

***7.2.1 Describe two best practices successfully implemented by the institution as per NAAC format provided in the manual.***

**Best Practice –**

**Title of the Practice:**

To develop state-of-the art manufacturing facility through Industry-Institute-Interaction by developing Robotics & Automation Center.

**Objectives of the Practice:**

Following are the objectives of the said practice -

- To create research facility
- To perform UG & PG projects based on advance manufacturing
- To develop Training Center for programming and advance manufacturing techniques
- To conduct certificate courses based on advance manufacturing.

**The Context:**

All engineering students hope to land a dream job on completion of the programme. But curriculum syllabus may not suffice for reaching the goal. In this context, the institution has taken an initiative to provide additional certification or training courses and prepare the students to be industry ready endowed with right attributes of an engineer.

In view of creating the proposed facility following efforts were made by the institute:

- Communication with eminent alumni from various organizations/industries
- Submitting proposals to authorities like AICTE for grant-in-aid
- Pursuing with the management of the institute for the budgetary provision and its approval

**The Practice:**

As a result of healthy rapport with the alumni, Institute succeeded in getting Welding Robot & Programming Software from the industry Yaskawa India Pvt. Ltd. under Corporate Social Responsibility (CSR) Scheme. Management of the institute made provision for the installation, transportation, electrification etc. Also, couples of facilities were created by getting grant-in-aid from AICTE. The details of the facilities available in the Robotics and Automation Laboratory are as under:

<b>Facility</b>	<b>Source of Finance</b>	<b>Approximate Cost</b>
YASKAWA Robot 'Moto man AR1440 Slim, Thru- Arm Arc Welding Robot & Programming Software	Yaskawa India Pvt. Ltd	Rs. 15.00
Rapid Prototyping Machine u-PRINT 3D Printer	AICTE under MODROB Scheme	Rs. 21.41
CNC Vertical Milling Machine 'FEXMILL'	AICTE under MODROB Scheme	Rs. 15.04
PLC Trainer M-1400	Existing facility	-

### **Evidences of Success:**

- Faculty Training  
One week training on robot programming and operation was provided by Sr. Engineer Santosh Kumar from Yaskawa India Pvt. Ltd. Total 10 faculty members from Mechanical Engineering Department participated in the training from 25/10/21 to 27/10/21.
- UG project based on Repeatability Testing/ Precision

### **Problems encountered:**

Although the expertise was available, the funds for state-of-the art manufacturing facility to be purchased for Robotics and Automation Center was a big challenge. Thanks to AICTE grants under the scheme MODROB and Yaskawa India Pvt. Ltd. under Corporate Social Responsibility (CSR) Scheme.

Availability of space was another problem encountered in this project which eventually was overcome by making some adjustments & better utilization of available space.