



**VIGNAN's** INSTITUTE OF INFORMATION TECHNOLOGY  
(AUTONOMOUS)

(Approved by AICTE - New Delhi & Affiliated to JNTUK, Kakinada)  
Beside VSEZ, Duvvada, Vadlapudi Post, Gajuwaka, Visakhapatnam - 530 049.



### **Best Practice-2**

## **TRANSDISCIPLINARY TRAINING TO CORE ENGINEERING STUDENTS**

### **Objectives:**

**To prepare core Engineering Student to Information Technology (IT) Jobs with High-Package.**

•VIGNAN Institute of Information Technology has initiated transdisciplinary training for core engineering students to prepare them for IT jobs with high packages. Transdisciplinary training can be highly beneficial in equipping students with the necessary skills and knowledge to excel in the IT industry. By incorporating this approach, VIGNAN is taking proactive steps to address the evolving needs of the job market and provide students with diverse career opportunities.

• It would be helpful to further elaborate on the specific components and implementation of the transdisciplinary training

program. Consider including details such as the duration and structure of the training, the programming languages and technologies covered, hands-on projects and practical application, industry collaborations, internships, and any additional support provided to students during the training process.

- Additionally, monitoring and evaluating the outcomes and success of the program will be crucial. Collecting data on the percentage of students who successfully transition to IT jobs, their job placements, and feedback from industry professionals and employers will provide valuable insights into the effectiveness of the training program.

Overall, by embracing transdisciplinary training, VIGNAN Institute of Information Technology is taking a proactive approach to enhance the employability and career prospects of its core engineering students in the IT industry.

### **Context:**

The production sector is experiencing a decline in job opportunities, which has led to a need for diversification of skills among engineering students. By developing programming skills and coding ability, students from disciplines such as Civil, Electrical, and Mechanical Engineering can explore IT job opportunities.

### **Practice:**

**Introduce Programming Skills Course:** One course on programming skills should be included in the curriculum for core engineering students. This course can be offered every semester to ensure continuous exposure and skill development.

### **Special Training on Coding:**

Apart from the regular programming course, additional special training sessions focused on coding should be provided to students. These sessions can be conducted by experienced IT professionals or faculty members with expertise in coding. The training should cover fundamental programming concepts, popular programming languages, algorithms, data structures, and problem-solving techniques.

### **Practical Application Projects:**

To reinforce the learning of programming skills, students should be assigned practical application projects that align with real-world IT scenarios. These projects can be based on solving engineering-related problems using coding or developing software solutions for engineering applications. This hands-on experience will help students bridge the gap between theoretical knowledge and practical implementation.

### **Industry Collaboration and Internships:**

Establish partnerships with IT companies and encourage students to undertake internships in the IT sector. This collaboration will provide students with exposure to industry practices, the latest technologies, and hands-on experience in a professional IT environment. It can also lead to potential job opportunities for students after graduation.

### **Evidence of Success:**

- Monitor the outcomes of this practice to measure its success:
- Track the percentage of students from core engineering disciplines who successfully transition to IT jobs.
- Conduct surveys or interviews with students to assess their satisfaction and confidence in their programming and coding skills.
- Gather feedback from IT industry recruiters and employers about the preparedness and performance of the transdisciplinary trained students.

### **Problem:**

- The mind-set of students being inclined towards core engineering jobs might pose a challenge in implementing this practice. Some students may have preconceived notions about their career paths and may be resistant to exploring IT job opportunities. To overcome this problem, it is important to:

- **Conduct awareness programs and workshops highlighting the growing demand for IT professionals and the potential career prospects.**
- **Showcase success stories of core engineering students who have successfully transitioned to IT jobs and achieved high packages.**
- **Provide mentoring and counselling support to address students' concerns and misconceptions about IT careers.**
- **Organize guest lectures or panel discussions featuring professionals working in the IT industry, sharing their experiences and insights.**
- **By implementing this best practice, core engineering students can acquire the necessary programming skills and coding ability, making them well-equipped to pursue IT jobs with high packages.**

**Evidence of Success: 50-60% Students in IT industry**