

**National Education Policy-2020**

**Common Minimum Syllabus for Uttarakhand State Universities and  
Colleges**

**PROPOSED SYLLABUS OF FORESTRY**

**Effective from the academic session 2025-26**

**of**

**Four Years Undergraduate Programme/ Honours  
Programme/Master's in Forestry**

***DEPARTMENT OF FORESTRY***

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List of Papers (DSC, GE, AEC, SEC, VAC) with Semester wise Titles for ‘Forestry’					
Year	Semester	Course	Paper Title	Theory/ Practical	Credits
Undergraduate Certificate in Forestry					
FIRST YEAR	I	DSC	Introductory Forestry	Theory/Practical	3+1
		GE	Principles and Practices of Forestry	Theory/Practical	3+1
		AEC	Indian Language	Theory	2
		SEC	Nursery Technology (University Pool)	Theory	0+2
		VAC	Environmental Education	Theory	2
	II	DSC	Forest Ecology	Theory/Practical	3+1
		GE	Participatory Forest Management (University Pool)	Theory/Practical	3+1
		AEC	Indian Language	Theory	2
		SEC	Nursery Technology (University Pool)	Theory	0+2
		VAC	Environmental Education	Theory	2
Undergraduate Diploma in Forestry					
SECOND YEAR	III	DSC	Principles of Silviculture	Theory/Practical	3+1
		DSE/ GE	Forest Biodiversity and Conservation	Theory/Practical	3+1
		AEC	Indian Language	Theory	2
		SEC	Plantation Technology/IAPC (University Pool)	Theory	0+2
		VAC	Value addition to NTFP	Theory	2
	IV	DSC	Agroforestry	Theory/Practical	3+1
		DSE/ GE	Forest Protection	Theory/Practical	3+1
		AEC	Indian Language	Theory	2
		SEC	Plantation Technology/IAPC (University Pool)	Theory	0+2

		VAC	Value addition to NTFP'S	Theory	2
<b>Bachelor of Forestry</b>					
<b>THIRD YEAR</b>	V	DSC	Forest Mensuration	Theory/Practical	3+1
		DSE/GE	Watershed Management	Theory/Practical	3+1
		SEC	Propagation of Medicinal and Aromatic Plants/IAPC (University Pool)	Theory	0+2
	VI	DSC	Forest Management and Policies	Theory/Practical	3+1
		DSE/GE	Seed Science and Technology	Theory/Practical	3+1
		SEC	Propagation of Medicinal and Aromatic Plants/IAPC (University Pool)	Theory	0+2

Bachelor of Forestry with Honours					
FOURTH YEAR	VII	DSC	Advances in Forest Ecology	Theory/Practical	3+1
		DSE 1	Advances in Silviculture and Systems	Theory/Practical	3+1
		DSE 2	Remote Sensing and GIS	Theory/Practical	3+1
		DSE 3/	Forest Pathology	Theory/Practical	3+1
		GE 1	Environmental Audit and EIA	Theory/Practical	3+1
		GE 2	Forest Resource Assessment	Theory/Practical	3+1
		DISSERTATION	Dissertation on Major OR Dissertation on Minor or Academic Project/Entrepreneurship	Theory/Practical	4+2
	VIII	DSC	Forest Utilization	Theory/Practical	3+1
		DSE 1	Forest Entomology	Theory/Practical	3+1
		DSE 2	Advance Agroforestry	Theory/Practical	3+1
		DSE 3	Environmental Management	Theory/Practical	3+1
		GE1	Tree Physiology	Theory/Practical	3+1
		GE2	Dendrology	Theory/Practical	3+1
		DISSERTATION	Dissertation on Major OR Dissertation on Minor or AcademicProject/Entrepreneurship	Theory/Practical	4+2
Master's in Forestry					
FIFTH YEAR	IX	DSC	Forest Products and Industries	Theory/Practical	3+1
		DSE 1	Energy Plantation and Biofuels	Theory/Practical	3+1
		DSE 2	Natural Resources and Management	Theory/Practical	3+1
		DSE 3	Advances in Tree Seed Technology	Theory/Practical	3+1
		GE 1	World Forestry and Tribal development	Theory/Practical	3+1
		GE2	Analytical Technique	Theory/Practical	3+1
		DISSERTATION	Dissertation on Major OR	Theory/Practical	4+2

			Dissertation on Minor or Academic Project/Entrepreneurship		
	X	DSC	Forest Economics	Theory/Practical	3+1
		DSE 1	Research Methodology	Theory/Practical	3+1
		DSE 2	Biostatistics	Theory/Practical	3+1
		DSE 3	Forest Genetics and Tree Improvement	Theory/Practical	3+1
		GE1	Climate Change and Mitigation	Theory/Practical	3+1
		GE2	Fundamentals of Soil Science	Theory/Practical	3+1
		DISSERTATION	Dissertation on Major OR Dissertation on Minor or Academic Project/Entrepreneurship	Theory/Practical	4+2

**ABILITY ENHANCEMENT COURSE (AEC) PREPARED FOR THE POOL OF COURSES**

	<b>Paper Title</b>	<b>Theory/Practical</b>	<b>Credits</b>
Ability Enhancement Course (AEC)	Indian Language	Theory	2

**VALUE ADDITION COURSE (VAC) PREPARED FOR THE POOL OF COURSES**

	<b>Paper Title</b>	<b>Theory/ Practical</b>	<b>Credits</b>
Value Addition Course (VAC)	Environmental Education	Theory	2
Value Addition Course (VAC)	Non-Timber Forest Products	Theory	2

**SKILL ENHANCEMENT COURSES (SEC) PREPARED FOR THE POOL OF COURSES**

	<b>Paper Title</b>	<b>Theory/ Practical</b>	<b>Credits</b>
Skill Enhancement Courses (SEC)	Nursery Technology (University Pool)	Practical	0+2
Skill Enhancement Courses (SEC)/IAPC	Plantation Technology (University Pool)	Practical	0+2
Skill Enhancement Courses (SEC)/IAPC	Propagation of Medicinal and Aromatic Plants (University Pool)	Practical	0+2

**Abbreviations-**

**DSC-Discipline Specific Course; DSE-Discipline Specific Electives;**

**GE-Generic Electives; AEC-Ability Enhancement Course; VAC-Value Addition Course**

**IAPC- Internship/Apprentice/Project/Community outreach**



**Programme Specific Outcomes (PSOs) (Undergraduate Programme) After this programme, the learners will be able to:**

<b>PSO 1</b>	It will impart basic knowledge and skills of forestry among the students.
<b>PSO 2</b>	It will inculcate forestry knowledge and practical skills among the students for diagnosis and analysis of existing problems in the fields of forestry and environment.
<b>PSO 3</b>	It will be helpful to produce trained forestry graduates to fill the requirements of different sectors, i.e., private, public, NGOs, and other organizations.
<b>PSO 4</b>	Assessment of various forestry problems and developing methods for their solutions.
<b>PSO 5</b>	Students will become forestry professionals and use their knowledge in research and technology.

**Programme Specific Outcomes (PSOs)-MASTER'S IN FORESTRY  
After this programme, the learners will be able to:**

<b>PSO 1</b>	Students comprehend the numerous functions of forests, how to regenerate and conserve them, and how to prevent their destruction.
<b>PSO 2</b>	Students at an advanced level of knowledge in specific fields of forestry to continue graduate studies or meet professionals in various roles in the public and private sectors.

## Semester-I

### Undergraduate Certificate in Forestry

#### Ability Enhancement Course (AEC)-Indian Language

No. of Hours- 45

#### CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

CourseTitle	Credits	Credit distribution of the Course			Eligibility criteria	Pre-requisite of the Course (if any)
		Lecture	Tutorial	Practical/Practice		
AEC: <b>Indian Language</b>	2	2	0	0	Passed Class XII	Nil

## Semester-II

### Undergraduate Certificate in Forestry

#### Ability Enhancement Course (AEC)-Indian Language

No. of Hours - 60

#### CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

CourseTitle	Credits	Credit distribution of the Course			Eligibility criteria	Pre- requisite of the Course (if any)
		Lecture	Tutorial	Practical/Practice		
AEC: <b>Indian Language</b>	2	2	0	0	Passed Class  ISemester	Nil

Semester-III

Undergraduate Diploma in Forestry

Ability Enhancement Course (AEC)-Indian Language

No. of Hours - 60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

CourseTitle	Credits	Credit distribution of the Course			Eligibility criteria	Pre- requisite of the Course (if any)
		Lecture	Tutorial	Practical/Practice		
AEC: Indian Language	2	2	0	0	Passed Class Iyear	Nil

## Semester-IV

### Undergraduate Diploma in Forestry

#### Ability Enhancement Course (AEC)-Indian Language

No. of Hours - 45

#### CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

CourseTitle	Credits	Credit distribution of the Course			Eligibility criteria	Pre-requisite of the Course (if any)
		Lecture	Tutorial	Practical/Practice		
AEC: Indian Language	2	2	0	0	Passed Class III Semester	Nil