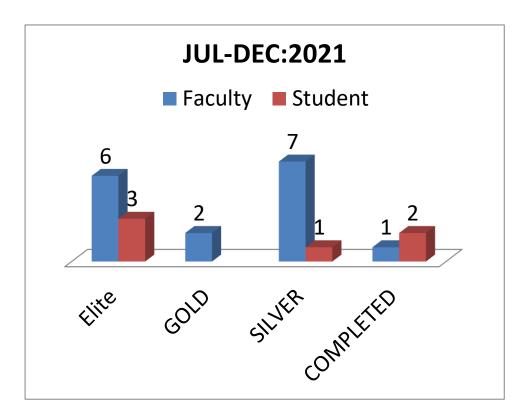
#### 6.5.1 Incremental Improvements

#### 1. NPTEL Certifications – Students and Staff

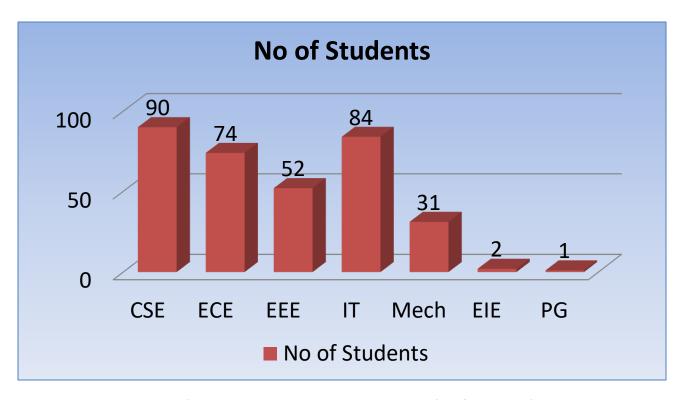
For the academic year 2021-2022, Certifications obtained by staff and students are low especially the students count is very low. For the whole academic year, only 6 students obtained NPTEL certifications.

But, for the current academic year, 2022-2023, 334 students obtained NPTEL certifications as per the following bar chart, because of continuous motivations from Quality Circle and respective HODs of branches.

#### Academic Year 2021-2022



Academic Year 2022-2023



### 2. Incremental Improvements - Research & Development

In keeping the importance of Research and Development as one among the major factor for the growth of institution, this circle is formed with the following teaching faculty with relevant positions.

Dr.M.R.Thansekhar,

Convener

Dr V.Kejalakshmi and Dr.S.Miruna Joe Amali

#### Co-Conveners

This circle promotes research activities among the teaching staff with regard to publication of research papers, presenting of research papers in reputed journals, seminars and conferences at all levels. Also, research projects are scrutinized and granted seed-funding so as to develop the project to its full swing.

This circle invites project proposals from both the students and the teaching staff. Once granted funding, this circle follows up with periodical survey of the projects and records the growth of the research activities. All the activities enforced by this circle some way or other contribute to effective functioning of another quality circle called Industrial Relations - Industry Institute Partnership Cell (IIPC).

### Summary of Activities of R & D Quality Circle for the Academic year 2021-2022

S.No	Objectives	Target	Achieved
1	Publication in International Journals	45	65
2	Proposals for sponsored research / Consultancy to industries / Govt. / Research agencies and institutes	30	50
3	Seminar/FDP on advanced research topics	10	15

### Summary of Activities of R & D Quality Circle for the Academic year 2022-2023

S.No	Objectives	Target	Achieved
1	Publication in International Journals	50	54
2	Proposals for sponsored research to Govt. / Research agencies and institutes	5	6
3	Seminar/FDP on advanced research topics	2	2

## Research Proposals approved by Funding Agencies during 21-22 – Total Proposals were 3.

S. No.	Investigators	Title	Agency	Amount (Rs. In lakhs)
1	Dr.S.Parathasarathy Dr.A.V.Ramprasad Mr.S.Nallathambi Dr.M.Ragini	Laser Based Hydraulic Controlled Variable Length Land Leveler Cum Plough Device With Remote Monitoring System	DST	14
2	Dr.S.Parathasarathy	S&T Capacity building for industrial needs	TNSCST	1.4
3	Dr.S. Suresh Raja	Perennial assistant fund	National Coordinating Institute UBA 2.0	1.75

# Research Proposals approved by Funding Agencies during 22-23 – Total Proposals were 6

S. No.	Investigators	Title	Agency	Amount(Rs. In lakhs)
1	Dr. S.Parthasarathy, Dr. K.Gnanambal, Dr.S.Miruna Joe Amali, Dr.S.Suresh Raja, Dr.P.Loganthurai	Smart Energy Management Device	DST	97
2	Dr. K.Gnanambal, Dr.S.N.Kannan Dr. S.Parthasarathy, Dr.S.Miruna Joe Amali	Efficient Energy Management of Local Power Grid with Electric Vehicle using Artificial Intelligence	SERB - POWER	29.94
3	Dr. R.Karthick Dr. S. Miruna Joe Amali	Smart Neera Adulteration Finding System	Chief Minister's Research Grant	24.49

4	Dr. R.Lakshmi	EB Budget Controller	MSME	8.5
5	Dr. R.Karthick	Sewage Detection and Monitoring System	MSME	9.85
6	Mr. D.Pravin Kumar	Smart Water Management and Quality Monitoring System	MSME	7