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देव संस्कृति विश्वविद्यालय
DEV SANSKRITI VISHWAVIDYALAYA

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Criteria 1

1.1.1: Curricula developed and implemented have relevance to the local, regional, national, and global developmental needs, which is reflected in the Programme outcomes (POs), and Course Outcomes(COs) of the Programmes offered by the University

DEV SANSKRITI VISHWAVIDYALAYA

1.1.1: Curricula developed and implemented have relevance to the local, regional, national, and global developmental needs, which is reflected in the Programme outcomes (POs), and Course Outcomes (COs) of the Programmes offered by the University

Dev Sanskriti Vishwavidyalaya (DSVV) has designed and implemented curricula that align closely with developmental needs on local, regional, national, and global scales. This alignment is evident through well-structured Programme Outcomes (POs) and Course Outcomes (COs) that span the university's varied academic disciplines.

Curriculum Development Approach

DSVV adopts a thorough and collaborative process for curriculum development. Each department has a specialized Curriculum Development Committee that gathers input from a range of stakeholders. This committee integrates feedback—both formal and informal—from industry experts, faculty, academic peers, alumni, and current students. External experts in relevant subjects are also consulted to ensure that the curriculum stays updated and reflects the latest trends.

The feedback collected during this process serves as the foundation for developing outcome-based curricula.

Alignment with Outcome-Based Education

Most of the university’s programs follow the Outcome-Based Education (OBE) framework. This method aligns with the Learning Outcome-Based Curriculum Framework (LOCF), reflecting key graduate attributes. The Program Outcomes (POs), Program-Specific Outcomes (PSOs), and Course Outcomes (COs) are carefully designed to address developmental priorities at local, national, and international levels.

Flexible and Innovative Curriculum

DSVV offers flexible and innovative programs across diverse disciplines such as science, arts, humanities, social sciences, and skill development. This multidisciplinary approach is combined with an emphasis on community engagement and value-based education.

Integration of Local and Global Perspectives

The university's curriculum strikes a balance between local and global perspectives. While meeting regional developmental goals, DSVV also ensures its programs are globally relevant. This is especially noticeable in areas like yogic sciences, holistic health, information technology, and animation, where international trends significantly impact curriculum design.

Practical Application and Community Engagement

DSVV places a strong focus on the practical application of knowledge through community service. Every graduating student is required to participate in an internship program, applying the skills they have acquired in a community setting.

Continuous Curriculum Improvement

DSVV continuously evaluates and refines its curriculum. Teaching and learning assessments are conducted throughout the semester to ensure educational effectiveness. The university fosters a student-centered learning environment through interactive methods like group discussions, case studies, Q&A sessions, multimedia presentations, quizzes, and scientific or project-based presentations.

Spiritual and Character Development

A distinctive feature of DSVV's curriculum is its emphasis on spiritual and character development. Weekly classes on the Gita and Meditation, led by the Chancellor, provide students with the opportunity to nurture their spiritual growth.

International Collaborations

DSVV has established over 70 international partnerships to enhance the global relevance of its programs. These collaborations ensure that the curriculum remains aligned with international standards, preparing students for global opportunities.

Department of Computer Science	B.Sc. Information Technology (Honors)	Syllabus Link
Department of Computer Science	Bachelor of Computer Application (Honors)	Syllabus Link
Department of Mathematics	B.Sc. Mathematics (Honors)	Syllabus Link
Department of Tourism Management	B.B.A Tourism & Travel Management (Honors)	Syllabus Link
Department of Journalism & Mass Communication	B.A. Journalism and Mass Communication (Honors)	Syllabus Link
Department of Animation and Visual effects	B.Voc. (Bachelor of Vocational) in 3D Animation and VFX (Honors)	Syllabus Link
Department of Rural Studies and Sustainability	Bachelor of Rural Studies (Honors)	Syllabus Link
Department of English	B.A. English (Honors)	Syllabus Link
Department of Psychology	B.A. Psychology (Honors)	Syllabus Link
Department Of Yogic Science & Human Consciousness	B.Sc. Yogic Science (Honors)	Syllabus Link
Department Of Vedic Studies & Sanskrit	B.A. Sanskrit (Honors)	Syllabus Link
Department Of Hindi	B.A. Hindi (Honors)	Syllabus Link
Department Of History And Indian Culture	B.A. History (Honors)	Syllabus Link

Department Of Indian Classical Music	B.A. Music (Vocal) (Honors)	Syllabus Link

Major Programs
Minor Programs
Value Added Courses
Skill Enhancement Courses
Multidisciplinary Courses
Ability Enhancement Courses

CURRICULUM
Curriculum & Credit Distribution Structure
B.Sc. Honours/Honours with Research (4 Years)
MAJOR in
Information Technology
Session: 2023-2027

Program Code: TCMCS6.0BSCHIT / TCMCS6.0BSCRIT

Based on
NEP-2020, UGC Guidelines Dec 2022 &
Outcome based **CBCS** pattern

Department of Computer Science
Faculty of Technology & Management
School of Technology, Communication & Management
Dev Sanskriti Vishwavidyalaya
Haridwar, Uttarakhand, India

B.Sc. - MAJOR in Information Technology
4 Years Honours Program
Program Code: TCMCS6.0BSCHIT

Dept. of Computer Science, Faculty of Technology & Management,
School of Technology, Communication and Management, DSVV

	Major Courses 80 + 12 Credits **+Internship* 2 Credits**	**Minor** Courses 32 Credits**	**Multidisciplinary Courses 9 Credits**	**AEC***** (Ability Enhancement Courses) **8 Credits** [MIL (Hindi/Sanskrit) / English]	**SEC** (Skill Enhancement Courses) **9 Credits**	**VAC** (Value Added Courses) **6 Credits**	**LM*** as VAC 16 Credits**	**TOTAL 160+10+4 Credits**
Semester 1	**6 Credits** Computer Hardware & Components (2,1,0) Office Automation (1,0,2)	**6 Credits** *Course(s) as per the chosen Minor (Minor will be other than that offered by Major Dept.)*	**3 Credits** *Course from University pool (Other than those offered by Major and Minor Depts.)*	**2 Credits** *Hindi-1/ Sanskrit-1***** (0,1,1) *By Hindi Dept. / Sanskrit and Vedic Studies Dept. of DSVV*	**1 Credit** *Course from University pool (Other than that offered by Major Dept.)*	**2 Credits** Environment Education **** (3,0,1) *(By Environmental Science Dept. of DSVV)*	**2 Credits** LM Course-1 (0,1,1) *By Life Management Dept. of DSVV*	**20+2 Credits**
Semester 2	**6 Credits** Basics of C Programming (1,0,2) Digital Marketing (1,1,1)	**6 Credits** *Course(s) as per the chosen Minor*	**3 Credits** *Course from University pool*	**2 Credits** *Hindi-2/ Sanskrit-2***** (0,1,1) *By Hindi Dept. / Sanskrit and Vedic Studies Dept. of DSVV*	**1 Credit** *Course from University pool*	**4 Credits** Digital and Technological Solutions***** (0,1,0) (By *Computer Science Dept. of DSVV*) & Understanding India****** (0,1,0) *(By History and Indian Culture Dept. of DSVV)*	**2 Credits** LM Course-2 (0,1,1) *By Life Management Dept. of DSVV*	**20+4 Credits**

Semester 3	**8 Credits** Elementary Data Structures (1,1,2) E-Commerce (1,1,0) Content Management System (1,0,1)	**4 Credits** *Course(s) as per the chosen Minor*	**3 Credits** *Course from University pool*	**2 Credits** *English-1****** (0,1,1) *By English Dept. of DSVV*	**3 Credits** *Course from University pool*		**2 Credits** LM Course-3 (0,1,1) *By Life Management Dept. of DSVV*	**20+2 Credits**
Semester 4	**10 Credits** Basics of Python Programming (1,0,2) Object Oriented Programming (1,0,2) HTML & CSS (1,1,2)	**4 Credits** *Course(s) as per the chosen Minor*		**2 Credits** *English-2****** (0,1,1) *By English Dept. of DSVV*	**4 Credits** *Course from University pool*		**2 Credits** LM Course-4 (0,1,1) *By Life Management Dept. of DSVV*	**20+2 Credits**
		TOTAL	**9 Credits**	**8 Credits**	**9 Credits**	**6 Credits**		

Semester	Major Courses	Minor Courses	LM*** as VAC	
Semester 5	**14 Credits** Java Script (2,0,2) System Analysis & Design (2,1,1) Computer Organization & Architecture (1,1,0) Operating System (2,1,1) **2 Credits** Internship* (0,0,2)	**4 Credits** *Course(s) as per the chosen Minor*	**2 Credits** LM Course-5 (0,1,1)	**20+2 Credits**
Semester 6	**16 Credits** DBMS (2,1,1) Artificial Intelligence (2,1,1) Cloud Computing (2,1,1) MIS (1,1,0) Introduction to Data Science (1,1,0)	**4 Credits** *Course(s) as per the chosen Minor*	**2 Credits** LM Course-6 (0,1,1)	**20+2 Credits**
Semester 7	**16 Credits** PHP (1,0,1) Computer Networks (2,1,1) Data Mining & Warehousing (1,1,1) Entrepreneurship in the Digital Age (1,1,1) SQL (1,1,2)	**2 Credits** *Course(s) as per the chosen Minor*	**2 Credits** LM Course-7 (0,1,1)	**20 Credits**
Semester 8	**16 Credits** Cyber Security (1,1,0) Software Engineering (1,1,0) Emerging trends & innovation in IT (1,1,0) Machine Learning (2,1,1) Web Application Development (1,0,2) Data Analytics with Python (0,1,2)	**2 Credits** *Course(s) as per the chosen Minor*	**2 Credits** LM Course-8 (0,1,1)	**20 Credits**
TOTAL	**80+12 Credits** **+ 2 Credits Internship***	**32 Credits**	**16 Credits**	**160+14 Credits**
	B.Sc. - MAJOR in Information Technology **4 Years Honours with Research Program** **Program Code:** TCMCS6.0BSCRIT **Eligibility Criteria –** After completing the requirements of the three-year Bachelor's degree (that is, having no remaining backlogs (Drop Courses) in the first three years of this 4 Years Bachelor's Program), only the students who have a CGPA of 7.5 or above, shall be eligible to continue studies in the fourth year of Honours with Research Program			
	First 6 semesters same as B.Sc. - MAJOR in Information Technology 4 Years Honours			
Semester 7	**12 Credits** Computer Networks (2,1,1) Data Mining & Warehousing (1,1,1) SQL (1,1,2) Research Methodology (0,1,0) **4 Credits** Research Synopsis (0,0,4)	**2 Credits** *Course(s) as per the chosen Minor*	**2 Credits** LM Course-7 (0,1,1)	**20 Credits**
Semester 8	**8 Credits** Cyber Security (1,1,0) Software Engineering (1,1,0) Machine Learning (2,1,1)	**2 Credits** *Course(s) as per the chosen Minor*	**2 Credits** LM Course-8 (0,1,1)	**20 Credits**

	8 Credits Dissertation (0,0,8)			
TOTAL	**80+12 Credits** **+ 2 Credits Internship***	**32 Credits**	**16 Credits**	**160+14 Credits**

Internship* - to be done at the end of Semester-4 during semester break

Minor Choice** - Students are free to choose any Minor offered by other Depts.

LM* -** University Value Added Course (VAC) offered by Life Management Dept. of the University

Digital and Technological Solutions, & Understanding India** - To be done either in 1st or 2nd semester as per University's decision

Environment Education** - To be done either in 1st or 2nd semester as per University's decision

AEC English-1&2*** - To be done either in 1st & 2nd semester (1st year) or in 3rd & 4th semester (2nd year)

AEC Hindi - 1&2/Sanskrit – 1&2*** - To be done either in 1st & 2nd semester (1st year) or in 3rd & 4th semester (2nd year)

MOOCs (massive open online courses) will be allowed as per University policy

B.Sc. - MAJOR in Information Technology
4 Years Honours / Honours with Research Program

Dept. of Computer Science, Faculty of Technology & Management,
School of Technology, Communication and Management, DSVV

Outcomes from Job Perspective

Completed Year	**Completed Credits**	**Outcomes from Job Perspective**
1st Year	**40 + 6** Major (12 Credits) + Minor (12 Credits) + Multidisciplinary (6 Credits) + AEC (4 Credits) + SEC (2 Credits) + VAC (10 Credits)	It opens up career opportunities such as computer hardware technician, Data entry operator, and social media manager.
2nd Year	**80 + 10** Major (30 Credits) + Minor (20 Credits) + Multidisciplinary (9 Credits) + AEC (8 Credits) + SEC (9 Credits) + VAC (14 Credits)	It opens up career opportunities such as Web Content manager, Search Engine, Web interface Designer and Solution designer.
3rd Year	**120 + 14** Major (60 Credits) + Minor (28 Credits) + Multidisciplinary (9 Credits) + AEC (8 Credits) + SEC (9 Credits) + VAC (18 Credits) + Internship (2 Credits)	It opens up career opportunities such as Front-end Developer, Junior Data Analyst, System Administrator.
4th Year	**160 + 14** Major (92 Credits) + Minor (32 Credits) + Multidisciplinary (9 Credits) + AEC (8 Credits) + SEC (9 Credits) + VAC (22 Credits) + Internship (2 Credits)	It opens up career opportunities such as Web Application Developer, Assistant Data Analyst, System Administrator.
4th Year with Research	**160 + 14 (including Research Project / Dissertation)** Major (80 Credits) + Minor (32 Credits) + Multidisciplinary (9 Credits) + AEC (8 Credits) + SEC (9 Credits) + VAC (22 Credits) + Internship (2 Credits) + Research Project / Dissertation (12Credits)	It opens up career opportunities such as , Software Engineer, Database Manager, Research fellow.

B.Sc. - MAJOR in Information Technology
4 Years Honours / Honours with Research Program

Dept. of Computer Science, Faculty of Technology & Management,
School of Technology, Communication and Management, DSVV

List of Courses

4 Years Honours Program

Program Code: TCMCS6.0BSCHIT

Course Type	Course Code	Course Title	LTP Ratio				Assessment Marks		
			L	T	P	Credits	Formative	Summative	Total
SEMESTER 01									
Major 1	CS101CHC	Computer Hardware & Components	2	1	0	3	40	60	100
Major 2	CS102OAT	Office Automation	1	0	2	3	40	60	100
SEMESTER 02									
Major 3	CS151BCP	Basics of C programming	1	0	2	3	40	60	100
Major 4	CS152DMR	Digital Marketing	1	1	1	3	40	60	100
SEMESTER 03									
Major 5	CS201EDS	Elementary Data Structures	1	1	2	4	40	60	100
Major 6	CS202ECO	E-Commerce	1	1	0	2	40	60	100
Major 7	CS203CMS	Content Management System	1	0	1	2	40	60	100
SEMESTER 04									
Major 8	CS251BPP	Basics of Python Programming	1	0	2	3	40	60	100
Major 9	CS252OOP	Object Oriented Programming	1	0	2	3	40	60	100
Major 10	CS253HCS	HTML & CSS	1	1	2	4	40	60	100
SEMESTER 05									
Major 11	CS301JSC	JavaScript	2	0	2	4	40	60	100
Major 12	CS302SAD	System Analysis & Design	2	1	1	4	40	60	100
Major 13	CS303OPS	Operating System	2	1	1	4	40	60	100
Major 14	CS304CAO	Computer Organization & Architecture	1	1	0	2	Major 26	CS451CYS	Cyber Security
Major 15	CS305INT	Internship	0	0	2	2	Major 27	CS453SEN	Software Engineering
Major 28									
Major 16	CS351DBM	DBMS	2	1	1	4	Major 29	CS461RDI	Research Dissertation
Major 17	CS352AIN	Artificial Intelligence	2	1	1	4	40	60	100
Major 18	CS356CLC	Cloud Computing	2	1	1	4	40	60	100
Major 19	CS357MIS	Management Information System	1	1	0	2	40	60	100

Course Type	Course Code	Course Title	LTP Ratio				Assessment Marks		
			L	T	P	Credits	Formative	Summative	Total
Major 20	CS353IDS	Introduction to Data Science	1	1	0	2	40	60	100
SEMESTER 07									
Major 21	CS405PHP	PHP	1	0	1	2	40	60	100
Major 22	CS402CON	Computer Networks	2	1	1	4	40	60	100
Major 23	CS406DMW	Data Mining & Warehousing	1	1	1	3	40	60	100
Major 24	CS407EDA	Entrepreneurship in the Digital Age	1	1	1	3	40	60	100
Major 25	CS404SQL	Structured Query Language	1	1	2	4	40	60	100
SEMESTER 08									
Major 26	CS451CYS	Cyber Security	1	1	0	2	40	60	100
Major 27	CS453SEN	Software Engineering	1	1	0	2	40	60	100
Major 28	CS457MAL	Machine Learning	2	1	1	4	40	60	100
Major 29	CS458ETI	Emerging Trends & innovations in IT	1	1	0	2	40	60	100
Major 30	CS459WAD	Web Application Development	1	0	2	3	40	60	100
Major 31	CS460PDA	Data Analytics with Python	0	1	2	3	40	60	100

4 Years Honours with Research Program

Program Code: TCMCS6.0BSCRIT

Eligibility Criteria – After completing the requirements of the three-year Bachelor's degree (that is, having no remaining backlogs (Drop Courses) in the first three years of this 4 Years Bachelor's Program), only the students who have a CGPA of 7.5 or above, shall be eligible to continue studies in the fourth year of Honours with Research Program

First 6 semesters same as B.Sc. - MAJOR in Information Technology 4 Years Honours

Course Type	Course Code	Course Title	LTP Ratio				Assessment Marks		
			L	T	P	Credits	Formative	Summative	Total
SEMESTER 07									
Major 21	CS405CON	Computer Networks	2	1	1	4	40	60	100
Major 22	CS406DMW	Data Mining & Warehousing	1	1	1	3	40	60	100
Major 23	CS408RME	Research Methodology	0	1	0	1	40	60	100
Major 24	CS404SQL	Structured Query Language	1	1	2	4	40	60	100
Major 25	CS409RSY	Research Synopsis	0	0	4	4	40	60	100
SEMESTER 08									
Major 26	CS451CYS	Cyber Security	1	1	0	2	40	60	100
Major 27	CS453SEN	Software Engineering	1	1	0	2	40	60	100
Major 28	CS457MAL	Machine Learning	2	1	1	4	40	60	100
Major 29	CS461RDI	Research Dissertation	0	0	8	8	40	60	100

PO and PSO
for
B.Sc. Honours/Honours with Research (4 Years)
Major in
Information Technology

Program Code: TCMCS6.0BSCHIT / TCMCS6.0BSCRIT

Preamble

The Department of Computer Science at Dev Sanskriti Vishwavidyalaya is known for cutting edge research and for imparting state of the value based technical education. We attract some of the brightest students and faculty and invite you to join us in the excitement.

The Computer Science Department is equipped with well established infrastructure: high end connectivity and some young energetic minds to produce the best value-based technocrats. The Academic team is equally supported by eminent scholars and professors of India and abroad along with the leading Industrialist, who make their vital presence through regular visit and video conferencing in the C.S. department.

Vision & Mission of Department of Computer Science

Vision:

- To evolve as a facilitator of excellent places for learning and a producer of competent IT Professionals, Innovators and Entrepreneurs with core human values, professional ethics.

Mission Statement:

- M1: To transform ambitious students into IT professionals with a great extent of technical skills and to develop an innovative mindset.
- M2: To prepare the next generation of IT professionals and innovators.
- M3: To provide the best infrastructure to facilitate teaching-learning in an effective way.
- M4: To facilitate value added courses to produce highly competent and socially conscious information technology professionals and entrepreneurs.
- M5: To accomplish academic excellence with human values through well designed curriculum adaptable to dynamic technological needs, competent faculty and innovative teaching-learning process.

Nature & Context of the Program :

B.Sc. (IT) program is a four year undergraduate honors degree program. The aim of this program is to produce value-based graduates (Technocrats) who can lead in the IT industry with their skills, knowledge and experience. The curriculum has been designed after brainstorming with academic and industry experts. It has been designed by keeping the Startup project of the government in focus to skill professionals who want to be entrepreneurs in IT.

PO (Program Outcomes) as Graduate Attributes

PO 1	INFORMATION TECHNOLOGY SKILLS	Apply core IT skills in the serving desired organization or community
PO 2	PROBLEM ANALYSIS	Identify and analyze computational problems under real world limitations with critical thinking.
PO 3	DESIGN / DEVELOPMENT SOLUTIONS	Design, implement and evaluate computer-based system software solutions as per industry need using analytical skills.
PO 4	CONDUCT STUDY OF COMPLEX PROBLEMS	Use computational knowledge and problem-solving methods to produce quality recommendations for business decision making
PO 5	USAGE OF MODERN IT TOOLS & TECHNOLOGIES	An ability to select, apply appropriate techniques, resources, and modern IT tools in a work environment.
PO 6	ECO-SOCIO RESPONSIBILITIES	An ability to propagate disciplinary knowledge to address eco-societal issues and bear responsibilities being sustainable in context.
PO 7	ETHICS & VALUES	An ability to use human values & ethical principles in professional environment
PO 8	INDIVIDUAL & TEAM WORK	To be effective in various roles as an individual, team member and leader in diverse teams, and multidisciplinary scenarios
PO 9	COMMUNICATION SKILL	An ability to communicate clearly, logically, critically in written and oral form for personal and professional environments.
PO 10	PROJECT MANAGEMENT	An ability to demonstrate the depth of knowledge and understanding of fundamental principles in corporate project management.
PO 11	IT CONSULTANCY	An ability to provide consultancy services to corporate and novice professionals.
PO 12	LIFE-LONG LEARNING	An ability to be an independent lifelong learner to cope up with ever changing technological trends.

PSO (Program Specific Outcomes)

PSO 1	Design and Develop technology-based solutions to the real-world problems
PSO 2	Extend its career as an IT enabled Entrepreneur
PSO 3	Ability to pursue their research in Information Technology

SYLLABUS

CS101CHC - Computer Hardware & Components

NOTIONAL LEARNING HOURS: 090 hrs				**CREDITS:** 03			**MARKS :** 100	
L	**T**	**P**	**A**	**L**	**T**	**P**	**Formative**	**Summative**
30	15	0	45	2	1	0	40	60

Note:

- *Notional Learning Hours = Course Credits x 30*
- *L- Lecture, T- Tutorial, P- Practical, A- Assessment*

NATURE & CONTEXT OF THE COURSE

The course on Computer Hardware & Components is designed to provide students with a fundamental understanding of computer hardware, including its architecture, operation, and components. The course aims to equip students with knowledge about the central processing unit (CPU), memory and storage, input and output devices, and system maintenance and troubleshooting.

PREREQUISITE

There are no prerequisites to this course.

COURSE OUTCOME (Student will be able to …)

A	Gain a basic understanding of computer hardware and components.
B	Understand the role of computer processors and memory in computing
C	Familiarize yourself with various types of storage devices and their functions.
D	Understand the role of motherboard and expansion cards in computing.
E	Understand the functions of computer peripherals and accessories.

ASSESSMENT CRITERIA

	Mid-Term Exam	**Assignments**	**Quiz**	**Seminar**	**Demonstration**	**Final Exam**	**Total (hrs)**
Assessment Hours	3	25	2	10	2	3	45
Course Outcomes	A & B	All	All	All	A	All	

UNIT -1 : Introduction to Computer Hardware

Outcome: Gain a basic understanding of computer hardware and components.	
S.N.	**Topics covered**
1	Overview of computer hardware components
2	Historical evolution of computer hardware
3	Types of computers
4	Hardware & software
5	Types of computer hardware and software
6	Data and information: characteristics, processing

UNIT -2 : COMPUTER PROCESSOR AND MEMORY

Outcome: Understand the role of computer processors and memory in computing	
S.N.	**Topics covered**
1	Central Processing Unit (CPU)
2	Control Unit (CU) and Arithmetic Logic Unit (ALU)
3	Types of processors: Single-core, multi-core, and multi-processor
4	Computer memory: primary memory (RAM), secondary memory (hard drive), and cache memory
5	Types of RAM and ROM

UNIT -3 : STORAGE DEVICES

Outcome: Familiarize yourself with various types of storage devices and their functions.	
S.N.	**Topics covered**
1	Types of storage devices
2	External storage devices (USB drives, external hard drives, and cloud storage)
3	RAID configurations

UNIT -4 :Input and Output Devices

Outcome: Understand the role of motherboard and expansion cards in computing.	
S.N.	**Topics covered**
1	Motherboard components:(CPU socket, RAM slots, expansion slots, and connectors)
2	Expansion cards:(video cards, sound cards, network cards, and RAID controllers)
3	BIOS and UEFI firmware

UNIT -5 : COMPUTER PERIPHERALS AND ACCESSORIES

Outcome: Understand the functions of computer peripherals and accessories.	
S.N.	**Topics covered**
1	Input devices
2	Output devices
3	Networking devices: modem, router, and switch
4	Other accessories: webcam, external hard drive, and UPS

Recommended Books or Learning Resources

R1	“Computer Fundamental”, Praddep k. Sinha and Priti Sinha, BPB Publication
R2	“Introduction to Computers”, Peter Nortan, McGraw- Hill Publication
R3	"Computer Organization and Design" by David A. Patterson and John L. Hennessy
R4	"The Essential Guide to Computer Hardware" by John Gower
R5	https://onlinecourses.swayam2.ac.in/cec19_cs06/preview

CS102OAT - Office Automation

NOTIONAL LEARNING HOURS: 090 hrs				CREDITS: 03			MARKS : 100	
L	**T**	**P**	**A**	**L**	**T**	**P**	**Formative**	**Summative**
15	0	60	15	1	0	2	40	60

Note:

- *Notional Learning Hours = Course Credits x 30*
- *L- Lecture, T- Tutorial, P- Practical, A- Assessment*

NATURE & CONTEXT OF THE COURSE

Office automation is the use of various technologies (e.g. computer and telecommunication) to simplify and support routine office functions, improve communication, increase office productivity and enhance the quality of clerical output. Many office tasks including preparation of reports and correspondence, communications, file maintenance, duplication and distribution of written materials, can be facilitated and improved through word processing and other office automation techniques. This course covers the fundamentals of operating systems, and cloud-based services for MS Word, Excel, PowerPoint, and Google Forms, with a focus on basic operations, formatting, tools, and printing.

PREREQUISITE

No Prerequisite Course required.

COURSE OUTCOME (Student will be able to …)

A	Identify and understand the benefits of office automation tools.
B	Create and format documents using Microsoft Word.
C	Use Microsoft Excel to manipulate and analyze data in spreadsheets.
D	Create professional presentations using Microsoft PowerPoint.
E	Collaborate, communicate, and manage tasks using Google Workspace.

ASSESSMENT CRITERIA

	Mid-Term Exam	Assignments	Quiz	Seminar	Group Discussion	Final Exam	Total (hrs)
Assessment Hours	03	02	01	04	02	03	15
Course Outcomes	A & B	E	All	D	B & C	All	

UNIT -1 : INTRODUCTION TO OFFICE AUTOMATION TOOLS

Outcome: Define office automation tools and their scope

S.N.	Topics covered
1	Definition and scope of office automation tools
2	Benefits of using office automation tools
3	Overview of popular office automation tools such as Microsoft Office
4	Google Workspace and Adobe Creative Cloud

UNIT -2 : WORD PROCESSING WITH MICROSOFT WORD

Outcome: Create, edit, and format documents using Word

S.N.	Topics covered
1	Overview of Microsoft Word interface and basic features
2	Creating, editing, and formatting documents
3	Working with templates and styles
4	Inserting tables, images, and other objects
5	Managing documents with tracking changes, comments
6	Collaboration tools

UNIT -3 : SPREADSHEET WITH MICROSOFT EXCEL

Outcome: Use Microsoft Excel to manipulate and analyze data in spreadsheets.

S.N.	Topics covered
1	Overview of Microsoft Excel interface and basic features
2	Creating and formatting spreadsheets
3	Entering and manipulating data with formulas and functions
4	Analyzing data with charts and graphs
5	Managing spreadsheets with sorting, filtering, and collaboration tools

UNIT -4 : PRESENTATIONS WITH MICROSOFT POWERPOINT

Outcome: Create professional presentations using Microsoft PowerPoint	
S.N.	**Topics covered**
1	Overview of Microsoft PowerPoint interface and basic features
2	Creating and formatting slides
3	Adding multimedia elements such as images, audio, and video
4	Animating and transitioning slides
5	Delivering and sharing presentations

UNIT -5 : GOOGLE WORKSPACE GSUITE

Outcome: Collaborate, communicate, and manage tasks using Google Workspace.	
S.N.	**Topics covered**
1	Overview of Google Workspace and its applications
2	Collaborating on documents, spreadsheets, and presentations with Google Drive
3	Communicating with Gmail and Google Meet
4	Managing tasks and schedules with Google Calendar and Google Tasks
5	Customizing and automating workflows with Google Apps Script

RECOMMENDED BOOKS OR LEARNING RESOURCES

R1	“Microsoft Office 2019 Step by Step" by Joan Lambert
R2	"Google Drive and Docs in 30 Minutes" by Ian Lamont
R3	"PowerPoint Basics In 30 Minutes" by Angela Rose
R4	"The Ultimate Guide to Adobe Creative Cloud" by Jamie Spencer
R5	"Excel Basics In 30 Minutes" by Ian Lamont
R6	https://elearn.nptel.ac.in/shop/nptel/digital-skilling/

CS151BCP - Basics of C Programming

NOTIONAL LEARNING HOURS: 090 hrs				**CREDITS:** 03			**MARKS :** 100	
L	**T**	**P**	**A**	**L**	**T**	**P**	**Formative**	**Summative**
15	0	60	15	1	0	2	40	60

Note:

- *Notional Learning Hours = Course Credits x 30*
- *L- Lecture, T- Tutorial, P- Practical, A- Assessment*

NATURE & CONTEXT OF THE COURSE

The course on Basics of C Programming is designed to introduce students to the fundamental concepts of programming in C language. The course covers various topics such as syntax, data types, conditional statements, loops, arrays, functions, pointers and structures. Through this course, students will gain a foundational understanding of C programming and develop programming skills required to build applications.

PREREQUISITE

It is expected to have basic operational knowledge of using computers and its fundamental concepts.

COURSE OUTCOME (Student will be able to …)

A	To understand the basic structure of a C program and have knowledge of character set and token
B	To apply operators, expressions, preprocessor directives, and format specifiers to manage input and output operations.
C	To use conditional and iteration statements, and arrange data with arrays and strings.
D	To gain knowledge about functions, parameter passing, and recursion & apply them in programs.
E	To understand and apply pointers, structures, and unions.

ASSESSMENT CRITERIA

	Mid-Term Exam	**Assignments**	**Quiz**	**Seminar**	**Group Discussion**	**Final Exam**	**Total (hrs)**
Assessment Hours	03	03	02	02	02	03	15
Course Outcomes	A & B	B & C	A & E	All	D	All	

UNIT -1 : FUNDAMENTALS OF C

Outcome: To understand the basic structure of a C program and have knowledge of character set and tokens	
S.N.	**Topics covered**
1	Overview of C
2	Basic Structure of C Program, Executing a C program
3	C-Character set , C- Tokens

UNIT -2 : OPERATORS AND EXPRESSIONS

Outcome: To apply operators, expressions, preprocessor directives, and format specifiers to manage input and output operations.	
S.N.	**Topics covered**
1	Operators & Expressions
2	Preprocessor Directives
3	Managing Input and Output Operations
4	Format Specifiers

UNIT -3 : CONTROL STRUCTURES & ARRAYS

Outcome: To use conditional and iteration statements, and arrange data with arrays and strings.	
S.N.	**Topics covered**
1	Conditional statements
2	Iteration Statements
3	Arrays

UNIT -4 : FUNCTIONS

Outcome: To gain knowledge about functions, parameter passing, and recursion & apply them in programs.	
S.N.	**Topics covered**
1	Functions (standard library functions & User-defined functions)
2	Parameters & Return types of functions
3	Recursion

UNIT -5 : DERIVED DATA TYPES

Outcome: To understand and apply pointers, structures, and unions.	
S.N.	**Topics covered**
1	Understanding Pointers
2	Pointer and Arrays
3	Defining and processing structures
4	Structures with pointers
5	Array of structures
6	Concepts of Union

RECOMMENDED BOOKS OR LEARNING RESOURCES

R1	Programming in C ,by E. Balaguruswamy, Tata McGraw Hill
R2	Let us C , by Kanetkar , BPB Publication
R3	The C Programming Language, by Brian Kernighan and Dennis Ritchie, Prentice Hall
R4	https://nptel.ac.in/courses/106104128/
R5	https://www.tutorialspoint.com/cprogramming/index.htm

CS152DMR - Digital Marketing

NOTIONAL LEARNING HOURS: 090 hrs				**CREDITS:** 03			**MARKS :** 100	
L	**T**	**P**	**A**	**L**	**T**	**P**	**Formative**	**Summative**
15	15	30	30	1	1	1	40	60

Note:

- *Notional Learning Hours = Course Credits x 30*
- *L- Lecture, T- Tutorial, P- Practical, A- Assessment*

NATURE & CONTEXT OF THE COURSE

The course aims to teach students the basics of digital marketing, audience analysis, SEO, social media marketing, and paid advertising to develop and implement effective digital marketing strategies for modern businesses.

PREREQUISITE

Basics of Computer Operation & Office Automation Tools

COURSE OUTCOME (Student will be able to …)

A	Understand the different digital marketing channels and their unique characteristics
B	Identify the key elements of a website design and how they impact user experience
C	Understand how search engines work and how they rank websites.
D	Recognize the different types of search engine marketing and their objectives.
E	Create effective ad campaigns using platforms such as Google Ads.

ASSESSMENT CRITERIA

	Mid-Term Exam	**Quiz**	**Lab Assignment**	**Term-end Exam**	**Total (hrs)**
Assessment Hours	03	2	22	03	30
Course Outcomes	A & B	All	B,C,E	All	

UNIT -1 : INTRODUCTION TO DIGITAL MARKETING

Outcome: Understand the different digital marketing channels and their unique characteristics	
S.N.	**Topics covered**
1	Fundamental of Marketing
2	Digital marketing channels
3	Customer’s motivation in the buying process

UNIT -2 : DESIGNING AND BUILDING A WEB OWNED PRESENCE

Outcome: Identify the key elements of a website design and how they impact user experience	
S.N.	**Topics covered**
1	Visual elements of website
2	Landing pages
3	Blog creation

UNIT -3 : SEARCH ENGINE OPTIMIZATION(SEO)

Outcome: Understand how search engines work and how they rank websites.	
S.N.	**Topics covered**
1	Working of Google's search algorithm
2	Crawling
3	Indexing
4	Ranking
5	SEO Tools: Keyword planner, Ubersuggest, SEO Sitecheckup

UNIT -4 : SEARCH ENGINE MARKETING (SEM)

Outcome: Recognize the different types of search engine marketing and

UNIT -4 : SEARCH ENGINE MARKETING (SEM)

their objectives.	
S.N.	**Topics covered**
1	Introduction to Search engine marketing (SEM)
2	SEM campaigns: objectives & elements
3	Display Advertising
4	Google Display Network - The complete process.
5	Working of Programmatic ad buying.

UNIT -5 : SOCIAL MEDIA MARKETING

Outcome: Create effective ad campaigns using platforms such as Google Ads.	
S.N.	**Topics covered**
1	Creating a social media presence (Facebook or Instagram Page)
2	Social media progress reporting to senior marketing management
3	Web Analytics

RECOMMENDED BOOKS OR LEARNING RESOURCES

R1	"Digital Marketing Analytics: Making Sense of Consumer Data in a Digital World" by Chuck Hemann and Ken Burbary
R2	"Epic Content Marketing: How to Tell a Different Story, Break through the Clutter, and Win More Customers by Marketing Less" by Joe Pulizzi
R3	"The Art of SEO: Mastering Search Engine Optimization" by Eric Enge, Stephan Spencer, and Jessie Stricchiola
R5	"SEO 2022” by Adam Clarke
R6	Marketing Analytics: Data-Driven Techniques with Microsoft Excel" by Wayne L. Winston
R7	https://onlinecourses.swayam2.ac.in/ugc19_hs26/preview

CURRICULUM

Curriculum & Credit Distribution Structure

B.C.A. (Bachelor of Computer Application) Honours

(4 Years)

MAJOR in

Computer Application

Session: 2023-2027

Program Code: TCMCS6.0BCAHCS

Based on

NEP-2020, UGC Guidelines Dec 2022 &

Outcome based **CBCS** pattern

Department of Computer Science

Faculty of Technology & Management

School of Technology, Communication & Management

Dev Sanskriti Vishwavidyalaya

Haridwar, Uttarakhand, India

PSO (Program Specific Outcomes)

PSO 1	Ability to understand, analyze and develop computer programs in the areas related to algorithm, system software, web design and networking for efficient design of computer-based systems.
PSO 2	Ability to apply standard software engineering practices and strategies in software project development using open-source programming environments to deliver a quality product for business success.
PSO 3	Ability to know various issues, latest trends in technology development and thereby innovate new ideas and solutions to existing problems.

SYLLABUS

CS101CHC - Computer Hardware & Components

NOTIONAL LEARNING HOURS: 090 hrs				**CREDITS:** 03			**MARKS :** 100	
L	**T**	**P**	**A**	**L**	**T**	**P**	**Formative**	**Summative**
30	15	0	45	2	1	0	40	60

Note:

- *Notional Learning Hours = Course Credits x 30*
- *L- Lecture, T- Tutorial, P- Practical, A- Assessment*

NATURE & CONTEXT OF THE COURSE

The course on Computer Hardware & Components is designed to provide students with a fundamental understanding of computer hardware, including its architecture, operation, and components. The course aims to equip students with knowledge about the central processing unit (CPU), memory and storage, input and output devices, and system maintenance and troubleshooting.

PREREQUISITE

There are no prerequisites to this course.

COURSE OUTCOME (Student will be able to …)

A	Gain a basic understanding of computer hardware and components.
B	Understand the role of computer processors and memory in computing
C	Familiarize yourself with various types of storage devices and their functions.
D	Understand the role of motherboard and expansion cards in computing.
E	Understand the functions of computer peripherals and accessories.

ASSESSMENT CRITERIA

	Mid-Term Exam	**Assignments**	**Quiz**	**Seminar**	**Demonstration**	**Final Exam**	**Total (hrs)**
Assessment Hours	3	25	2	10	2	3	45
Course Outcomes	A & B	All	All	All	A	All	

UNIT -1 : Introduction to Computer Hardware

Outcome: Gain a basic understanding of computer hardware and components.	
S.N.	**Topics covered**
1	Overview of computer hardware components
2	Historical evolution of computer hardware
3	Types of computers
4	Hardware & software
5	Types of computer hardware and software
6	Data and information: characteristics, processing

UNIT -2 : COMPUTER PROCESSOR AND MEMORY

Outcome: Understand the role of computer processors and memory in computing	
S.N.	**Topics covered**
1	Central Processing Unit (CPU)
2	Control Unit (CU) and Arithmetic Logic Unit (ALU)
3	Types of processors: Single-core, multi-core, and multi-processor
4	Computer memory: primary memory (RAM), secondary memory (hard drive), and cache memory
5	Types of RAM and ROM

UNIT -3 : STORAGE DEVICES

Outcome: Familiarize yourself with various types of storage devices and their functions.	
S.N.	**Topics covered**
1	Types of storage devices
2	External storage devices (USB drives, external hard drives, and cloud storage)
3	RAID configurations

UNIT -4 :Input and Output Devices

Outcome: Understand the role of motherboard and expansion cards in computing.	
S.N.	**Topics covered**
1	Motherboard components:(CPU socket, RAM slots, expansion slots, and connectors)
2	Expansion cards:(video cards, sound cards, network cards, and RAID controllers)
3	BIOS and UEFI firmware

UNIT -5 : COMPUTER PERIPHERALS AND ACCESSORIES

Outcome: Understand the functions of computer peripherals and accessories.	
S.N.	**Topics covered**
1	Input devices
2	Output devices
3	Networking devices: modem, router, and switch
4	Other accessories: webcam, external hard drive, and UPS

Recommended Books or Learning Resources

R1	“Computer Fundamental”, Praddep k. Sinha and Priti Sinha, BPB Publication
R2	“Introduction to Computers”, Peter Nortan, McGraw- Hill Publication
R3	"Computer Organization and Design" by David A. Patterson and John L. Hennessy
R4	"The Essential Guide to Computer Hardware" by John Gower
R5	https://onlinecourses.swayam2.ac.in/cec19_cs06/preview

PO (Program Outcomes) as Graduate Attributes –

1. Disciplinary Knowledge: Capable of demonstrating comprehensive knowledge and understanding of the subject, its relevance to prevant issues.
2. Communication Skills: Ability to express thoughts and ideas effectively in writing and orally; demonstrate the ability to listen carefully, read and write analytically, and present complex information clearly and concisely.
3. Analytic Thinking: Capability to apply analytic thought to a body of knowledge; evaluate the reliability and relevance of evidence, identify logical flaws and holes in the arguments to formulate coherent assertions; analyze and synthesize data and claims from a variety of sources; draw valid conclusions and support them with evidence and examples, and address opposing viewpoints.
4. Research-related Skills: A sense of inquiry and capability for asking relevant/ appropriate questions, critically evaluating ideas, evidence and experiences from an open-minded and scientific reasoned perspective; Ability to define problems, analyze, interpret and draw conclusions from quantitative/qualitative data, predict cause-and-effect relationships.
5. Leadership Skills: Capability for mapping out an inspiring vision, building a team who can achieve the vision, motivating and inspiring team members to engage with that vision, using efficient management skills to guide people to the right destination, and solving problems by applying one's learnings to real-life situations.
6. Cooperation/Teamwork: Ability to work effectively and respectfully with diverse teams; facilitate cooperative or coordinated effort on the part of a group, and act together as a group or a team in the interests of a common cause and work efficiently as a member of a team.
7. Information/Digital Literacy: Capability to use ICT in a variety of learning situations, demonstrate the ability to access, evaluate, and use a variety of relevant information sources; and use appropriate software for analysis of data.
8. Moral and Ethical Awareness: Ability to embrace moral/ethical values in conducting one's life, Avoiding unethical behavior such as fabrication, falsification or misrepresentation of data or committing plagiarism, not adhering to intellectual property rights. Appreciating environmental and sustainability issues; and adopting objective, unbiased and truthful actions in all aspects of work. Possessing knowledge of the values and beliefs of multiple cultures from global perspectives; and engaging effectively in a multicultural society and interacting respectfully with diverse groups.
9. Self-directed Learning & Lifelong Learner: Ability to acquire knowledge and skills, learning how to learn, that is necessary for participating in learning activities throughout life, through self-paced and self-directed learning aimed at personal development, meeting economic, social and cultural objectives, and adapting to changing trends and demands of the workplace through knowledge/skill development/reskilling. And be a lifelong learner.

PSO (Program Specific Outcomes)

1. **Basic knowledge of Communication field** - Get a basic understanding of different types of communication, communication process and prevalent Communication theories and models and think from an Indian perspective with global outlook .
2. **Understanding of Journalism & Media Industry:** Students will learn about the origin and evolution of Journalism, its present state as a big media industry and its different platforms like – print, electronic and digital media etc. with their latest trends.
3. **Proficiency in written and oral communication:** Students should develop advanced writing and speaking skills to communicate effectively in various social settings as per professional and academic demand.
4. **Critical thinking and analysis:** Students would be able to analyze media content, social issues and burning topics and evaluate them based on various perspectives and be part of the solution not the problem.
5. **Ability to research and present scientifically:** Students would be able to formulate a good research problem and apply appropriate research methodology to find out a solution to the defined problem and present it as a piece of quality research work.
6. **Understanding of cultural diversity and role of media:** Students will develop an appreciation for cultural diversity and an understanding of social issues and use of media as a means of solution to the prevalent intercultural issues & problems.
7. **Technological proficiency:** Students would get fair exposure to practical use of various media software tools and platforms to create quality content for print, electronic and digital media at different exit points as defined.
8. **Professional skills:** Students will be ready for different media outlets as per each year's PSO with necessary professional skills required by the media industry ready for jobs with specific skill sets at different exit points as mentioned.
9. **Ethical awareness, values concern and agent of positive change:** Students would get sensitized to higher value systems, social and constitutional ethical standards and show noble professional and social conduct and be agents of positive change in society and world at large.

SYLLABUS

Semester - 1 / Course 1/ JM101ITJ

Introduction to Journalism

Credits (L+T+P): 2 (2+0+0) Maximum Marks: 100 (Summative=60 + Formative=40)

Notional Learning Hours= 2*30=60 Hrs. (L=30 Hours + A= 30 Hours)

Course Objective: To provide a basic idea about the domain of journalism and news gathering. This course will develop a solid foundation to comprehend the role of journalism in democracy and equip learners with contemporary trends in journalism.

Course Outcome: By the end of the course the students will be able to -

A. Get a basic comprehension of news, news angles and sources of news.
B. Understand different platforms of Media and their impact on society.
C. Get sensitized about the role of the press in maintaining a healthy democracy.
D. Figure out the prevalent trends in the profession of journalism.
E. Build a basic connotation of print media and its functionality.

ASSESSMENT	ASSESSMENT CRITERIA					
	MID-TERM EXAM	ASSIGNMENT	QUIZ	SEMINAR	GROUP DISCUSSION	FINAL EXAM
HOURS ASSESSMENT	3 hrs	8 hrs	2 hrs	8 hrs	6 hrs	3 hrs
COURSE OUTCOME ASSESSMENT	A & B	B & C	All	B & C	A, D & E	All

Unit: 1 Understanding News [6+0+0 hours]

1.1 News: Meaning, definition, nature
1.2 Basic components of a news story
1.3 News Sources & News Values
1.4 Types of news

Unit: 2 Type of Media, their characteristics & impact [7+0+0 hours]

2.1 Print Media, its Characteristics and Impact
2.2 Electronic Media, its Characteristics and Impact
2.3 Web Media, its Characteristics and Impact

Unit: 3 Role of media in a democracy [9+0+0 hours]

3.1 Responsibility to Society
3.2 Press and Democracy
3.3 Contemporary debates and issues to media
3.4 Ethics in Journalism
3.5 Agenda setting

Unit: 4 Contemporary trends in Journalism [8+0+0 hours]

4.1 Yellow journalism
4.2 Tabloid journalism
4.3 Media trial
4.4 Campaign journalism
4.5 Citizen journalism

Suggested Readings:

1. News Reporting & Editing, Dr. Ambrish Saxena, Kanishka Publication, New Delhi.
2. Bruce D. Itule and Douglas A. Anderson. News Writing and Reporting for today's media McGraw Hill Publication.
3. M.L. Stein, Susan Paterno & R. Christopher Burnett. News Writing's Handbook: an introduction to journalism; Blackwell Publishing.
4. George Rodman. Mass Media in a Changing World; Mcgraw Hill Publication.
5. Carole Flemming and Emma Hemmingway. An introduction to journalism; Vistaar Publications.
6. Richrd Keeble. The Newspaper's Handbook; Routledge Publication.
7. आलोक मेहता, पत्रकारिता की लक्ष्मणरेखा, डीके एजेन्सी, नई दिल्ली

CURRICULUM

Curriculum & Credit Distribution Structure

B.R.S. (Bachelor of Rural Studies) Honours/Honours with Research (4 Years)

MAJOR in

Rural Studies

Session: 2023-2027

Program Code: BSSRS6.0BRSHRUL/ BSSRS6.0BRSRRUL

Based on

NEP-2020, UGC Guidelines Dec 2022 &

Outcome based **CBCS** pattern

Department of Rural Studies & Sustainability

Faculty of Rural Studies and Sustainability,

School of Biological Sciences and Sustainability,

Dev Sanskriti Vishwavidyalaya

Haridwar, Uttarakhand, India

PO (Program Outcomes) as Graduate Attributes –

1. **Disciplinary knowledge:** Capable of demonstrating comprehensive knowledge and understanding of one or more disciplines that form a part of an undergraduate Programme of study.
2. **Communication Skills:** Ability to express thoughts and ideas effectively in writing and orally; Communicate with others using appropriate media; confidently share one's views and express herself/himself; demonstrate the ability to listen carefully, read and write analytically, and present complex information in a clear and concise manner to different groups.
3. **Critical thinking:** Capability to apply analytic thought to a body of knowledge; analyse and evaluate evidence, arguments, claims, beliefs on the basis of empirical evidence; identify relevant assumptions or implications; formulate coherent arguments; critically evaluate practices, policies and theories by following scientific approach to knowledge development.
4. **Research-related skills:** A sense of inquiry and capability for asking relevant/appropriate questions, problematizing, synthesising and articulating; Ability to recognise cause-and-effect relationships, define problems, formulate hypotheses, test hypotheses, analyse, interpret and draw conclusions from data, establish hypotheses, predict cause-and-effect relationships; ability to plan, execute and report the results of an experiment or investigation.
5. **Problem solving:** Capacity to extrapolate from what one has learned and apply their competencies to solve different kinds of non-familiar problems, rather than replicate curriculum content knowledge; and apply one's learning to real life situations.
6. **Cooperation/Team work:** Ability to work effectively and respectfully with diverse teams; facilitate cooperative or coordinated effort on the part of a group, and act together as a group or a team in the interests of a common cause and work efficiently as a member of a team.
7. **Reflective thinking:** Critical sensibility to lived experiences, with self-awareness and reflexivity of both self and society.
8. **Self-directed learning:** Ability to work independently, identify appropriate resources required for a project, and manage a project through to completion.
9. **Moral and ethical awareness/reasoning:** Ability to embrace moral/ethical values in conducting one's life, formulate a position/argument about an ethical issue from multiple perspectives, and use ethical practices in all work. Capable of demonstrating the ability to identify ethical issues related to one's work, avoid unethical behaviour such as fabrication, falsification or misrepresentation of data or committing plagiarism, not adhering to intellectual property rights; appreciating environmental and sustainability issues; and adopting objective, unbiased and truthful actions in all aspects of work.
10. **Leadership readiness/qualities:** Capability for mapping out the tasks of a team or an organization, and setting direction, formulating an inspiring vision, building a team who can help achieve the vision, motivating and inspiring team members to engage with that vision, and using management skills to guide people to the right destination, in a smooth and efficient way.
11. **Lifelong learner:** Ability to acquire knowledge and skills, including learning how to learn", that are necessary for participating in learning activities throughout life, through self-paced and self-directed learning aimed at personal development, meeting economic, social and cultural objectives, and adapting to changing trades and demands of work place through knowledge/skill development/re-skilling.

PSO (Program Specific Outcomes)

PSO 1: The Programme will enable students to establish own NGO as per his/her interest and targeted goals.

PSO 2: Develop as an entrepreneur for self employment by establishing a small scale Enterprise/ unit.

PSO 3: Will be able to seek placement in Govt. Sector (Rural development) or Bank, NGO, SSI or Gaushala.

PSO 4: He/she will be equipped to pursue higher studies in areas like MRS, MBA, MSW or any other related academic field.

PSO 5: Possess adequate practical skill that will help them in establishing own medicinal herbs production or processing unit or crop production Farmor become a Farm Manager

PSO 6: Develop capabilities for establishing commercial organic production unit.

SYLLABUS

Semester - 1 / Course 1/ RS101RDC

Rural Development : Concepts and Dimensions

Credits (L+T+P): 3 (2+1+0) Maximum Marks: 100 (Summative=60 + Formative=40)

Notional Learning Hours – 3 * 30 = 90 Hours(L=30 Hrs, T=15 Hrs, A=45 Hrs)

Course Objective : Provide basic knowledge of need for sustainable rural development along with the successful models of rural development.

Course Outcomes : After studying the course the student will be able to :

A. Explain the rural development and the difference between Growth and Development.
B. Explain courses of rural backwardness and constraints of rural development.
C. Describe the different models of economic development.
D. Explain the sustainable rural development needed for rural areas economic development.
E. Explain the micro-finance model of Bangladesh and lessons for India.
F. Elaborate the various issues related to rural development and list the steps required for rural development

Assessment Criteria							
Assessment	**Mid-Term Exam**	**Assignment**	**Quiz**	**Seminar**	**Group Discussion**	**Field Visits**	**Final Exam**
Hours	3	10	2	12	10	5	3
Course Outcome	A,B,C	B &F	All	B&F	C&E	B&D	All

Unit	Course Content	L+T+P Hours
Unit - 1	**Concept of Development** and growth is general, Distinction between growth & development, indicators of development, Measures of Development.	**4+3+0**
Unit - 2	**Concept of Rural Development,** scope of rural development, Causes of rural backwardness, Need of rural Development, constraints of rural Development.	**6+3+0**
Unit - 3	**Paradigms of Rural Development**- Lewis Model of Economic Development, 'Big Push' theory of Development, Myrdal's thesis of 'Spread and Backwash Effects', Pt. Sriram Sharma's model of Rural Development.	**8+3+0**
Unit –4	**Important issues in Rural Development**- Human Resource Development in Rural Development, Poverty & Unemployment, Rural Development & Environmental protection,	**7+3+0**
Unit –5	**Rural Development experiences in Asian countries** - Need of Rural Development in Asian countries, Success of Grameen Model of Micro Finance in Bangladesh, Lessons for India, Approaches to Rural Development in India	**5+3+0**
	Total	**30+15+0**

CURRICULUM

Curriculum & Credit Distribution Structure

B.B.A. (Bachelor of Business Administration)
Honours/Honours with Research (4 Years)
MAJOR in
Tourism and Travel Management
Session: 2023-2027

Program Code: TCMTM6.0BBAHTTM / TCMTM6.0BBARTTM

Based on
NEP-2020, UGC Guidelines Dec 2022 &
Outcome based **CBCS** pattern

Department of Tourism Management
Faculty of Technology & Management
School of Technology, Communication & Management
Dev Sanskriti Vishwavidyalaya
Haridwar, Uttarakhand, India

PSO (Program Specific Outcomes)

PSO 1: Knowledge of Industry: Demonstrate a comprehensive understanding of the industry, including its historical development, current trends, key players, and various sectors (e.g., hospitality, transportation, attractions).

PSO 2: Destination Management: Acquire skills to effectively analyze, plan, and manage tourism destinations, including conducting market research, developing tourism products and services, and implementing sustainable tourism practices.

PSO 3: Marketing and Promotions: Develop proficiency in designing and implementing marketing strategies specific to the sector, including the use of digital marketing tools, social media, and customer relationship management techniques to attract and retain customers.

PSO 4: Tourism Operations and Management: Demonstrate the ability to effectively manage tourism operations, including tour planning and management, event management, customer service, quality assurance, and crisis management in a variety of tourism contexts.

PSO 5: Financial Management: Acquire knowledge and skills in financial management practices specific to the industry, including budgeting, revenue management, pricing strategies, and financial analysis.

PSO 6: Cultural and Heritage Tourism: Understand the importance of cultural and heritage tourism, and develop the ability to promote and manage tourism products that preserve and showcase cultural heritage, traditions, and local communities.

PSO 7: Sustainable Tourism Practices: Demonstrate a commitment to sustainable tourism practices by understanding the environmental, social, and economic impacts of tourism and implementing strategies to minimize negative effects and promote responsible tourism.

PSO 8: Ethical and Legal Issues: Understand and apply ethical principles and legal frameworks relevant to the industry, including issues related to consumer protection, intellectual property, privacy, and sustainability.

PSO 9: Entrepreneurship and Innovation: Develop an entrepreneurial mindset and the ability to identify and exploit opportunities in the industry, including creating innovative tourism products and services and managing small tourism businesses.

PSO 10: Communication and Interpersonal Skills: Demonstrate effective communication skills, both written and verbal, and the ability to work collaboratively in diverse teams, resolving conflicts, and interacting with clients, stakeholders, and industry professionals.

SYLLABUS

Semester - 1 / Course 1/ TM101FOT

Fundamentals of Tourism

Credits (L+T+P): 2 (2+0+0) Maximum Marks: 100 (Summative=60 + Formative=40)

Notional Learning Hours= 2*30=60 Hrs. (L=30 Hours + A= 30 Hours)

Course Objective: The objective of this course is to provide students with a comprehensive understanding of the tourism industry. It intends to equip students with the knowledge and skills necessary to analyze, evaluate, and contribute to the growth and sustainability of the tourism industry.

Course Outcome: By the end of the course the students will be able to -

A - Developing an understanding of the tourism industry and its perspectives.
B - Examining the history and evolution of tourism as a social and economic phenomenon.
C - Understanding the history and evolution of these organizations, including their founding principles, objectives, and membership structures.
D - Students will learn to comprehend and practice tourism terminologies and familiarize the students with the contemporary issues of tourism.
E - Analyze the challenges and prospects of the tourism industry from economic, social, and environmental perspectives.

ASSESSMENT	ASSESSMENT CRITERIA					
	MID-TERM EXAM	ASSIGNMENT	QUIZ	SEMINAR	GROUP DISCUSSION	FINAL EXAM
HOURS ASSESSMENT	3 hrs	10 hrs	2 hrs	6 hrs	6 hrs	3 hrs
COURSE OUTCOME ASSESSMENT	A, B	C & D	All	C & D	D, E	All

Unit 1	Meaning, definition, characteristics and types of Tourism, 5 A's of Tourism. Travel Documents.
Unit 2	History of Tourism through ages, linkages of tourism with other subjects like history, sociology, geography, management and economics, impacts of tourism.
Unit 3	Origin, Organization and Function of WTO, and IATA as International Organizations while TAAI, IATO and ITDC as Domestic Organizations
Unit 4	Tours, Tourist, Visitor, Traveller, Excursionist, Classification of Tourists and its significance. Problem and Prospects of Tourism

Suggested Readings:

- Kamra, Krishan K., Basics of tourism, Kanishka Publication, New Delhi,
- Anand, M.M., Tourism and Hotel Industry in India, Prentice Hall, New Delhi, 1976
- Bhatia, A. K., Tourism Development: Principles, Practices and Philosophies, Sterling Publishers, New Delhi
- McIntosh, Robert, W. Goldner, Charles, Tourism: Principles, Practices and Philosophies, John Wiley and Sons Inc. New York, 1990 (9th edition)
- Negi, J.M.S., Tourism and Travel- Concepts and principles, Gitanjali Publishing House, New Delhi, 1990

CURRICULUM

Curriculum & Credit Distribution Structure

B.Sc. Honours/Honours with Research (4 Years)

MAJOR in

Yogic Science

Session: 2023-2027

Program Code: INDYS6.0BSCHYS/ INDYS6.0BSCRYS

Based on

NEP-2020, UGC Guidelines Dec 2022 &

Outcome based **CBCS** pattern

Department of Yogic Science & Human Consciousness

Faculty of Yoga and Health

School of Indology

Dev Sanskriti Vishwavidyalaya

Haridwar, Uttarakhand, India

PO (Program Outcomes) as Graduate Attributes

1. Disciplinary Knowledge: Capable of demonstrating comprehensive knowledge and understanding of Yogic Science and Human Consciousness, its different platforms and related issues.

2. Communication Skills: Ability to express thoughts and ideas effectively in writing and orally; Communicate with others using appropriate media; confidently share one's views and express herself/himself; demonstrate the ability to listen carefully, read and write analytically, and present complex information clearly and concisely to different groups.

3. Reasoned Analysis: Capability to apply analytic thought to a body of knowledge; evaluate the reliability and relevance of evidence, identify logical flaws and holes in the arguments to formulate coherent assertions; analyze and synthesize data and claims from a variety of sources; identify relevant assumptions or implications; critically evaluate practices, policies and theories by following a scientific approach to knowledge development; draw valid conclusions and support them with evidence and examples, and address opposing viewpoints.

4. Research-related Skills: A sense of inquiry and capability for asking relevant/ appropriate questions, critically evaluating ideas, evidence and experiences from an open-minded and scientific reasoned perspective; problematizing, synthesizing and articulating; Ability to recognize cause-and-effect relationships, defining problems, analyze, interpret and draw conclusions from quantitative/qualitative data, predict cause-and-effect relationships.

5. Leadership Skills: Capability for mapping out an inspiring vision, building a team who can achieve the vision, motivating and inspiring team members to engage with that vision, using efficient management skills to guide people to the right destination, formulating competencies to solve different kinds of non-familiar problems by applying one's learning's to real-life situations.

6. Cooperation/Teamwork: Ability to work effectively and respectfully with diverse teams; facilitate cooperative or coordinated effort on the part of a group, and act together as a group or a team in the interests of a common cause and work efficiently as a member of a team.

7. Information/Digital Literacy: Capability to use ICT in a variety of learning situations, demonstrate the ability to access, evaluate, and use a variety of relevant information sources; and use appropriate software for analysis of data.

8. Moral and Ethical Awareness: Ability to embrace moral/ethical values in conducting one's life, formulate a position/argument about an ethical issue from multiple perspectives, and use ethical practices in all work. Avoiding unethical behavior such as fabrication, falsification or misrepresentation of data or committing plagiarism, not adhering to intellectual property rights. Appreciating environmental and sustainability issues; and adopting objective, unbiased and truthful actions in all aspects of work. Possessing knowledge of the values and beliefs of multiple cultures and global perspectives; and the capability to effectively engage in a multicultural society and interact respectfully with diverse groups.

9. Lifelong Learning: Ability to acquire knowledge and skills, learning how to learn, that is necessary for participating in learning activities throughout life, through self-paced and self-directed learning aimed at personal development, meeting economic, social and cultural objectives, and adapting to changing trends and demands of the workplace through knowledge/skill development/reskilling

PSO (Program Specific Outcomes)

1. **Comprehensive understanding of the theory and practice of yoga**, including its history, philosophy, and principles.

2. **Proficiency in various yoga techniques, such as** asanas, pranayama, Meditation, and relaxation techniques.

3. **Knowledge of the human anatomy and physiology**, and how it relates to yoga practice.

4. **Understanding of the benefits and limitations of yoga** for physical, mental, and emotional health, and the ability to design and teach safe and effective yoga classes.

5. **Knowledge of other related subjects** such as Ayurveda, Sanskrit, and yoga therapy.

6. **Strong communication, interpersonal, and teaching skills** to effectively instruct and motivate yoga students.

7. **Awareness of ethical principles and professional standards** that govern the practice and teaching of yoga.