

MINDSPARK

The Official Newsletter of Instrumentation and Control Engineering



JULY - DECEMBER 2024

ISSUE - XI

***THIS NEWSLETTER IS DEDICATED TO THE
LOVING MEMORIES OF***



***Late Dr. Deepali H. Shah
(Associate Professor- IC Department)***

(24/10/1973 – 23/07/2024)

***“YOUR MEMORIES WILL ALWAYS BE IN OUR
HEARTS”***

DR. SWETA P. DAVE

PRINCIPAL

GOVERNMENT ENGINEERING COLLEGE, GANDHINAGAR



Dear students, faculties & alumni of GECGN!

As we step in to the new year, I am filled with gratitude and excitement about the journey ahead.

Together, we have created a community where every individual is valued, encouraged, and empowered to succeed.

This year, we are focused on continuing to foster an environment that supports not only academic growth but also personal development.

We are committed to helping each student discover their strengths, embrace challenges, and build a foundation for a bright future.

Thank you for your ongoing support. Here's to a year of growth, joy, and success!

Dr. NARENDRA K. ARORA

HOD IC DEPT

GOVERNMENT ENGINEERING COLLEGE, GANDHINAGAR



Dear students, faculties & alumni of GECGN !!

It gives me immense pleasure to present the eleventh issue of the Departmental newsletter, MindSpark.

This newsletter provides an overview of the departmental activities, facilities, profiles of faculty members, and details of students and faculty achievements of our department.

I wish through this newsletter, students and faculties will be encouraged more to participate in activities and contribute in the growth of the department. Together, we are building not only knowledge but also confidence and resilience that will serve the students well in the years ahead. Once again, I congratulate all the IC family members for the Newsletter and wish all the bright future ahead.

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THE INSTITUTE



• VISION

- To be a premier engineering institution, imparting quality education for innovative solutions relevant to society and environment.

• MISSION

- To develop human potential to fullest extent so that intellectual and innovative engineers can emerge in a wide range of professions.
- To advance knowledge and educate students in engineering and other areas of scholarship that will best serve the nation and the world in future.
- To produce quality engineers, entrepreneurs and leaders to meet the present and future needs of society as well as environment.

THE DEPARTEMENT

VISION

- To impart quality education in Instrumentation and Control engineering through innovation to meet technological challenges of industries and society with environmental considerations.

MISSION

- To impart knowledge about present trends in the field of instrumentation and control engineering.
- To train competent instrumentation and control engineers who can design, operate, process instrumentation and also manufacturing an automation system in industries .
- To encourage students to work on innovative research projects related to Instrumentation and Control engineering considering environmental aspect .

PEO -PROGRAM EDUCATION OBJECTIVE STATEMENTS

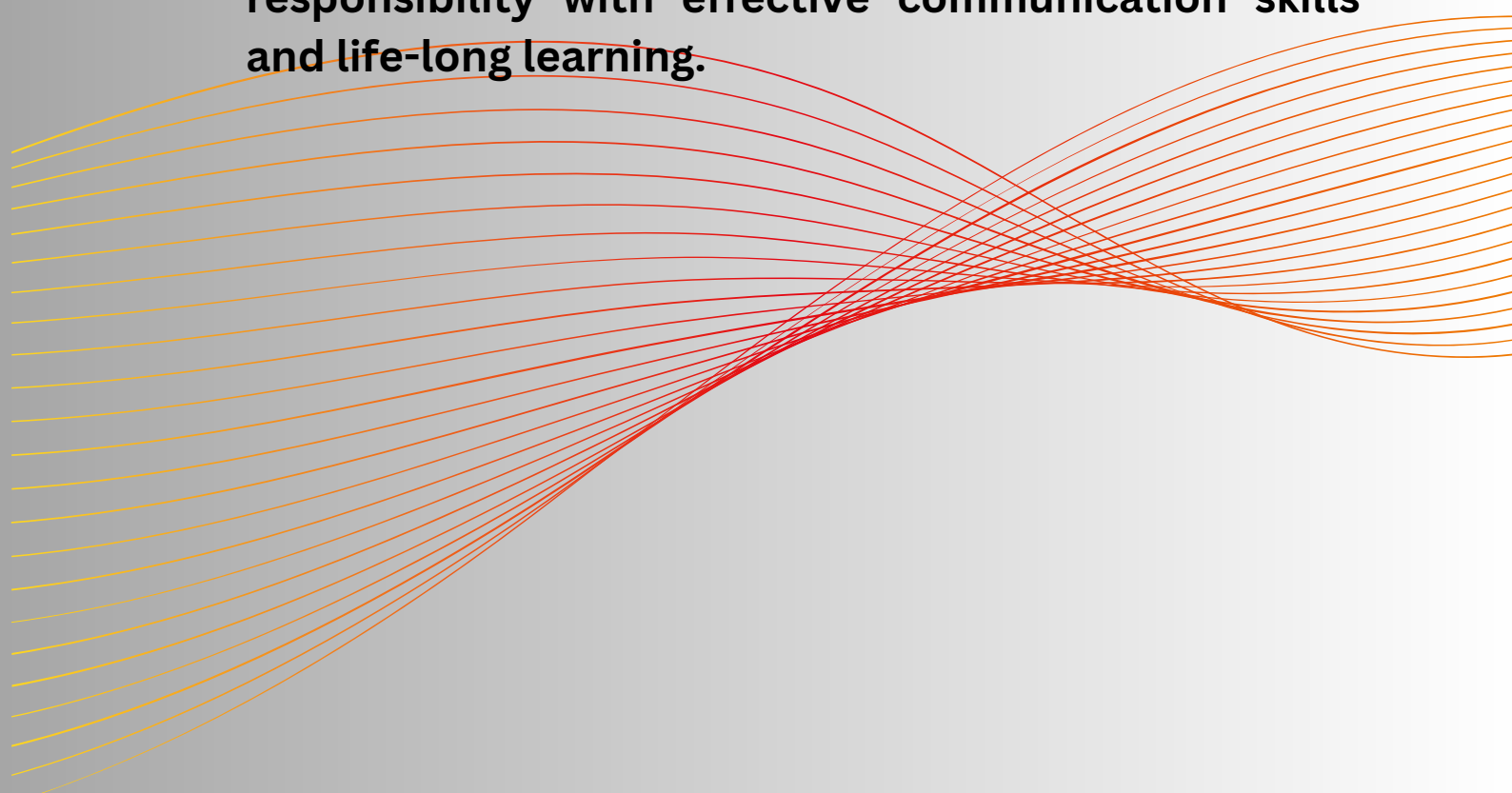
PEO – 1 – To operate and maintain industrial instrumentation and control system.

PEO -2 – To design industrial instrumentation and control system by innovative approach.

PEO -3 – To inculcate professional and ethical attitude, effective communication skills, multidisciplinary approach and an ability to relate engineering issues in social and environmental context.

PEO -4– To acquire the ability for life-long learning needed for a successful Professional career.

PSO – PROGRAM SPECIFIC OUTCOMES

- **PSO 1 – Design and develop solutions for Process control and automation industries and able to pursue career in research, industry, higher studies and adapt to changing technology.**
 - **PSO 2 – Able to understand professional and ethical responsibility with effective communication skills and life-long learning.**
- 
- A decorative graphic consisting of numerous thin, wavy lines in shades of orange and red. These lines originate from the left side of the page and curve towards the right, creating a sense of movement and flow. The lines vary in frequency and amplitude, with some forming tight, dense curves and others being more spread out.

FACULTY DETAIL



PROF M. R. JANI

Designation- Associate professor
Qualification- M.E.(IC)
Experience - 29 Years 6 months

Dr. S. A. RANKAWAT

Designation- Associate professor
Qualification- Ph.D.
Experience - 29 Years 6 months



PROF. A. D. RATHOD

Designation- Associate professor
Qualification- M.E. (IC)
Experience - 24 Years 6 months

PROF. M. B. HINGU

Designation- Assistant Professor
Qualification- M.Tech.(SYSCON, IITB)
Experience - 27 Years 6 months ,
01 years industry



PROF I.U. AJMERI

Designation- Assistant Professor
Qualification- M.E. (IC)
Experience - 26 Years 6 months

Dr. K. C. DAVE

Designation- Assistant Professor
Qualification- Ph.D.
Experience - 15 Years 6 months



PROF K.K.ACHARYA

Designation- Assistant Professor
Qualification- M.E. (IC)
Experience - 15 Years 6 months ,
02 years industry



Dr. K. B. PATHAK

Designation- Assistant Professor
Qualification- Ph.D.
Experience - 20 Years 6 months



PROF K.S. VASHISHTHA

Designation- Assistant Professor
Qualification- M.E. (IC)
Experience - 14 Years 6 months



PROF. N.V. PATEL

Designation- Assistant Professor
Qualification- M.E. (IC)
Experience - 13 Years 6 months,
05 years industry



PROF. P. N. PATEL

Designation- Assistant Professor
Qualification- M.E. (IC)
Experience - 10 Years 6 months



PROF. R. S. RANA

Designation- Assistant Professor
Qualification- M.Tech.(IC)
Experience - 08 Years 6 months



PROF R. L. ZADFIYA

Designation- Assistant Professor
Qualification- M.Tech. (IC)
Experience - 14 Years 6 months

Dr. A. N. BOKADE

Designation- Assistant Professor
Qualification- Ph.D.
Experience - 19 Years 6 months



PROF. J. J. SHAH

Designation- Assistant Professor
Qualification- M.E.(IC)
Experience - 08 Years 6 months

DEPARTMENTAL ACTIVITIES

Workshop on “FUNDAMENTALS OF CONTROL SYSTEM”- 05/08/2024 for IC & EC branch students

The poster is for a workshop titled "FUNDAMENTALS OF CONTROL SYSTEM" held at the Government Engineering College, Gandhinagar. It is organized by the Instrumentation & Control Department. The workshop is scheduled for 5th August 2024, starting at 10:30 AM. The venue is Block 2, IC Department. The poster lists three faculty coordinators: Dr. K. B. Pathak, Prof. M. B. Hingu, and Prof. M.R. Jani. It also mentions that the workshop is beneficial to students of IC, EC, BM & RA branches. A QR code is provided for registration. The poster includes portraits of Dr. N.K. Arora, HOD-IC, and Dr. S.P. Dave, Principal. A note states that seats are limited and the workshop will be on a 'First Come First Serve' basis. The poster also features the college logo and the 75th Azadi Ka Amrit Mahotsav logo.

GOVERNMENT ENGINEERING COLLEGE, GANDHINAGAR
INSTRUMENTATION & CONTROL DEPARTMENT

A WORKSHOP ON
FUNDAMENTALS OF CONTROL SYSTEM

Venue
Block 2, IC Department

Date & Time
5th August, 2024, 10:30 AM onwards

Registration QR Code

Faculty Coordinators
Dr. K. B. Pathak (IC Department)
Prof. M. B. Hingu (IC Department)
Prof. M.R. Jani
Coordinator

Beneficial to Students of IC, EC, BM & RA

Dr. N.K. Arora
HOD-IC
GEC, Gandhinagar

Dr. S.P. Dave
Principal
GEC, Gandhinagar

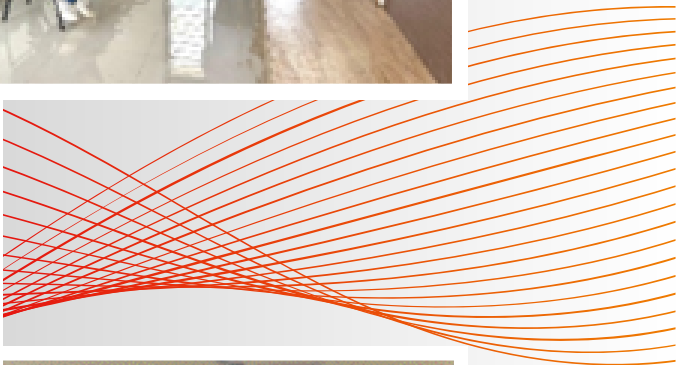
Seats are limited therefore it will be on 'First Come First Serve' basis

Fundamentals of Control system workshops covered basics of control system, modern tools, modern control theory using state-space analysis and compensation in both time and frequency domain.

Hands-on sessions were planned for case studies with industrial applications. Tools used for hands-on practice are MATLAB, SCILAB and online available open source software.

During registration, students gave overwhelming response with huge number of registration. Workshop was conducted for students of IC and EC branch.

Total Participants: 80



Workshop on “FUNDAMENTALS OF CONTROL SYSTEM”- 13/08/2024 for RA, EE & BM branch students



GOVERNMENT ENGINEERING COLLEGE, GANDHINAGAR

INSTRUMENTATION & CONTROL DEPARTMENT

A WORKSHOP ON
FUNDAMENTALS OF CONTROL SYSTEM



Seats are limited therefore it will be on 'First Come First Serve' basis

Venue
Block 2, IC Department

Date & Time
13th August, 2024, 10:30 AM onwards

Registration QR Code



Dr. K. B. Pathak (IC Department)
Prof. M. B. Hingu (IC Department)
Faculty Coordinators

Prof. M.R. Jani
Coordinator

Beneficial to Students of IC, EC, BM & RA



Dr. N.K. Arora
HOD-IC
GEC, Gandhinagar



Dr. S.P. Dave
Principal
GEC, Gandhinagar





For instrumentation and Control and allied branches, control system is very much important topic. Basics of control system, various techniques and design of control system are of prime importance.

To bridge the gap between basics of control theory, system design and advance control theory, concepts of control system design are important.

During registration, students gave overwhelming response with huge number of registration. Workshop was conducted for students of RA, EE and BM branch.

Total participants: 68

Bright Students Felicitation- 15/08/2024



The IC department students having highest SPI in Summer exam 2023, were felicitated on 15th August by certificates. Following students were awarded with certificates:

STUDENT NAME	SEMESTER
Lalbaboo Gupta	VII
Yadav Tejasvini	VII
Paradhi Jaykumar Hirji	V
Sharma Anchal Mithilesh	V

Teachers' Day Celebration-05/09/2024

૦૫ સપ્ટેમ્બર ૨૦૨૪ - શિક્ષકદિન

તારીખ પાંચમી સપ્ટેમ્બર આપણે સર્વે આપણા ભૂતપૂર્વ
રાષ્ટ્રપતિ **ડૉ. સર્વપલ્લી રાધાકૃષ્ણન** નાં જન્મદિવસ
(૫ સપ્ટેમ્બર, ૧૮૮૮) ને "શિક્ષકદિન" તરીકે ઉજવીએ છીએ.
ડૉ. સર્વપલ્લી રાધાકૃષ્ણન એક મહાન ફિલોસોફર અને શિક્ષક
હતા. તેમણે એકવાર કહ્યું હતું કે -
"હું પહેલા શિક્ષક છું, અને પછી રાષ્ટ્રપ્રમુખ છું"

DATE: 05/09/2024
TIME: 01:00 PM
(Room No : 2202 IC DEPARTMENT Hall)





Instrumentation & Control Department
Government Engineering College,
Sector-28, Gandhinagar







Teachers' Day was celebrated on September 5th to honour the contributions of teachers, educators, and researchers. It's also a day to recognize the work of professors. The day is celebrated on the birthday of Dr. Sarvepalli Radhakrishnan, India's second president and a distinguished educator.

ISA event-Expert Talk on “POWER PLANT INSTRUMENTATION” - 01/10/2024


A seminar on Power Plant Instrumentation was conducted as a part of ISA Students' Chapter activity. Mr. Amar Parmar and Mr. Jagadish Simariya from MASIBUS automation conducted this expert session. Total 60 students and 4 faculties participated in this event.



GOVERNMENT ENGINEERING COLLEGE, SECTOR-28, GANDHINAGAR
INSTRUMENTATION & CONTROL DEPARTMENT



ISA Students Chapter Organizes



ONE EARTH • ONE FAMILY • ONE FUTURE

An
Expert Session On
Power Plant Instrumentation
By
Project Engineer: Mr. Amar Parmar & Mr. Jagdish Simariya [MASIBUS Automation]

Date: 1st OCT 2024 Time: 03:15 PM Onwards Venue: Room No. 2202-A

Registration Link: <https://forms.gle/C5WKshuPpC3AK7EH8>

PATRON Dr S. P. Dave Principal	CONVENER Dr N.K. Arora HOD	ISA FACULTY ADVISER Dr S.A. Rankawat	DEPT COORDINATOR Prof K.K.Acharya
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Alumni Meet- 05/10/2024

The department of Instrumentation and Control Engineering had organized an alumni meeting for all batches and alumni on 05th October 2024. The alumni meet was offline. The meeting started at 11.30 a.m. Mr. Dev Trivedi and Mr. Neerav Barot students of semester 7th compered the program. Prof. (Dr.) N. K. Arora, HoD of IC department addressed all the attendees.

Mr. Meet Modi, Ms. Vinisha Fatania and Mr. Vedant Panchal alumni of IC department delivered expert talk on “Scope of Instrumentation in Process Industries”, “Importance of Instrumentation and Control in Modern Industries” and “Journey from Student to Professional Career” respectively. Approximate 50 students from all batches, alumnis and teachers participated in the event. Students and staff shared the memories, most of them volunteered to render services for the benefit of the current students of IC departments. The event was stimulating and enjoyable and simultaneously profitable as all insights came up.

Mr. Dev Trivedi and Neerav Barot students of semester 7 disseminated Mission Vision of department and institute.

At the end, the Prof. K. K. Acharya sincerely expressed its gratitude to the honorable Principal Madam and Head of IC Department for their guidance and support to make this event a grand success and thanks to all faculties, staff members and alumni for attending Alumni Meet and contributing towards making it such an unforgettable event .



GOVERNMENT ENGINEERING COLLEGE, GANDHINAGAR
INSTRUMENTATION & CONTROL DEPARTMENT
IS ORGANIZING





SPEAKER
Meet Modi
Senior Instrument Engineer,
GNFC Ltd.
Bharuch, Gujarat



SPEAKER
Vinisha Fatania
Assistant Manager,
Adani Solar
Mundra, Gujarat



SPEAKER
Vedant Panchal
Assistant Manager,
Adani kutch Copper Ltd.
Mundra, Gujarat

Alumni Meet 2024
Relive.... Reconnect Rejoice.... A trip to Nostalgia

Date: 05th October 2024
Time: 11:30 am onwards
Venue: 2202-A, IC Department



PATRON
Dr. S. P. Dave
Principal,
GEC, Gandhinagar



CONVENOR
Dr. N. K. Arora
HOD-IC,
GEC, Gandhinagar



CHAIRMAN
Prof. M. R. Jani
Alumni Association,
GEC, Gandhinagar







Faculty Coordinator
Prof. J. J. Shah
IC Department, GEC Gandhinagar



ISA Event-15/10/2024

A seminar on “Industry 4.0 & Digitalization” was conducted on 15th Oct-2024. An expert from SIEMENS INDIA LTD, Conducted this expert session and provided important information about various trends related to industry 4.0, PLC,SCADA and the need of digitalization. Students were made aware of various industrial applications and it was really an interactive session with participation of 45 students and 5 faculty members.

GOVERNMENT ENGINEERING COLLEGE, SECTOR-28, GANDHINAGAR
INSTRUMENTATION & CONTROL DEPARTMENT

ISA Students Chapter Organizes
An
Expert Session On
INDUSTRY-4.0 & DIGITALIZATION
by
Mr. Chandrakant Keshrani [Branch Manager, Siemens India Ltd, Ahmedabad Branch]

Date: 15th October 2024 Time: 11:00 AM Onwards Venue: Room No. 2202-A

Registration Link: <https://forms.gle/sabAF4ayUgw3iNAQ9>

PATRON Dr S. P. Dave Principal	CONVENER Dr N.K. Arora HOD	ISA FACULTY ADVISER Dr S.A. Rankawat	DEPT.COORDINATOR Prof. K.K.Acharya
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AMUL FED dairy visit - 18/10/2024

Students of semester 5, visited the Amul Fed Dairy plant, Bhat, on 18th October, 2024. The visit was started with an expert session on how the production and processing of milk and milk products are being looked after. Then students got the opportunity to see different sections of the plant and various instruments involved in the automation process. It was an amazing experience to see the automation & instrumentation involved in the plant.



FACULTY ACHIEVEMENT:

- Prof. Aarti N. Bokade has completed her PhD from GTU.
- All the faculties of IC department have taken “FIT INDIA” pledge on 28/08/2024.
- All the faculties of IC department have taken “BHARAT VIKAS” pledge on 08/10/2024.
- Prof. K.K.Acharya and Prof. K.B.Pathak have published 02 two research papers in UGC Care Approved journals with the following titles
 - 1) “Integration of Physical Systems with Virtual Instrument Models: An Exploration of Digital Twin Technology”
Prof. K. B. Pathak & Prof. K. K. Acharya, Tanz Research Journal Vol 10, Issue 7 JULY -24
 - 2) “ Smart System for Diagnosis of Renal abnormality in its Early Stage” Prof.K.K.Acharya & Prof.K.B.Pathak, Tanz Research Journal Vol 10, Issue 7 JULY -24

FACULTY TRAINING:

- o Prof. K. K. Acharya, Prof. (Dr.) K. B. Pathak & Prof. K. S. Vashishtha have completed 2 weeks Industrial Training at Adaptive Engineering Pvt. Ltd. From 08/07/2024 to 20/07/2024.
- o Prof. A.N.Bokade, Prof. J.J.Shah have completed 2 weeks industrial training at AMTECH Electronics (India) Ltd., Gandhinagar during 1/7/2024 to 15/7/2024
- o Prof. Niyat V. Patel, Prof. P N Patel, Prof. R S Rana & Prof. R L Zadfiya have completed 2 weeks industrial training at AMTECH Electronics (India) Ltd., Gandhinagar during 15/7/2024 to 27/7/2024
- o Prof. A.N.Bokade has completed NPTEL ONLINE 12 week course (Jul-Oct 2024) on Psychology of Learning.



Elite

NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

This certificate is awarded to
AARTI NARENDRA BOKADE
for successfully completing the course
Psychology of Learning

with a consolidated score of **99** %

Online Assignments	25/25	Proctored Exam	73.5/75
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Total number of candidates certified in this course: 6085

Jul-Oct 2024
(12 week course)




Prof. Haimanti Banerji
Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL24HS117S366100002

To verify the certificate



No. of credits recommended: 3 or 4



- Prof. A.N.Bokade has completed NPTEL ONLINE 8 week course (Jul-Sep 2024) on Sustainable Happiness.



- Prof.(Dr.) S. A. Rankawat has completed NPTEL ONLINE 8 week course (Jul-Sep 2024) on Sustainable Happiness.



- Prof. J. J. Shah has completed NPTEL ONLINE 12 week course (Jul-Oct 2024) on Psychology of Learning.



Elite


NPTEL ONLINE CERTIFICATION
(Funded by the MoE, Govt. of India)

This certificate is awarded to
SHAH JHEEL JITENDRA
for successfully completing the course
Psychology of Learning
with a consolidated score of **99** %


Online Assignments	25/25	Proctored Exam	73.5/75
--------------------	-------	----------------	---------

Total number of candidates certified in this course: **6085**


Jul-Oct 2024
(12 week course)

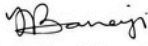


Indian Institute of Technology Kharagpur




Skill India
कौशल भारत - कुशल भारत






Prof. Haimanti Banerji
Coordinator, NPTEL
IIT Kharagpur





FREE ONLINE EDUCATION
swayam
विद्येय नयेत्, शिष्ये नयेत्

Roll No: NPTEL24HS117S457300535 To verify the certificate 

No. of credits recommended: 3 or 4

- Prof. J. J. Shah has completed NPTEL ONLINE 8 week course (Jul-Sep 2024) on Sustainable Happiness.



Elite


NPTEL ONLINE CERTIFICATION
(Funded by the MoE, Govt. of India)

This certificate is awarded to
SHAH JHEEL JITENDRA
for successfully completing the course
Sustainable Happiness
with a consolidated score of **96** %


Online Assignments	25/25	Proctored Exam	70.5/75
--------------------	-------	----------------	---------

Total number of candidates certified in this course: **1848**


Jul-Sep 2024
(8 week course)




Indian Institute of Technology Kharagpur




Skill India
कौशल भारत - कुशल भारत






Prof. Haimanti Banerji
Coordinator, NPTEL
IIT Kharagpur



FREE ONLINE EDUCATION
swayam
विद्येय नयेत्, शिष्ये नयेत्

Roll No: NPTEL24HS102S235200370 To verify the certificate 

No. of credits recommended: 2 or 3

STUDENT ACHIEVEMENTS:

- IC department student members of ISA students' chapter have participated in "All Gujarat Automation Engineers Meet-2024"- Poster presentation, organized at Nirma University, Ahmedabad and secured 2nd position.



Our Student, Tejasvini Yadav (I.C. Batch-2024) is selected as Sub-Lieutenant in the Aviation Specialisation (Naval Air Operations Officer) - Executive Branch of the Indian Navy and appointed as additional in Indian Naval Ship Zamorin for training in the Indian Naval Academy (INA), Ezhimala, Kerala.

PLACEMENT DETAIL

The Instrumentation and Control Engineering Department takes immense pride in fostering a culture of excellence and professional growth among its students. This year, our placement efforts reflect the dedication of our students and the department's unwavering commitment to their career success. With the support of leading companies, skill-building sessions, and career guidance initiatives, our students have achieved remarkable placements.

The placement drive is a pivotal step in a student's academic journey, opening doors to promising career opportunities and growth. To prepare our students for success, we emphasize holistic development, including technical knowledge, communication skills, and professional behavior.

As part of this initiative, a session on Employability Skills and Corporate Expectations was organized for our IC students on 14th October 2024. The session was conducted by CA Nikhil Nainani, a Finance Trainer and expert from Pune Institute of Business Management. This session offered valuable insights into industry expectations, effective resume-building, interview strategies, and the key skills required for a successful career. Students gained a deeper understanding of how to align their strengths with corporate demands, significantly enhancing their readiness for the placement drive.



GOVERNMENT ENGINEERING COLLEGE, SECTOR-28, GANDHINAGAR
INSTRUMENTATION & CONTROL DEPARTMENT



G20
भारत 2023 INDIA

An
Expert Session On
"Bridging the Gap: Employability Skills and Corporate Expectations"



PATRON
Dr. S.P. Dave
Principal GEC,
Gandhinagar



CONVENOR
Dr. N.K. Arora
HOD-IC,
GEC, Gandhinagar



SPEAKER
CA Nikhil Nainani
Pune Institute Of Business Management
Finance Trainer
14+ Years Experience
Chartered Accountant

Date : 14 OCT 2024
Vanne : Seminar Hall (2202-A) IC
Time : 11:30 AM Onwards

FACULTY CO-ORDINATOR
Prof. A.N. Bokade
Asst.Prof-IC,GEC,
Gandhinagar



Expert Session On “Bridging the Gap: Employability Skills and Corporate Expectations” (14th Oct,2024)

Several esteemed companies participated in the placement drive, offering diverse opportunities for our students. These companies include:

- Axis Solutions Pvt. Ltd.
- IDMC Ltd.
- Adani Ltd.
- Shree Nidhi Automation Pvt. Ltd.
- Powency Circuit Pvt. Ltd.
- Soul Electric Private Limited
- Innotech Automation LLP
- Deepak Group
- ABM Systems Inc.
- Yokogawa Ltd

Some glimpses of the various placement drives conducted for our students are showcased here, capturing the essence of our commitment to their success.



The on campus placement drive conducted by Axis Solutions Pvt. Ltd. (20-09-2024)



The on campus Placement drive conducted by Powency Circuit Pvt. Ltd. at I.C. Department (04-12-2024)

We extend our heartfelt congratulations and best wishes to all the students who have successfully secured placements in the various drives conducted by esteemed companies.



Congratulations
for being placed in
IDMC LIMITED

Government Engineering College, Gandhinagar.
Instrumentation & Control Department



Aditya Purohit



CHAIR PERSON

**Dr. SWETA P. DAVE
PRINCIPAL
GEC, GANDHINAGAR**

EDITOR

**PROF M.R. JANI,
ASSOCIATE PROFESSOR,
IC DEPT
GEC, GANDHINAGAR**

ASSOCIATE EDITOR

**PROF K.S. VASHISHTHA
ASSISTANT PROFESSOR,
IC DEPT
GEC, GANDHINAGAR**

DESIGNING SECTION

**NIYANTA PATEL
4 TH SEM
SHIKHA GAMIT
4 TH SEM**