

# HEARTY WELCOME TO

Hon'ble Chairperson and Members  
of NAAC peer team



**Department of Instrument Technology AUCE,  
Andhra University, Visakhapatnam**

# OVERVIEW



Dept of  
Instrument  
Technology

- **Vision & Mission**
- **Department Profile/History/Achievement**
- **Curricular Aspects**
- **Teaching & learning**
- **Research, Innovation and Extensions**
- **Students support and Progression**
- **Infrastructure and learning resources**
- **Governance, leadership and Management**
- **Institutional values and best practices**
- **Progressive Plan**



- Instrumentation Engineering department shall strive to act as a podium for the development and transfer of technical competence in academics, entrepreneurship and research in the field of Instrumentation Engineering to meet the changing needs of society.
- The Department will strive to become a centre for excellence in the field of Instrumentation and Control Engineering to enrich the students with Quality Education and Contemporary Technologies to meet the global needs.

# MISSION



Dept of  
Instrument  
Technology

- To provide modular programmes from skill development to the research level.
- To impart education and training in innovative state-of-the-art technology in the field of Instrumentation Engineering.
- To promote holistic development among the students.
- To provide extension services to rural society, industry professionals, institutions of research and higher learning in the field of Instrumentation Engineering.
- To interact with the industry, educational and research organizations, and alumni in the fields of curriculum development, training and research for sustainable social development and changing needs of society.



# QUALITY POLICY

**Excellence in teaching, research and consultancy by:**

- **Imparting globally focused education**
- **Creating world-class professionals**
- **Establishing synergic relationships with industry and society**
- **Developing state of art infrastructure and well-endowed faculty**
- **Imparting knowledge through teamwork and incessant efforts.**

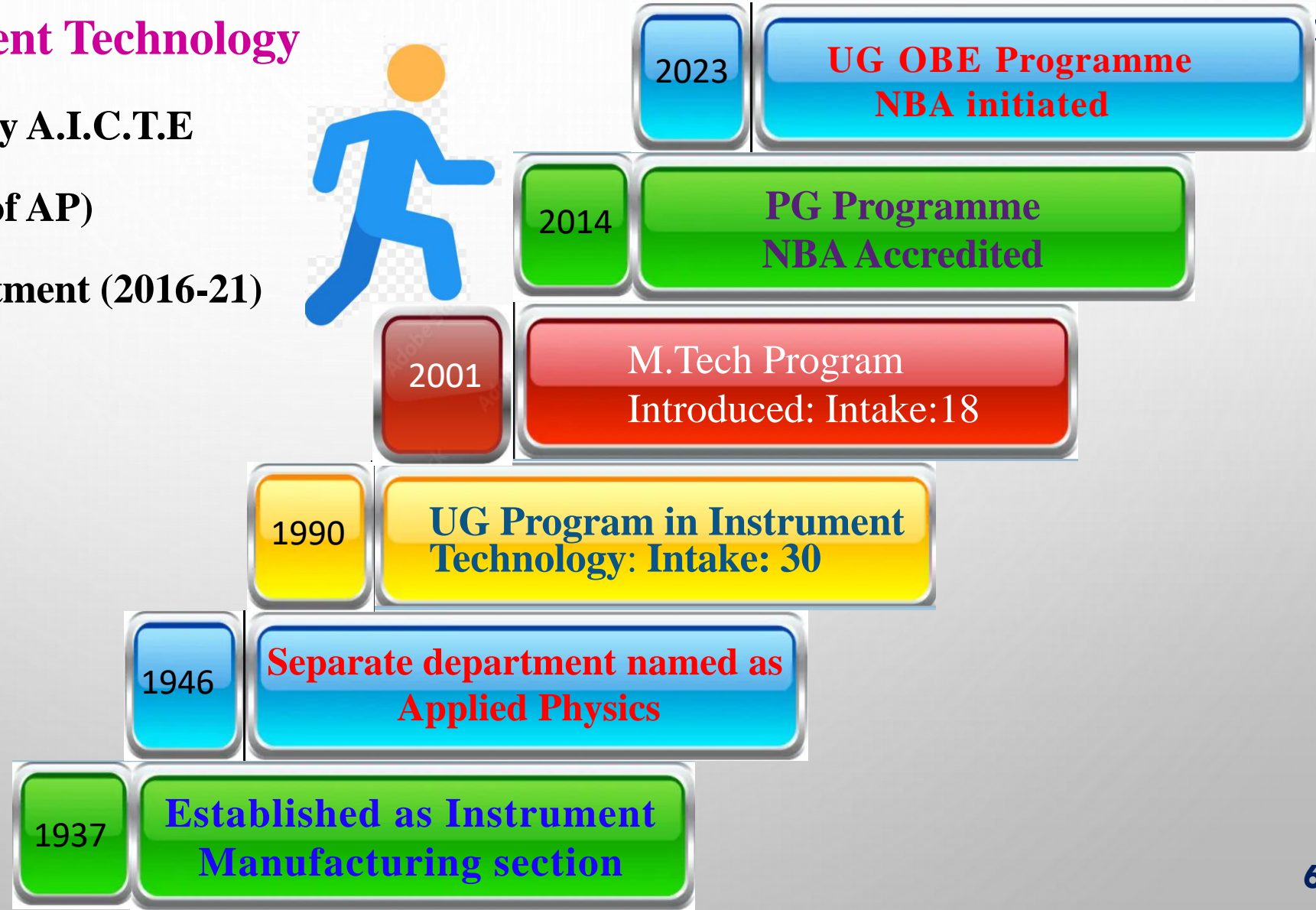
# Department profile & Milestones achieved



Dept of  
Instrument  
y

## Department of Instrument Technology

- All Programmes Approved by A.I.C.T.E
- Approved by D.T.E. (Govt. of AP)
- UGC-SAP Supported Department (2016-21)





# DEPARTMENT ACHIEVEMENTS (2017 – 2022)

## FACULTY

- All faculty members are Doctorates
- SFR (~ 11:1)
- PhDs awarded (36)
- FDPs / Workshops (24)
- NPTEL & Coursera Courses (10)
- Publications (128)
- Patents (10)
- Awards (5)

## STUDENTS

- Admissions (99%)
- Results (95%)
- Certification & Value added Courses (06)  
Participated Students (153)
- Placements (80%)
- Internships (54)
- Higher Studies (9-11%)

# Infrastructural Highlights



Dept of  
Instrument  
Technology

E-Class Rooms: 04

Laboratories: 10

Research Labs: 02

Seminar hall: 01

Library and Reading Room: 01





# RESEARCH LABORATORY EQUIPMENT



Dept of  
Instrument  
Technology



## Name of the Equipment

RF and DC Sputtering Unit.  
Impedance Analyzer: PSM1735  
LCR meter, Model: 4263B

## Price

₹ 16,21,483.50  
₹ 11,08,380.00  
₹ 8,88,544.93



Planetary Ball mill

₹ 7,16,625.00

Electron Beam Evaporation Unit.

₹ 5,97,187.50

Muffle(Box) Furnace

₹ 3,10,537.50

BOD incubator

₹ 2,99,250.00

Chemical vapor deposition unit

₹ 2,32,004.50

Trinocular Microscope CX43

₹ 2,07,821.25

Binocular microscope

₹ 99,849.75

Spin Coater

₹ 95,550.00

BOD Incubator stabilizer

₹ 93,477.02

50Lt. Nitrogen cylinders

₹ 45,904.95

Electronic Weighing Balance

₹ 39,175.50

Artix7 FPGA Kits

₹ 32,050.20

Oxygen double stage regulator

₹ 12,669.93





# Teacher's Profile

## List of Faculty

S.No.	Name	Designation	Qualification	Experience (Years)	Specialization
1	<u>Prof. A. Bhujanga Rao</u>	Professor & BOS Chairman	Ph.D	33	Instrumentation
2	<u>Prof. Y. Srinivasa Rao</u>	Professor	Ph.D	17	Micro Electronics
3	<u>Prof. D. V. R.K Reddy</u>	Professor	Ph.D	17	MEMS and Nano Technology
4	<u>Prof. M. Ramesh Patnaik</u>	Professor	Ph.D	17	Industrial Process Instrumentation
5	<u>Dr. A. Kamala Kumari</u>	Associate Professor & Head of Department	Ph.D	17	Digital Systems and Computer Electronics
6	<u>Dr. Daisy Rani</u>	Associate Professor	Ph.D	17	MEMS & NEMS
7	<u>Dr. P. Swapna</u>	Associate Professor	Ph.D	17	MEMS & NEMS

# List of Faculty



Dept of  
Instrument  
Technology

S.No.	Name	Qualification	Specialization
8	Mr. B. Lakshmi Narayana Reddy	M.Tech.,	VLSI & Embedded Systems
9	Mr. K. Venu Gopal	M.Tech.,	Embedded Systems
10	Ms. Ch. Swathi	M.Tech.,	Electronics Instrumentation
11	Mr. B. Yakub	M.Tech.,	Embedded Systems
12	Mr. Kumar R.N.	M.Tech.,	Electronics and Nano Technology

# FACULTY CONTRIBUTION



Dept of  
Instrument  
Technology



- Ph.D.
- BOS Chairman
- Dean R&D

Prof. A. Bhujanga  
Rao



- M.Tech., Ph.D.,  
PDF.

Prof. Y. Srinivasa Rao



- M.Tech., Ph.D.
- CEO, MITC, AP

Prof. D.V. Rama Koti  
Reddy



- M.Tech., Ph.D.

Prof. M. Ramesh  
Patnaik



- M.Tech., Ph.D.
- Head of the  
Department

Dr. A. Kamala  
Kumari



- M.Tech., Ph.D.
- Warden

Dr. P. Swapna



- M.Tech., Ph.D.
- Warden

Dr. A. Daisy Rani




# RESEARCH, INNOVATIONS AND EXTENSIONS

<b>S. No.</b>	<b>Agency</b>	<b>Name of the Principal Investigator/ Co Investigator (if applicable)</b>	<b>Fund received (In Lakhs)</b>	<b>Type (Government/ Non-Government)</b>	<b>Duration</b>
1	<u>UGC-SAP</u>	Prof. Koti Reddy	₹ 36	Government	2016 - 2021
2	<u>DST-FIST</u>	HOD, Dept. Instrument Technology.	₹ 87	Government	2018 - 2023
3	<u>MARGADARSHAN</u>	Prof. Koti Reddy	₹ 30.66	Government	2016 - 2019
4	<u>WOMEN SCIENTIST (WOS - A)</u>	Prof. Koti Reddy	₹ 22.9	Government	2017 -2020

# PROJECT APPROVAL ORDERS



Dept of  
Instrument  
Technology

  
**UNIVERSITY GRANTS COMMISSION**  
**BAHADUR SHAH ZAFAR MARG**  
**NEW DELHI - 110 002**

No. F.3-10/2016/DRS-I(SAP-II) February, 2016

To  
The Registrar,  
Andhra University,  
Visakhapatnam - 530003,  
Andhra Pradesh.

Subj: University Grants Commission Assistance to the Department of Instrument Technology, Andhra University at the level of DRS-I for a period of 5 years (1-4-2016 to 31-3-2021) under Special Assistance Programme (SAP).

Sir,

- This has reference to the department profile and proposal submitted by the Department of Instrument Technology of your University for consideration to support under Special Assistance Programme (SAP) of the UGC as per revised guidelines of the Programme.
- The UGC Special Assistance Programme (SAP) is intended through constant effort to raise the quality of teaching/ research in different disciplines in Bio-Sciences, Sciences, Engineering & Technology, Humanities, Social Science departments and carefully selected on the basis of their work, academic achievements and viable potential for further development. The essence and primary aim of the scheme is combination of teaching and research to encourage group research efforts in pursuit of excellence.
- The Proposal of the department of Instrument Technology was examined by the Expert Committee on 26<sup>th</sup> May, 2015. After a very careful and critical in-depth examination of the academic achievements of the department, as given in the departmental profile, the Expert Committee recommended the department for consideration by the commission to support the department at the level of DRS-I.
- On the basis of the recommendations of the Expert Committee, I am directed to convey the approval of the Commission to provide financial assistance to the Department of Instrument Technology, Andhra University at the level of DRS-I for a duration of 5 years (2016-2021) with the following thrust areas) for research and teaching.

UGC - SAP

No. SR/ST/ET/2016/170 (C)  
**GOVERNMENT OF INDIA**  
**MINISTRY OF SCIENCE & TECHNOLOGY**  
**DEPARTMENT OF SCIENCE & TECHNOLOGY**  
**R & D (Infrastructure) DIVISION**

Technology Bhawan  
New Mehrauli Road  
New Delhi - 110016

19<sup>th</sup> March, 2016

**ORDER**

Subject: Financial assistance (1<sup>st</sup> instalment) to the Department of Instrument Technology, Andhra University, Visakhapatnam-530003, (Andhra Pradesh) under FIST Program.

Sanction of the President is hereby accorded to the approval of the aforesaid project at a total cost of **₹. 87,00,000/- (Rupees Eighty Seven Lakh only)** for 5 years. The detailed breakup of the grant for General 4 will as Capital Components are given below.

To support of research facilities in the Department  
**Capital Assets: Rs. 80.0 L**  
**E-Rs. 80.0 L ( Inkjet Printer)**  
**General Components: Rs. 7.0 L**  
**GS-Rs. 7.0 L**  
**Total: Rs. 87.0 Lakh.**

2. The total budget recommended for 5 years has been chased as below: (Rs. in lakh)

Year	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year	Total
Capital Assets	80.0					80.0
Maintenance		1.5	1.5	2.0	2.0	7.0
<b>Total</b>	<b>80.0</b>	<b>1.5</b>	<b>1.5</b>	<b>2.0</b>	<b>2.0</b>	<b>87.0</b>

3. Sanction of the President is also accorded to the release of **₹. 80,00,000/- (Rupees Eighty Lakh only)** to the Registrar, Andhra University, Visakhapatnam-530003, (Andhra Pradesh) under FIST Programme as a 1<sup>st</sup> instalment of the grant in 2016-2016 under creation of capital assets head for the maximum cost of the aforesaid equipment including (9.4%) Custom Duty & other duties under the 'Equipment'. The break-up of the 1<sup>st</sup> instalment grant released now would be **Equipment: Rs. 80.0 lakh for procurement of Equipment mentioned above (Equipments of Foreign Origin to be acquired on F.O. Terms, only an amount not include charges for any comprehensive Maintenance and Training personnel from the vendors during procurement process).**

4. The Department/Institute will appropriately limit the expenditure within the sanctioned amount in case of any unplanned excess expenditure. The Department is requested to utilize the released funds within one year from the date of sanction order.

5. This sanction is subject to the condition that the grantee organization will furnish to the Department of Science & Technology, financial year wise Utilization Certificate (UC) in the proforma prescribed as per GFR 2017 and audited statement of expenditure (SE) along with up to date progress report at the end of each financial year duly reflecting the interest earned / accrued on the grants received under the project. This is also subject to the condition of submission of the final statement of expenditure, utilization certificate and project completion report within one year from the scheduled date of completion of the project.

D. N. Venkatesh T. Pandey Contd. 2

DST - FIST

**ALL INDIA COUNCIL FOR TECHNICAL EDUCATION**  
 Nelson Mandela Marg, Vasant Vihar  
 New Delhi - 110067

Ref No. File No. 58-02/HFD/MargdarshanPolicy-12016-17 March 03, 2017

The Drawing and Disbursing Officer,  
All India Council for Technical Education,  
Nelson Mandela Marg,  
Vasant Vihar, New Delhi - 110067.

Subj: Release of Grants under Share & Mentor Institutions (Margdarshan) Scheme during the current financial year 2016-17.

Sr.

This is to convey the sanction of the Council for payment of **₹.30,66,867/- (Rupees Thirty Lakh Sixty Six Thousand Six Hundred Sixty Seven)** Only under i/c Share & Mentor Institutions (Margdarshan) as Grant-in-aid for meeting the expenditure for implementing the Scheme in order to create & update general research capabilities, as per details given below:

1. Name of the Beneficiary Institution (University / College / Institution)	ANDHRA UNIVERSITY COLLEGE OF ENGINEERING, ANDHRA UNIVERSITY, WALTAIR, VISAKHAPATNAM - 530003 Andhra Pradesh
2. Chief Coordinator's Name & Dept.	Mr. Venkata Rama Dodda
3. Grant-in-aid Sanctioned	₹.34,90,000/- (₹.29,00,000/- for non-recurring grant & ₹.5,90,000/- for recurring expenditure)
4. Amount to be Released during the year 2016-17	Non Recurring: ₹.29,00,000/- Recurring (1 <sup>st</sup> Year): ₹.5,66,867/- Total: ₹.30,66,867/-
5. Duration	3 Years

- The sanctioned grant-in-aid is debatable in the major Head 002 00 (Share & Mentor Institutions (Margdarshan)) (category not mentioned), may be General and is valid for Payment during the financial year 2016-17.
- The grant-in-aid of the grant shall be drawn by the Drawing and Disbursing Officer (DDO), All India Council for Technical Education, New Delhi on the Grant-in-aid bill and shall be disbursed to and credited to the account of ANDHRA UNIVERSITY COLLEGE OF ENGINEERING, ANDHRA UNIVERSITY, WALTAIR, VISAKHAPATNAM - 530003, Andhra Pradesh through RTGS.
- The date of release of the grant by AICTE shall be taken as the date of commencement of the project. The Principal/Disbursing Officer shall intimate about the receipt of the grant to AICTE. Any expenditure incurred prior to issuance of the approval letter is not released to be approved on the grant and if the University/Institution do not take the project work within 3 months of the receipt of the grant, approval shall lapse back to AICTE.

Contd. 2

AICTE - MARGADHARSAN

No. SR/WOS-A/ET-104/2016 (C)  
**Government of India**  
**Ministry of Science & Technology**  
**Department of Science & Technology**  
**KIRAN DIVISION**

Technology Bhawan  
New Mehrauli Road  
New Delhi - 110016  
dated 28.12.2017

**ORDER**

Subj: Financial approval of the project under Women Scientist Scheme A (WOSA) entitled "Flexible carbon nanotube strain gauge sensors for biomedical applications".

PI: Ms. Chahamou Swathi, Department of Instrument Technology, Andhra University College of Engineering, Visakhapatnam-530003, AP.

In continuation of the Sanction Order No. SR/WOS-A/ET-104/2016 (G) dated 28.12.2017 Sanction of the President is hereby accorded to the payment of **₹. 5,00,000/- (Rupees Five Lakh only)** as the Grant for "creation of capital assets" in the above mentioned project. The details of the equipments to be procured are given below:

Sl. No.	Needs	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	Total
A.	<b>Non-Recurring (Capital Items)</b>				
	Equipments	5,00,000/-			5,00,000/-
	CVD				
	<b>TOTAL</b>	<b>5,00,000/-</b>			<b>5,00,000/-</b>

- The grantee organization will maintain separate audited account for the project and the entire amount of grant will be kept in an interest bearing bank account. The interest earned / accrued should be reported to DST (financial year wise) while submitting the Statement of Expenditure/Utilization Certificate. The interest thus earned will be treated as a credit to the grantee organization, which will be adjusted towards future release of grant.
- This sanction is subject to the condition that the grantee organization will furnish to the Department of Science & Technology, financial year wise Utilization Certificate (UC) in the proforma prescribed as per GFR 2017 and audited statement of expenditure (SE) along with up to date progress report at the end of each financial year duly reflecting the interest earned / accrued on the grants received under the project. This is also subject to the condition of submission of the final statement of expenditure, utilization certificate and project completion report within one year from the scheduled date of completion of the project.
- The grantee organization will have to enter & upload the Utilization Certificate in the PFMS portal besides sending it in physical form to this Division. The subsequent instalment will be released only after confirmation of the acceptance of the UC by the Division and entry of previous Utilization Certificate in the PFMS.
- If the grant has been released under capital head through separate sanction order under the same project for purchase of equipment(s), separate SEUC has to be furnished for the released Capital head grant.
- The account of the grantee organization shall be open to inspection by the sanctioning authority and audit (both by C&A of India and Internal Audit by the Principal Accounts Office of the DST), whenever the organization is called upon to do so, as laid down under Rule 230(1) of General Financial Rules 2017.
- The grant-in-aid being released is subject to the condition that:
  - A transparent procurement procedure in line with the Provisions of General Financial Rules 2017 will be followed by the Institute/ Organization under the appropriate rules of the grantee organization while procuring capital assets sanctioned for the above mentioned project and a certificate to this effect will be submitted by the Grantee organization immediately on receipt of the grant.

Contd. 2

WOMEN SCIENTIST (WOS - A)

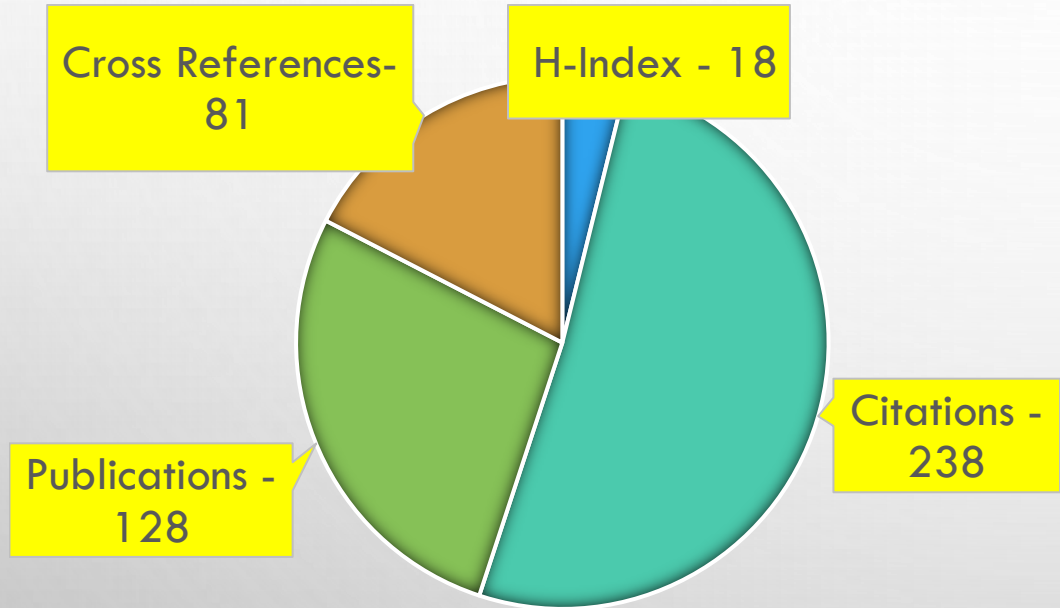
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# RESEARCH, INNOVATIONS AND EXTENSIONS(Contd.,)

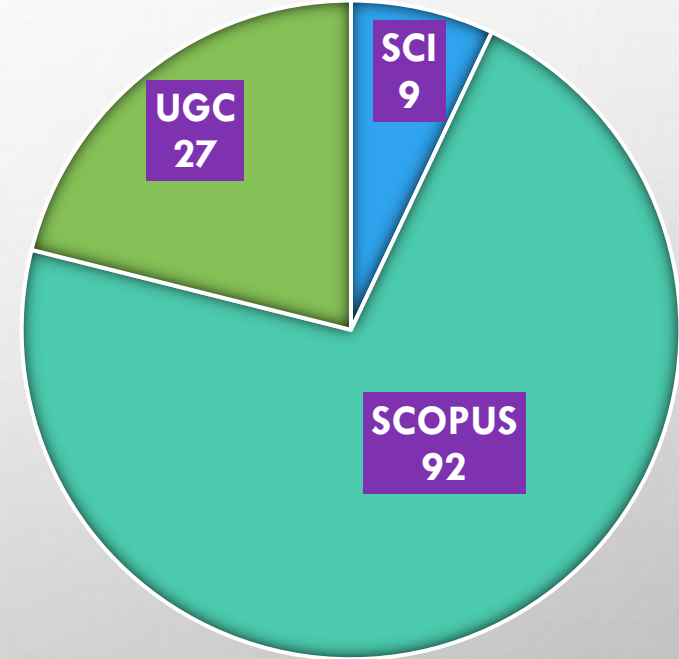
## DEPARTMENT RESEARCH STATUS (2017 – 22)

**AU - Vidwan Department of  
Instrument Technology Research Profile**



- H-Index
- Citations
- Publications
- Cross Reference

**SCI/SCOPUS/UGC Care Publications**



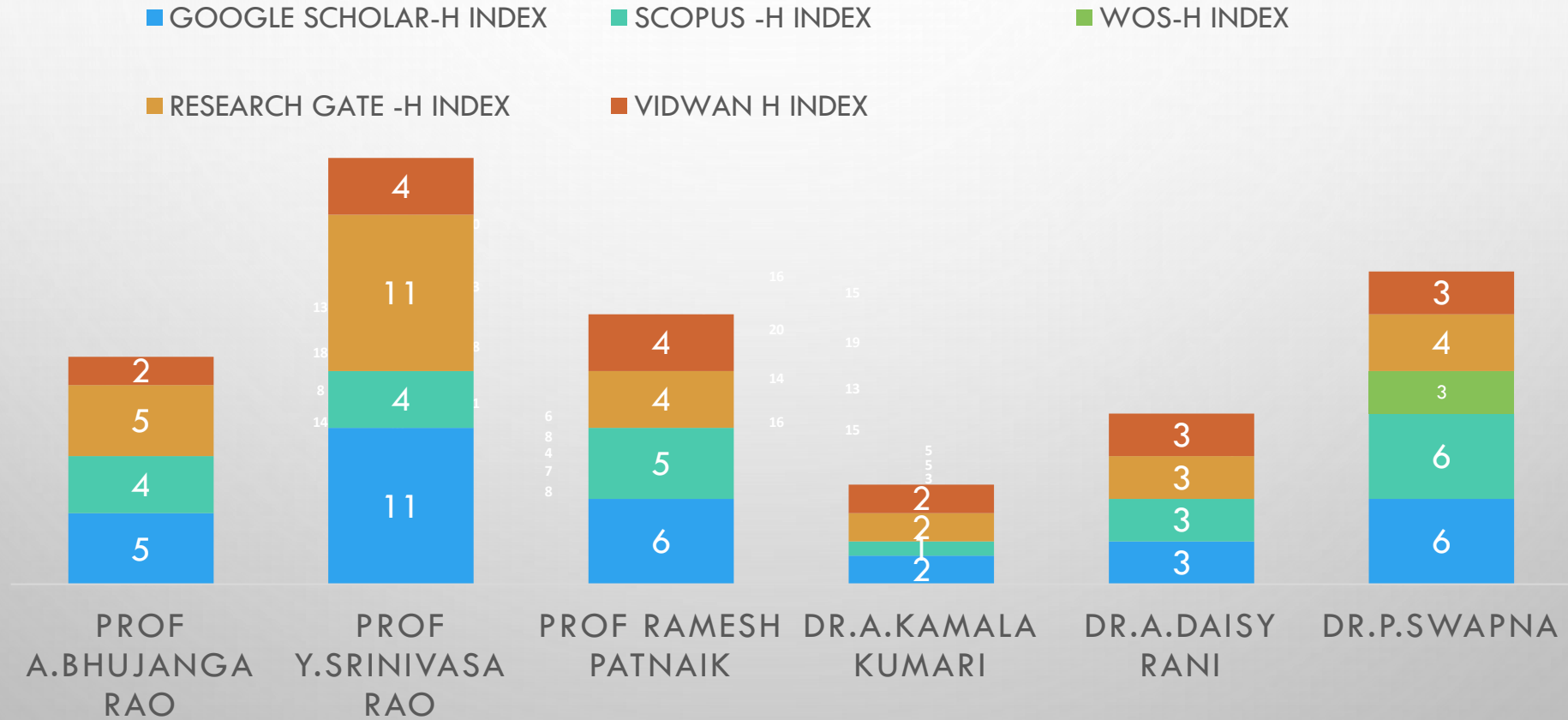
- SCI
- SCOPUS
- UGC



# RESEARCH, INNOVATIONS AND EXTENSIONS(Contd.,)

## Faculty Research Status (2017 – 22)

### FACULTY PUBLICATION PROFILE



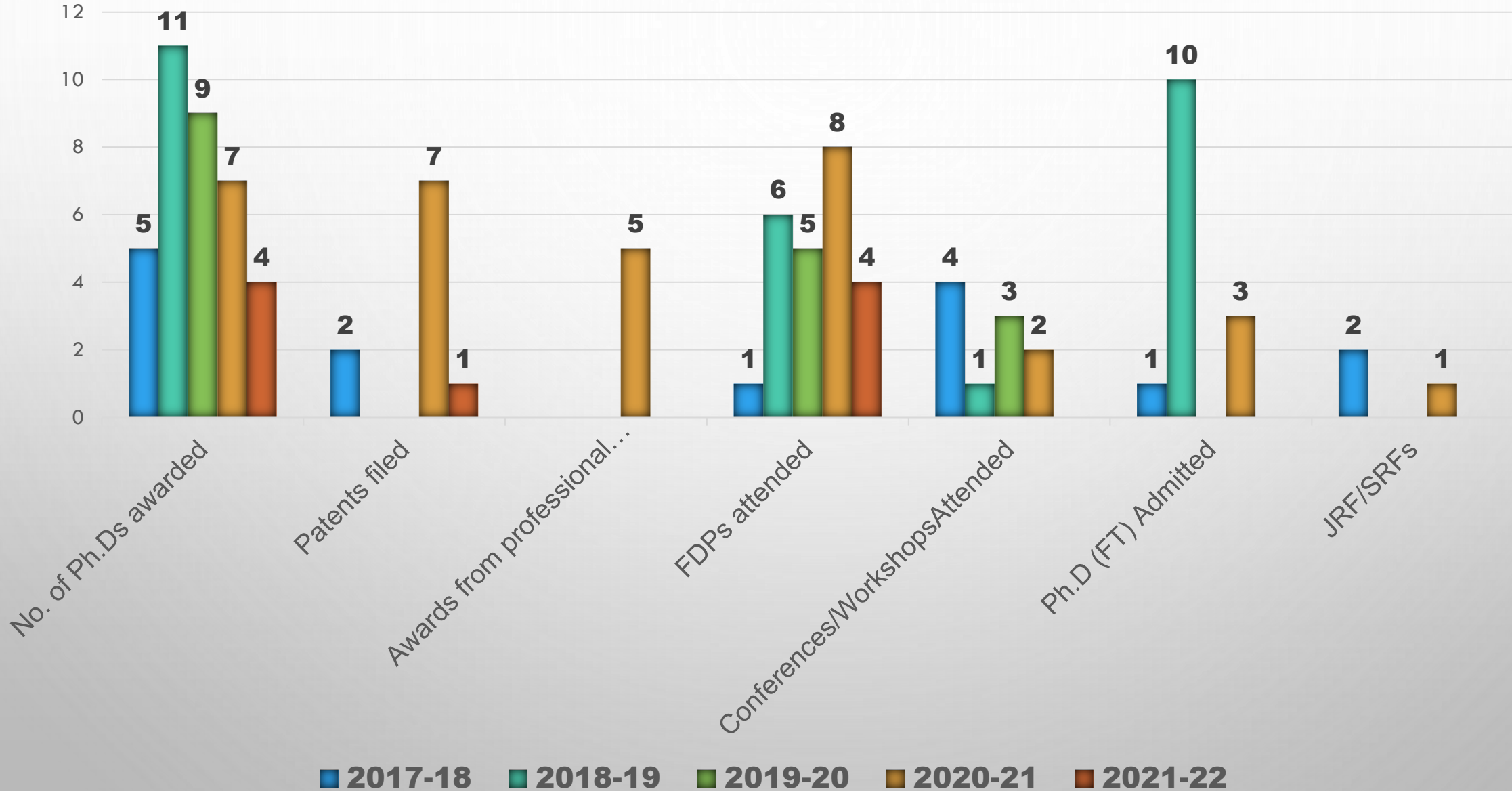




# Research, Innovations and Extensions



## ACHIEVEMENTS



# Research, Innovations and Extensions (Contd.,)



## Patents published

Name of the Patentee	Patent Number	Title of the patent	Year of Award / published of patent
<u>Prof.A.Bhujanga Rao</u>	202241040734A	Artificial intelligence enabled Reconfiguration on chip(SOC) Architecture and method thereof	22-07-2022
<u>Prof D V R Koti Reddy</u>	202141017552A	Low cost automated antimicrobial susceptibility testing system	30-07-2021
<u>Prof. Y. Srinivasa Rao</u>	201741017485	Pulse voltage trimming of polymer Thick Film Resistors.	18-05-2017
<u>Prof. Y. Srinivasa Rao</u>	20174011994	Microwave trimming of polymer Thick Film Resistors.	03-04-2017
<u>Prof.M.Ramesh Patnaik</u>	202141012068	A throughput Improvement method for IEEE 802.15.4 Based Wireless personal area Networks	26-03-2021
<u>Dr. A. Kamala Kumari</u>	202141038936 A	Plurality of gases detection from combustion material using air quality monitoring system with optimized sensors.	10-09-2021
<u>Dr. Swapna Peravali</u>	202141017903 A	Machine Learning-based Headlight Intensity Altering device for Electrical Vehicles	23-04-2021
<u>Dr. Swapna Peravali</u>	202141029922A	Wireless automation system with plurality of voice recognition and Encryption of fast fourier transformation	16-07-2021
<u>Dr. Swapna Peravali</u>	202141037361	A system and method for detecting cloud transients, cloud density using optimized solar tracking system	27-08-2021
<u>Dr Daisy Rani Alli</u>	202141017552A	Low cost automated antimicrobial susceptibility testing system	30-07-2021

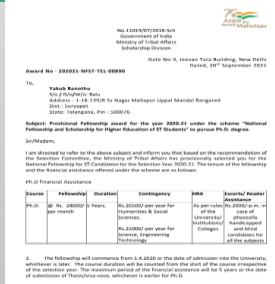
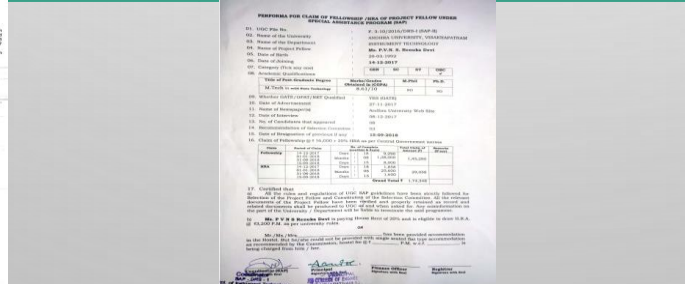
# Research, Innovations and Extension (Contd.,)



Dept of  
Instrument  
Technology

## JRF/SRF/OTHER FELLOWSHIPs

Sl.No	Name of Research fellow	Name of the Department	Sanction order	Year of Enrollment	Duration of Fellowships	Types of the fellowship	Fellowship amount	Granting agency	Qualifying Exam
1	<u>CH.SWATHI</u>	Inst Tech	SR/WOS-A/ET-104-2016(G)	2017	3years	Women scientist-A (Wos-A)	Rs.22,90,000/-	DST	Nil
2	<u>P.V.N.S. Renuka Devi</u>	Inst Tech	F.3-10/2016/DRS-I (SAP-II)	2017	2 years	PROJECT FELLOW	Rs 1,74,348/-	DST	GATE
3	<u>Yakub Banothu</u>	Inst Tech	Award No - 202021-NFST-TEL-00890	2021	5 years	National Fellowship and Scholarship for Higher Education of ST Students	Rs. 28000/- per month	Ministry of Tribal Affairs	Nil



# Academic Highlights



Dept of  
Instrument  
Technology

## ACADEMICS

### Qualified, Experienced and Motivated Faculty

- Faculty avg. experience - **18 yrs.**
- Maximum experience : **33 yrs.**

### Well Equipped Laboratories

- Number of labs in the department: **10**
- Research Labs: **02**

### Results and Placements

- Consistent results in Final year : more than **90%**
- Placements : more than **85%** of the eligible students

### Workshops and courses for excellent skill development

- Value Added Courses - **6**
- Webinars - **2**

# THRUST AREAS OF RESEARCH



Dept of  
Instrumentation  
Technology

## Control Systems

- **Optimization of Control Systems**
- **Design & Analysis of Control Systems**

## Sensors

- Design of various sensors
- Optimization of sensor structures and fabrication

## Process Instrumentation

- Study about safety and security of the plant
- Measurement and Control

## Nano-Technology

- Design of MEMS & Nano sensors
- Synthesis of Nanomaterials and fabrication of sensors

## VLSI

- ASIC – FPGA Design & Implementation
- Device Fabrication

# MAJOR / KEY INITIATIVES



Dept of  
Instrument  
Technology

## Faculty Centric

- Financial Assistance for Paper presentation abroad
- Incentive for Paper Publication in cited and reputed Journals
- Incentive for Grants received
- Financial Assistance for attending Workshop/Seminars/Conferences
- Monetary incentives to functional heads
- Free Medical Facility

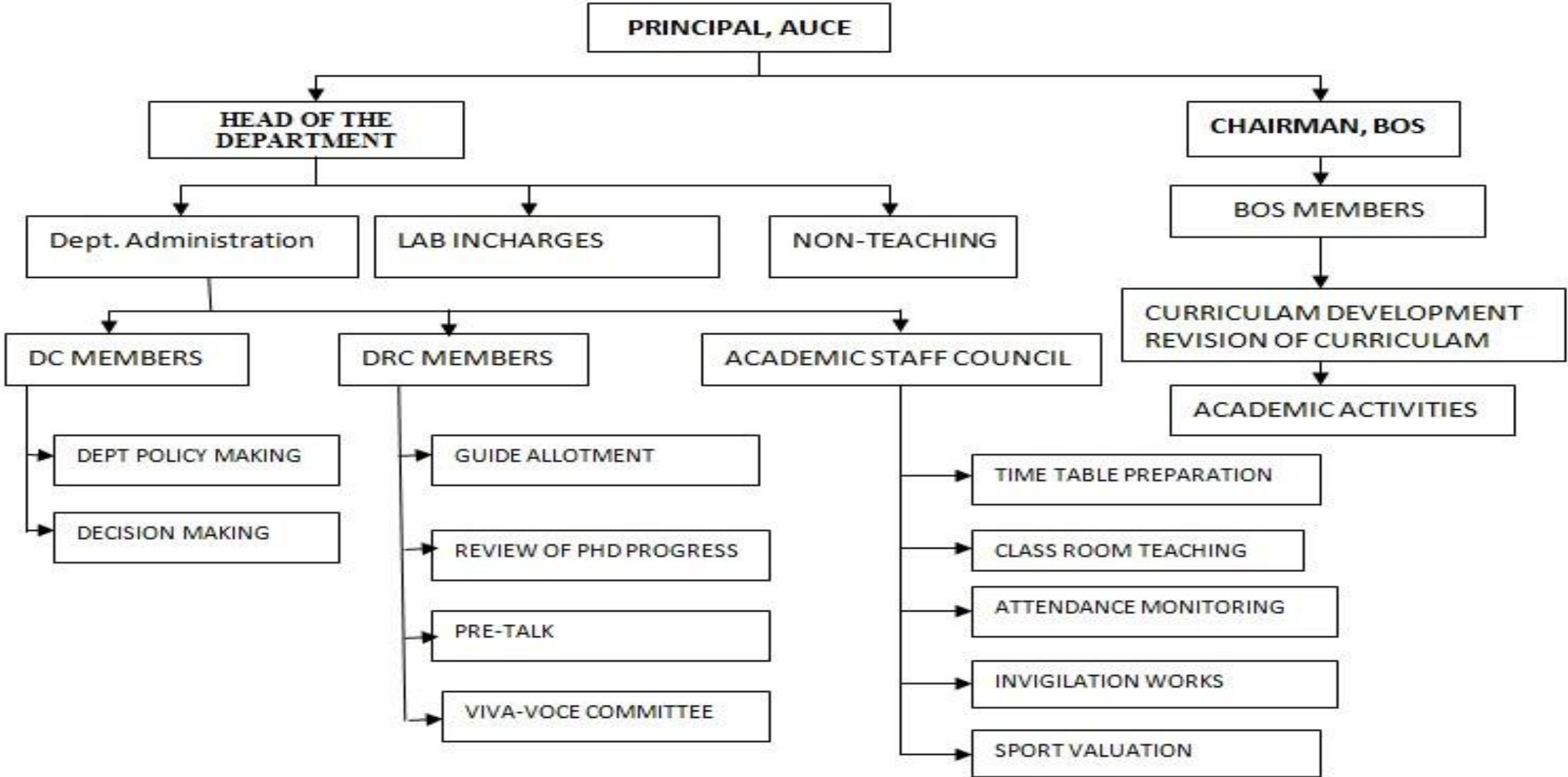
## Staff Centric

- Skill Enhancement Training
- Free Medical Facility & Insurance
- Encouragement for Higher qualifications

## Student Centric

- Add- on courses
- Minors & Honorary Degrees
- Free Medical facility
- Remedial Classes

# INTRODUCTION – AUCE ACADEMIC SYSTEM (ORGANIZATION CHART)

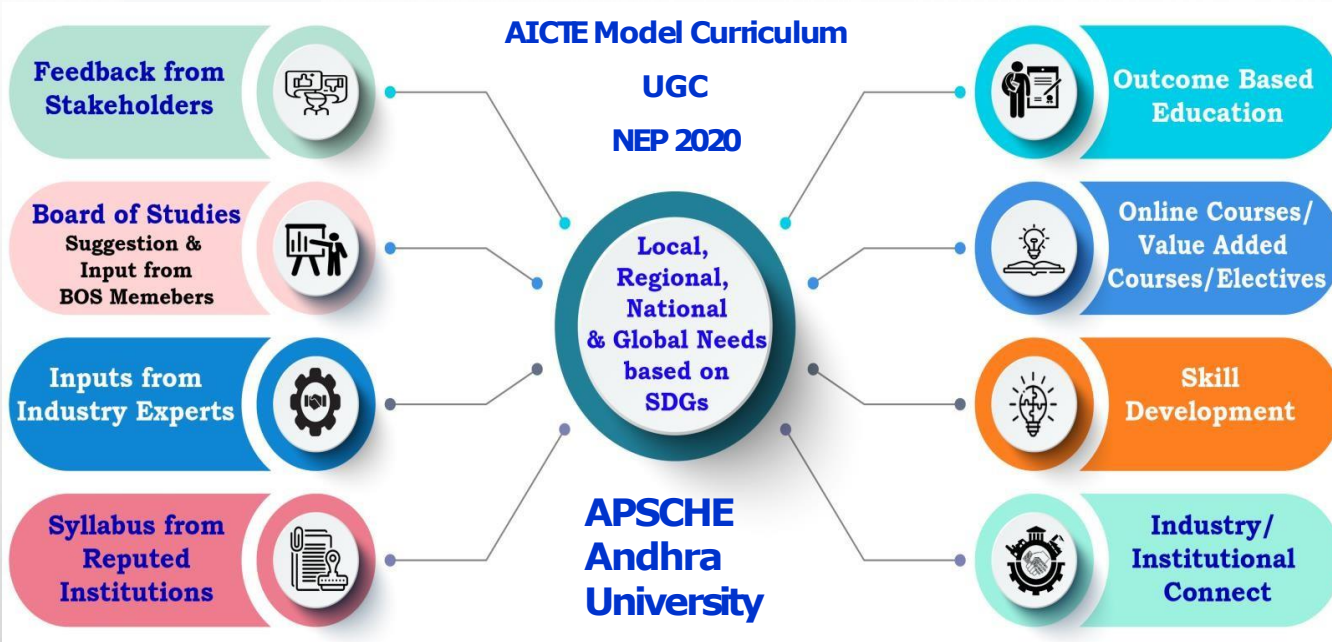




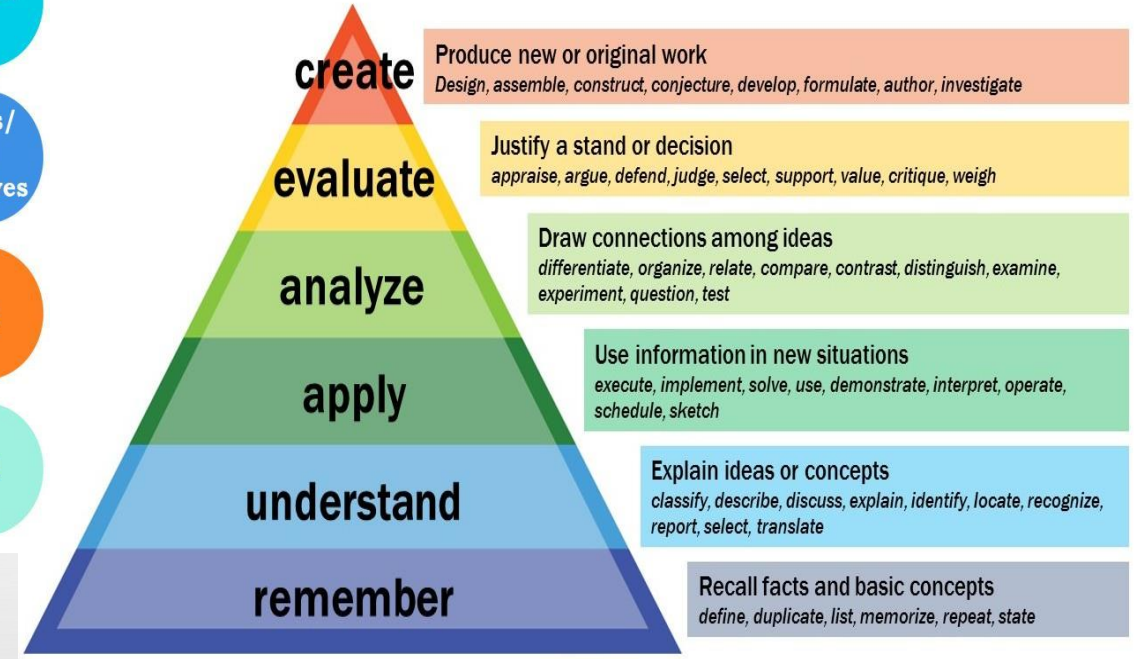
# CURRICULAR ASPECTS: CURRICULUM DESIGN & DEVELOPMENT PROCESS



Dept of  
Educational Technology



## Bloom's Taxonomy



### NEP in Curriculum

1. Multidisciplinary/interdisciplinary- Minor Degrees, Honors Degrees with Specialization
2. Academic bank of credits (ABC)
3. Skill development: Skill Labs, Dassaults Laboratory, CoEs
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online courses)
5. Focus on Outcome based education (OBE)
6. Online education: Online Platforms, E-Content , LMS, etc.

**Criterion 1****Courses With Employability/Skill Development/Value Added Programmes Offered In U.G/P.G**

Dept of  
Instrument  
Technology

• Average % of courses having focus on employability/ entrepreneurship/ skill development - 80

• Courses offered Core courses and Electives/MOOCs Courses Link to COs:

- [B.Tech Instrumentation\(2015-16\)](#)
- [B.Tech Instrumentation\(2019-20\)](#)
- [M.Tech Instrumentation\(2019-20\)](#)
- [B.Tech Instrumentation\(2020-21\)](#)
- [B.Tech Instrumentation\(2021-22\)](#)

Programme Code	Programme name	Year of Introduction (CBCS)	Status of implementation of CBCS/Elective course system (Yes/No)	Year of revision
3-1-16	B. Tech. Instrumentation Engineering	2017-18	YES	2019-20
				2020-21
				2021-22
3-2-31	M.Tech. – Instrumentation & Control	2015-16	YES	2019-20



**Value Addition Courses**

Industrial Requirements/Market demands, Guest speakers, Technological Upgradation, Skill Enhancement courses.



**Project Works – Mini/Main Laboratory/Research based learning**



**Internships / Field Works**

hands-on experience, field trips



**Student forum-based activities**

Group Discussions, Case Studies, extra-curricular activities, interests outside the classroom and problem-solving exercises



***Learning is more meaningful and enjoyable when content and process are learned in the context of real and present problems.***

# CURRICULAR ASPECTS (CONTD.,)



## Student Projects

Programme name	2017-18	2018-19	2019-20	2020-21	2021-22
<b>B.Tech. (Instrumentation Engineering)</b>	<b>11</b>	<b>12</b>	<b>11</b>	<b>10</b>	<b>13</b>
<b>M.Tech. (Instrumentation and Control)</b>	<b>14</b>	<b>12</b>	<b>11</b>	<b>11</b>	<b>10</b>
<b>Ph.D.</b>	<b>05</b>	<b>11</b>	<b>09</b>	<b>07</b>	<b>04</b>

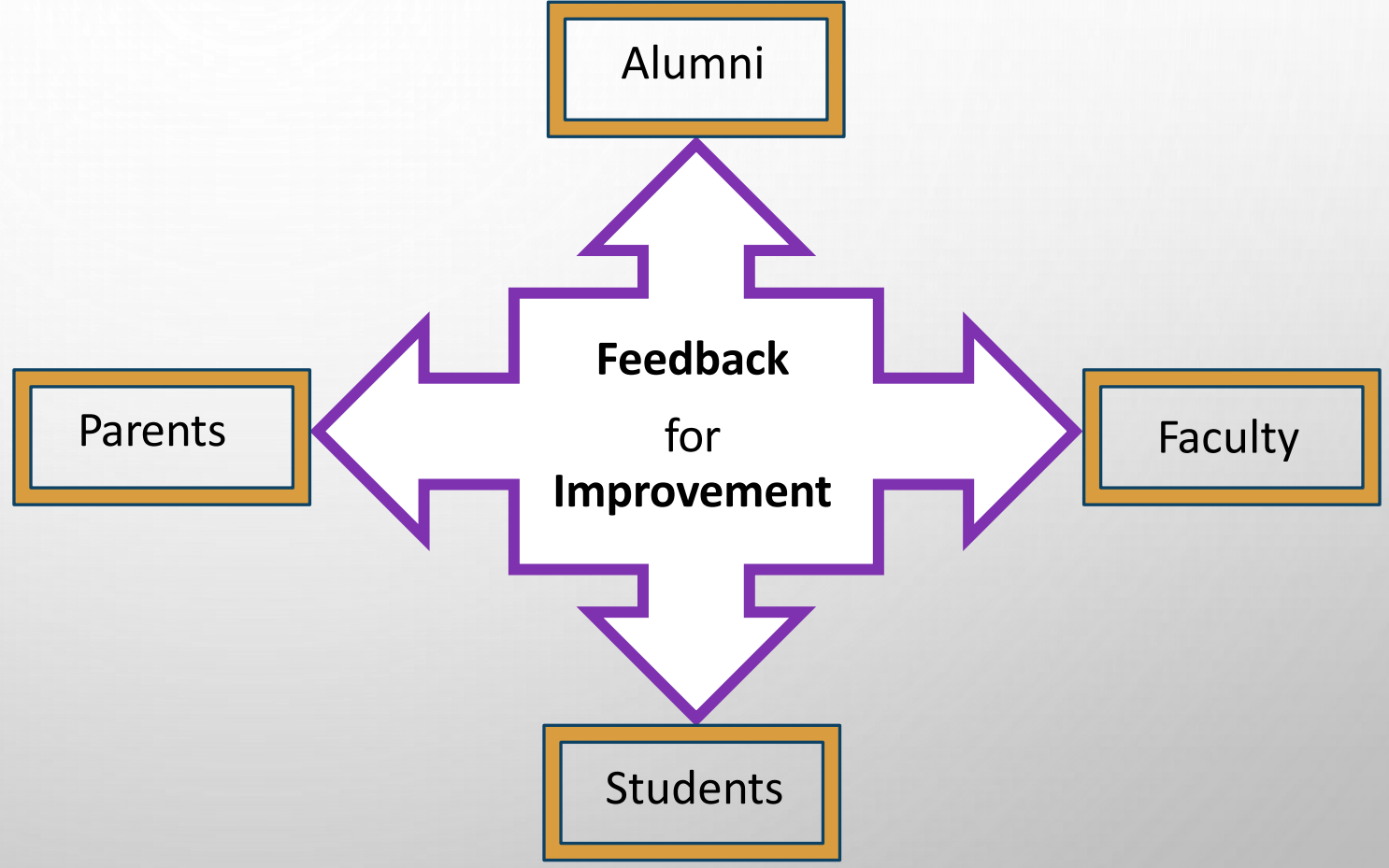
# CURRICULAR ASPECTS (CONTD.,)

## Feedback Analysis



Feedback system is in place and has an **active process** of

- Collecting feedback from all stakeholders
- Analysing the feedback
- Identifying the significant indicators to enhance the learning effectiveness.

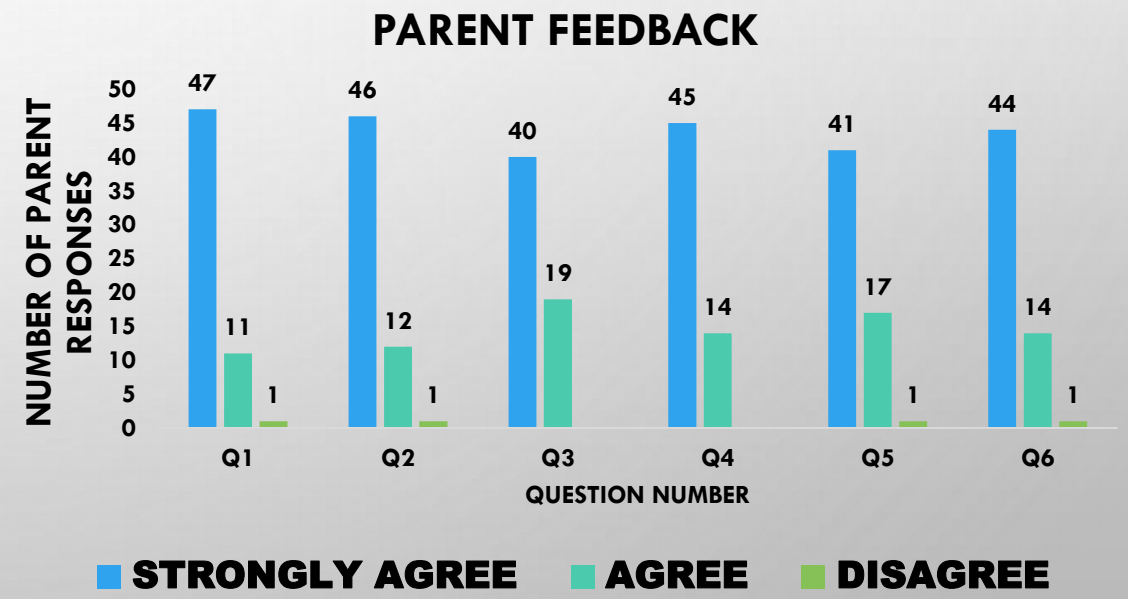
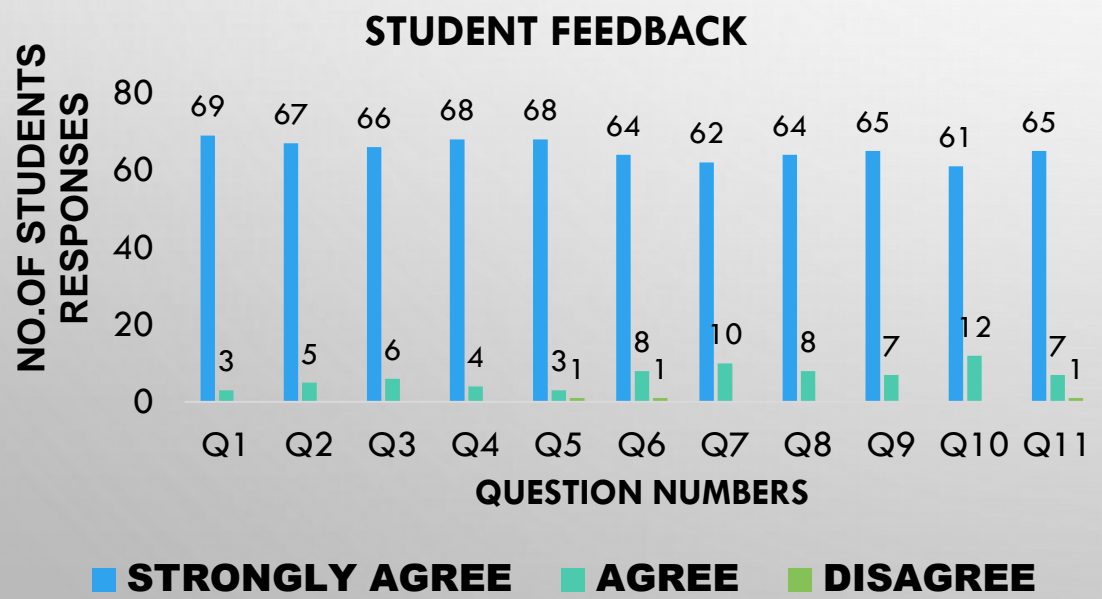


# CURRICULAR ASPECTS (CONTD.,)



## Feedback for curriculum collected and analysed report

- Students feedback on curriculum - 72
- Parents feedback on curriculum - 59
- Faculty feedback on curriculum - 14
- Alumni Feedback on curriculum - 20

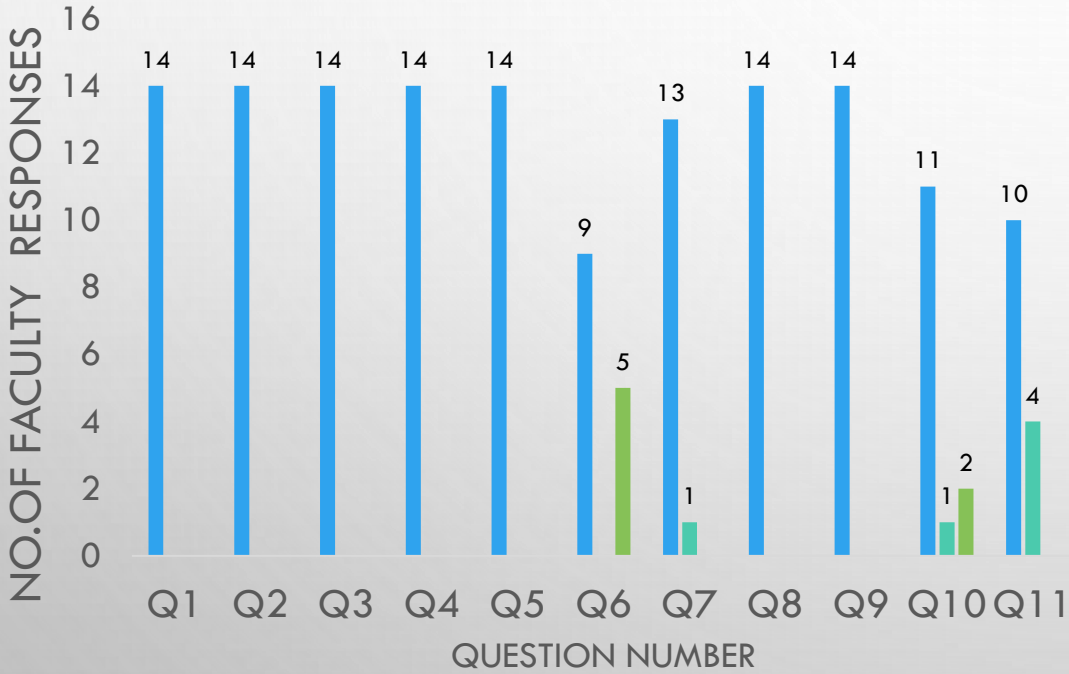




# CURRICULAR ASPECTS (CONTD.,)

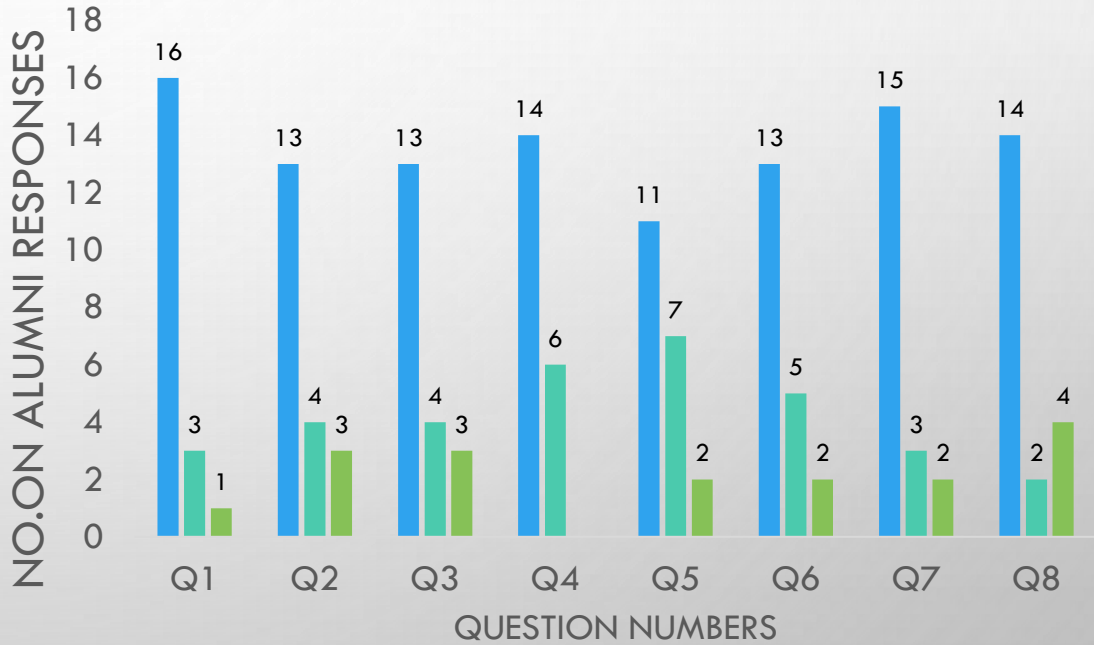
## Feedback for curriculum collected and analysed report

FACULTY FEEDBACK



STRONGLY AGREE    AGREE    DISAGREE

ALUMNI FEEDBACK



STRONGLY AGREE    AGREE    DISAGREE

# CURRICULAR ASPECTS (CONTD.,)

## Feedback Collections Models



Dept of  
Instrument  
Technology

ANDHRA UNIVERSITY VISAKHAPATNAM

### FACULTY FEEDBACK ON CURRICULUM

Name of the Department & College: Instrumentation Technology, A. U College of Engineering		Emp Code: 1138	
Name of the Faculty: Prof. A. Bhujanga Rao		Designation: Professor	
Name of the Course: 1. Sensors and Transducers, 2. Industrial Instrumentation, 3. Microprocessors and Applications 4. Microcontroller Based Instrumentation, 5. Computer Based Process Control		Course code: A.Y:2020-2021 and 2021/2022	
Semester: III, IV, V, VI and VII			

Kindly fill your feedback on curriculum, Teaching Learning and Evaluation of the courses you are teaching and select the appropriate option by marking ✓ as per the following criteria

S.No	Parameter	C - Disagree			Specific remarks (If any)
		A	B	C	
	Prerequisites, OBE attributes, text books/reference books/ weblinks for each course are properly mentioned	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	yes
	Course objectives and course outcomes are well defined and clear to faculty and students.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	yes
	The curriculum states the required course components	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	yes
	Proper organization of the syllabi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	yes
	The curriculum meets requirement of stake holders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	yes
	Any difficulty in completion of syllabi within time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Some times, extraordinary circumstances.
	Continuous evaluation is based on the cognitive level, tools in line with revised Bloom's Taxonomy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Compliance of syllabi with LOs, COs, POs & PSOs attainment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	yes
	Curriculum reflection on Graduate attributes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Identification & analysis of gaps in the present curriculum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Taken care off
	Bridging the gaps in the subsequent curriculum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	yes
	Any specific remarks/suggestions	Every time when the syllabus has revised the gaps in course curriculum and latest trends in the course are being incorporated to meet the industry and societal needs. The present curriculum is Based on outcome based education all the required parameters are taken care off.			

A. Bhujanga Rao  
Signature of faculty

ANDHRA UNIVERSITY VISAKHAPATNAM

### ALUMNI FEEDBACK ON CURRICULUM

Name:	Durga Prasad Mavuduri	Department & College:	Dept. of Instrumentation Engg ( Applied Physics)
Year of Passing out:	1988	Regd. No.:	
Contact No.:	+1 408 828 9909	CGPA obtained	
E-Mail ID	mavuduri@gmail.com	Mobile No.:	+1 408 828 9909
Present affiliation	University of Emerging Technologies		
Designation	CEO		

**You are requested to put a tick mark in the appropriate box provided against each Question as per the following criteria**

S.No	Parameter	C - Disagree			Remarks
		A	B	C	
1.	Quality of curriculum as per OBE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.	Quality of teaching learning & evaluation processes, Course materials, Video lectures by Faculty related to curriculum	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Availability of skill oriented /value added /capacity building courses	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Compliance of curriculum in achievement of attainment of COs and LOs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Availability of required equipment in all laboratories as per curriculum.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Compliance of curriculum in achievement of attainment of POs and PSOs.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7.	The curriculum is helpful in getting skills for placements/higher education/ entrepreneurship/ internship/competitive examinations.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8.	The curriculum meets the industrial/societal requirements	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

9. Give your feedback on various electives offered during your course of study  
**Opto-Electronics, Control Engg. and Process Control are some of the best.**

10. Skills acquired by you during the completion of your UG/PG project.  
**Better Theoretical principles of Instrumentation and Process control**

11. List out the courses/activities helped to improve your life skills.  
**Opto-Electronics, Control Engg, Process Control, Industrial Electronics, Egg Drawing**

12. Any other suggestions:  
**Focus on core automation and industrial instrumentation would have been better**

Signature

ANDHRA UNIVERSITY VISAKHAPATNAM

### STUDENT FEEDBACK ON CURRICULUM

Name of the Department & College: Instrumentation technology & Andhraniversity college of engineering		Name of the Student: UPPULA SATYANARAYANA PRASAD	
Period of study: 2018-2022		Registration Number: 318106816031	
Name of course: B.TECH		Semester: 7	

Kindly fill your feedback on curriculum, of the courses you have attended and select the appropriate option by marking ✓ as per the following criteria

S.No	Parameter	C - Disagree			Remarks
		A (3)	B (2)	C (1)	
1.	Prerequisites of the course were met	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	None
2.	Course objectives and course outcomes were clear	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	None
3.	Content of syllabus in alignment with course outcomes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	None
4.	Units/Modules/Topics in the course are properly ordered	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	None
5.	Sufficiency of theory/tutorial/practical/seminar classes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	None
6.	Modern learning tools and teaching methods encourage the student participation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	None
7.	Assessment criteria intended for the course is appropriate	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	None
8.	Intended Skills / Course outcomes acquired after completion of the course.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	None
9.	Compliance of syllabi in attainment of POs & PSOs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	None
10.	Course provides additional knowledge in advanced topics.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	None
11.	Availability of Contents in prescribed text books / reference books /weblinks.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	None
12.	Any suggestions/Specific remarks	Kindly requesting to increase practical knowledge in course.			

U.S. Prasad  
(Signature of the Student)

ANDHRA UNIVERSITY VISAKHAPATNAM

### PARENT/GUARDIAN FEEDBACK ON CURRICULUM

Parent Name: Pragada Krishna			
Student Name: Pragada yamini	Regd. No of the student: 318106816028		
Year of Passing out: 2022	CGPA: 7.57		
Contact No. of parent: 9848781273	Mobile No. of student: 9550093775		
E-Mail ID of parent if any: krishnapragada80@gmail.com	Email of student: pragadayamini25@gmail.com		
Occupation of the parent: Contract labour			

**You are requested to put a tick mark in the appropriate box provided against each Question as per the following criteria**

S.No	Parameter	C - Disagree			Specific Remarks
		A	B	C	
1.	Quality of curriculum	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.	Quality of teaching learning process, Course materials, Video lectures by Faculty etc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Availability of skill oriented courses.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Examination system adopted by college	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Availability of required equipment in all laboratories as per curriculum.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Compliance of curriculum in attainment of POs and PSOs.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Which courses in the curriculum helped your ward in getting employed.	UNEMPLOYED			
8.	Did you identify gap between industry and our curriculum? If yes please specify?	NO			
9.	Give your feedback on electives	PPI and AI are very helpful subjects			
10.	Skills acquired by your ward during the completion of UG project.	Project not done yet			
11.	List out the courses/activities helped to improve life skills of your ward.	activity skills and			
12.	Any other suggestions/remarks:				

FACULTY

ALUMNI

STUDENT

PARENT



**DEMAND RATIO**



Academic Year	2017-18	2018-19	2019-20	2020-21	2021-22
<b>B.TECH</b>					
<b>Seats Available</b>	<b>33</b>	<b>33</b>	<b>72</b>	<b>37</b>	<b>37</b>
<b>Students Admitted</b>	<b>33</b>	<b>33</b>	<b>72</b>	<b>37</b>	<b>37</b>
<b>Applications Received</b>	<b>145428</b>	<b>132281</b>	<b>133003</b>	<b>133072</b>	<b>133072</b>
<b>Demand Ratio</b>	<b>4691</b>	<b>4267</b>	<b>1643</b>	<b>2334</b>	<b>2294</b>
<b>M.TECH</b>					
<b>Seats Available</b>	<b>18</b>	<b>18</b>	<b>18</b>	<b>18</b>	<b>18</b>
<b>Students Admitted</b>	<b>12</b>	<b>12</b>	<b>07</b>	<b>07</b>	<b>08</b>
<b>Applications Received</b>	<b>26677</b>	<b>23831</b>	<b>20986</b>	<b>20165</b>	<b>20165</b>
<b>Demand Ratio</b>	<b>1482</b>	<b>1589</b>	<b>1399</b>	<b>1120</b>	<b>1186</b>



# STUDENT DIVERSITY

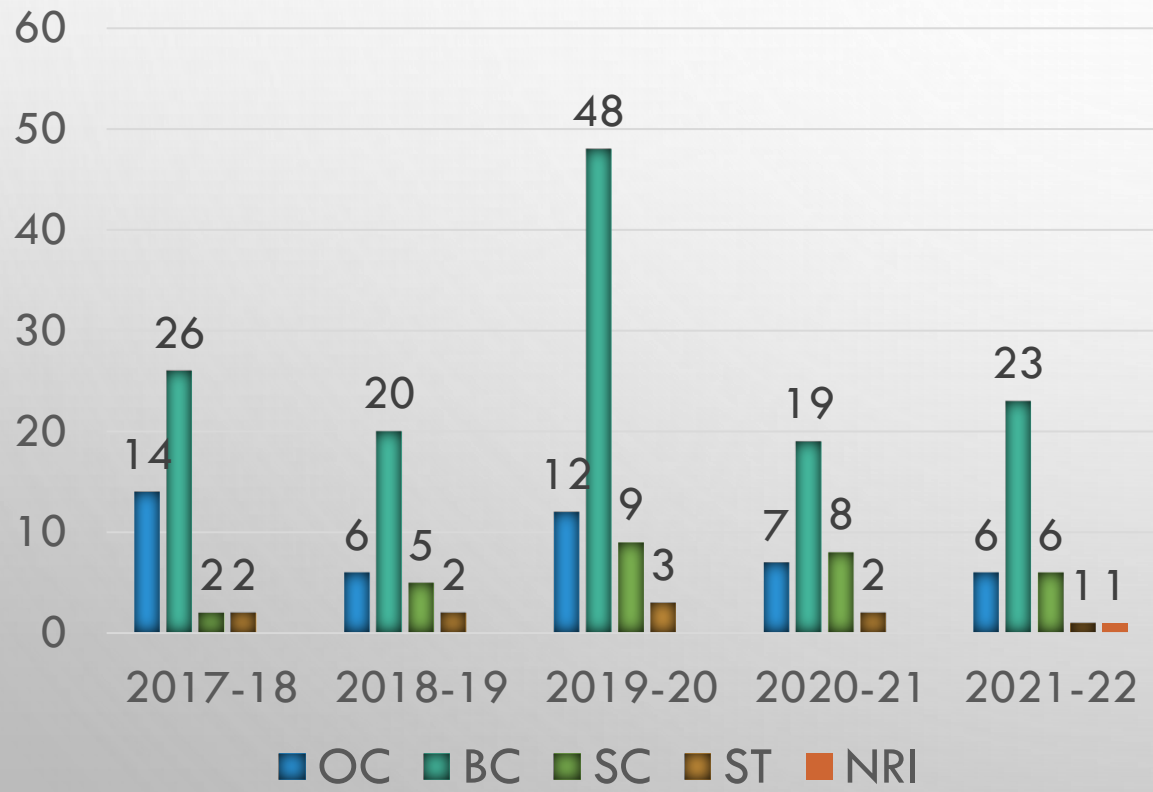
## B.Tech

S.No	ADMITTED YEAR	MALE	FEMALE	CATEGORY				
				OC	BC	SC	ST	NRI
1	2017-18	21	23	14	26	2	2	-
2	2018-19	14	14	6	20	5	2	-
3	2019-20	45	27	12	48	9	3	-
4	2020-21	20	16	7	19	8	2	-
5	2021-22	21	16	6	23	6	1	1

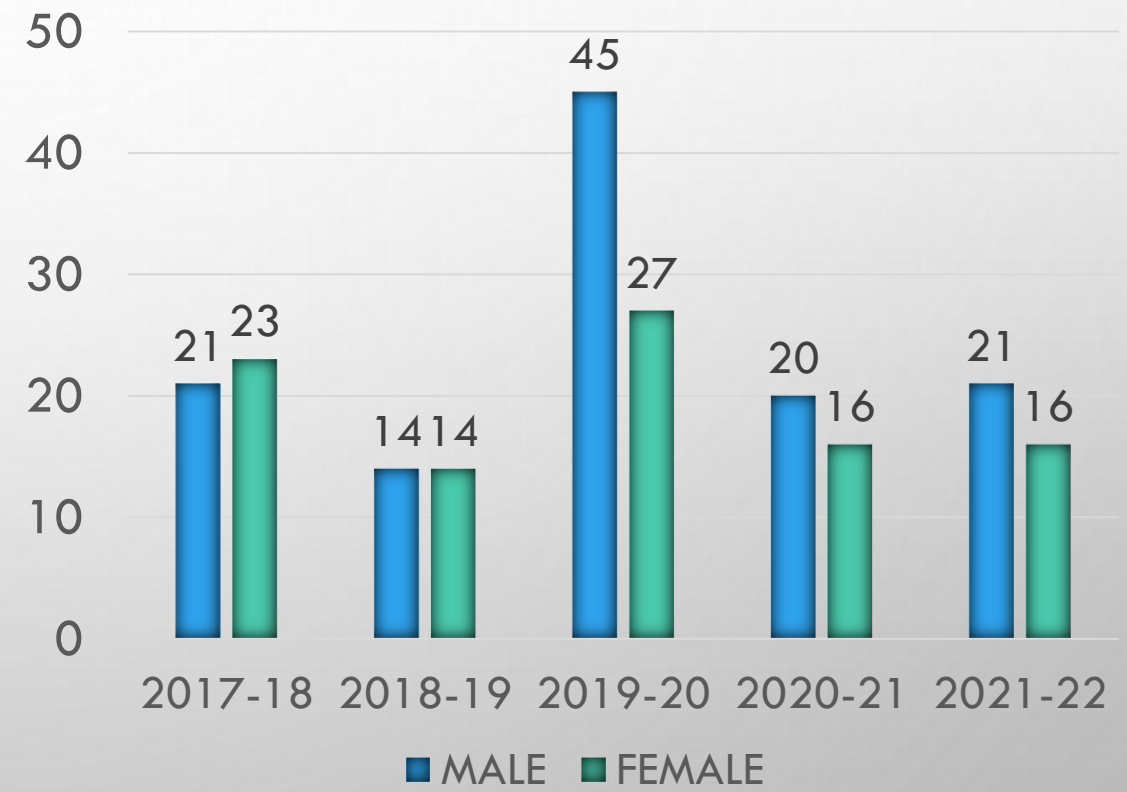


# STUDENT DIVERSITY (Contd.,)

Student Diversity( Reservation Based)



Student Diversity (Gender Based)



# STUDENT DIVERSITY(Contd.,)



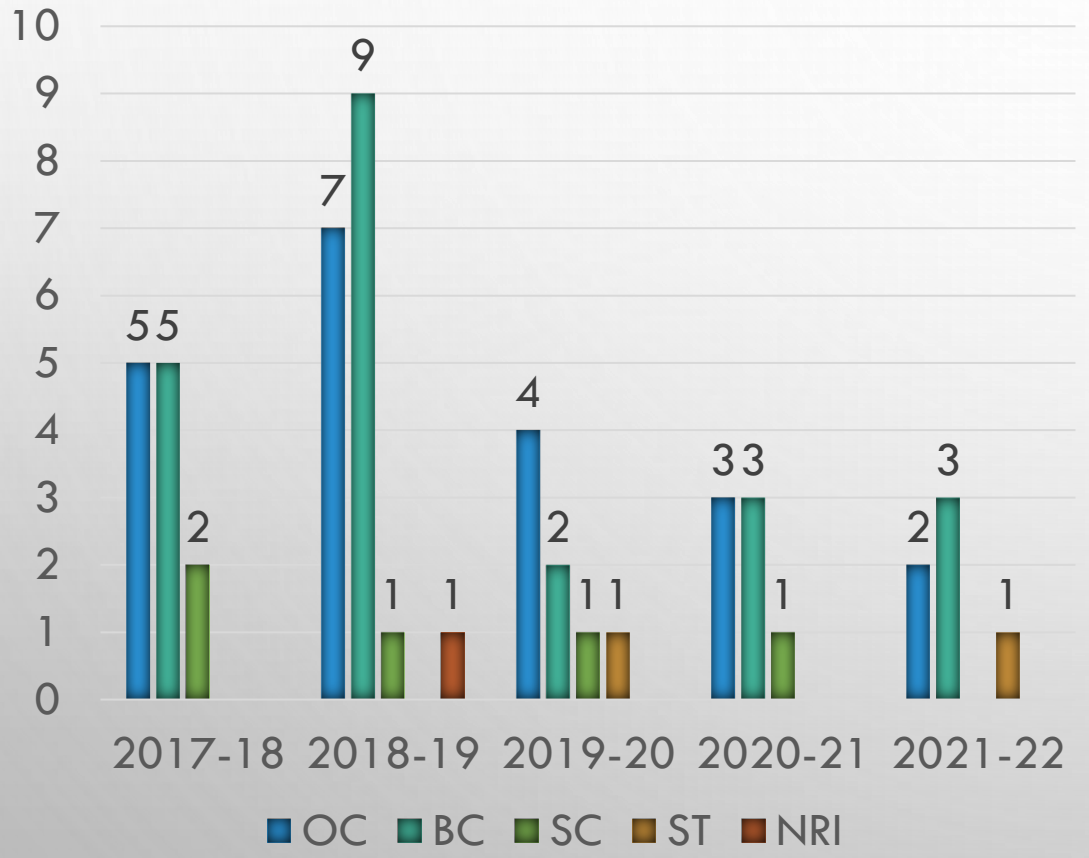
## M.Tech

S.No	ADMITTED YEAR	MALE	FEMALE	CATEGORY				
				OC	BC	SC	ST	NRI
1	2017-18	11	1	5	5	2	0	0
2	2018-19	12	6	7	9	1	0	1
3	2019-20	8	0	4	2	1	1	0
4	2020-21	5	2	3	3	1	0	0
5	2021-22	4	2	2	3	0	1	0

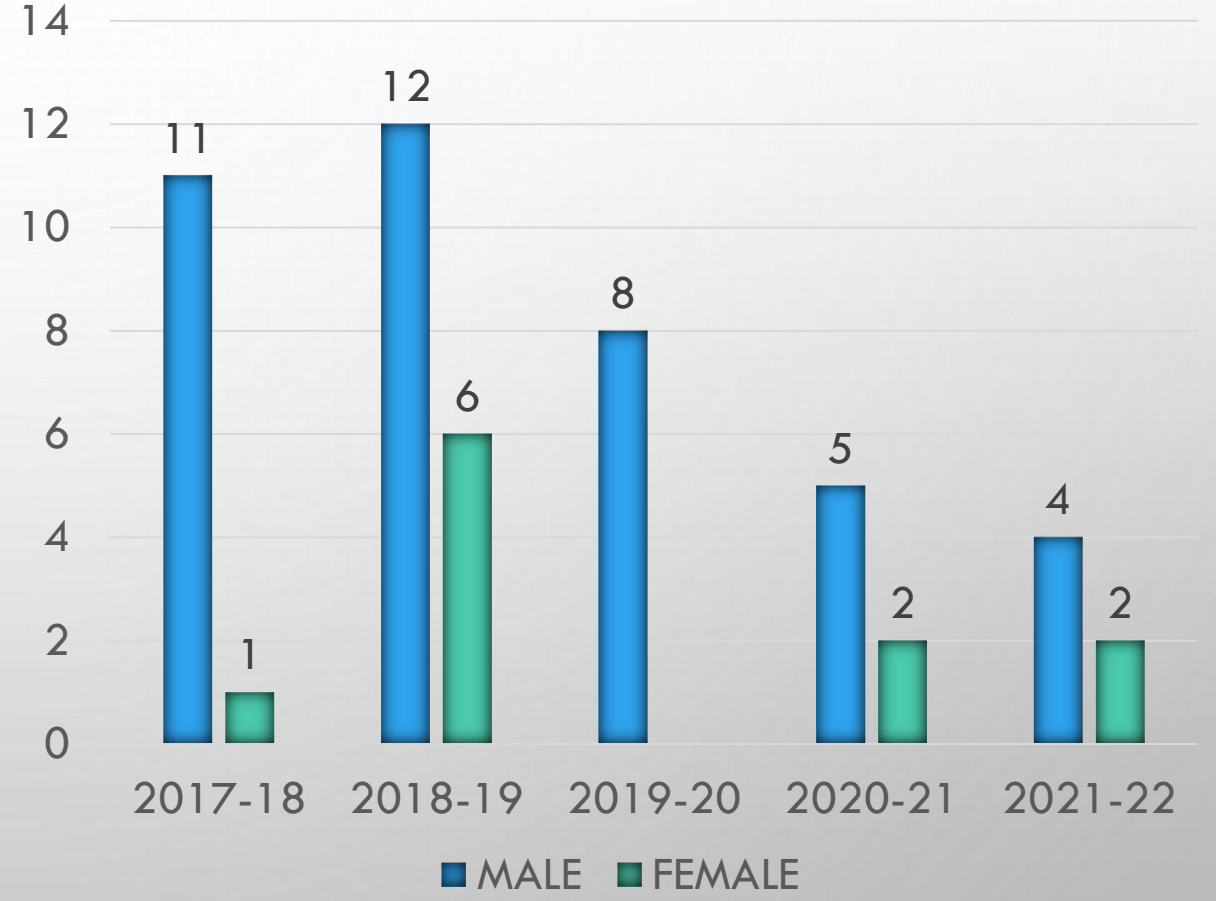


# STUDENT DIVERSITY(Contd.,)

Student Diversity (Reservation Based)



Student Diversity (Gender Based)



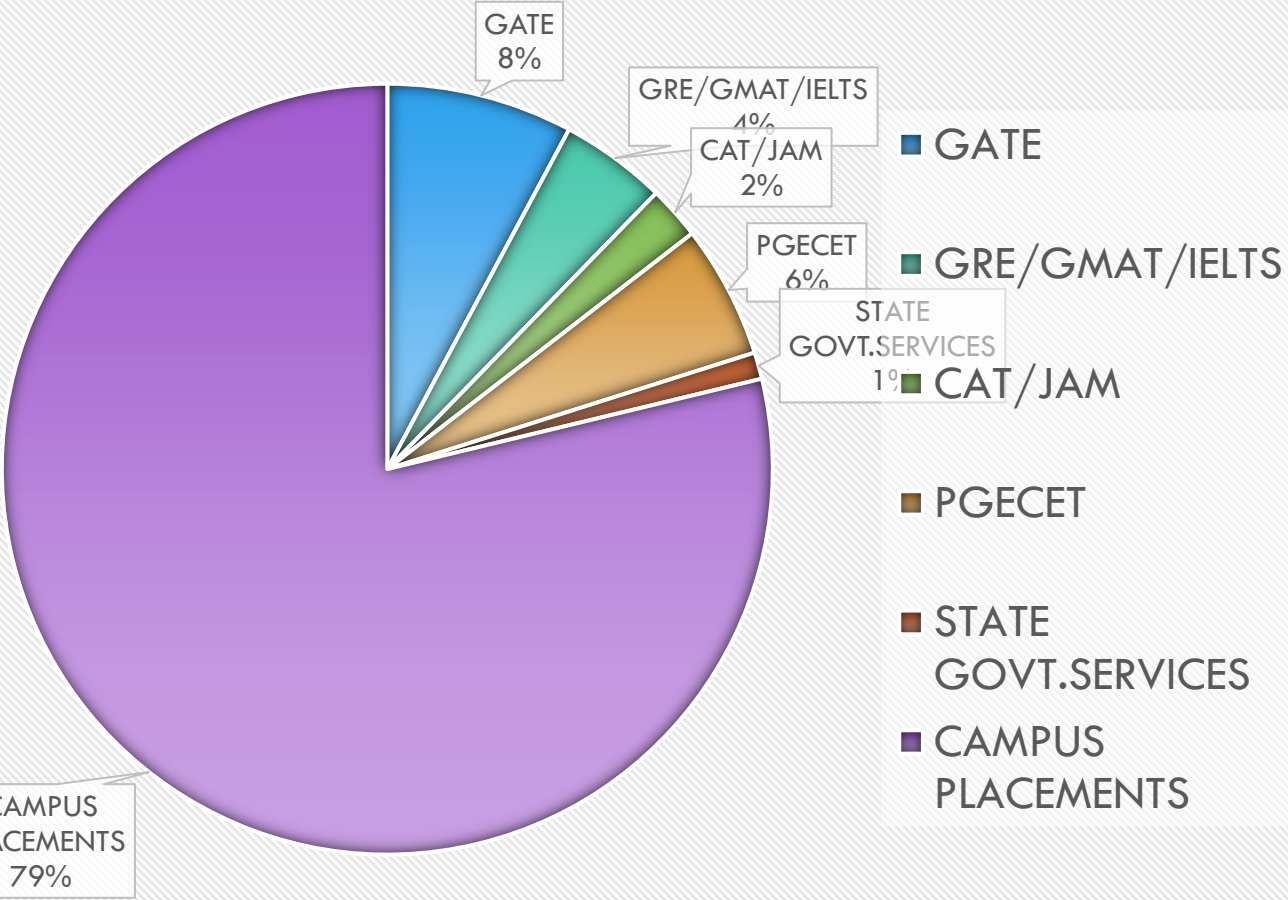
# STUDENTS CAREER PROGRESSION



Dept of  
Instrument  
Technology

## STUDENT STRENGTH

B.Tech.	M.Tech.
239	51



CORE COMPANIES	PACKAGE (LPA)	SOFTWARE COMPANIES	PACKAGE (LPA)
Engineers India Limited(01)	17.00	PWC(01)	6.00
Indian Oil Corporation Ltd(01)	16.40	COMVIVA(02)	5.00
WESTLINE(01)	12.00	CARGILL(02)	5.00
JSW(03)	9.20	HEXAWARE(03)	4.50
RELIANCE(14)	7.50	HCL TECH(01)	4.50
ITC PSPD(02)	7.20	COGNIZANT(15)	4.00
TECHNIP ENERGIES(04)	7.00	TCS(03)	3.50
TATA Power (05)	6.50		
L&T(08)	6.00		
AG&P(01)	6.00		
EFFETRONICS(02)	5.00		
PROXIMA(01)	4.00		
DECCAN CHEMICALS(14)	3.40		
QUEST GLOBAL(04)	3.25		



## STUDENT - FACULTY RATIO

Program Name	No. of Students				
	2017-18	2018-19	2019-20	2020-21	2021-22
<b>B.Tech Instrumentation Engineering (4 Yrs)</b>	<b>90</b>	<b>93</b>	<b>99</b>	<b>138</b>	<b>141</b>
<b>M.Tech. – Instrumentation &amp; Control (2 Yrs)</b>	<b>25</b>	<b>30</b>	<b>26</b>	<b>15</b>	<b>16</b>
<b>Total No. of Students</b>	<b>115</b>	<b>123</b>	<b>125</b>	<b>153</b>	<b>157</b>
<b>No. of Faculty Members</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>
<b>Student – Faculty Ratio</b>	<b>~10:1</b>	<b>~10:1</b>	<b>~10:1</b>	<b>~13:1</b>	<b>~13:1</b>

**Note: Average Student – Faculty Ratio: 11:1**

# STUDENT'S CATEGORIZATIONS



## For advanced learners

<b>Student Centric Methods</b>	<b>Programmes</b>
<b>Student managed events</b> <b>Personality development program</b> <b>Placement support/ Career Guidance</b> <b>Industrial Internship</b> <b>Monetary benefit Student Achievements</b>	<b>SPIKES (A National Level Student Symposium) - 02</b> <b>Communication Skills Lab</b> <b>Placement training/Webinar on Career Guidance - 03</b> <b>Summer Internship Provided In Various Local Industries</b> <b>Awards &amp; Merit Scholarships - 01</b>

## For Slow Learners

<b>Student Centric Methods</b>	<b>Programmes</b>
<b>Remedial classes</b> <b>Participative learning</b> <b>On-line Guiding &amp; Doubts Clearing Sessions</b>	<b>Conducting additional classes and Giving assignments</b> <b>Periodic Online interactive programs with experts</b> <b>Through Google Classroom</b>





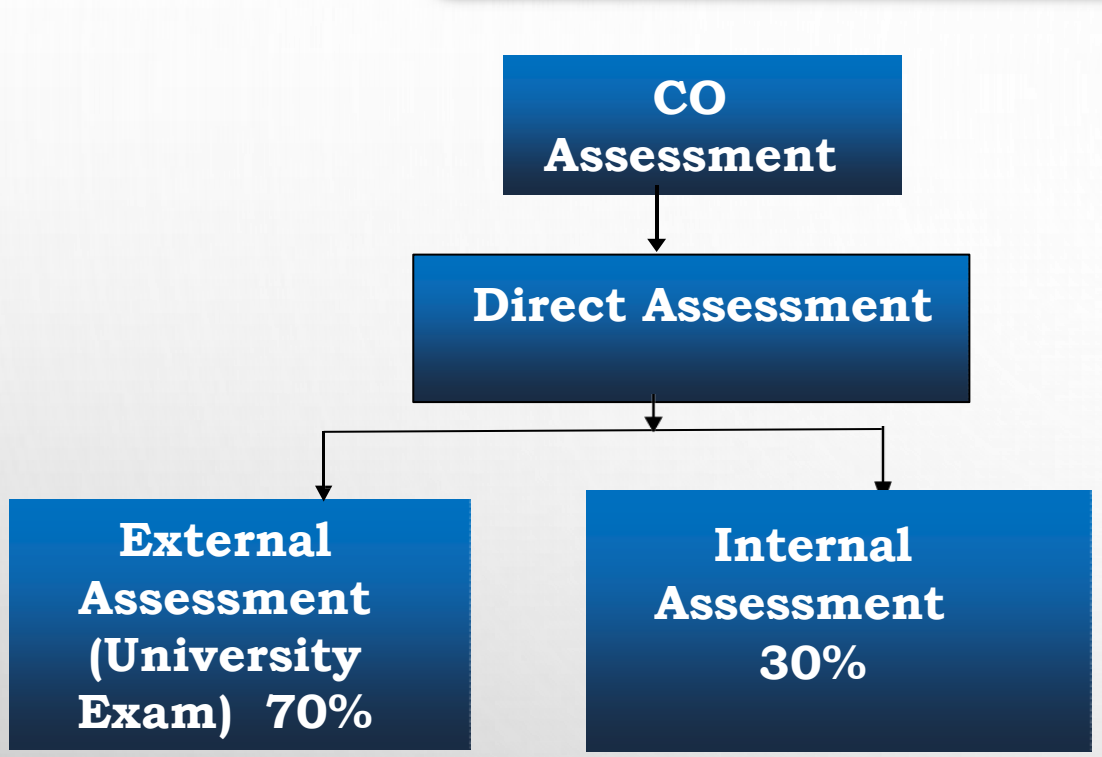
# STUDENT - MENTOR RATIO

Program Name	No. of Students				
	2017-18	2018-19	2019-20	2020-21	2021-22
<b>B.Tech Instrumentation Engineering (4 Yrs)</b>	<b>93</b>	<b>92</b>	<b>98</b>	<b>137</b>	<b>143</b>
<b>M.Tech. Instrumentation and control (2 Yrs)</b>	<b>25</b>	<b>30</b>	<b>26</b>	<b>15</b>	<b>13</b>
<b>Total No. of Students</b>	<b>118</b>	<b>122</b>	<b>124</b>	<b>152</b>	<b>156</b>
<b>No. of Mentors</b>	<b>07</b>	<b>07</b>	<b>07</b>	<b>10</b>	<b>10</b>
<b>Student – Mentors Ratio</b>	<b>~16:1</b>	<b>~17:1</b>	<b>~17:1</b>	<b>~15:1</b>	<b>~15:1</b>

**Note: Average Student – Mentor Ratio: ~16:1**

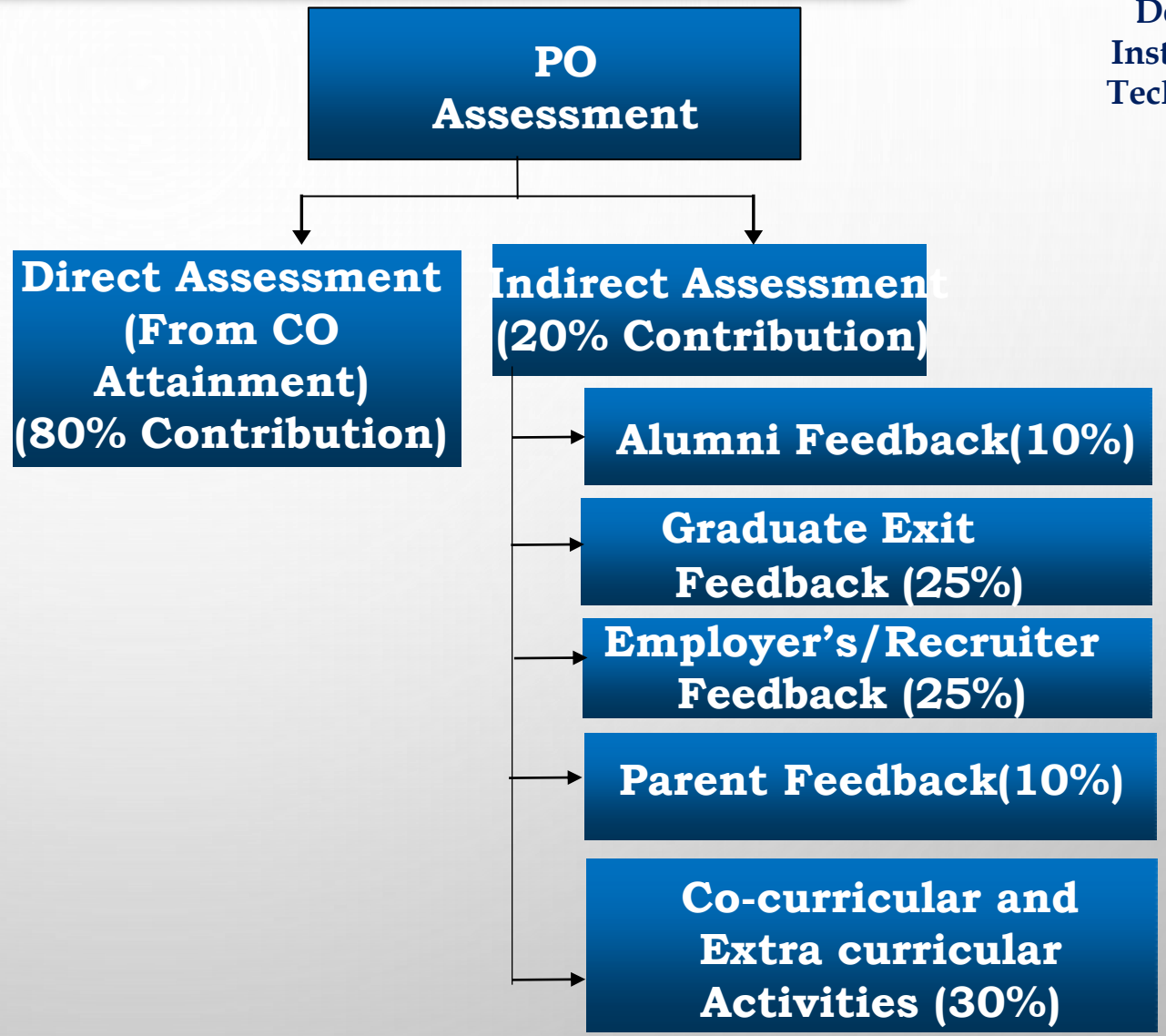


# CO & PO ASSESSMENT PROCESS AND TOOLS



**CO Assessment Process**

Attainment Levels	% of Attainment
1	$60 \leq \% < 70$
2	$70 \leq \% < 80$
3	$\% \geq 80$



**PO Assessment Process**

# Programme Educational Objectives (PEOs) – UG B.Tech. Programme



Dept of  
Instrument  
Technology

**Programme Educational Objectives are long term statements to educate the students about objectives of Instrumentation Engineering Programme**

**PEO1:**

To provide students with a solid foundation in Mathematics, Engineering Sciences, Electronics and Instrumentation Engineering which prepares students for wide range of career opportunities in Industries, Research field and in academics

- a. Fundamental Knowledge
- b. Lifelong Learning

**PEO2:**

To train the students with good engineering breadth to comprehend, analyze, innovate and design new products in core and multidisciplinary domain, to provide technical solutions to real life problems and to render technical services to the needs of the society

- a. Ethics and Values
- b. Society Concern

**PEO3:**

To provide students with an academic environment of excellence, pro-activeness, leadership positions in multidisciplinary teams and lifelong learning for successful professional career.

- a. Team work
- b. Communication Skills

**PEO4:**

To inculcate professional and ethical attitude, creative, effective communication and presentation skills and enhanced ability to work in teams to pursue complex, open ended investigations and research.

- a. Professional Development
- b. Higher Studies

**PEO5:**

To motivate students towards becoming entrepreneurs, collaborators and innovators, leading or participating in efforts to address social, technical and business challenges.

- a. Leadership Qualities
- b. 21<sup>st</sup> Century Skills

# Programme Educational Objectives (PEOs) – PG M.Tech. Programme



Dept of  
Instrument  
Technology

Programme Educational Objectives are long term statements to educate the students about objectives of Instrumentation and Control Programme

**PEO1:**

Extract knowledge through literature survey, experimentation, expertise in research methodology, technique and tools.

a.Extract Knowledge  
b.Research  
Methodology

**PEO2:**

Utilize, expertise in designing and analysing complex and real life problems that are techno-economically and socially sustainable.

Expertise in  
Designing

**PEO3:**

Demonstrate professional ethics and commitment to organizational goals.

Professional Ethics

**PEO4:**

Demonstrate Leadership and team work while working with diverse multi-disciplinary/interdisciplinary groups.

Leadership and  
Team work

**PEO5:**

Exhibit sustained learning and adaptation to modern engineering tools, techniques and practices through instruction, group activity and self-study.

a.Sustained Learning  
b.Group Activity  
c.Self - study



## PROGRAMME OUTCOMES – (POs)

PO1:

- **Engineering Knowledge** – The students shall be able to apply the principles of Basic Sciences and Mathematical skills in learning in Basic Engineering subjects. The knowledge gained thus enables the students to apply them in learning the core branch i.e. Instrumentation Engineering.

PO2:

- **Problem Analysis**-The students shall acquire Analytical Thinking; Problem solving abilities, get exposure to the modern computational procedures and apply them in the core Instrumentation Engineering.

PO3

- **Design/Development of solutions** – The background knowledge gained, the Analytical and computational skills acquired by the students shall enable the students to apply them in the core Instrumentation Engineering to design Electronic circuits, highly sensitive sensor networks for monitoring and control of various physical, chemical, and Industrial parameters and processes.

PO4:

- **Conduct investigations of complex problems** – The students shall be able to apply the knowledge and adopt research methodologies for the modernization of existing designs of Instruments, design sophisticated instrumentation systems interfaced to dedicated embedded controllers or High-end computers. They shall be able to Acquire, Analyze, Interpret and Control any complex processes or problems in Industry and R & D.

PO5:

- **Modern tool usage** – The students gain expertise in the utilization of modern software tools like C, JAVA, Multi-sim, Signal and Image processing tools for applications in communications, Biomedical (ECG, EEG, MRI) etc. Hardware gadgets like the Digital Storage Oscilloscopes, Function Generators, Spectrum Analysers., for applications in Industry and R & D.

PO6:

- **The engineer and society** – The students of Instrumentation engineering should be motivated to utilize their Scientific, Technological, Computational and Instrumentation skills for the better addressing the societal needs. Design new sophisticated instruments for the high-end Research and Process Industries, Pharmaceutical and Bio-medical fields.

# PROGRAMME OUTCOMES (Contd.,)



Dept of  
Instrument  
Technology

PO7:

- **Environment and Sustainability** – Instrumentation Engineering is a multi-disciplinary branch. The students shall be motivated to utilize their knowledge for design of highly sensitive and low energy consumption, low radiation emitting, lower environment polluting instruments, operating on renewable energy sources and implement all such measures to sustain the quality of the environment.

PO8:

- **Ethics** – The students are motivated to follow a code of ethics and moral perspectives at the individual level as well as professional level to protect the interests of all the stakeholders, with a concern for societal responsibilities.

PO9:

- **Individual and teamwork** - Communication skills, Aptitude development programs, Team activities like SPIKES National level workshops/ Seminar Presentations etc. contribute greatly for the development of individual talents/skills. Involvement in Professional, Cultural, Sports activities provided in the institute shall also develop capabilities of a student to mould oneself as an Individual member, Team leader or an Organizer.

PO10:

- **Communication** – The intensity of inputs (Listening, Speaking, Reading and Writing Skills) inputs and trainings imparted through all these activities, the students shall acquire excellent communication skills both oral as well as writing skills. They shall be able to transform their innovative ideas into excellent technical reports for presentation or publication in seminars and journals.

PO11:

- **Project management and finance** – The students shall be able to conceptualize ideas, formulate projects, visualize their execution and realize final product. The students shall demonstrate the skills required for drafting of proposals for projects with thorough understanding of the procurement plans (materials, software, hardware), project management and financial allocations and management during the execution of the project.

PO12:

- **Life-long learning** – The students shall be motivated to keep themselves in-tune with the contemporary changes in technological processes through life-long learning and contribute their expertise for the benefit of the current stake holders and the society.

# PROGRAMME SPECIFIC OUTCOMES (PSOs) – UG B.TECH. PROGRAMME



Dept of  
Instrument  
Technology

**Programme Specific Outcomes are statements to ensure the objectives to be achieved in Instrumentation Engineering Programme**

**PSO1:**

**Specify, design, prototype and test Instrumentation systems that perform processing as per user requirements using contemporary devices and technology.**

a. Testing Instrumentation systems

**PSO2:**

**Develop hardware and software tools/ programs used in industrial and other automation systems.**

a. Develop hardware and software tools

**PSO3:**

**Inculcate comprehensive education in Instrumentation engineering to ensure core competency in Instrumentation, Control and Automation.**

a. Comprehensive Education  
b. Ensure Core Competency

**PSO4:**

**Conduct themselves in a responsible, professional and ethical manner supporting sustainable economic development which enhances the quality of life.**

a. Student Conduct  
b. Enhances Quality of Life

# PROGRAMME SPECIFIC OUTCOMES (PSOs) – PG M.TECH. PROGRAMME



Dept of  
Instrument  
Technology

**Programme Specific Outcomes are statements to ensure the objectives to be achieved in Instrumentation and Control Programme**

**PSO1:**

**Apply knowledge to design, analyze and synthesize problems related to Instrumentation and Control Engineering.**

a. Knowledge to Design  
b. Synthesize Problem

**PSO2:**

**To evolve innovative solutions for real-time and industrial problems using skills, modern tools and recent technologies.**

a. Innovative Solution  
b. Modern tools and recent technologies



# CO – PO - MAPPING



Dept of  
Instrument  
ology

**B. Tech**

**Course Name: Analytical Instrumentation**

CO	PO												PSO			
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
CO1	2	3	3	1	3	3	2		1	3		2	1			1
CO2	3	3	2	3	2	3		3	3					3		
CO3		1		2						2		3		3		
CO4	3	2		3	3		3	2			2				1	
CO5	3	3	3		2	2			2		3	2	1			

Correlation levels    1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

**B. Tech**

**Course Name: Industrial Electronics**

CO	PO												PSO			
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
CO1	3	2	2	3	3	3	2		2				1	2		
CO2	2	2	3		2	3			2					2	3	
CO3	3	1		3	3	2	3	2	3		2	3			3	1
CO4	3	2	3	2						2				2		1
CO5	2	2	1	3	2									1	2	

Correlation levels    1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)



# CO – PO – MAPPING (Contd.,)

**B. Tech**

**Course Name: Virtual Instrumentation**

Dept of  
Instrumentology

CO	PO												PSO			
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
CO1	3	2	3		3			2					3			
CO2	3	3	3	3		3			2					1	3	
CO3	2	3			3	2	3	2		2		3	1		2	2
CO4			3	2		3					3			3		
CO5	3	2	3	3	2		2		2		2	2	2		1	

Correlation levels 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

**B. Tech**

**Course Name: Process Control And Control Components**

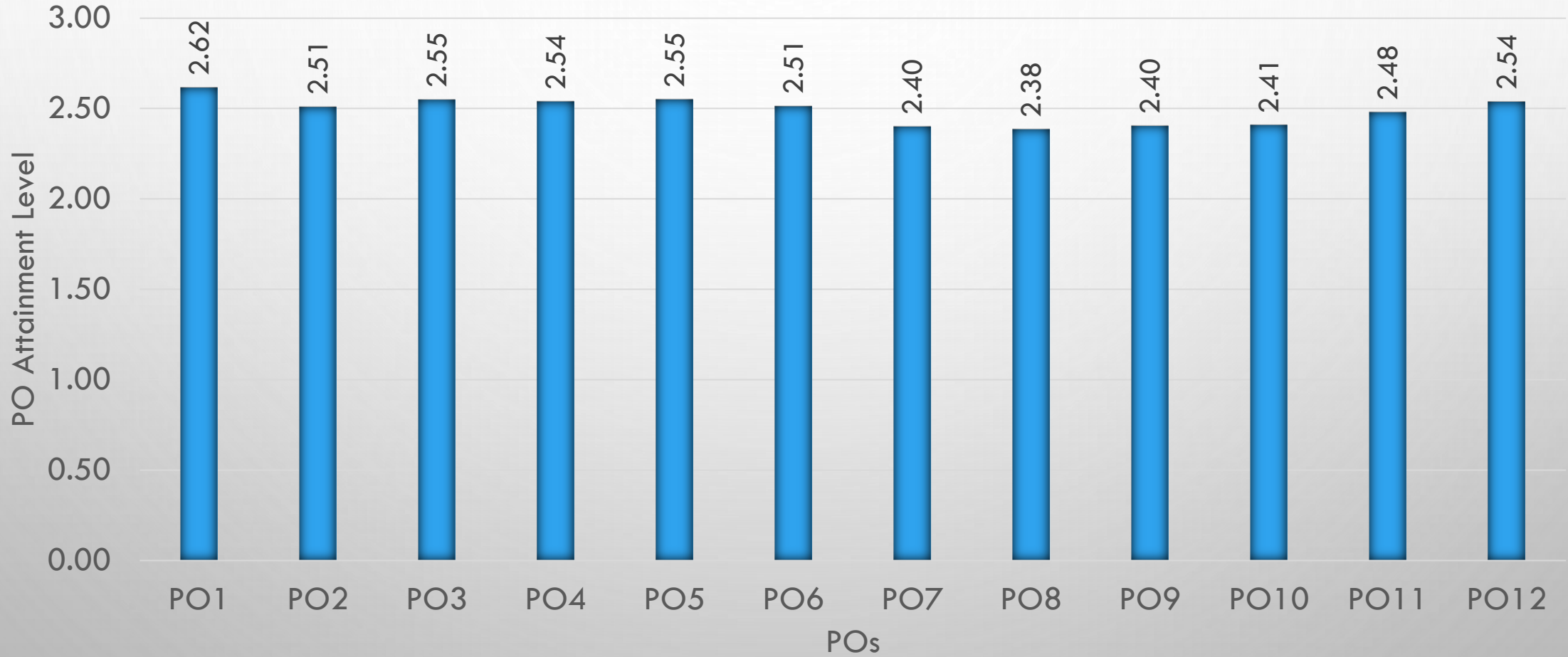
CO	PO												PSO			
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
CO1	3	3	2	1	3					2		3	2			1
CO2	2	1	3	2	2	3	2	2	3			2		2	1	
CO3	1	2	3		3								2			1
CO4	2	2					3			3	2			1	2	1
CO5	3	3	3	3	2	2		2							1	

Correlation levels 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)



# PO ATTAINMENT LEVEL

**PO Attainment Level (Average PO Attainment of Instrument Technology Program)**





## STUDENT'S RESULT ANALYSIS

	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
<b>Number of students appeared in the final year examination</b>	<b>33</b>	<b>33</b>	<b>33</b>	<b>33</b>	<b>33</b>
<b>Number of students passed in final year examination</b>	<b>29</b>	<b>29</b>	<b>25</b>	<b>32</b>	<b>30</b>
<b>Percentage of students passed in final year examination</b>	<b>87.79%</b>	<b>87.4%</b>	<b>80%</b>	<b>96%</b>	<b>90.6%</b>

**AWARDS FROM PROFESSIONAL SOCIETIES/BODIES**

S.NO	NAME OF THE FACULTY	AWARD TITLE	AWARDING AGENCY	YEAR
1.	Dr.A.Daisy Rani	Best Woman Researcher Award	IJIEMR-ELSEVIER	2021
2.	Dr.A.Daisy Rani	Academic Excellence Award	Smt. Vimala Devi Education Society	2021
3.	Dr.A.Kamala Kumari	Academic Award for Best Researcher	Universal Group of Institutions, Chandigarh	2021
4.	Dr.P.Swapna	Best Woman Researcher Award	IJIEMR-ELSEVIER	2021
5.	Dr.P.Swapna	Global Teacher Award	AKS Educational Trust	2021



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SINCE 1994

**IJIEMR - ELSEVIER SSRN  
RESEARCH AWARDS 2021**

ELSEVIER

**BEST WOMEN RESEARCHER AWARD**

Proudly Presented to

**Dr Swapna Peravali**

Organized by  
**International Journal For  
Innovative Engineering  
and Management Research**

August 08<sup>th</sup>, 2021      Signing Authority

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**IJIEMR - ELSEVIER SSRN  
RESEARCH AWARDS 2021**

ELSEVIER

**BEST WOMEN RESEARCHER AWARD**

Proudly Presented to

**Dr. Daisy Rani Alli**

Organized by  
**International Journal For  
Innovative Engineering  
and Management Research**

August 08<sup>th</sup>, 2021      Signing Authority

**CERTIFICATE  
OF RECOGNITION**  
IS AWARDED TO

*Dr. Swapna Peravali*

AU COLLEGE OF ENGINEERING(A), ANDHRA UNIVERSITY  
VISAKHAPATNAM

On 24<sup>th</sup> day of October, 2021 for being a proud winner of  
**GLOBAL TEACHER AWARD 2021**

For accomplishing excellence in educational services via your occupational  
competence & exemplary work in the field of education.

**DINESH KAMRA**  
Vice-Chancellor

**SARVESH SAKHUBHAI**  
Principal

**UNIVERSAL**  
GROUP OF INSTITUTIONS  
Lalru, Chandigarh

Conference World  
www.conferenceworld.in    www.iardo.com

**CERTIFICATE  
of Achievement**

This Certificate is Proudly Presented to  
**Dr. A. Kamala Kumari**  
with the title

Sardar Vallabhbhai Patel: The Iron Man of India; 2021  
Academic Award for Best Researcher

on the occasion of  
International Award Ceremony on the Birth Anniversary of Sardar Vallabhbhai Patel  
**31<sup>st</sup> October 2021**  
Organized by:  
**UNIVERSAL GROUP OF INSTITUTIONS, Lalru, Chandigarh, Punjab**  
in collaboration with:  
**IARDO and Conference world**

**Certificate  
OF AWARD**

Organized by  
**Smt Vimla Devi Education Society**  
(Registered under the Societies Registration Act XXI, Delhi, India) - [Since 2013]  
Registration No. S/1596/SDM/NW/2013 Dated 12 April 2013

In association with **MANGALMAY  
GROUP OF INSTITUTIONS**

Registration No: SVDES/AWARDS/IC-C19PCVTRTGF0-2021/S.NO. IAC/A-03

It is certified that Prof./Dr./Ms./Mrs. **DR. DAISY RANI ALLI**  
of **Assistant Professor, Dept of Instrument Technology, Andhra University College of Engineering, Andhra University, Visakhapatnam**  
Nominated & Awarded for **ACADEMIC EXCELLENCE AWARD 2020-21**

in the International Award Convention held on 22nd-23rd May, 2021. Organized by Smt Vimla Devi Education Society (SVDES), Delhi in association with Mangalmay Group of Institutions, Greater Noida (NCR), in International Conference on "Covid-19 Post Corona Virus Recent Trends, Research, Technologies & Global Future Opportunities" to Recognize, Reward & Honour the contribution of Academicians, Professionals, Scholars, Educationists, Corporate Experts & Social Development People Globally

Venue :- **MIMT, Plot No. 8 and 9, Knowledge Park II, Date : 22nd -23rd May 2021**

**Dr. Meenakshi Sharma**  
Conference Convener  
Professor, MIMT Greater Noida

**Dr Kirti Agarwal**  
President  
Smt Vimla Devi Education Society, Delhi

**INFRASTRUCTURES AND TEACHING RESOURCES**



Room number or Name of classrooms/Seminar Hall with LCD / wi-fi/LAN facilities with room numbers	Type of ICT facility
Final Year classroom	Sound system, Air condition, LCD Projector and smart Board
Third year classroom	Computer, AC's, LCD projector and Smart Board
Second year classroom	AC's, LCD Projector and white Board
Seminar hall	AC's, Sound system, LCD Projector
Conference room	AC's, LCD Projector and Smart Board, white Board

# INFRASTRUCTURE AND TEACHING RESOURCES(CONTD.,)



**Dept of  
Instrument  
Technology**

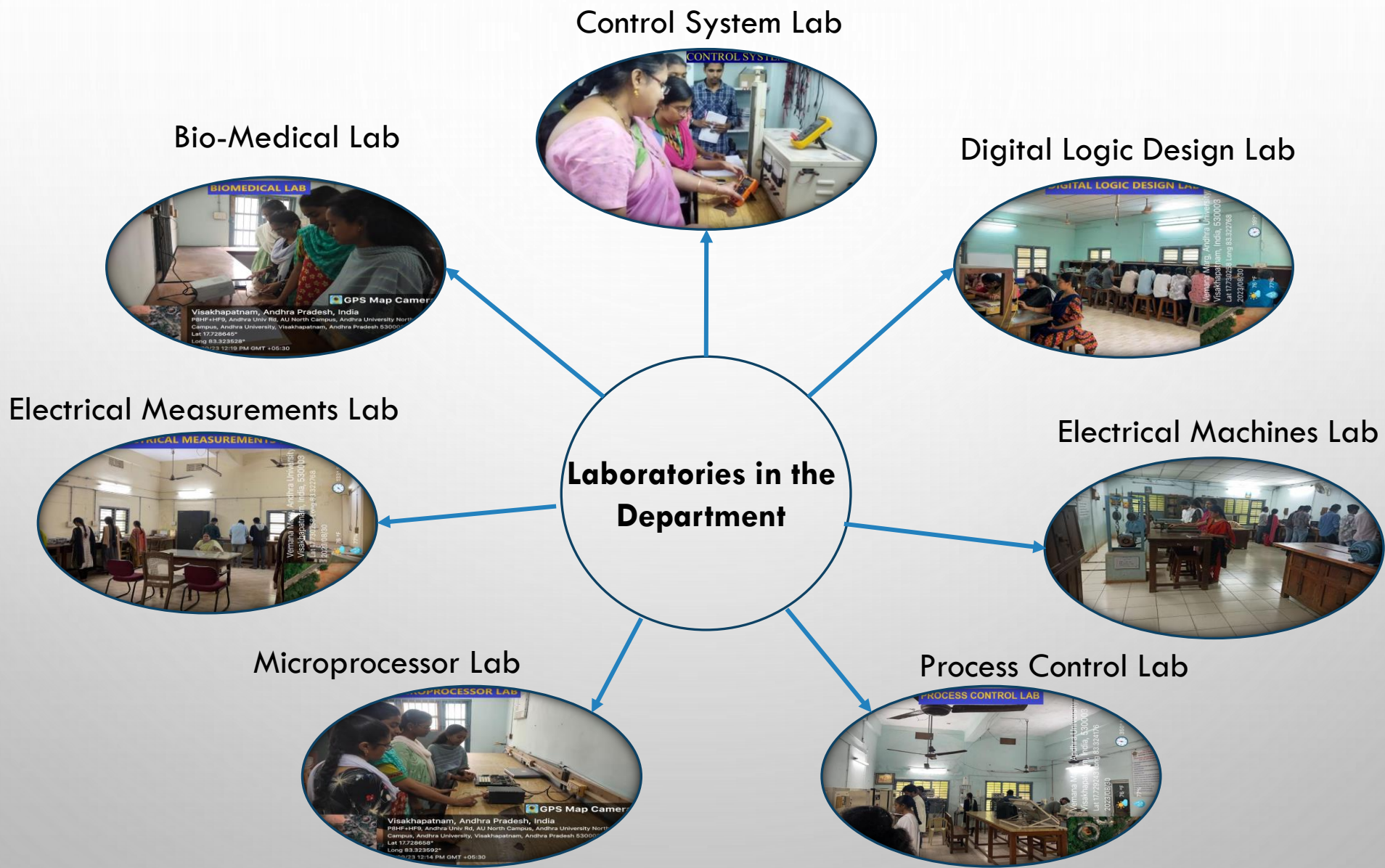
## **e-Class rooms / smart class rooms**



**The Department is totally technology enabled. There is 24\*7 internet and Wi-Fi connection available for the staff and students. There are three LCD projectors , 2 Digital interactive smart Boards, audio-visual equipment to have online class as well as offline classes.**



Laboratories in the Department





## **Department library/e -resources/Wi-fi/internet facilities/ link to library e-resources**

- Text Book Volumes – 433 (Donated by Alumni and Retired Teachers)
- College is having 1GBPS leased line.
- IEEE and DELNET, Central Funding (E-SHODHSINDHU, SHODHGANGA), J-GATE, INFILIBNET.
- <https://www.andhrauniversity.edu.in/library>
- E-Journals – IEEE.
- Apex Journals
- DELNET - <http://delnet.in/>
- J-Gate
- INFLIBNET

# INFRASTRUCTURES AND TEACHING RESOURCE (CONTD.,)




## □ . Link to library e resources

- SHODHGANGA - <https://shodhganga.inflibnet.ac.in/>
- Andhra University in Top 10 Indian Universities in Shodhganga

**Shodhganga : a reservoir of Indian theses @ INFLIBNET**  
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Physical Sciences	1840	2010 - 2019	4115	Telugu	344
Engineering and Technology	1501	2000 - 2009	1722	Hindi	204
Arts and Humanities	1351	1990 - 1999	844	Sanskrit	53
Engineering	1210	1980 - 1989	821	Marathi	3
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  - Applied Phycis-Analytical 1

# INFRASTRUCTURES AND TEACHING RESOURCE (CONTD.,)



➤ E-Journals Access – IEEE.

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- Conferences (39,622)
- Journals (10,337)
- Magazines (1,036)
- Early Access Articles (206)
- Standards (117)
- Books (102)
- Courses (2)



## Students Support and Progression

### Scholarships

S. No	Academic Year	Number of Students benefited	Amount (Lakhs)
1	2017-18	63	8.7
2	2018-19	67	9.6
3	2019-20	60	5.6
4	2020-21	65	3.25
5	2021-22	60	5.6

### Competitive Exams (GATE/GRE/CAT/PGE CET etc.,)

S. No	Academic Year	Number of Students Qualified
1	2017-18	15
2	2018-19	2
3	2019-20	3
4	2020-21	7
5	2021-22	4

**Ragging**  
*free*  
**campus.**

# SKILL DEVELOPMENT PROGRAMMES



Dept of  
Instrument  
Technology

<b>S.No</b>	<b>Name of the value added courses (with 30 or more contact hours) offered</b>	<b>Number of students enrolled in the year</b>	<b>Number of Students completing the course in the year</b>
1	BASICS OF PLC	52	52
2	BASICS OF PROCESS INSTRUMENTATION	55	55
3	BASICS OF SCADA	17	17
4	BASICS OF INDUCTION MOTOR	23	23
5	BASICS OF AC -DC DRIVES	5	5
6	INDUSTRIAL AUTOMATION WITH PLC	1	1



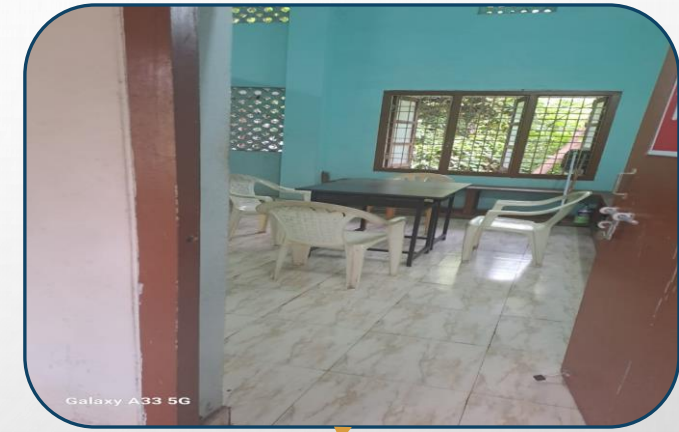
### Drinking Water



### Library



### Ladies Waiting Hall



Other facilities to  
student available  
in the Department



## STUDENTS SUPPORT AND PROGRESSION Students Council & Activities



Dept of  
Instrument  
Technology



Independence Day



Republic Day



Tri-color Flag Day



International Yoga Day



NSS Day



Spikes



Swachh Bharath



Books Drive



Blood Donation Camp



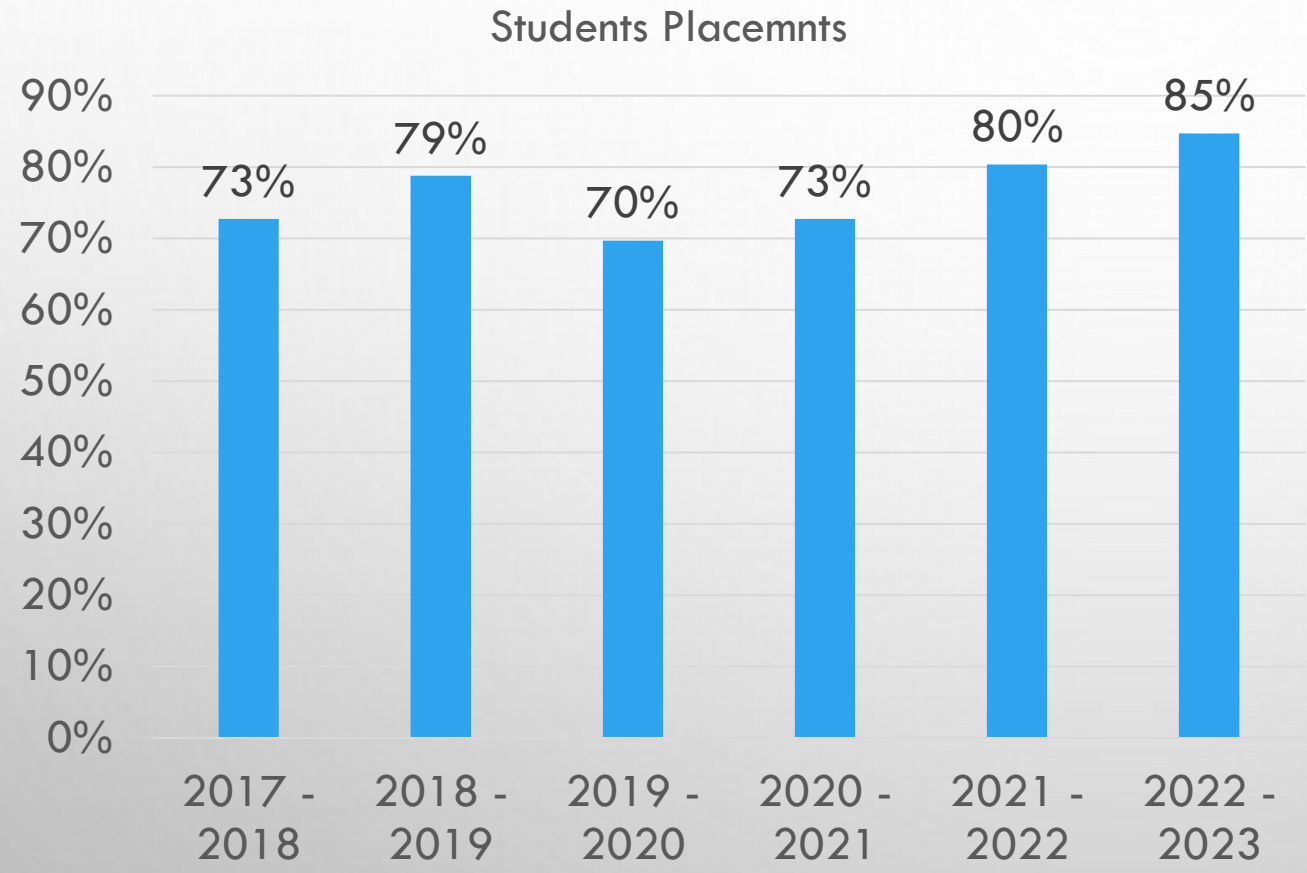
Career Guidance - 1



Career Guidance - 2



Class Room Seminars



**Note: More than 50% of the placed students got 2 or more offers in the current year**

# LIST OF STUDENTS GOT PLACEMENTS IN MULTIPLE COMPANIES



Dept of  
Instrument  
Technology

S.No	Name of the Student	Placement(s) Offered by	Currently Placed In to
1	L. Dambeshwar Naidu	<ul style="list-style-type: none"> <li>➤ IOCL,</li> <li>➤ TATA Power,</li> <li>➤ Engineers India Ltd,</li> <li>➤ PROXIMA.</li> </ul>	Indian Oil Corporation Ltd
2	S.Venkat Rithwik	<ul style="list-style-type: none"> <li>➤ Hexaware Technologies,</li> <li>➤ Cognizant,</li> <li>➤ TCS,</li> <li>➤ Reliance Industries LTD.</li> </ul>	Reliance India Limited
3	K Tanmayi	<ul style="list-style-type: none"> <li>➤ Quest Global,</li> <li>➤ HCL Technologies.</li> </ul>	Quest Global
4	D. Sai Devendra	<ul style="list-style-type: none"> <li>➤ Deccan Chemicals,</li> <li>➤ L&amp;T.</li> </ul>	L&T
5	D. Vinay Kumar	<ul style="list-style-type: none"> <li>➤ TCS,</li> <li>➤ Cognizant .</li> </ul>	Cognizant
6	M.Raga Priya	<ul style="list-style-type: none"> <li>➤ Quest Global,</li> <li>➤ Mahindra and Mahindra,</li> <li>➤ Linde Engineering PVT LTD.</li> </ul>	Linde Engineering PVT LTD.
7	G.Sai Likhita	<ul style="list-style-type: none"> <li>➤ Cognizant,</li> <li>➤ Hexaware,</li> <li>➤ Effortronics</li> <li>➤ Linde Engineering PVT LTD</li> </ul>	Linde Engineering PVT LTD.
8	A.H.S. Nithin	<ul style="list-style-type: none"> <li>➤ Cargill,</li> <li>➤ ITC.</li> </ul>	ITC



## LIST OF STUDENTS GOT PLACEMENTS IN MULTIPLE COMPANIES (Contd.,)

S.No	Name of the Student	Placement(s) Offered by	Currently Placed In to
9	E.Raj Rithwik	➤ Cognizant, ➤ L&T.	L&T
10	K. Abhinav Sai	➤ Reliance India Limited ➤ Comviva	Reliance India Limited
11	V Gowtham sai	➤ JSW, ➤ CTS.	JSW
12	S Kiranmai	➤ AGNP, ➤ Technip.	Technip
13	Anirudh Ganta	➤ Westline, ➤ Deccon Chemicals.	Westline
14	G Mounika Syamala	➤ L & T, ➤ CTS.	L&T
15	Ch. Gayathri	➤ L&T, ➤ Hexaware, ➤ Cargill.	L&T
16	K.Amala Chandrika	➤ Reliance , ➤ CTS.	Reliance

## LIST OF STUDENTS GOT PLACEMENTS IN MULTIPLE COMPANIES (Contd.,)



Dept of  
Instrument  
Technology

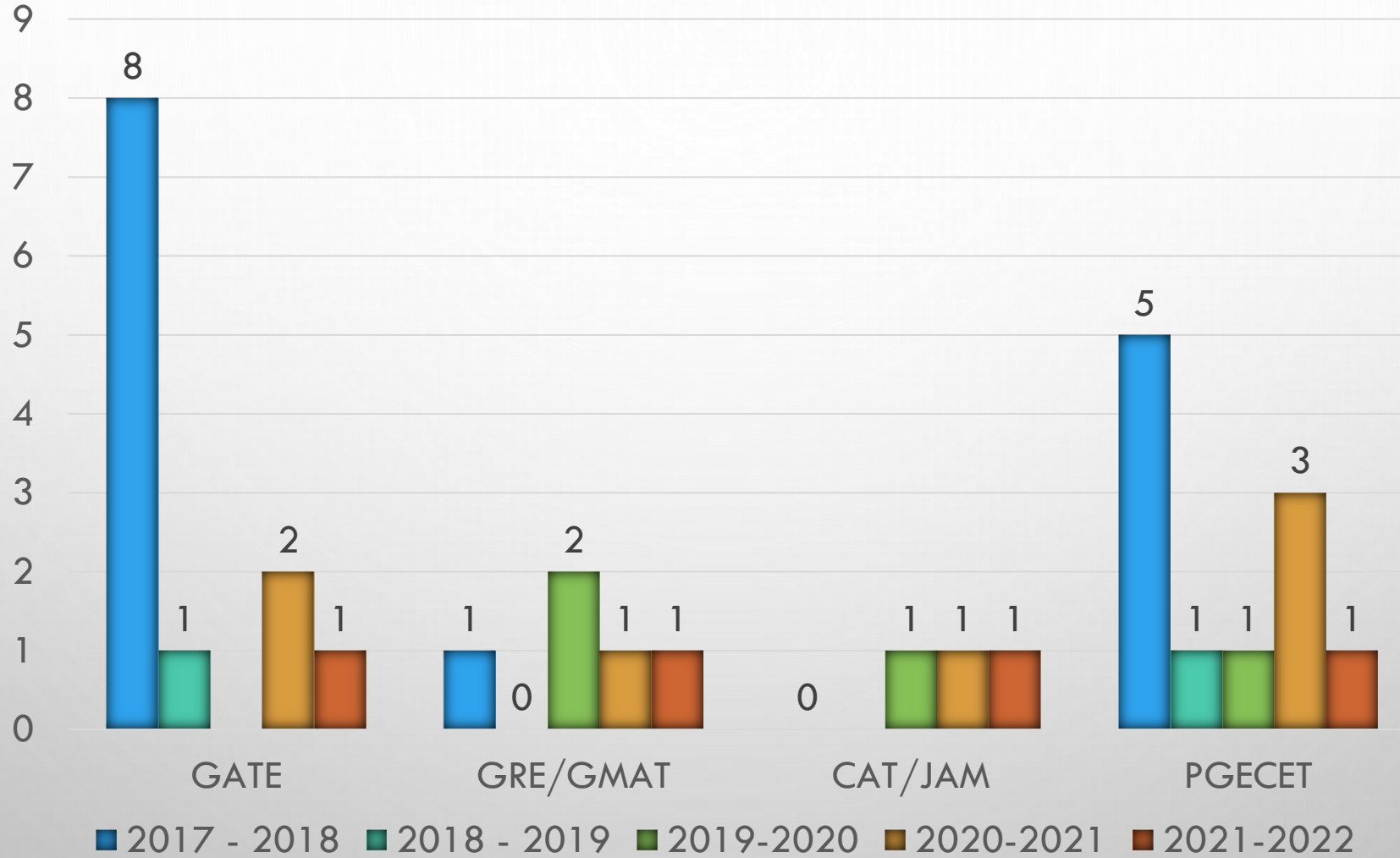
S.No	Name of the Student	Placement(s) Offered by	Currently Placed In to
17	K Jeethasri	<ul style="list-style-type: none"> <li>➤ Quest,</li> <li>➤ L&amp;T.</li> </ul>	L&T
18	L. Suryadeep	<ul style="list-style-type: none"> <li>➤ CTS ,</li> <li>➤ Reliance.</li> </ul>	CTS
19	M. Mohith	<ul style="list-style-type: none"> <li>➤ L&amp;T,</li> <li>➤ CTS,</li> </ul>	L&T
20	N.Harshitha	<ul style="list-style-type: none"> <li>➤ Technip,</li> <li>➤ IELTS.</li> </ul>	IELTS
21	N.Kamalesh	<ul style="list-style-type: none"> <li>➤ Effortronics,</li> <li>➤ Reliance.</li> </ul>	Effortronics
22	S Sriya Gayathri	<ul style="list-style-type: none"> <li>➤ Technip,</li> <li>➤ Hexaware.</li> </ul>	Hexaware
23	T Nikil Sai Sandeep	<ul style="list-style-type: none"> <li>➤ Reliance,</li> <li>➤ JSW,</li> <li>➤ CTS.</li> </ul>	JSW
24	R Prudvi	<ul style="list-style-type: none"> <li>➤ CTS,</li> <li>➤ TCS.</li> </ul>	TCS

# STUDENTS PROGRESSION



Dept of  
Instrument  
Technology

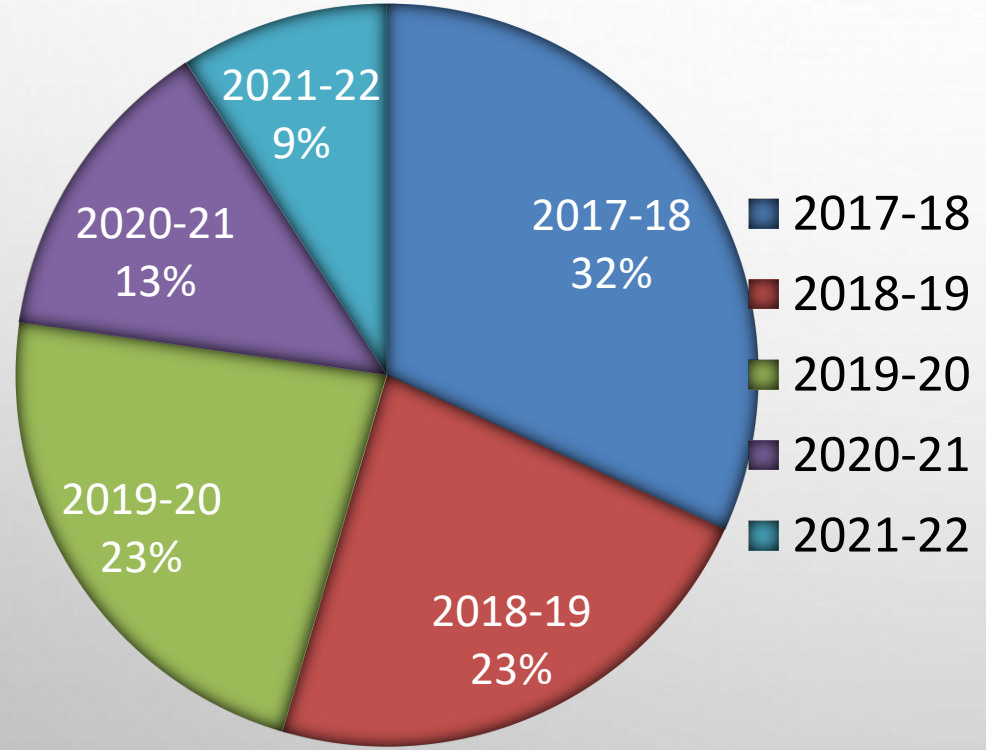
## HIGHER STUDIES





## STUDENTS PROGRESSION

### Higher Studies



### Sports Activities

Students participated in inter-university and national wise sports events



ANDHRA UNIVERSITY  
 DEPARTMENT OF PHYSICAL EDUCATION AND SPORTS SCIENCES

Prof.N.Vijay Mohan, M.P.Ed., M.Phil., M.S.S., P.O.D.R.A.B.D.  
 Director of Physical Education & Secretary, AU Sports Board  
 Dept. of Physical Education & Sports Sciences  
 Andhra University  
 Visakhapatnam-530 003 (AP)

0891-2844496  
 Cell: 9703831117  
 vijaymohansports@gmail.com  
 anuprisesports@gmail.com  
 Web: andhraniversity.edu.in

To  
 The Principal  
 Date: 26-06-2022

Sir,  
 I am happy to inform you that the following player(s) of your institution is/are provisionally selected to represent Andhra University Roller Sports (Men & Women) and Roller Hockey (Men & Women) team for the year 2021-2022. The All India Inter-University Roller Sports (Men & Women) and Roller Hockey (Men & Women) team will be participating All India Inter-University Tournament held at Andhra University Campus from 30.06.2022 to 03.07.2022. In this connection, I request you to kindly inform your student that the All India Inter University participation from 28.06.2022 to 04.07.2022

S.No.	Name of the Player	Name of the College
1.	V. Bhavaya Sri	St Josephs College For W
2.	B.Venu vardhan	Dr.L.B.College
3.	Priyam Tated	GVP College
4.	Pratham Tated	Ushodaya Degree College
5.	P.Sai Charan	Samata
6.	A.Vinzel Judsan	AU College of Engg
7.	K.mai Kiran	Grossa
8.	P.Chandh Reddy	Noble Institute of Science and Tech
9.	K.Rohith Naidu	GVP Degree And PG College
10.	R.Saty Sai Malitha Varun	Dr.L.B.College
11.	R.Farheen Shaik	AU College of Engg
12.	B.Ashritha	Dr.L.B.Engg College
13.	K.L.Nagendra Sadwik	Samata
14.	D.Yasowanthi Varma	AU College of Engg
15.	M.Bhagya Shree	AU College of Engg
16.	K.Usha Bhagya Sree	AU College of Engg
17.	G.Akhila	AU College of Engg
18.	U.Sravya	AU College of Engg W
19.	S.Ukta	Dr.L.B.College
20.	Preethi Patnik	AU College of Engg
21.	A.Prasanna	NBM Law College

Thanking you,  
 Yours sincerely,  
 (N.VIJAY MOHAN)  
 Director of Physical Education & Secretary, Sports Board  
 Andhra University  
 Visakhapatnam-530 003

**STUDENTS SUPPORT AND PROGRESSION**

Dept of  
Instrument  
Technology

**PROMINENT ALUMNI**

<b>S.No</b>	<b>NAME</b>	<b>DESIGNATION</b>	<b>ORGANIZATION</b>
<b>1</b>	<b>Dr. T.G.K.Murthy</b>	<b>Former Director ISRO, Ex-Scientific Advisor to Govt of India</b>	<b>Govt of India</b>
<b>2</b>	<b>Dr.Chennupati Jagadeesh</b>	<b>President, Australian Academy of Sciences and Scientific advisor</b>	<b>Govt of Australia</b>
<b>3</b>	<b>Mr. M.Ravindra Sai</b>	<b>Chief Commissioner Income Tax</b>	<b>Govt of India</b>
<b>4</b>	<b>Mr. B.Raghavendra Rao</b>	<b>Deputy Managing Director</b>	<b>SBI, Bombay</b>
<b>5</b>	<b>Mr. A.V.Raja Mouli</b>	<b>IAS</b>	<b>Home Secretary, Govt of UP.</b>
<b>6</b>	<b>Dr. C.D. Malleswar</b>	<b>Director, NSTL Visakhapatnam.</b>	<b>DRDO, Govt of India</b>
<b>7</b>	<b>Mr.T.Kodanda Ramaiah</b>	<b>Vice President</b>	<b>Reliance Industries Ltd, Kakinada</b>
<b>8</b>	<b>Mr. Sairam Kumar</b>	<b>General Manager Automation</b>	<b>Vizag Steel</b>
<b>9</b>	<b>Mr.S.MuraliMohan</b>	<b>General Manager, Projects</b>	<b>HPCL, Visakh Refinery</b>
<b>10</b>	<b>Mr.Chinmay S.Pant</b>	<b>Vice President-Marketing</b>	<b>Orion Instruments, PUNE</b>



## STUDENTS SUPPORT AND PROGRESSION PROMINENT ALUMNI (CONTD.,)



Dept of  
Instrument  
Technology

S.NO	NAME	DESIGNATION	ORGANIZATION
11	Mr.M.Muralidhar	Head, Operations	ITC Limited Chennai
12	Mr.K.Srinivasa Bhaskar	General Manager	NTPC
13	Mr. G.Ramprasad	Head, Control Systems Engineer	Enbridge INC, CANADA
14	Mr.K.V.Ramesh	Head, Instrumentation & Control	QATAR Gas, DOHA, QATAR
15	Mr. M.Venkaiah	Head Instrumentation Engg	Kuwait National Petroleum company, Ltd, KUWAIT
16	Mr. Ch. Suresh Babu	Executive Director & Board Member Balasore Alloys	Odisha
17	Mr. G.V.S.Brahmam	Director, Neo Geo Info Technologies	Hyderabad
18	Mr. K.Chandrasekhar	Head, Optical Engineering, META	California, USA
19	Mr. K. Sunil	General Manager	ONGC

# Alumni of the Department Contributed Lab Equipment, cost approximately ₹1.65 Lakhs



Dept of  
Instrument  
Technology

Visakhapatnam,  
Date: 02/05/2022

From,  
The Head of the Department,  
Instrument technology,  
Andhra University College of Engineering,  
Visakhapatnam.

To,  
The Principal,  
AUCE(A),  
Visakhapatnam.

Respected Sir,

Sub: Request for permission to accept equipment sponsored by our old students for establishing "Electrical Measurements Laboratory" – Reg :

Ref: My telephonic conversation with some of the old students in this regard.

I bring to your kind notice that on my request, some of our Alumni belongs to 2009-2013, 2010-2014 and 2008-2012 batches came forward to sponsor some equipment to proposed "Electrical Measurements Laboratory". This lab is very essential for 2/4 B.Tech second semester students as per the revised curriculum of 2020-2021 Academic year. They have also proposed to submit the list of equipment to them, to buy the same and supply to the Department of Instrument Technology.

Hence, I request you to kindly permit us to accept the proposal of our Alumni and to proceed further to establish new "Electrical Measurements Laboratory" in our Department with their support.

Please consider the request and do the needful.

Thanking you Sir,


Yours Sincerely,  
*A.K.*  
(Dr. A. KAMALA KUMARI)  
Head of the Department

**Head of the Department  
Department of Instrument Technology,  
A.U. College of Engineering,  
Visakhapatnam**

*Permitted the department to accept the lab equipment donated by the alumni of the department.*

*Principal*  
PRINCIPAL  
AU COLLEGE OF ENGINEERING (A)  
VISAKHAPATNAM-530 016

Cell : +91- 87128 28301



## TECHNO VISION SOLUTIONS

# 48-14-31/1, 2nd Floor, Akhila Arcade, Ramataikies Road, Asilmetta Jn., Visakhapatnam - 530 016  
E-mail: tvs.vizag@gmail.com.

### INVOICE


The Head of the Department  
Department of Instrument Technology  
AU College of Engineering,  
Andhra University,  
Visakhapatnam (AP)

22-23/Invoice/031  
Dt. 29.07.2022

Sl. No.	PARTICULARS	Qty	Unit Price (INR)	Extended Value (INR)
1.0)	Kelvin Bridge trainer kit Make and model: NVIS 6534	1	7,000.00	7,000.00
2.0)	Maxwell Bridge Trainer kit Make and model: NVIS 6533	1	7,500.00	7,500.00
3.0)	Hay Bridge Trainer kit Make and model: NVIS 6535	1	7,500.00	7,500.00
4.0)	Schering Bridge Trainer Make and model: NVIS 6037	1	11,000.00	11,000.00
5.0)	Measurement of power and power factor in 3 phase by Two Watt meter method	1	36,500.00	36,500.00
6.0)	Measurement R, L, C and Q meter using LCR, Q METER. Make: Scientific Model: SM5118	1	20,000.00	20,000.00
7.0)	Extension of ranges of digital ammeters and digital voltmeter. Consists of panel. Digital Voltmeter: 1 No. Digital Ammeter: 1 No. MCB Protection, Indicator, Terminals, Patch chords.	1	15,500.00	15,500.00
8.1)	Function Generator: 3MHz Make: Scientific Model: SM5070	3	9,650.00	28,950.00
9.0)	Digital Multimeter; Make: MECO	4	1,375.00	5,500.00
<b>SUB TOTAL</b>				1,39,450.00
<b>GTS @ 18%</b>				25,101.00
<b>TOTAL</b>				1,64,551.00

For **TECHNO VISION SOLUTIONS**

*[Signature]*  
Authorised Signatory



**Governance, Leadership/Management**  
**Conferences/Workshops attended with financial support**



Dept of  
Instrument  
Technology

Year	Name of teacher	Name of conference/ workshop attended for which financial support provided	Amount of support
<b>2017-18</b>	Prof.Y.Srinivasa Rao	"National Technical Symposium SPIKES- 18	₹ 1,00,000
	Prof.D.V. Rama Koti Reddy	One day Workshop on "Semiconductor Nano Wires for Optoelectronic Applications"	₹ 58,885
	Prof.Y.Srinivasa Rao	A four day national level technical symposium (SPIKES -18)	₹ 9,700
	Prof.D.V. Rama Koti Reddy	Training programme for Visiting the lab of Prof. S. Mohan, IISc Bangalore	₹ 14,002
<b>2018-19</b>	Dr. A. Kamala Kumari	Faculty Development Program on "Advanced Embedded System Design on Zynq Ultra Scale+using Vivado" held at JNTUH, Hyderabad.	₹ 11,809
<b>2019-20</b>	Prof.D.V. Rama Koti Reddy	Training programme for Visiting the lab of Prof. S. Mohan, IISc Bangalore	₹ 19,772
	Prof.D.V. Rama Koti Reddy	Workshop on "Smart Sensors" in the Department of Instrument Technology AUCE(A) in association with ISSS AP	₹ 1,70,674
	Dr. A.Dasiy Rani	SPIKES-20 Organized by department of Instrument Technology	₹ 2,02,548
<b>2020-21</b>	Dr. A. Daisy Rani	One week capacity building workshop on "Outcome Based Education (OBE) and Accreditation Process" which was conducted by Bharati Vidyapeeth's Institute of Computer Applications and Management (BVICAM), New Delhi	₹ 2,000
	Dr. P. Swapna	One week capacity building workshop on "Outcome Based Education (OBE) and Accreditation Process" which was conducted by Bharati Vidyapeeth's Institute of Computer Applications and Management (BVICAM), New Delhi	₹ 2,000

# BEST PRACTICES

## 1 : SPIKES : National Level Technical Symposium

# Spikes 20



Cultural



Poster  
Launch



Drones



Paper  
Presentation



Inaugural



Project  
Exhibition



Workshop



Workshop



Workshop



Cultural



Workshop



**2. Merit Students Award:** Prof. P. Sitarama Swamy Memorial Gold medal is awarded to IV/IV B.Tech Topper of the batch in annual Convocation since the year 1994.

### 3. Design and Installation of Clock Tower at Andhra University





### 3 : Interaction With Start-up Cells Through a-HUB Incubation Centre




**DIGIOTAI**  
Innovation. Inter-Connected.  
Mobile - +91 9963611235

**Vijay Gunti**  
www.digiotai.com  
vijay.g@digiotai.com

**Chief Technology Officer**  
Andhra University Incubation Center,  
College of Engineering, North Campus,  
AU, Visakhapatnam - 530003



One of our Alumni established a start-up “DIGIOTAI” at a-HUB.

# COMPANY PROFILE

DIGITAL TRANSFORMATION PARTNER

## ABOUT US :



### OUR STORY

DIGIOTAI is a digital transformation (DX) enablement partner to reputed entities worldwide, enabling companies to update and thrive in the digital economy. DIGIOTAI empower companies with digital business solutions, improved operations, digital growth, and innovation.



### OUR VISION

DIGIOTAI Solutions, as a company, has been founded with a vision and a commitment to help drive a complete digital transformation enablement across enterprises using the emerging stack of technologies such as IoT, Data Science, AI, Blockchain & AR/VR.



### OUR MISSION

Our mission is to build sustainable and industry agnostic automated platforms and solutions, that can ensure an easy adoption towards the digital transformation curve, with us driving the ecosystem across Ideation, Conceptualization, Development and Turnkey realizations

## OUR SERVICES



Digital Transformaiton , Industry4.0, Sustainability , Emerging Technologies Consulting



Technology Services : IOT,IIOT, AI, ML, BLOCKCHAIN



DEVELOPMENT : Python, Full stack, Data, React, Nodejs

## WHY CHOOSE US?

Our Hub platform makes it easy for your entire company to work together — from Digital Transformaiton enablement of your corganisation

## CONTACT US

Vijay Gunti  
+91 9963611235

## 4: Holistic personality Development for Wellness of Individuals



Dept of  
Instrument  
Technology





## Best Practices (Contd.,)

- Solid waste management – GVMC recyclers (at hostel premises)
- Liquid waste management – pits
- Andhra university e-waste management policy comprises: e-waste awareness, Responsibility of consumers, Dos and Don'ts, Procedure for storage of e-waste
- Rain water harvesting pits are provided in the campus.





# ANDHRA UNIVERSITY

## E-WASTE HANDLING AND MANAGEMENT GUIDELINES

### E-WASTE Awareness

**E-Waste:** Electrical and electronic equipment, whole or in part discarded as waste by the consumer or bulk consumer as well as rejects from the manufacturing refurbishment and repair processes.



### Electrical and Electronic Equipment

Means equipment which are dependent on electric current or electro-magnetic field in order to become functional.

### E-waste Exchange

Means an independent market instrument offering assistance or independent electronic systems offering services for sale and purchase of e-waste generated from end-of-life electrical and electronic equipment.

E-Waste, if any, should be handled as per the **E-Waste (Management) Rules, 2022** and its subsequent modifications. The rules are available in the AU web site.

E-Waste should not be disposed of into any water body or on to the land. It needs to be properly handled and sent to the authorised organisations only.

### Responsibilities of Consumer or Bulk Consumer

- Ensure that e-waste generated by them is channelised to authorised dismantler or recycler
- Maintain records of e-waste generated by them in Form-2 and make such records available for scrutiny by the concerned State Pollution Control Board
- Ensure that such end-of-life electrical and electronic equipment are not admixed with e-waste containing radioactive material as covered under the provisions of the Atomic Energy Act, 1962(33 of 1962) and rules made there under
- File annual returns in Form-3, to the concerned State Pollution Control Board on or before the 30<sup>th</sup> day of June following the financial year to which that return relates.

### Dos and Don'ts

Do identify all electronic waste items that are recyclable

Make sure that your electronic products are given to an authorized recyclers/dismantlers only but not to informal and unorganized sectors like Local Scrap Dealer/ Rag Pickers.

Always disconnect the battery from product.

Do erase personal data that might be held on a device & back everything up

Place your Drop-off used electronic items at one place in the generated facility

Segregate the e-waste as per the product but don't mix all the electrical and electronic items

Do not dismantle your electronic products on your own

Do not throw electronics in bins having "Do not dispose" sign or garbage bin along with municipal waste.

Don't leave hard drives in personal electronic devices

### Procedure for Storage of E-waste


- E-waste may be stored for a period not exceeding 180 days
- Maintain a record of collection, sale, transfer and storage of wastes and make these records available for inspection.
- Concerned State Pollution Control Board may extend the said period up to 365 days in case the waste need for recycling or reuse.

### Categories of Electrical and Electronic Equipment

- Consumer electrical and electronics items

Ex:  Television sets, refrigerator etc..

- Information technology and telecommunication items

Ex:  Computers and their accessories like printers, typewriters, Telephones and their accessories like cordless, cellular etc.

E-waste manifest should be done as per Form-6

Form-2 should be followed for maintaining records of E-waste handled or generated

## FUTURE PLANS



- The Department is planning to start an M.Tech Program in Industrial Internet of Things (IIOT).
- Planning to establish advanced lab in MEMS, Smart sensors.
- To set up world class calibration Lab to cater local industrial needs.
- To start workshops/training programs for technical professionals
- To establish Centre of Excellence in Instrumentation and Automation.

