

## **Problem-Based Learning**

Problem-Based Learning (PrBL) is an innovative teaching methodology where students learn by analyzing and solving real-world problems rather than only studying theoretical concepts. In this method, the learning process starts with a problem or challenge, and students must research, discuss, and develop possible solutions.

In a problem-based learning environment, students usually work in small groups. They identify what they already know about the problem, determine what they need to learn, and then gather information through research, discussions, and practical investigation. The teacher acts as a facilitator or guide, helping students think critically and directing them toward the correct approach.

This method encourages students to apply theoretical knowledge to practical situations, improving their analytical thinking, decision-making, teamwork, and communication skills.

Problem-Based Learning makes students active participants in the learning process and prepares them to handle complex engineering challenges in real-life situations.

Example:

- Active participation in Hackathon
- Submission of TNSCST Project Proposals

TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY  
 DOTE Campus, Chennai - 600 025

FORMAT OF APPLICATION FOR SCIENCE & TECHNOLOGY PROJECTS (2025-2026)  
 (Two Copies to be submitted)

1	Title of the Project	: AI-DRIVEN CONVERSATIONAL ASSISTANT USING RAG FOR GOVERNMENT SCHEMES
2	Discipline under which the project is to be considered (Must write any one of: Agricultural Sciences / Biological Sciences / Physical Sciences / Chemical Sciences / Medical Sciences/ Veterinary Sciences / Social Sciences Environmental Sciences/ Engineering & Technology)	: Engineering & Technology
3	Name & Designation of the Principal Investigator	: Dr.R.GOPI PROFESSOR, DEPARTMENT OF CSE
4	Postal Address of the Principal Investigator	: DHANALAKSHMI SRINIVASAN ENGINEERING COLLEGE THURAIYUR ROAD, PERAMBALUR- 621212
5	Name, Designation and address of Co-investigator if any	: Mrs.T.GEETHA, M.E., ASSISTANT PROFESSOR HEAD OF THE DEPARTMENT,CSE
6	Contact Phone numbers (Office and residence) of PI & Co-PI along with email id	: 9789855569 & 9442275203 csehod@gmail.com Geetha.t@dsengg.ac.in
7	Name of the Institution/Organization in which the project will be carried out	: DHANALAKSHMI SRINIVASAN ENGINEERING COLLEGE, PERAMBALUR
8	Name of other Institution(s) Organization(s) involved in the Project	: NIL
9	Duration of the Project (Maximum 2 years)	: 12 Months
10	Total Cost of the Project Proposal (details to be furnished in the prescribed format)	: 3,15,000
11	An abstract, not exceeding one page describing the background, objectives, methodology & year wise budget	: To be enclosed separately
12	Details of the project proposal including the State-of-the art of the subject, the work already done in this area in India or elsewhere, and defining clearly the objectives and methodology and year wise phasing of the project.	: To be enclosed separately



13	Brief bio-data of the Investigator(s)	: To be enclosed separately
14	Facilities available at the Institution/ organization to carry out the project	: To be enclosed separately
15	Social relevance and usefulness of the project	: To be enclosed separately
16	Whether the same Investigator(s) is / are receiving funds from any Other agencies If yes, Title of the Project Agency Amount	: No

Place: Perambalur  
 Date: 2.3.26.

Praveen  
 Signature of the Head of the Department With Seal

**HOD**  
 Dept. of Computer Science  
 and Engineering  
 Dhanalakshmi Srinivasan  
 Engineering College  
 Perambalur - 621 212



Praveen  
 Signature of the Head of the Institution With Seal

**PRINCIPAL**  
 DHANALAKSHMI SRINIVASAN ENGINEERING COLLEGE,  
 (AUTONOMOUS)  
 PERAMBALUR - 621 212.

1. Praveen  
 2. Praveen  
 Signature of the Investigator(s)