

**CURRICULUM FOR INTEGRATED TEACHER EDUCATION
PROGRAMME LEADING TO B.Sc. B.Ed. DEGREE**

Name of Degree	Name of Specialization	Total Intake (Full-time)	Year of Starting	Duration	Eligibility for Admission
B.Sc. B.Ed. (Secondary)	Science and Education	50	2023	4 years (8 semesters)	The ITEP shall be of four academic years comprising eight semesters including internship (field-based experiences and practice teaching). Candidates with minimum fifty percent marks in Senior Secondary or plus two examination or its equivalent (under 5+3+3+4 pattern) from a recognized board are eligible for admission through the National Common Entrance Test (NCET), conducted by the National Testing Agency (NTA)

COURSE CATEGORIES AND CREDIT REQUIREMENTS:

The structure of B.Sc. B.Ed. programmes shall have the following Course Categories:

Sl. No.	Course Category	No. of Courses	No. of credits
1.	Foundations of Education (FE)	10	30
2.	Disciplinary Major and Minor	19	64
3.	Stage Specific Content cum Pedagogy (CP)	4	16
4.	Ability Enhancement and Value added Courses (AE)	12	28
5.	School Experience (SE)	6	20
6.	Community Engagement and Service (CE)	1	2

Total Credits required

160

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PROGRAMME STRUCTURE

Semester - I							
Sl. No.	Subject Code	Title	L	T	P	O	C
1.	UED091B01	Evolution of Indian Education	4	0	0	2	4
2.	UED091B02	Language I (Hindi)	3	1	0	2	4
3.	UED091B03	Art Education	1	0	2	2	2
4.	UED091B04	Understanding India I	2	0	0	2	2
5.	UED091C01	Mathematics Major I (Mathematics I)	3	1	0	5	4
6.	UED091C02	Physics Major I (Vector Calculus and Mechanics)	3	1	0	5	4
7.	UED091C03	Chemistry Major I (General Chemistry)	4	0	0	5	4
8.	UED091E01	Physics Paper I (Mechanics and Optics)	3	1	0	4	2
9.	UED091E02	Chemistry Paper I (Fundamentals of Chemistry)	1	0	2	3	2
10.	UED091E03	Mathematics Paper I (Introduction to Calculus)	2	0	0	1	2

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PROGRAMME STRUCTURE

Semester - II							
Sl. No.	Subject Code	Title	L	T	P	O	C
1.	UED092B01	Language II (English)	3	1	0	2	4
2.	UED092B02	Understanding India II	2	0	0	2	2
3.	UED092B03	Teacher and Society	2	0	0	2	2
4.	UED092C01	Mathematics Major II (Mathematics (II))	3	1	0	5	4
5.	UED092C02	Mathematics Major III (Introduction to Algebra)	3	1	0	5	4
6.	UED092C03	Physics Major II (General Properties of Matter)	3	0	0	5	3
7.	UED092C04	Physics Major III (Mathematical Physics)	3	0	0	5	3
8.	UED092C05	Chemistry Major II (Inorganic and Environmental Chemistry)	4	0	0	5	4
9.	UED092C06	Chemistry Major III (Introduction to Physical Chemistry)	4	0	0	5	4
10.	UED092E01	Physics Paper II (Thermodynamics and Waves)	2	0	0	2	2
11.	UED092E02	Chemistry Paper II (Acid base and Redox Chemistry)	2	0	0	2	2
12.	UED092E03	Mathematics Paper II (Fundamentals of Algebra)	2	0	0	2	2
13.	UED092P01	Physics Major Lab I	0	0	3	0	2

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PROGRAMME STRUCTURE

Semester - III							
Sl. No.	Subject Code	Title	L	T	P	O	C
1.	UED093B01	Child Development and Educational Psychology	4	0	0	4	4
2.	UED093B02	Pedagogy I	3	1	0	4	4
3.	UED093C01	Mathematics Major IV (Introduction to Differential Equation)	3	0	2	4	4
4.	UED093C02	Mathematics Major V (Real & Complex Analysis)	3	1	0	4	4
5.	UED093C03	Mathematics Major VI (Programming in C & MATLAB (Theory)	2	0	0	2	2
6.	UED093C04	Physics Major IV (Classical Mechanics and Relativity)	3	0	0	4	3
7.	UED093C05	Physics Major V (Electromagnetics)	3	1	0	4	4
8.	UED093C06	Physics Major VI (Optics)	3	0	0	4	3
9.	UED093C07	Chemistry Major IV (Hydrocarbons and Stereochemistry)	4	0	0	4	4
10.	UED093C08	Chemistry Major V (Main Group Elements and Chemical Equilibrium)	4	0	0	4	4
11.	UED093P01	Mathematics Major Lab I (Programming in C & MATLAB (Lab)	0	0	3	2	2
12.	UED093P02	Physics Major Lab II	0	0	3	0	2
13.	UED093P03	Chemistry Major Lab I (Organic Chemistry)	0	0	2	4	2
14.	UED093P04	Chemistry Major Lab II (Inorganic Chemistry)	0	0	2	4	2

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Semester - IV							
Sl. No.	Subject Code	Title	L	T	P	O	C
1.	UED094B01	Philosophical and Sociological Perspectives of Education I	3	1	0	4	4
2.	UED094B02	Pedagogy II	3	1	0	4	4
3.	UED094C01	Mathematics Major VII (Numerical Analysis)	2	0	0	2	3
4.	UED094C02	Mathematics Major VIII (LPP and Game Theory)	3	1	0	4	4
5.	UED094C03	Physics Major VII (Thermodynamics and Statistical Mechanics)	3	0	0	4	3
6.	UED094C04	Physics Major VIII (Quantum Mechanics)	3	0	0	4	3
7.	UED094C06	Chemistry Major VI (Electrochemistry And Chemical Kinetics)	4	0	0	4	4
8.	UED094C07	Chemistry Major VII (Organic Reagents And Name Reactions)	4	0	0	4	4
9.	UED094E01	Mathematics Paper III Minor (Advanced Mathematics)	3	1	0	2	4
10.	UED094E02	Physics Paper III Minor (Electromagnetism And Modern Physics)	2	0	0	2	2
11.	UED094E03	Chemistry Paper III Minor (Basic Principles of Spectroscopy)	2	0	0	0	2
12.	UED094P01	Mathematics Major Lab II (Numerical Analysis with Programming)	0	0	3	2	2
13.	UED094P02	Physics Minor Lab	0	0	3	2	2
14.	UED094P03	Chemistry Minor Lab	0	0	3	0	2
15.	UED094P04	Physics Major Lab III	0	0	3	0	2

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PROGRAMME STRUCTURE

Semester - V							
Sl. No.	Subject Code	Title	L	T	P	O	C
1.	UED095B01	ICT in Education	1	0	2	3	2
2.	UED095B02	Pedagogy III	3	1	0	3	4
3.	UED095C01	Mathematics Major IX (Probability & Statistics)	3	1	0	3	4
4.	UED095C02	Mathematics Major X (3D Geometry & Integral Transform)	3	1	0	4	4
5.	UED095C03	Mathematics Major XI (Statics & Dynamics)	3	1	0	4	4
6.	UED095C04	Physics Major IX (Condensed Matter Physics)	3	1	0	4	4
7.	UED095C05	Physics Major X (Electronics)	3	0	0	4	3
8.	UED095C06	Physics Major XI (Atomic & Nuclear Physics)	3	0	0	4	3
9.	UED095C07	Chemistry Major VIII (Transition And Inner Transition Elements)	4	0	0	3	4
10.	UED095C08	Chemistry Major IX (Fundamentals of Spectroscopy)	4	0	0	4	4
11.	UED095P01	Physics Lab IV	0	0	3	0	2
12.	UED095P02	Chemistry Major Lab III (Physical Chemistry)	0	0	2	2	2
13.	UED095P03	Pre-internship Practice	0	0	3	3	2
14.	UED095P04	Chemistry Major Lab IV (Material Science)	0	0	2	2	2

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Semester - VI								
Sl. No.	Subject Code	Title	L	T	P	O	C	
1.	UED096B01	Assessment and Evaluation	2	0	0	1	2	
2.	UED096B02	Pedagogy IV	3	1	0	1	4	
3.	UED096B03	Inclusive Education	2	0	0	1	2	
4.	UED096B04	Mathematical and Quantitative Reasoning	1	1	0	1	2	
5.	UED096C01	Mathematics Major XII (Number Theory and Cryptology)	3	1	0	3	4	
6.	UED096C02	Mathematics Major XIII (Project)	0	0	0	12	4	
7.	UED096C03	Physics Major XII (Laser, Optical Fiber & Nano Science)	3	1	0	3	4	
8.	UED096C04	Physics Major XIII (Project)	0	0	0	12	4	
9.	UED096C05	Chemistry Major X (Elective)	3 1 0 3 4					
		E1. Introduction to Quantum mechanics						
		E2. Solid State Chemistry						
		E3. Basics of Biochemistry						
		E4. Surface Colloids Chemistry						
		E5. Introduction to Nanomaterials						
10.	UED096C06	Chemistry Major XI (Project)	0	0	0	12	4	
11.	UED096P01	School Observation	0	0	2	1	2	

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Semester - VII							
Sl. No.	Subject Code	Title	L	T	P	O	C
1.	UED097B01	Perspectives on School Leadership and Management	2	0	0	0	2
2.	UED097B02	Curriculum Planning and Development	1	1	0	0	2
3.	UED097B03	Art Education II	1	0	2	0	2
4.	UED097B04	Sports, Nutrition and Fitness	1	0	2	0	2
5.	UED097P01	School based Research Project	0	0	0	0	2
6.	UED097P02	Internship in Teaching	0	0	0	30	10

Semester - VIII							
Sl. No.	Subject Code	Title	L	T	P	O	C
1.	UED098B01	Philosophical and Sociological Perspectives of Education II	4	0	0	2	4
2.	UED098B02	Education Policy Analysis	2	0	0	2	2
3.	UED098B04	Education Elective	4	0	0	4	4
4.	UED098B03	Yoga and Understanding Self	2	0	0	4	2
5.	UED098B05	Citizenship Education, Sustainability and Environment Education	2	0	0	2	2
6.	UED098P01	Post-Internship (Review and Analysis)	0	0	3	2	2
7.	UED098P02	Teaching Learning Material/Work Experience	0	0	3	2	2
8.	UED098P03	Community Engagement and Service	0	0	3	2	2