to Light is an offspring of the lofty ideals of its founders and great educationists like 'Bharat Ratna' Mahamana Pt. Madan Mohan Malviya.

MISSION

The primary mission of the college is to uplift the society through education. Like a beacon, nurturing a healthy human resource endowed materially, intellectually, morally and spiritually, the institution continues to spread the light of knowledge.

CORE VALUES



About College

Sanatan Dharma College envisioned by the *great Sanatanis and Social Reformers* Mahamana Pandit Madan Mohan Malviya Ji and Shri Deen Dayal Upadhyaya Ji was established in 1916 at Lahore. The partition of India was a huge set back to the institution. However, it goes to the credit of Tyagmurthi Goswami Ganesh Duttji, who rehabilitated and re-established the college in Ambala Cantt in 1948. The Ministry of Defence provided 10.32 acres of land and with the help of various philanthropists, the construction for the college building was in the pipeline.

The college is recognized under sections 2(f) and 12(b) of UGC Act 1956. The management, staff, students and the civil society have worked in tandem to establish it as a multi-faculty, premier, **co-educational institute of higher learning** which has acquired the dimensions of a mini-University. The college offers **16** undergraduate and **07** postgraduate courses. At present there are **99** teachers and around 3000 students.

After 107 years of its commitment to excellence in Higher Education, the institute extended its mission of integration of ICT in teaching learning and made a conscious effort to train campus community and teaching fraternity nation-wide. E-content development cell of the college has trained more than 5000 educators from different schools and colleges. As a result a huge collection of e-resources have been generated by the faculty. The quality conscious management readily became a part of the accreditation regimen. 1st Cycle of Accreditation was carried out in 2003, awarded Grade B++; followed by 2nd Cycle of Accreditation in 2011 with the award of Grade A; 3rd Cycle of Accreditation in 2017 resulted in Grade A+ with CGPA 3.51. However, it was in the latest Cycle-IV in 2023 that College etched its name in the annals of educational history, securing the highest grade in Haryana and standing second nationwide. With an unparalleled Grade A++ and an exceptional CGPA of 3.72, the college emerged as a radiant beacon of academic brilliance, illuminating the path for others to follow. The college was awarded the status of College with Potential for Excellence by UGC, New Delhi twice in 2010

and 2014

Why Choose SDC ?



02

03

107-Year heritage of academic excellence

WORLD CLASS INFRASTRUCTURE

- 07 Air-conditioned & Multipurpose Halls
- 46 ventilated & brightly illuminated classrooms
- 34 well-equipped, air-conditioned & ICT enabled Labs
- 04 Lush green gardens
- Hygienic cafeteria
- Green House
- Maharishi Valmiki chair
- Rich & fully automated Library

TOP NOTCH DIGITAL INFRASTRUCTURE

- 19 Smart Class rooms
- Super Nova Magnifier, Screen reader, Braile
- Wi-fi Campus with full security & CCTV for 24 X 7
- Lecture recording studio
- Network Resource Centre
- Huge volume of E-resources with remote access-
 - E-books, E-Journals,
 - Institutional Membership of DELNET,
 - Membership of N-List/e-shodsindhu consortium
- Dynamic Website
- Online College Information Management System
- Learning Management System(Moodle)
- Youtube Channel

NEEDY & MERITORIOUS STUDENTS

- 100% needy and meritorious students are provided with books from Book Bank in the Library.
- SC Students with Annual income below Rs 2,50,000 are given admission on Zero Fee.
- Merit-Cum-Means Scholarship
- HDFC Bank's Educational Crisis Scholarship
- Scholarship for Only Girl Child
- Scholarship for BC and Minority
- STFC(Shriram Transport Finance Company) India Meritorious Scholarship Programme
- Special Concessions-Sports, Academic, Cultural, YRC, NSS,NCC
- Raj Karni Ramlal Verma Ji Trust (Fatherless Girl Child) Scholarship
- Sita Ram Jindal Foundation Fund Scholarship(Merit scholarship)
- Earn While you Learn Scheme

Dynamic Cells: Cultivating Multi-Skill Development for Digital & Industry-Ready Graduates, Entrepreneurs & Innovators





Partenering with NGOs

- Career Guidance/ Placement Cell
- Subject Associations
- Women Cell
- YRC,NSS,NCC units
- Young Speaker Club
- Institution's Innovation Cell
- Entrepreneurship Development Cell
- Zila Rojgar Srijan Kendra
- Deen Dayal Upadhaya Kaushal Kendra
- Environment Club
- E-Resource Development Cell

Why Choose SDC ?











05

Engaging Education: interactive learning practices @SDC enhanced with ICT

50+ collaborations with industry and institutions of high eminence for training, skill enhancement, and placements.

Diverse Learning Styles: Incorporating a range of methods like

lecture-based instruction, group learning, individual self-study, inquiry-based learning, game-based learning, expeditionary learning, technology-based learning, peer teaching, and problem-solving approaches to accommodate diverse learning preferences.

Interactive Experiences: Utilizing workshops, industrial visits, guest lectures, MOOCs, self-paced learning, and platforms such as Moodle and CIMS to foster engagement and enhance learning outcomes.

Interactive Technology: Integrating interactive technology such as smartboards, simulations, and educational apps to make learning more engaging and effective.

Flipped Classroom Model: Implementing a flipped classroom approach where students review instructional materials independently before class and engage in interactive activities and discussions during class time.

Feedback and Assessment: Providing timely feedback and assessments to monitor student progress and adjust teaching strategies accordingly.

Continuous Improvement: Regularly evaluating and refining teaching practices based on student feedback and performance data to enhance the effectiveness of interactive learning experiences.

Mentor-Ward System

Learning through E-Resources-PPT's , Recorded Lectures Videos, Tutorials , e-notes & e-books

Training delivered by our highly qualified and digitally empowered faculty, ensuring an enriching and innovative learning experience.

Statutory Cells Grievance Redressal/Internal Complaint Committee Anti Ragging/Discipline Committee Right to Information Act SC/ST/OBC/Minority Cell



Remarkable Academic Record(Last five years)

DISTINCTIONSTOPPERS IN
COMPETITIVE EXAMS
250+3000+250+PASS %PLACEMENTS
(LAST 2 YRS)
200+

ENTREPRENEURS GENERATED 200+ Jobs under EWYL Scheme 150+

Joint Ventures incubated under Zila Rojgar Srijan Kendra 14

PROFESSIONAL PROGRAMS @SDC

BACHELOR OF COMPUTER APPLICATIONS (BCA) Seats: 120	BACHELOR OF VOCATION SOFTWARE DEVELOPMENT (B.Voc SD) Seats: 50	BACHELOR OF SCIENCE(HONS) INFORMATION TECHNOLOGY B.Sc. (Hons) IT) Seats: 40	BACHELOR OF BUSINESS ADMINISTRATION (B.B.A) Seats: 60
Eligibility:	Eligibility:	Eligibility:	Eligibility:
10+2 in any discipline with English	10+2 in any discipline with English	10+2 in non-medical stream and	10 +2 in any stream and
As compulsory subject with at least	as compulsory subject and at least	English as compulsory subject	English as compulsory sub
50% marks in aggregate	50% marks in aggregate	and at least 50% marks in Aggregate	and at least 40% marks aggregate



BACHELOR OF SCIENCE(HONS) INFORAMTION TECHNOLOGY(B.Sc.(Hons)-IT)

B.Sc IT Honours is a comprehensive undergraduate program that blends theoretical knowledge with practical skills in software development, hardware technologies, and networking fundamentals. Students delve into diverse subjects including computer programming, database management, Data Communication & Networking, web development, Artificial Intelligence, IOT, Mobile Application Development etc. With a focus on software and hardware aspects of information technology, the program equips graduates with a holistic understanding of IT systems and their applications. This multidisciplinary approach prepares students for a wide range of career opportunities in the IT industry, spanning roles such as software engineer, system analyst, network administrator, web developer, and IT consultant. With hands-on training and industry-relevant projects, B.Sc IT Honours graduates emerge ready to tackle the challenges of the rapidly evolving tech landscape.

Semester	Major Subject	Minor/V ocational	Multidisciplinar yCourses	AbilityEnhan cementCours es	SkillEnhance mentCourses	ValueAdded Courses	Total Credit s	Exit Option
Ι	MCC-A14credit MCC-A24credit	CC-M1 4credit	MDC-1 3credit	AEC-1 2credit	SEC-1 3credit	VAC-1 2credit	22	Under Graduate Certificate in Subject
II	MCC-A34credit DSEC-A14credit	CC-M2 4credit	MDC-2 3credit	AEC-2 2credit	SEC-2 3credit	VAC-2 2credit	22	with 48 credits
		Ι	nternship of 4 credits of 4	4-6 weeks duration	after 2 nd semester	r		
Ш	MCC-A44credit MCC-A54credit	CC-M3 4credit	MDC-3 3credit	AEC-3 2credit	SEC-3 3credit	VAC-3 2credit	22	Under Graduate Diploma in Subjects
IV	MCC-A64credit MCC-A74credit MCC-A84credit DSE-A14credit	CC-M4(V) 4credit		AEC-4 2credit		VAC-4 2credit	24	with 94 credits
		Internship of 4 c	redits of 4-6 weeks durati	on after 4 th semeste	er(If not done afte	er 2 nd semester)		
V	MCC- A94creditMCC- A104creditDSE- A24credit	CC-M5(V) 4credit			Internship# 4credit		24	Bachelor with Major in (Subject) after earning136 Credits
VI	MCC-A114credit MCC-A124credit DSE-A4 4credit DSE-A54credit	CC-M6(V) 4credit			SEC-4 2credit		22	
Credits	Major=72	Minor=24	MDC=09	AEC=08	Internship=04	VAC=08	SEC=11	Total=136

	Fourth Year (Honours Programme)								
Semester		MajorSubject		MinorSubject					
	Core Courses	Discipline Specific Courses	Practicum Courses	Core Courses	Total credits	Degree to be awarded			
VII	CC- H14CreditsCC- H24CreditsCC- H34Credits	DSE-H1 4credit	PC-H1 4credit	CC-HM1 4credit	24	Bachelor(Honours)in Major subject with184Credits			
VIII	CC-H44Credits CC-H54Credits CC-H64Credits	DSE-H2 4credit	PC-H2 4credit	CC-HM2 4credit	24				
			OR			-			
VII	CC-H14Credits CC-H24Credits CC-H34Credits	DSE-H1 4credit	PC-H1 4credit	CC-HM1 4credit	24	Bachelor(Honours with Research) in Major subject with184Credits			
VIII	CC-H44Credits CC-H54Credits		Project/Dissertation 12credits	CC-HM2 4credit	24				

CURRICULUM FRAMEWORK AS PER NEP 2020 (Multiple Entry-Exit, Internships and Choice Based Credit System)

UG Program with Single major in Information Technology

		FIRST YE	AR: SEMEST	TER-1				
Course	Paper(s)	Nomenclature of Paper	Credits	Hours/ Week	Interna lmarks	External Marks	Total Marks	Exam Duration
CC-1 MCC-A1 4 credit	B23- HIT- 101	Digital Electronics-I Practical	3	3 2	20 10	50 20	70 30	3 hrs. 3 hrs.
CC-2 MCC-A2 4 credit	B23- HIT-	Computer and Programming Fundamentals	3	3	20	50	70	3 hrs.
	102	Practical	1	2	10	20	30	3 hrs.
CC-M1 4 credit	From Available CC-M1 of 4 credits as per NEP							
MDC-1 3 credits		From A	vailable MD	C-1 of three	credits as pe	r NEP		
AEC-1 2 credit		From	Available AE	C-1 of two c	redits as per	NEP		
SEC-1 3 credit	From Available SEC-1 of three credits as per NEP							
VAC-1 2 credit	From Available VAC-1 of two credits as per NEP							
		FIRST YE	AR: SEMES	TER-2				
Course	Paper(s)	Nomenclature of Paper	Credits	Hours/ Week	Internal marks	External Marks	Total Marks	Exam Duration
CC-3 MCC-A3	B23-	Digital Electronics-II	3	3	20	50	70	3 hrs.
4 credit	HIT- 201	Practical	1	2	10	20	30	3 hrs.
DSEC-A1	B23- HIT-	Office Automation Tools	3	3	20	50	70	3 hrs.
4 credit (select any one	202	Practical	1	2	10	20	30	3 hrs.
option)	B23- HIT-	Basics of Web Development	3	3	20	50	70	3 hrs.
	203	Practical	1	2	10	20	30	3 hrs.
CC-M2 4 credit		From	Available C	C-M2 of 4 cr	edits as per 1	NEP		
MDC-2 3 credits		From A	vailable MD	C-2 of three	credits as pe	r NEP		
AEC-2 2 credit		From	Available AE	C-2 of two c	redits as per	NEP		
SEC-2 3 credit		From A	Available SEC	C-2 of three	credits as per	NEP		
VAC-2	From Available VAC-2 of two credits as per NEP							

		SECC	OND YEAR: SI	EMESTER-3					
Course	Paper(s)	Nomenclature of Paper	Credits	Hours/ Week	Internal marks	External Marks	Total Marks	Exam Duration	
CC-4	B23-HIT-301	Industrial Electronics	3	3	20	50	70	3 hrs.	
MCC- A4 4 credit		Practical	1	2	10	20	30	3 hrs.	
CC-5 MCC-	B23-HIT-302	Computer Programming with C	3	3	20	50	70	3 hrs.	
A5 4 credit		Practical	1	2	10	20	30	3 hrs.	
CC-M3 4 credit	From Available CC-M3 of 4 credits as per NEP								
MDC-3 3 credit		From Available MDC-3 of three credits as per NEP							
AEC-3 2 credit		From	Available AEC	C-3 of two credi	its as per NEP				
SEC-3 3 credit		From	Available SEC	-3 of three cred	lits as per NEP				
VAC-3 2 credit		From	Available VAC	C-3 of two credi	its as per NEP				
		SECO	OND YEAR: S	EMESTER-4					
Course	Paper(s)	Nomenclature of Paper	Credits	Hours/ Week	Internal marks	External Marks	Total Marks	Exam Duration	
CC-6 MCC-	B23-HIT-401	Transistor & Linear Integrated Circuits	3	3	20	50	70	3 hrs.	

A6 4 credit		Practical	1	2	10	20	30	3 hrs.
CC-7 MCC-	B23-HIT-402	Fundamentals of Database Management Systems	3	3	20	50	70	3 hrs.
A7 4 credit		Practical	1	2	10	20	30	3 hrs.
CC-8 MCC-	B23-HIT-403	Electronic Communication	3	3	20	50	70	3 hrs.
A8 4 Credits		Practical	1	2	10	20	30	3 hrs.
DSE-A1	B23-HIT-404	Object Oriented Programming with C++	3	3	20	50	70	3 hrs.
4 credits (Select		Practical	1	2	10	20	30	3 hrs.
one	B23-HIT-405	Programming in Java	3	3	20	50	70	3 hrs.
option)		Practical	1	2	10	20	30	3 hrs.
CC-M4(V) 4 credit		From .	Available CC-N	M4(V) of 4 cred	lits as per NEP			
AEC-4 2 credit		From	Available AEC	C-4 of two credi	ts as per NEP			
VAC-4 2 credit		From	Available VAC	-4 of two credi	its as per NEP			

		THIRD YE	AR: SEMES	ΓER-5				
Course	Paper(s)	Nomenclature of Paper	Credits	Hours/ Week	Internal marks	External Marks	Total Marks	Exam Duratio
CC-9 MCC-A9 4 credit	B23- HIT-501	Microprocessor 8085 Architecture &Programming	3	3	20	50	70	3 hrs.
		Practical	1	2	10	20	30	3 hrs.
CC-10 MCC-A10 4 credit	B23- HIT-502	Operating Systems	3	3	20	50	70	3 hrs.
		Practical	1	2	10	20	30	3 hrs.
DSE-A2	B23- HIT-503	Web Development using ASP	3	3	20	50	70	3 hrs.
4 credits (Select anyone option)		Practical	1	2	10	20	30	3 hrs.
v t	B23- HIT-504	Web Development using PHP	3	3	20	50	70	3 hrs.
		Practical	1	2	10	20	30	3 hrs.
	B23- HIT-505	Data Structure	3	3	20	50	70	3 hrs.
DSE-A3 4 credits (Select anyone option)		Practical	1	2	10	20	30	3 hrs.
	B23- HIT-506	Animation Techniques	3	3	20	50	70	3 hrs.
		Practical	1	2	10	20	30	3 hrs.
CC-M5(V) 4 credit		From Avail	able CC-M5(V) of 4 cree	dits as per NEI)		
Internship 4 credit			Inter	nships				
	•	THIRD YEAR:	SEMESTER	-6				
Course	Paper(s)	Nomenclature of Paper	Credits	Hours/ Week	Internal marks	External Marks	Total Marks	Exam Duratio
CC-11 MCC-A11 4 credit	B23- HIT-601	8085 Peripheral Devices	3	3	20	50	70	3 hrs.
		and 8051 Microcontroller						
		Practical	1	2	10	20	30	3 hrs.
CC-12 MCC-A12 4 credit	B23- HIT-602		1 3	2 3	10 20	20 50	30 70	3 hrs. 3 hrs.
	B23- HIT-602	Practical Introduction to Python						3 hrs.
4 credit DSE-A4 4 credit (Select	B23- HIT-602 B23- HIT-603	Practical Introduction to Python Programming	3	3	20	50	70	3 hrs. 3 hrs.
4 credit DSE-A4		Practical Introduction to Python Programming Practical Data Communication &	3	3	20 10	50 20	70 30	3 hrs. 3 hrs. 3 hrs.
4 credit DSE-A4 4 credit (Select		Practical Introduction to Python Programming Practical Data Communication & Computer Networks	3 1 3	3 2 3	20 10 20	50 20 50	70 30 70	
4 credit DSE-A4 4 credit (Select	B23- HIT-603	Practical Introduction to Python Programming Practical Data Communication & Computer Networks Practical Data ware Housing &	3 1 3 1	3 2 3 2	20 10 20 10	50 20 50 20	70 30 70 30	3 hrs. 3 hrs. 3 hrs. 3 hrs.
4 credit DSE-A4 4 credit (Select anyone option DSE-A5 4 Credits (Select	B23- HIT-603	Practical Introduction to Python Programming Practical Data Communication & Computer Networks Practical Data ware Housing & Data Mining	3 1 3 1 3	3 2 3 2 3	20 10 20 10 20	50 20 50 20 50	70 30 70 30 70	3 hrs. 3 hrs. 3 hrs. 3 hrs. 3 hrs. 3 hrs. 3 hrs.
4 credit DSE-A4 4 credit (Select anyone option DSE-A5	B23- HIT-603 B23- HIT-604	Practical Introduction to Python Programming Practical Data Communication & Computer Networks Practical Data ware Housing & Data Mining Practical Linux & Shell	3 1 3 1 3 1 1	3 2 3 2 3 2 2	20 10 20 10 20 10	50 20 50 20 50 20 20	70 30 70 30 70 30 30	3 hrs. 3 hrs. 3 hrs. 3 hrs. 3 hrs.
4 credit DSE-A4 4 credit (Select anyone option DSE-A5 4 Credits (Select	B23- HIT-603 B23- HIT-604	Practical Introduction to Python Programming Practical Data Communication & Computer Networks Practical Data ware Housing & Data Mining Practical Linux & Shell Programming	3 1 3 1 3 1 3	3 2 3 2 3 2 3	20 10 20 10 20 10 20	50 20 50 20 50 20 50 20 50 20 50 20 50 20 50	70 30 70 30 70 30 70 30 70	3 hrs. 3 hrs.
4 credit DSE-A4 4 credit (Select anyone option DSE-A5 4 Credits (Select	B23- HIT-603 B23- HIT-604 B23- HIT-605	Practical Introduction to Python Programming Practical Data Communication & Computer Networks Practical Data ware Housing & Data Mining Practical Linux & Shell Programming Practical Internet Concepts &	3 1 3 1 3 1 3 1 3 1	3 2 3 2 3 2 3 2 2	20 10 20 10 20 10 20 10	50 20 50 20 50 20 50 20 50 20 50 20 50 20 50 20 50 20 50 20 50	70 30 70 30 70 30 70 30 70 30 70 30 30 30 30 30 30 30 30	3 hrs. 3 hrs.
4 credit DSE-A4 4 credit (Select anyone option DSE-A5 4 Credits (Select	B23- HIT-603 B23- HIT-604 B23- HIT-605	PracticalIntroduction to Python ProgrammingProgrammingPracticalData Communication & Computer NetworksPracticalData ware Housing & Data MiningPracticalLinux & Shell ProgrammingPracticalInternet Concepts & ApplicationsPractical	3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	3 2 3 2 3 2 3 2 3 2 3 2	20 10 20 10 20 10 20 10 20	50 20 50 20 50 20 50 20 50 20 50 20 50 20 50 20 50 20 50 20 50 20 50 20 50 20	70 30 70 30 70 30 70 30 70 30 70 30 70 30 70 30 70 30 70	3 hrs. 3 hrs. 3 hrs. 3 hrs. 3 hrs. 3 hrs. 3 hrs. 3 hrs.

		FOURTH YEA	AR: SEMESTE	R-7				
Course	Paper(s)	Nomenclature of Paper	Credits	Hours / Week	Interna Imarks	Externa lMarks	Total Marks	Exam Duration
CC-H1 4 credit	B23- HIT-701	Artificial Intelligence & Machine Learning	4	4	30	70	100	3 hrs.
CC-H2 4 credit	B23- HIT-702	Software Engineering	4	4	30	70	100	3 hrs.
CC-H3 4 credits	B23- HIT-703	Satellite Communication	4	4	30	70	100	3 hrs.
DSE-H1 4 credits (Select any one option)	B23- HIT-704	Introduction to VHDL	4	4	30	70	100	3 hrs.
	B23- HIT-705	Cloud Computing	4	4	30	70	100	3 hrs.
PC-H1 4 credits	B23- HIT-706	Practical Based on B23-HIT -701 TO 704/705	4	8	30	70	100	6 hrs
CC-HM1 4 credits		From	Available Min	or of 4 credi	ts as per NEP			
		FOURTH	YEAR: SI	EMESTER	·8			
CC-H4 4 credit	B23- HIT-801	Signals & Systems	4	4	30	70	100	3 hrs.
CC-H5 4 credit	B23- HIT-802	Computer Graphics	4	4	30	70	100	3 hrs.
CC-H6 4 Credits	B23- HIT-803	Optical Fiber Communication	4	4	30	70	100	3 hrs.
DSE-H2 4 credits (Select any one option	B23- HIT-804	Mobile App Development	4	4	30	70	100	3 hrs.
	B23- HIT-805	Internet of Things	4	4	30	70	100	3 hrs.
PC-H2 4 credits	B23- HIT-806	Practical Based on B23-HIT-801 TO 804/805	4	8	30	70	100	6 hrs
CC-HM2 4 credits		From	Available Mine	or of 4 credi	ts as per NEP			
			OR					
Course	Paper(s)	Nomenclature of Paper	Credits	Hours / Week	Interna lmarks	Externa IMarks	Tot al Ma r ks	Exam Duration
CC-H4 4 credit	B23- HIT-801	Signals & Systems	4	4	30	70	100	3 hrs.
CC-H5 4 credit	B23- HIT-802	Computer Graphics	4	4	30	70	100	3 hrs.
Project/ Dissertation12 credits	B23- HIT-807	Project/ Dissertation	8+4		-	300	300	-
CC-HM2 4 credits		From	Available Min	or of 4 credi	ts as per NEP			

Sector	Job Prospects
Private Sector	 Software Developer/Engineer Web Developer Mobile App Developer Database Administrator Network Administrator Systems Analyst IT Consultant Cybersecurity Analyst Data Analyst/Scientist Quality Assurance Tester UI/UX Designer
	Technical Support SpecialistProject Manager
Government Sector	 IT Officer Systems Administrator Database Administrator Network Administrator Cybersecurity Analyst Data Analyst/Scientist IT Consultant Project Coordinator Research Analyst Technical Assistant Information Officer Technical Writer

Job Prospects after B.Sc (Hons) IT

Higher Education Option	Description
Master of Science (M.Sc) in Information Technology	Advanced program offering specialization in various aspects of IT, including software development, network administration, cybersecurity, database management, and more.
Master of Computer Applications (MCA)	Postgraduate program providing in-depth training in computer science and applications, covering topics such as programming, algorithms, software engineering, and project management.
Master of Technology (M.Tech) in Information Technology	Specialized program focusing on advanced topics in IT, such as cloud computing, big data analytics, artificial intelligence, machine learning, and Internet of Things (IoT).
Master of Business Administration (MBA) with a specialization in Information Technology	MBA program with a focus on IT management, offering a blend of business and technical knowledge for leadership roles in IT organizations.
Postgraduate Diploma in Information Technology	Specialized diploma program offering training in specific areas of IT, such as software development, cybersecurity, network administration, or database management.

Certifications and Short-Term Courses	Professional certifications and short-term courses providing specialized skills in programming languages, web development, cybersecurity, cloud computing, data science, and more.
Research and Ph.D. Programs	Opportunities for academic or research-oriented careers through Ph.D. programs, contributing to the advancement of knowledge in IT fields through research and scholarly work.

Glossary

Major and Minor Subject: Major subject is a subject of choice in a discipline which equips student with knowledge, understanding and skills majorly in the chosen field of learning contributing to the core of the programme.

Minor subject the is a student to gain a broader understanding in addition to the Major subject.

The courses in a Major discipline will be Core Courses(CC), Discipline Specific Elective(DSE) courses, Discipline Skill Enhancement Course(DSEC), Practicum (PC), Project/Dissertation, while Minor courses will include CC as well as Vocational Courses(VOC).

Core Course(CC): A compulsory course of a subject aimed to cover the basics of Major/Minor subject.

Discipline Specific Elective(DSE) Course: A discipline specific elective course is a course aimed to impart options for varied knowledge and s kills in the specialized fields of a Discipline/subject.

Discipline Skill Enhancement Course (DSEC) : A discipline skill enhancement course is a course aimed to provide knowledge, skills, training and competencies in a discipline/subject.

Vocational Courses(VOC): A vocational course is focused on practicalwork, preparing students for a particular skilled profession. Such courses develop capacities for sustenance, work, and economic participation and develop values and sensibilities toward physical work and dignity of labour.

Other Courses

Multidisciplinary Courses(MDC): These courses are based on introductory knowledge in a subject. A student will study MDC in a subject other than the discipline of Major and Minor subjects to gain knowledge across the disciplines.

Ability Enhancement Courses (AEC): These courses aim at enabling the students to achieve competency in the English language o or Modern Indian Languages(MIL) with special emphasis on language and communication skills.

Skill Enhancement Courses(SEC): These courses aim at imparting practical skills, hands-on training, soft skills, etc. to enhance the employability of students.

Value-Added Courses (VAC): These courses aim at enabling the students to acquire and demonstrate the acquisition of knowledge and understanding of human values, Indian Knowledge System(IKS), contemporary India, environmental science and education, digital and technical solutions, health and wellness, yoga education, sports and fitness, etc.



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