

**Course Code EDEC 127**  
**SEMESTER-I**  
**SCIENCE & TECHNOLOGY CONTENT & METHOD**  
**Objectives : Student Teachers...**

1. Develop an understanding of the nature and place of Science  
Formulates instructional objectives in term of behavioral out comes.
2. Construct suitable tool of evaluation, understand, continuous and comprehensive evaluation and employ it for feedback and remediation.
3. Understand the teaching methods, approaches and techniques for teaching material.
4. Use appropriate educational technology and develops low cost teaching material.
5. Analyze and evaluate science syllabus and science textbooks.
6. Develop skills in organizing curriculum activities such as science club, science fair, science exhibition and field trips.

**Unit:1 Content**

Std- 8, Chapter no : 1, 8,10,12  
Std- 9, Chapter no : All chapters from Std 9<sup>th</sup> Textbook of  
Semester 1  
Std-10 Chapter no : 1,3,4,6,9

**Unit:2 Modern Science, Taxonomy and Planning for Teaching**

- 2.1 Concept of Science
- 2.2 Nature of mordent Science
- 2.3 Growth of Science teaching in India.
- 2.4 Science teaching competency, its social and professional responsibility.
- 2.5 Values of Science in modern life : Utilitarian value, Disciplinary value and Cultural value
- 2.6 Objectives of teaching science and technology at secondary level: Taxonomy of educational, Objectives.
- 2.7 General and specific objective and behavioral changes.
- 2.8 Planning for Science and technology teaching:
  - (1) Lesson plan
  - (2) Unit planning
  - (3) Monthly planning
  - (4) yearly planning.

### **Unit:3 Teaching Methodology**

#### 1.1 Modern methods of Science and technology teaching

- (1) Lecture method
- (2) Demonstration method
- (3) Experimental method
- (4) Project method
- (5) Inductive-Deductive method
- (6) Panel discussion
- (7) Symposium method

### **Unit: 4 Field Work (any one of the following)**

- (1) Planning and Implementation of Project Based Learning
- (2) Biography of eminent Scientists of world and India (Indian and foreign Scientists one each for every Students )
- (3) Interview with Experienced Science teacher  
(By keeping merits and demerits of various methods and techniques of teaching Science and technology in mind)
- (4) Collecting information about New methods of Teaching Science and Technology through Internet
- (5) Organize or participate in Panel Discussion or Symposium on any topic from  
unit 1 (content)
- (6) Any other science and technology related activities