

DEPARTMENT OF EDUCATION

Syllabus

For

Integrated Teacher Education Programme (ITEP)

(Secondary Level)

As per the NCTE Curriculum Framework



**Hemvati Nandan Bahuguna Garhwal (Central)
University, Srinagar, Uttarakhand**

2024

About the Course

The Integrated Teacher Education Programme (Secondary Stage) is a dual-major bachelor's degree programme, with one major in Education and the other in a disciplinary/interdisciplinary branch of knowledge. The programme seeks to develop among student-teachers an ethic of social engagement, and capacities such as problem solving, critical thinking, creative thinking, communication skills, ethical and moral reasoning, etc., that are necessary for preparing competent teachers.

ITEP with secondary stage specialisation aimed at preparing teachers for the secondary stage for grades 9, 10, 11 and 12 of school education. This programme envisions the creation of passionate, motivated, qualified, professionally trained, and well-equipped teachers capable of designing and implementing developmentally appropriate learning experiences for students at the secondary stage of school education. It ensures that teachers are grounded in Indian values, languages, knowledge, ethos, and traditions, including tribal traditions, while also being well-versed in the latest advances in education and delivery of the highest quality education in content, pedagogy, values, and practice to the prospective teachers.

Programme Intake

The annual intake for ITEP secondary is 150, one unit of each B.A. B.Ed., B.Sc. B.Ed. and B.Com. B.Ed. consisting of 50 (Fifty) seats in each course. Reservation of seats for SC/ST/OBC/EWS and PWD will be as per the existing Central Government / University rules.

Eligibility and Admission

Candidates having a Certificate obtained after successful completion of Grade 12 (or equivalent stage of education, such as Pre-University, Intermediate, etc.) with a minimum of 50% marks in aggregate or an equivalent grade from a recognised Board/University are eligible for the course. Admissions will be strictly according to merit based on the scores obtained in the National Common Entrance Examination (NCET) conducted by the National Testing Agency (NTA) for the session, and the admission policy of the HNB Garhwal University. The university will invite applications for registration on the Samarth Portal for admission in the ITEP.

Duration of the Programme:

The ITEP is of four academic years' duration across eight semesters of study. It will be conducted on the semester pattern with two semesters in an academic year. Each semester will consist of 15 -16 weeks of teaching and learning activities, excluding end-of-semester examinations. A semester will consist of a minimum of 96 working days, excluding end-of-semester examination days. Each working week will have a minimum of 40 hours of instructional/contact time.

Multiple Entry and Exit

The ITEP envisages multiple entry and exit points and re-entry options, with appropriate certifications. Student-teachers who wish to exit after completion of one year (two semesters) of study will be given a Certificate indicating the credits accrued for the courses pursued. Student-teachers who wish to exit after completion of two years (four semesters) will be given a Diploma indicating the credits accrued for the courses completed. Student-teachers who wish to exit after successful completion of three years (six semesters) will be awarded a Bachelor's Degree in the chosen major area of study upon securing a minimum of 132 credits and satisfying the minimum credit requirements of 48 credits for the Major. Student-teachers who successfully complete four years (eight semesters) of study will be awarded a dual-major bachelor's degree, such as B.A. B.Ed., B.Sc. B.Ed., or B.Com. B.Ed. etc. upon securing 176 credits.

Medium of Instruction

The medium of instruction will be English and Hindi for all courses. Medium of examination shall be English or Hindi.

Course Transaction

The course transaction mechanism will involve classroom teaching and structured interaction, requiring a minimum of 15 hours of instructional/contact time per credit in a semester. Practicum requiring students to participate in an approved project or practical activity will require a minimum of 30 hours of student engagement per credit in a semester. This will be applicable to activities such as seminars, internships, lab-based activities, workshop-based activities, field-based learning/projects and practices, community engagement and service, etc.

Attendance Requirement

A student teacher will be required to attain satisfactory attendance to appear in the examination. He/she has to attend not less than 80% of the total working days for theory classes and 100% of the school internship days. However, 10% attendance may be relaxed by the HOD for illness or medical condition after submitting the medical certificate in original, countersigned by the CMO.

Examination Pattern

The assessment will include both internal and external examinations. Internal assessment will be conducted based on assignments, project reports, dairies, maintenance of student attendance register/ other registers and students' portfolios. The summative assessment will be conducted in the following manner.

There shall be a university examination at the end of each semester as per the details of the scheme of examination. The minimum pass marks in each year or semester examination shall be 40 % for each theory paper (including internal and external examinations) and practicum, and 50% for internship in teaching separately. The student teachers will have to pass each theory paper separately. A student teacher who fails in a maximum of two courses in the first year or semester of the course will be eligible to take the examination in that part of the subject (theory paper/practicum), as the case may be, in which he/she fails along with the next semester. In case a student teacher fails in the internship in teaching, he/she will have to undergo the full year of the course of study as a regular student in the subsequent year. A student teacher will have to complete the program in a maximum of eight years.

Programme Objectives

The attributes expected to be demonstrated by student-teachers on completion of ITEP with Secondary Stage Specialisation (Grades 9 & 10) include the following:

- A comprehensive knowledge of the aims of education, curricular goals, competencies and learning outcomes defined for Grades 9 & 10, and the curricular structure and learning content that are to be used for creating learning experiences that reflect the cultural, geographical, linguistic, and social contexts of children.
- Procedural knowledge required by student-teachers to perform and accomplish the professional tasks associated with teaching in Grades 9 & 10, and

- To adopt effective pedagogical approaches to curriculum transaction that would facilitate the achievement by children of the expected learning outcomes and competencies on completion of Grades 9 & 10.
- Capacities for:
 - Designing and delivering developmentally appropriate learning experiences that are required to promote age-appropriate physical, socio-emotional, ethical, cognitive, aesthetic and cultural development of students enrolled in Grades 9 & 10.
 - Designing learning experiences to facilitate the achievement by students of learning outcomes and competencies relating to courses within curricular areas such as three Languages, Arts Education, Physical Education, Vocational Education, Social Science, Interdisciplinary Area, Mathematics and Computational Thinking, and Science.
 - Assessment of student learning, including selection of assessment methods, tools and processes that are appropriate for children studying in Grades 9 & 10, and recording, documentation and reporting of student progress towards the expected learning outcomes.
 - Responding to the learning needs of students with disability or other learning disabilities, students with individual learning needs, including through identification of disability or developmental delay of children in Grades 9 & 10, and delivering learning experiences in an inclusive and caring environment.
 - Managing classroom activities and field-based learning, and student behaviour, and engaging with parents and other caregivers of children in Grades 9 & 10, as well as with community members and leaders for mobilising support for ensuring retention and learning achievement of enrolled children.

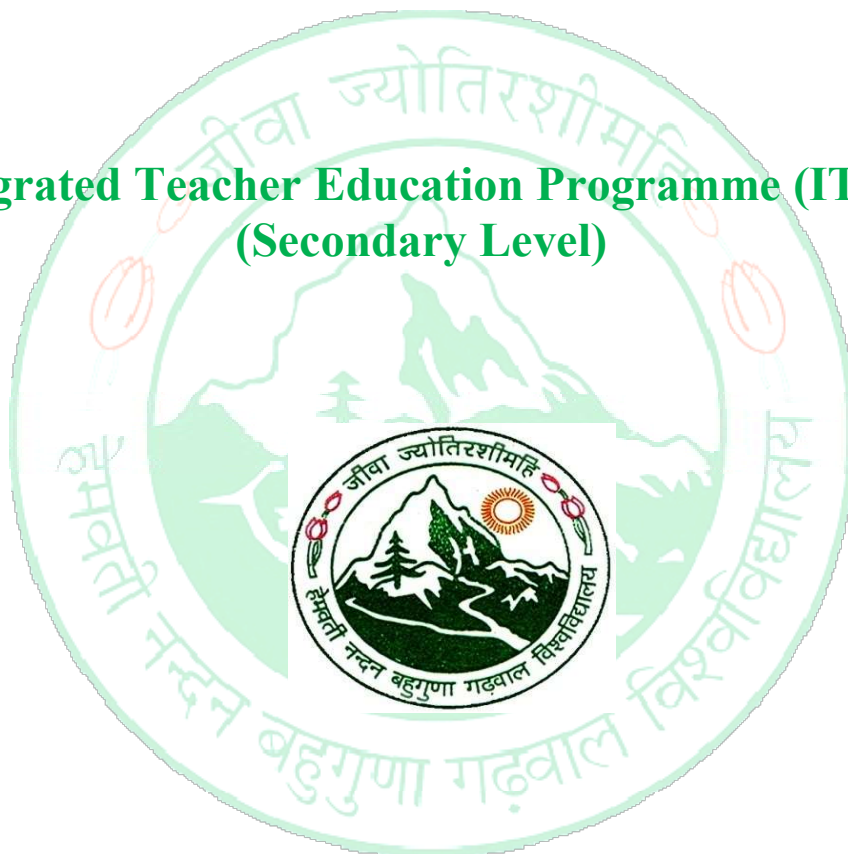
Course Outlines (Semester I - VIII) for B.A. B.Ed., B.Sc. B.Ed. and B.Com. B.Ed. are described below.

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For

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**Hemvati Nandan Bahuguna Garhwal (Central) University
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2024

Integrated Teacher Education Programme (ITEP)

Course-wise Detail

Sub/Sem	I	II	III	IV	V	VI	VII	VIII
Education								
Foundation	EFC-101 Evolution of Indian Education (Cr-4)		EFC-301 Child Development and Educational Psychology (Cr-4)	EFC-401 Philosophical and Sociological Perspectives of Education-I (Cr-4)	1. EFC-501 Inclusive Education (Cr-2)	1. EFC-601 Assessment and Evaluation (Cr-2) 2. EFC-602 Curriculum Planning and Dev. (Cr-2)	1. EFC-701 Education Policy Analysis (Cr-2)	1. EFC-801 Philosophical and Sociological Perspectives of Education II (Cr-4) 2. EFC-802 Perspectives on School Leadership and Management (Cr-2) 3. EFC-803 One Elective (Cr4)
Stage Specific (B.Sc. B.Ed.)			ESSCCPC-302 Stage-Specific Content -cum- Pedagogy Courses (Cr-4) Basics of Pedagogy at Secondary Stage (Cr-4)	ESSCCPC-402 Stage-Specific Content -cum- Pedagogy Courses (Cr-4) (Any Two) A. Content cum Pedagogy of Mathematics at Secondary Stage – Course (I) (Cr-2) B. Content cum Pedagogy of Physics at Secondary Stage - Course (I) (Cr-2) C. Content cum Pedagogy of Chemistry at	ESSCCPC-502 Stage-Specific Content -cum- Pedagogy Courses (Cr-4) (Any Two) A. Content cum Pedagogy of Mathematics at Secondary Stage – Course (II) (Cr-2) B. Content cum Pedagogy of Physics at Secondary Stage - Course (II) (Cr-2) C. Content cum Pedagogy of Chemistry at	ESSCCPC-603 Stage-Specific Content -cum- Pedagogy Courses (Cr-4) (Any Two) A. Content cum Pedagogy of Mathematics at Sec. Stage – Course (III) (Cr-2) B. Content cum Pedagogy of Physics at Secondary Stage - Course (III) (Cr-2) C. Content cum Pedagogy of Chemistry at	2.	4.

				Secondary Stage - Course (I) (Cr-2) D. Content cum Pedagogy of Zoology at Secondary Stage - Course (I) (Cr-2) E. Content cum Pedagogy of Botany at Secondary Stage - Course (I) (Cr-2)	Secondary Stage - Course (II) (Cr-2) D. Content cum Pedagogy of Zoology at Secondary Stage - Course (II) (Cr-2) E. Content cum Pedagogy of Botany at Secondary Stage - Course (II) (Cr-2)	Secondary Stage - Course (III) (Cr-2) D. Content cum Pedagogy of Zoology at Sec. Stage - Course (III) (Cr-2) E. Content cum Pedagogy of Botany at Secondary Stage - Course (III) (Cr-2)		
Stage Specific (B.A. B.Ed.)			ESSCCPC-302 Stage-Specific Content -cum- Pedagogy Courses Basics of Pedagogy at Secondary Stage (Cr-4)	ESSCCPC-402 Stage-Specific Content -cum- Pedagogy Courses (Any Two) F. Content cum Pedagogy of History at Sec. Stage - Course (I) (Cr-2) G. Content cum Pedagogy of Pol. Sci. at Sec. Stage - Course (I) (Cr-2) H. Content cum Pedagogy of Geography at Sec. Stage - Course (I) (Cr-2) I. Content cum Pedagogy of Sociology at Secondary Stage - Course (I) (Cr-2) J. Content cum Pedagogy of Economics at	ESSCCPC-502 Stage-Specific Content -cum- Pedagogy Courses (Cr-4) (Any Two) F. Content cum Pedagogy of History at Sec. Stage - Course (II) (Cr-2) G. Content cum Pedagogy of Pol. Sci. at Sec. Stage - Course (II) (Cr-2) H. Content cum Pedagogy of Geography at Sec. Stage - Course (II) (Cr-2) I. Content cum Pedagogy of Sociology at Secondary Stage - Course (II) (Cr-2) J. Content cum Pedagogy of Economics at	ESSCCPC-603 Stage-Specific Content -cum- Pedagogy Courses (Cr-4) (Any Two) F. Content cum Pedagogy of History at Secondary Stage - Course (III) (Cr-2) G. Content cum Pedagogy of Pol. Sci. at Sec. Stage - Course (III) (Cr-2) H. Content cum Pedagogy of Geography at Sec. Stage - Course (III) (Cr-2) I. Content cum Pedagogy of Sociology at Secondary Stage - Course (III) (Cr-2) J. Content cum Pedagogy of Economics at		

				Secondary Stage - Course (I) (Cr-2) K. Content cum Pedagogy of Art at Secondary Stage - Course (I) (Cr-2) L. Content cum Pedagogy of Hindi at Secondary Stage - Course (I) (Cr-2) M. Content cum Pedagogy of English at Secondary Stage - Course (I) (Cr-2) N. Content cum Pedagogy of Sanskrit at Sec. Stage - Course (I) (Cr-2)	Secondary Stage - Course (II) (Cr-2) K. Content cum Pedagogy of Art at Secondary Stage - Course (II) (Cr-2) L. Content cum Pedagogy of Hindi at Secondary Stage - Course (II) (Cr-2) M. Content cum Pedagogy of English at Secondary Stage - Course (II) (Cr-2) N. Content cum Pedagogy of Sanskrit at Secondary Stage - Course (II) (Cr-2)	Secondary Stage - Course (III) (Cr-2) K. Content cum Pedagogy of Art at Sec. Stage - Course (III) (Cr-2) L. Content cum Pedagogy of Hindi at Sec. Stage - Course (III) (Cr-2) M. Content cum Pedagogy of English at Secondary Stage - Course (III) (Cr-2) N. Content cum Pedagogy of Sanskrit at Sec. Stage - Course (III) (Cr-2)		
Stage Specific (B.Com. B.Ed.)			ESSCCPC-302 Stage-Specific Content -cum- Pedagogy Courses (Cr-4) Basics of Pedagogy at Secondary Stage (Cr-4)	ESSCCPC-402 Stage-Specific Content -cum- Pedagogy Courses (Cr-4) O. Content cum Pedagogy of Business Studies at Secondary Stage - Course (I) (Cr-2) P. Content cum Pedagogy of Accountancy at Secondary Stage - Course (I) (Cr-2)	ESSCCPC-502 Stage-Specific Content -cum- Pedagogy Courses (Cr-4) O. Content cum Pedagogy of Business Studies at Secondary Stage - Course (II) (Cr-2) P. Content cum Pedagogy of Accountancy at Secondary Stage - Course (II) (Cr-2)	ESSCCPC-603 Stage-Specific Content -cum- Pedagogy Courses (Cr-4) O. Content cum Pedagogy of Business Studies at Secondary Stage - Course (III) (Cr-2) P. Content cum Pedagogy of Accountancy at Secondary Stage - Course (III) (Cr-2)		
Ability Enhancement & Value-Added Courses	1. EAEVAC-102 Language-I (as per the 8 th schedule of the Constitution of India) (Cr-4) 2. EAEVAC-103	1. EAEVAC-201 Language-II (Other than Language-I) (Cr-4) 2. EAEVAC-202		1. EAEVAC-403 Citizenship Education, Sustainability and Environment Education	1. EAEVAC-503 ICT in Education (Cr-2)	1. EAEVAC-604 Mathematical & Quantitative Reasoning (Cr-2)	1. EAEVAC-702 Sports, Nutrition and Fitness (Cr-2)	1. EAEVAC-804 Yoga & Understanding Self (Cr-2) 2. EAEVAC-805

	Art Education (Visual) (Cr-2) 3. EAEVAC-104 Understanding India (India Ethos and Knowledge System) (Cr-2) 4. EAEVAC-105 Understanding and Connecting with the Environment (Cr-2)	Understanding India (India Ethos and Knowledge System) (Cr-2) 3. EAEVAC-203 Teacher and Society (Cr-2)		(Cr-2)				Art Education (Visual) (Cr-2)
School Exp					ESEC-504 Pre-internship Practice (Cr-2)	1. ESEC-605 School Observation (Cr-2) 2. ESEC-606 Creating Teaching Learning Material (Cr-2)	1. ESEC-703 School-Based Research Project (Cr-2) 2. ESEC-704 Internship in Teaching (Cr-10)	1. ESEC-806 Post Internship (Cr-2)
Comm Engagement					ECESC-505 Community Engagement and Services (Cr-2)			
Disciplinary (B.A. B.Ed.)								
Core 1 (Major)	DCMJ-1 (Cr-6)	DCMJ-2 (Cr-6)	DCMJ-3 (Cr-6)	DCMJ-4 (Cr-6)	DCMJ-5 (Cr6)	DCMJ-6 (Cr-6)		
Political Science	DCPOL-101 Introduction to Political Theory (CR=6)	DCPOL-201 Political Science (Indian Government and Politics) (CR=6)	DCPOL-301 Comparative Government and Politics (CR=6)	DCPOL-401 Introduction to International Relations (CR=6)	DCPOL-501 Introduction to Western Political Thought or Global Politics or Introduction to Public Admin (CR=6)	DCPOL-601 Introduction to Indian Political Thought or Introduction to Indian Foreign Policy or Introduction to Public Policy (CR=6)		

Political Science (Skill)	DCPOL(SEC)-102 Legal Literacy-I or Dynamics of Public Opinion-I (CR=2)	DCPOL(SEC)-202 Legal Literacy-II or Dynamics of Public Opinion-II (CR=2)						
History	DCHIS-101 History of India (from Earliest Times up to 300CE) (CR=6)	DCPOL(SEC)-202 History (History of India from C.300 to 1200 CE) (CR=6)	DCHIS-301 History of India from 1200 to 1707 CE. (CR=6)	DCHIS-401 History of India (from 1707 - 19050) (CR=6)	DCHIS-501 European History (from 1780 - 1939) (CR=6)	DCHIS-601 Nationalism and Idea of Freedom in 20th Century World (CR=6)		
History (Skill)	DCHIS(SEC)-102 An Introduction to Archaeology (CR=2)	DCHIS(SEC)-202 Historical Tourism (CR=2)						
Geography	DCGEO-101 Physical Geography (CR=4)	DCGEO-201 Geography (Human Geography) (CR=4)	DCGEO-301 Geography of India (CR=4)	DCGEO-401 Geographical Thought (CR=4)	DCGEO-501 Economic Geography (CR=4)	DCGEO-601 Environmental Geography (CR=4)		
	DCGEO-101(P) Physical Geography (Practical) (CR=1)	DCGEO-201 (P) Geography-Practical (CR=2)	DCGEO-301 Statistical Methods in Geography (P) (CR=2)	DCGEO-401 (P) Graphic Representation of DATA and Geological Maps (CR=2)	DCGEO-501(P) Practical Geography V (Field Visit, Survey methods and Report Writing (CR=2)	DCGEO-601(P) Practical Geography VI (Field Surveying Techniques (CR=2)		
Geography (Skill)	DCGEO(SEC)-102 Regional Development and Planning with Special Reference to Uttarakhand (2024-25) (CR=2)	DCGEO(SEC)-202 Geographical Field Mapping and Statistical Training with Software (2024-25) (CR=2)						
Economics	DCECO-101 Principles of Microeconomics I (CR=6)	DCECO-201 Economics (Principles of Microeconomics - II) (CR=6)	DCECO-301 Principles of Macroeconomics Economics-I (CR=6)	DCECO-401 Principal of Macro Economics II (CR=6)	DCECO-501 Economic Development and Policy in India-I or Money & Banking or Environmental Economics (CR=6)	DCECO-601 Economic Development and Policy in India-II or Uttarakhand Economy or Public Finance (CR=6)		

Economics (Skill)	DCECO(SEC)-102 Entrepreneurship and Start-up-I (CR=2)	DCECO(SEC)-202 Entrepreneurship and Start-up-II or Survey Methods and Data Analysis-II (CR=2)						
Sociology	DCSOC-101 Basic Sociological Concept (CR=6)	DCSOC-201 Indian Society (CR=6)	DCSOC-301 Sociological Thoughts (CR=6)	DCSOC-401 Social Change in India (CR=6)	DCSOC-501 Social Research or Indian Sociological Thinkers (CR=6)	DCSOC-601 Social Problems or Society through the Visuals (CR=6)		
Sociology (Skill)	DCSOC(SEC)-102 Basic Concepts of Social Research (CR=2)	DCSOC(SEC)-202 Methods and Techniques of Social Research (CR=2)						
Drawing & Painting	DCDRA-101 Fundamentals of Visual Art. (CR=2)	DCDRA-201 Drawing Painting (Methods and Materials of Painting) (CR=2)	DCDRA-301 History of Indian Art-Part-1(Pre Historic art to Bengal Renaissance Period) (CR=4)	DCDRA-401 History of Indian Art – Part - 2 (Modern and Contemporary Indian Painting) (CR=2)	DCDRA-501 Brief History of European Painting-1 or Element of Technical Drawing -1 or Graphic Design (CR=2)	DCDRA-601 Brief History of European Painting-2 or Element of Technical Drawing - 2 or Brief History of Print making (Cr-2)		
	DCDRA-101(P) Free Hand Drawing (Practical) (CR=4)	DCDRA-201(P) Drawing Painting (Still Life (Drawing) - Practical) (CR=4)	DCDRA-301(P) Rendering (Practical) (CR=2)	DCDRA-401 (P) Head Study Drawing (CR=4)	DCDRA-501(P) Creative Composition or Tie and Die or Photography (CR=4)	DCDRA-601(P) Thematic Composition or Letter Writing or Screen Painting (CR=4)		
Drawing & Painting (Skill)	DCDRA(SEC)-102(P) Line Drawing-Part-A (Practical) (CR=2)	DCDRA(SEC)-202 Line Drawing- Part B (CR=2)						
Hindi	DCHIN-101 प्राचीन एवं मध्यकालीन काव्य (CR=6)	DCHIN-201 आधुनिक गद्य (CR=6)	DCHIN-301 अवार्चन हिंदी काव्य (CR=6)	DCHIN-401 हिंदी साहित्य का संक्षिप्त इतिहास (CR=6)	DCHIN-501 गढ़वाली लोक साहित्य एवं संस्कृति अथवा हिंदी काव्यधारा में हिमालय (CR=6)	DCHIN-601 आधुनिक भारतीय साहित्य अथवा हिंदी का राष्ट्रीय काव्य (CR=6)		

Hindi (Skill)	DCHIN(SEC)-102 भाषा शिक्षण कौशल अथवा भाषा कम्प्यूटिंग (CR=2)	DCHIN(SEC)-202 कार्यालयी हिंदी अथवा प्रयोजनमूलक हिंदी (CR=2)						
English	DCENG-101 Prose (CR=6)	DCENG-201 English (Drama) (CR=6)	DCENG-301 Poetry (CR=6)	DCENG-401 Fiction and Short Stories (CR=6)	DCENG-501 History of English Literature Part I or Literary Moments 1 or Twentieth Century British Poetry & Drama (CR=6)	DCENG-601 History of Language Literature Part II or Literary Moments Part II or Twentieth Century American Poetry & Drama (CR=6)		
English (Skill)	DCENG(SEC)-102 Academic Writing (CR=2)	DCENG(SEC)-202 Studying Theatre (CR=2)						
Sanskrit	DCSAN-101 नीतिकाव्य व्याकरण एवं अनुवाद (CR=6)	DCSAN-201 नाटक अलंकार एवं छंद (CR=6)	DCSAN-301 गद्य पद्य एवं व्याकरण (CR=6)	DCSAN-401 संस्कृत साहित्य का इतिहास, संस्कृति एवं निबन्ध (CR=6)	DCSAN-501 वेद एवं उपनिषद् अथवा समास एवं छंदशास्त्र (CR=6)	DCSAN-601 काव्य दर्शन एवं व्याकरण अथवा संस्कृत पत्रकारिता (CR=6)		
Sanskrit (Skill)	DCSAN(SEC)-102 आयुर्वेद सामान्य परिचय (CR=2)	DCSAN(SEC)-202 भारतीय वास्तुकला प्रणाली (CR=2)						
Core 2 (Minor)		DCMN-1 (6)	DCMN-2 (6)	DCMN-3 (6)				
Political Science		DCPOL-201 Political Science (Indian Government and Politics) (CR=6)	DCPOL-301 Comparative Government and Politics (CR=6)	DCPOL-401 Introduction to International Relations (CR=6)				
History		DCPOL(SEC)-202 History (History of India from C.300 to 1200 CE) (CR=6)	DCHIS-301 History of India from 1200 to 1707 CE. (CR=6)	DCHIS-401 History of India (from 1707 - 19050) (CR=6)				

Geography		DCGEO-201 Geography (Human Geography) (CR=4) DCGEO-201 (P) Geography- Practical (CR=2)	DCGEO-301 Geography of India (CR=4) DCGEO-301 Geography of India (P) (CR=2)	DCGEO-401 Geographical Thought (CR=4) DCGEO-401 (P) Geographical Thought (CR=2)				
Economics		DCECO-201 Economics (Principles of Microeconomics - II) (CR=6)	DCECO-301 Principles of Macroeconomics-I (CR=6)	DCECO-401 Principal of Macro Economics II (CR=6)				
Sociology		DCSOC-201 Indian Society (CR=6)	DCSOC-301 Sociological Thoughts (CR=6)	DCSOC-401 Social Change in India (CR=6)				
Drawing & Painting		DCDRA-201 Drawing Painting (Methods and Materials of Painting) (CR=2) DCDRA-201(P) Drawing Painting (Still Life (Drawing) - Practical) (CR=4)	DCDRA-301 History of Indian Art-Part-1 (Prehistoric art to Bengal Renaissance Period) (CR=4) DCDRA-301(P) Rendering (Practical) (CR=2)	DCDRA- 401 History of Indian Art – Part - 2 (Modern and Contemporary Indian Painting) (CR=2) DCDRA-401 (P) Head Study Drawing (CR=4)				
Hindi		DCHIN-201 आधुनिक गद्य (CR=6)	DCHIN-301 अवार्चन हिंदी काव्य (CR=6)	DCHIN-401 हिंदी साहित्य का संक्षिप्त इतिहास(CR6)				
English		DCENG-201 English (Drama) (CR=6)	DCENG-301 Poetry (CR=6)	DCENG-401 Fiction and Short Stories (CR=6)				
Sanskrit		DCSAN-201 नाटक अलंकार एवं छंद (CR=6)	DCSAN-301 गद्य पद्य एवं व्याकरण (CR=6)	DCSAN-401 संस्कृत साहित्य का इतिहास, संस्कृति एवं निबन्ध (CR=6)				

Disciplinary B.Sc. B.Ed.

Core 1 (Major)	DCMJ-1 (Cr-6)	DCMJ-2 (Cr-6)	DCMJ-3 (Cr-6)	DCMJ-4 (Cr-6)	DCMJ-5 (Cr6)	DCMJ-6 (Cr-6)		
Botany	DCBOT-101 Diversity of Lower Plants (Theory and Practical) (Cr-6)	DCBOT-201 Microbiology And Plant Pathology (Cr-6)	DCBOT-301 Plant Physiology and Biochemistry (Theory and Practical) (Cr-6)	DCBOT-401 Plant Taxonomy and Plant Embryology (Theory and Practical) (Cr-6)	DCBOT-501 DSE 1- Biotechnology and Genetic Engineering Theory (Cr-4) and Practical (Cr-2)			
Botany Skill	DCBOT-102 Mushroom Cultivation Technology (Cr-2)	DCBOT-202 Floriculture (Cr-2)						
Zoology	DCZOO-101 Animal Diversity-I Theory (Cr-4) and Practical (Cr-2)	DCZOO-201 Animal Diversity-II Theory (Cr-4) and Practical (Cr-2)	DCZOO-301 Elementary Cell Biology & Molecular Biology Theory (Cr-4) and Practical (Cr-2)	DCZOO-401 Physiology and Elementary Biochemistry Theory (Cr-4) and Practical (Cr-2)	DCZOO-501 DSE (Anyone) DSE-1. Applied Zoology DSE-2. Wildlife Conservation & Management DSE-3. Principles of Genetics & Evolutionary Biology DSE-4. Animal Behaviour & Endocrinology DSE-5. Introduction to Developmental Biology DSE-6. Basics of Biotechnology Theory (Cr-4) and Practical (Cr-2)	DCZOO-601 DSE (Anyone) DSE-1. Applied Zoology DSE-2. Wildlife Conservation & Management DSE-3. Principles of Genetics & Evolutionary Biology DSE-4. Animal Behaviour & Endocrinology DSE-5. Introduction to Developmental Biology DSE-6. Basics of Biotechnology Theory (Cr-4) and Practical (Cr-2)		
Zoology Skill Students will elect one	DCZOO-102	DCZOO-202						

course each in the I & II Semesters	SZ-1. Laboratory Techniques in Biology SZ-2. Basic Instrumentation SZ-3. Public Health and Hygiene SZ-4. Aquarium Fish Keeping SZ-5. Medical Diagnostics SZ-6. Bioinformatics	SZ-1. Laboratory Techniques in Biology SZ-2. Basic Instrumentation SZ-3. Public Health and Hygiene SZ-4. Aquarium Fish Keeping SZ-5. Medical Diagnostics SZ-6. Bioinformatics						
Physics	DCPHY-101 Mechanics and Properties of Matter Theory (Cr-4) and Practical (Cr-2)	DCPHY-201 Electricity and Magnetism Theory (Cr-4) and Practical (Cr-2)	DCPHY-301 Heat and Thermodynamics Theory (Cr-4) and Practical (Cr-2)	DCPHY-401 Waves and Optics Theory (Cr-4) and Practical (Cr-2)	DCPHY-501 Modern Physics Theory (Cr-4) and Practical (Cr-2)	DCPHY-601 Quantum Mechanics Theory (Cr-4) and Practical (Cr-2)		
Physics Skill	DCPHY-102 Basic Electronics (Cr-2)	DCPHY-202 Waves and Oscillations (Cr-2)						
Chemistry	DCCHE-101 Inorganic Chemistry -I Organic Chemistry- I Theory (Cr-4) and Practical (Cr-2)	DCCHE-201 Physical Chemistry- I Organic Chemistry-II Theory (Cr-4) and Practical (Cr-2)	DCCHE-301 Physical Chemistry-II Organic Chemistry - III Theory (Cr-4) and Practical (Cr-2)	DCCHE-401 Inorganic Chemistry- II Physical Chemistry- III Theory (Cr-4) and Practical (Cr-2)	DCCHE-501 Students can opt for any one 1. Analytical Methods in Chemistry 2. Polymer Chemistry 3. Green Chemistry Theory (Cr-4) and Practical (Cr-2)	DCCHE-601 Students can opt for any one 1. Instrumental Methods of Chemical Analysis 2. Organometallics, Bio-inorganic, Polynuclear Hydrocarbon, UV and IR Spectroscopy 3. Molecules of Life Theory (Cr-4) and Practical (Cr-2)		
Chemistry Skill	DCCHE-102 Basic Analytical Chemistry I OR	DCCHE-202 Basic Analytical Chemistry II or						

	Green Methods in Chemistry (Cr-2)	Pesticidal Chemistry (Cr-2)						
Mathematics	DCM-101 Differential Calculus Theory-6 Cr	DCM-201 Differential Equations Theory-6 Cr	DCM-301 Real Analysis Theory- 5Cr and Tutorial-1Cr	DCM-401 Abstract Algebra Theory- 5Cr and Tutorial-1Cr	DCM-501 Linear Algebra Theory-6 Cr	DCM-601 Complex Analysis Theory-6 Cr		
Mathematics Skill	DCM-102 Integral Calculus (Cr-2)	DCM-202 Vector calculus (Cr-2)						
Core 2 (Minor)		DCMN-1 (6)	DCMN-2 (6)	DCMN-3 (6)				
Botany		DCBOT-201 Microbiology And Plant Pathology (Cr-6)	DCBOT-301 Plant Physiology and Biochemistry (Theory and Practical) (Cr-6)	DCBOT-401 Plant Taxonomy and Plant Embryology (Theory and Practical) (Cr-6)				
Zoology		DCZOO-201 Animal Diversity- II Theory (Cr-4) and Practical (Cr-2)	DCZOO-301 Elementary Cell Biology & Molecular Biology Theory (Cr-4) and Practical (Cr-2)	DCZOO-401 Physiology and Elementary Biochemistry Theory (Cr-4) and Practical (Cr-2)				
Physics		DCPHY-201 Electricity and Magnetism Theory (Cr-4) and Practical (Cr-2)	DCPHY-301 Heat and Thermodynamics Theory (Cr-4) and Practical (Cr-2)	DCPHY-401 Waves and Optics Theory (Cr-4) and Practical (Cr-2)				
Chemistry		DCCHE-201 Physical Chemistry- I Organic Chemistry-II Theory (Cr-4) and Practical (Cr-2)	DCCHE-301 Physical Chemistry-II Organic Chemistry - III Theory (Cr-4) and Practical (Cr-2)	DCCHE-401 Inorganic Chemistry- II Physical Chemistry- III Theory (Cr-4) and Practical (Cr-2)				
Mathematics		DCM-201 Differential Equations Theory-6 Cr	DCM-301 Real Analysis Theory- 5Cr and Tutorial-1Cr	DCM-401 Abstract Algebra Theory- 5Cr and Tutorial-1Cr				

Disciplinary B.Com. B.Ed.

Core 1 (Major)	DCMJ-1(Cr-6)	DCMJ-2 (Cr-6)	DCMJ-3 (Cr6)	DCMJ-4 (Cr-6)	DCMJ-5 (Cr6)	DCMJ-6 (Cr-6)		
	Principles of Management (CR-6)	Business Regulatory Framework (Cr-6)	Income Tax Law and Practice (Cr-6)	Corporate Accounting (Cr-6)	Management Accounting (Cr6)	Goods and Services Tax (Cr-6)		
Skill	Personal Finance and Planning (Cr-2)	Office Management and Secretarial Practice (Cr-2)						
Core 2 (Minor)		DCMN-1 (6)	DCMN-2 (6)	DCMN-3 (6)				
		Advanced Financial Accounting (Cr-6)	Cost Accounting (Cr-6)	Business Environment (Cr-6)				
SEC			SEC- 303 Life Skills and Personality Dev. (Cr-2)					
Research Project & Dissertation					RM-501 Introduction to Research - 4 Cr	RM 602 Academic Writing 2 Cr	Dissertation -I 6 Cr Or Interdisciplinary Research 4Cr Synopsis Preparation 2Cr	Dissertation -II 6 Cr Or Paper Publication 4Cr Entrepreneurship Education 2Cr
Total Credit	22	22	22	22	22	22	22	22

The students may complete one MOOC of 6 to 8 weeks in the interdisciplinary area in any semester. The certificate of completion of the MOOC should be submitted in the eighth semester.