PRAGATI ENGINEERING COLLEGE



(Approved by AICTE, Permanently Affiliated to JNTUK Kakinada) 1-378, ADB Road, Surampalem – 533 437, Near Peddapuram, E.G.Dist., A.P. Ph: (08852) – 252233, 252234, 252235 Fax: (08852) – 252232



Institution's Innovation Council

1) The Institutions Innovation Council of Pragati Engineering College (IIC -PEC) is established in September 2020.IIC –PEC got 3.0 star in 5-star rating scale from **MoE's Innovation Cell** for the session 2023-24 and conducted 39 activities towards developing Entrepreneurship, Startup, IPR, Innovation and Research ecosystem during the period 01/9/23 to 31/8/24 and received participation certification on NIRF-23 (INNOVATION) ranking.

2)

Activities Conducted

| S. No | Activity Name | Category | Quarter | Remarks |
|----------|---|-------------------------|-----------|--|
| 1 | A Mentoring Support program for ATAL Tinkering lab To ZPP high school, Gandepalli on 15/09/2023 | Calender Activity | Quarter-I | The program was conducted on 15.09.2023 on entrepreneurship and sustainability at atal tinkering lab. In this program, students 61 no's has participated. |
| 2 | National Intellectual Property Conference #NIP Conf2023 On 13/10/2023 to 14/10/2023 | Self Driven Activity | Quarter-I | The Program Was Conducted for IIC-PEC students, Interested Students Participated the event. |
| 3 | A Role of innovation and entrepreneurship in modern life on 14/10/23 | Calender Activity | Quarter-I | The program was conducted on 14.10.2023.total 54 student members participated the program |
| 4 | National Innovation Day on 15/10/2024 | Celebration Activity | Quarter-I | IIC-PEC celebrated National Innovation Day. Total 55 Students Participated the Program. |
| 5 | An Innovative idea competition on the eve of national entrepreneurship day on 9/11/23 | Celebration Activity | Quarter-I | The program was conducted on 09.11.2023 at 10.30am.total 43 students are participated for innovative idea competition and shared their ideas towards entrepreneurship. |
| 6 | Poster presentation | Celebration | Quarter=I | The program was conducted on |

| | on national education day on 11/11/23 | Activity | | 11.11.2023.total 53student members participated the program. |
|----|--|-------------------------|------------|---|
| 7 | Entrepreneurship Opportunities for Engineers on 14/11/2023 | Self Driven Activity | Quarter-I | The program was conducted on the IIC-PEC Students. |
| 8 | Entrepreneurship Mind setup on 21/11/2023 | Self Driven Activity | Quarter-I | The program was conducted on the eve of jan jatiya gourav diwas on 21.11.2023. |
| | Role of technology | Self Driven | Quarter-I | The program was conducted on |
| 9 | on tribal | Activity | | the eve of jan jatiya gourav |
| 9 | development & | | | diwas on 22.11.2023,total 41 |
| | welfare on 22/11/23 | | | members joined the program. |
| | Innovative methods for protection of | Self Driven | Quarter-I | The program was conducted on |
| | environment on | Activity | | 22.11.2023. On the eve of jan |
| 10 | 24/11/23 | | | jatiya gourav diwas on |
| | | | | 24.11.2023 |
| | | | | Total 45 members joined the program. |
| | Artificial intelligence | Self Driven | Quarter-I | The program was conducted on |
| | startups in the | Activity | | 25.11.2023. Total 41 members joined the |
| 11 | world: a hot spot for | | | program. |
| | AI innovation on | | | |
| | 25/11/23 | | | |
| 12 | Startup funding in india: webinar on 28/11/23 | Calender Activity | Quarter-I | The program was conducted on 28.11.2023.total 40 members joined the program. |
| 13 | National Pollution Control Day on 02/12/2023 | Celebration Activity | Quarter-II | The program was conducted on 02/12/2023.Article Writing Was conducted to the Students. |
| 14 | National Energy Conservation Day 14/12/2024 | Celebration Activity | Quarter-II | Article Writing, Poster Presentation Activities Conducted. |
| 15 | Technology For Viksit Bharat @2047, An Idea Wxchange Program on 18/12/2023 | MIC Driven Activity | Quarter-II | Department of ECE Conducted Technology For Viksit Bharat @2047, An Idea Wxchange Program on 18.12.2023 |
| 16 | IIC regional meet | MIC Driven | Quarter-II | The program was held at kL |

| | On 6/1/24 | Activity | | deemed to be university, vijayawada on 06.01.2024 Total 2 faculty members & 1 student participated the program. |
|----|--|-------------------------|-------------|--|
| 17 | National Youth Day on 11/01/2024 | celebration Activity | Quarter-II | Article Writing Event Coducted on the occation of National Youth Day. total 51student members participated the program |
| 18 | Innovation Festival on 20/01/2024 | Calender Activity | Quarter-II | The program was conducted on 20.01.24, Total 57 Students Participated. |
| 20 | Article writing on national startupday 25/01/23 | Celebration Activity | Quarter-II | The program was conducted on 25.01.2024.total 46student members participated the program |
| 21 | Industry Exposure Visit @ISRO on 31/01/2024 | Calender Activity | Quarter-II | Satish Dhawan Space Centre(SDSC) SHAR, Sriharikota Visited by ECE Department Students. |
| 22 | Future trends for entrepreneur skills 2/2/24 | calendar Activity | Quarter-II | The program was conducted on 02.02.2024.total 62student members participated the program |
| 23 | Aligning entrepreneurial orientation & behaviour On 08.02.2024 | calendar Activity | Quarter-II | The program was conducted on 08.02.2024.total 42student members participated the program |
| 24 | How to use ai as innovation co-pilot on 2/2/24 | Self Driven Activity | Quarter-II | The program was conducted on 20.02.2024.total 67student members participated the program |
| 25 | Expert talk on national science day 20/02/24 | Celebration Activity | Quarter-II | The program was conducted on 20.02.2024.total 67student members participated the program |
| 26 | International womens day on 8/3/24 | Celebration Activity | Quarter-II | Pragati engg. College celebrated the international womens day in seminar hall, Total 54 faculty, 200students involved. |
| 27 | Nurturing your agristartup idea into reality on 13.04.24 | calendar Activity | Quarter-III | A program for agrientrepreneurship has the prospect of social and economic developmenton 13 /4/24 53 student and 10 faculty jpined this program |
| 28 | Patent licensing on | calendar | Quarter-III | Aim is long-term and provides |

| | 17/4/24 | Activity | | overall direction, while objectives are short-term and measurable Total 23 faculty and 22 student joined this program |
|----|---|----------------------|-------------|---|
| 29 | Essential business skills for engineers: bridging the gap between business and engineering. On17/4/24 | calendar Activity | Quarter-III | This program help on how to leverage cross-disciplinary concepts to contribute to your organization's success opportunities for growth in business management and leadership roles for engineers and technical professionals |
| 30 | Increasing awareness of open science at your research institution on 18/4/2024 | calendar Activity | Quarter-III | Total 41students & 10 faculty members participated.this program bringing the use of science on innovation desigh among student and faculty |
| 31 | Rethinking teacher education for innovation on 19/4/24 | calendar Activity | Quarter-III | This continuous process of gaining new knowledge, refining skills, adopting new methods are essential in enhancing the quality of teachers trained in teacher education institutions. To adapt such practices, guidance, and motivation are essential to make student teachers achieve their goals. Total participatent 46. |
| 32 | Intellectual property rights, protection & valuation 24/4/24 to 26/4/24 | calendar Activity | Quarter-III | Total 45 students & 32 faculty members participated the program.its an awearness and guideline for faculty and student on patent and ipr activities |
| 33 | Navigating the future entrepreneurship, innovation, and change managmeent | calendar Activity | Quarter-III | The purpose of change management is to implement strategies for effecting and controlling change and helping people to adapt to change. Change management activities |

| | 24/4/24 | | | range from individual.43 participate join this program |
|----|--|-------------------------|-------------|---|
| 34 | Building our common future with innovation and creativity on 26/4/24 | calendar Activity | Quarter-III | Total 42 students participated this program.this program provide scope of an innovators and its value on creativities |
| 35 | Bootstrapping your startup on 30/4/24 | calendar Activity | Quarter-III | Explore technological and business partnership with ibm. Ibm for startups is the hub to help you innovate and enhance your solution with ibm ai.44 participate join this. |
| 36 | Entrepreneurial decision-making On 20/05/2024 | Self driven activity | Quarter-III | Mr.B.Bharath kumar, Asst.Professor, ME dept, delivered a talk, 45 students attended the session. |
| 37 | Explore innovation strategies for business growth. Learn to foster creativity, develop new products 25/06/2024 | Self Driven Activity | Quarter-IV | Mr.Siva Sankar, Assistant Professor, EEE, IA Member, Delvered a talk, total 52 members participated. |
| 38 | New technologies in engineering field for startups-additive manufacturing On 02/07/2024 | Calender activity | Quarter-IV | Resource person of the session is mr.K. Sandeep, Engineer at Incredible, Additive Manufacturing. Total 53 students & 8 faculty members attended the program. |
| 39 | New innovative technologies for brightiening ideas through internet of things On 22/7/2024 | Self driven activity | Quarter-IV | The speaker of the session is Dr.subodh panda,Professor, iic coordinator,ECE dept, pragati engineering college, surampalem. Totally 52 students are attended the session. |
| 40 | Guiding framework for creating and engaging trained faculty and student iic members innovation | MIC driven activity | Quarter-IV | Mr. Sahu introduced the innovation ambassador training program under the institution innovation council (iic) umbrella,8 faculty and 52 students attended this very |

| | ambassadors (IA) in iic institutions and rewarding mechanisms for IA" on 29/07/2024 | | | informative session. |
|----|--|----------------------|------------|---|
| 41 | Entrepreneurship as a start up culture for young engineers On 30/7/2024 | Self driven activity | Quarter-IV | The speaker of the session is Dr.subodh panda,professor, iic coordinator,ece dept, pragati engineering college, surampalem. Totally 50 students are attended the session. |
| 42 | "Strengthening IIC Linkages with ATLs and SICs in Schools and the Framework for Providing Mentorship and Guidance" on 31/7/2024 | MIC Driven Activity | Quarter-IV | Mic Driven Activity program attended by Pragati Engineering College, Total 52 Students are participated. |
| 43 | Alumni talk On Unveiling the fluid mechanics potential in marine engines and ship construction on 3/7/24 | Calender activity | Quarter-IV | The guest lecture is delivered by keynote speaker Mr. Ahamed sharief shaik who is currently working as a sub lieutenant, indian merchant navy, engineers department. 100 students were participated curiously for the event |
| 44 | "Orientation cum Refreshers,Session on Institution& Innovation Council Objectives, Structure, Operation for IIC Institutions" on 5/8/2024 | MIC Driven Activity | Quarter-IV | A total of 51 students were participated for the MIC Driven event, |
| 45 | Innovation & entrepreneurship outreach program under ATAL TINKERING LAB | Calender activity | Quarter-IV | In this program, students 55 no's has participated and gained the knowledge about the entrepreneurship in day to day life. |

| | To zpp high school, gandepalli on 09/08/2024 | | | |
|----|---|-------------------------|------------|--|
| 46 | Career opportunities in mechanical engineering after graduation & entrepreneurial skill set On 08/07/2024 | Self driven activity | Quarter-IV | A total of 44 students were participated for the event, Mr. B.Bharath kumar interacted well with the students. |
| 47 | Azadi ka Amritkal on Independence Day- 15/08/2024 | Celebration Activity | Quarter-IV | Article writing was conducted on the occasion of Independence Day- 2024 |
| 48 | Iot & ai integration -enhancing startup capabilities through advanced technologies On 27/8/2024 | Calender activity | Quarter-IV | The speaker of the session is Mr.Abhisek tiwary, program director, KPMG,Lucknow. Totally 52 students are attended the session. |

A. Brief mention of key functionaries at the IIC

IIC Members:

1. Dr.G.Naresh - President

2. Shri M.Srinivas - Expert from nearby Industry,

(Managing Director, Sri Lalitha Enterprises Industries Pvt.

Ltd)

3. Mr.Sesha Sai - Member/Startup / Alumni entrepreneur

(Director, Imagtorel Technologies PVT LTD)

4. Mrs. M.Radhika Mani - Vice President

5. Dr.G.Satish - NIRF Coordinator

6. Dr.Subodh Panda - Convenor & ARIIA Coordinator

7. Mrs. A. Sri Divya - Member/Patent Expert

8. Mr.K.Chandrasekhar - Start-up activity coordinator

9. Mr. Garaga raju - IPR activity coordinator

10. Mr.K.Sivasankar - Innovation activity coordinator

11. Mr. B Bharath Kumar - Internship coordinator

12. Mrs T.Durga - Social Media Coordinator

13. Mr.V.Sai Kiran - Member

14. Mr.D.Konda Babu - Member

15. Mrs. Pericherla Sravani - Member

16. Mr. P.Ram Mohan Rao - Member

17. Mr. A.Surya Narayana Rao - Member

Student Coordinators:

1. J Sri sai Mukund, EEE - Innovation activity coordinator

2. A.Vyshnavika, EEE - Innovation activity coordinator

3. K Siva Sankari, ME - Internship coordinator

D.Ashish Vardhan, ME
 T.Durga Pavani, ECE
 Badam Navya, ECE
 K.V.V.L.S.Karthik, CSE
 Challa.Mohan Lakshmi Suryakala, CSE- Start-up activity coordinator

9. Sk.Towsiq,CSE(AI&ML) - Social Media Coordinator

10. D.Bhanu Durgesh, CSE-DS - Social Media Coordinator

11. A.Chirag - Member
12. M.Sri Reshma Lakshmi, IT - Member
13. P.Prathyusha, CE - Member
14. Y.Rakesh, CE - Member
15. B.Avinash, CSE-AI - Member

IIC Convenor Message:

Dr.Subodh Panda

To coruscate the idea of innovative thinking and competitive mindset, I feel great pleasure for various events structured in accordance with the dynamic interest of the students which offer several intellectual activities, exposure for the skills of critical thinking.

This IIC would become a more suitable platform for exchange of views on recent technologies among the students, which develop their level of confidence and personality. Undoubtedly, it will be a great benefit to the participants on enhancing and strengthening their skills in Yukti, Kavach, SIH.etc.., Hope all the participants will carry greater memories of technical fest.

B. Portfolio/graphical/Tabular representation of Resource strength (human capital and Physical capital) of the IIC institution

Total No. of IIC Members

1. Dr.G.Naresh - President

2.Shri M.Srinivas - Expert from nearby Industry,

(Managing Director, Sri Lalitha Enterprises Industries Pvt.

Ltd)

3.Mr.Sesha Sai - Member/Startup / Alumni entrepreneur

(Director, Imagtorel Technologies PVT LTD)

4.Mrs. M.Radhika Mani
5. Dr.G.Satish
Vice President
NIRF Coordinator

6. Dr.Subodh Panda - Convenor & ARIIA Coordinator

7. Mrs. A. Sri Divya8. Mr.K.ChandrasekharMember/Patent ExpertStart-up activity coordinator

9. Mr. Garaga raju - IPR activity coordinator

10. Mr.K.Sivasankar - Innovation activity coordinator

11. Mr. B Bharath Kumar
 12. Mrs T.Durga
 Internship coordinator
 Social Media Coordinator

13.Mr.V.Sai Kiran - Member
14. Mr.D.Konda Babu - Member
15. Mrs. Pericherla Sravani - Member
16. Mr. P.Ram Mohan Rao - Member
17.Mr. A.Surya Narayana Rao - Member

• Total No. of IAs

Dr.Subodh Panda - Convenor & ARIIA Coordinator

Mr.K.Chandrasekhar - Start-up activity coordinator

Mr.K.Sivasankar - Innovation activity coordinator

Mr. B Bharath Kumar - Internship coordinator

Mrs T.Durga - Social Media Coordinator

Mr.G.Satya Mohan Chowdary — Member

Mrs. PericherlaSravani - Member

• Total No. of faculty Mentors From Portal

Dr.Subodh Panda - Convenor&ARIIA Coordinator

Mr.K.Chandrasekhar - Start-up activity coordinator

Mr.Garagaraju - IPR activity coordinator

Mr.K.Sivasankar - Innovation activity coordinator

Mr. B Bharath Kumar - Internship coordinator

MrsT.Durga - Social Media Coordinator

Dr.K.Saroja Rani - Member

Mr.D.KondaBabu - Member

Mrs. PericherlaSravani - Member

• Pre-Incubation Units, If any

• Incubation Units, If any

• IP Facilitation Unit, If any

E. Highlight Achievements (Narrative/Graphical/tabular representation)

• Number and Different types of I&E and IPR activities Conducted

| S.no | Title of the Credit Course | Course Code | Type of course (Elective/Core) | Courses offering Department | Total Credit of the course | Year & Sem | |
|------|-------------------------------|-----------------|--------------------------------|-----------------------------------|----------------------------------|------------------|--|
| | | | , | | | | |
| 1 | Entrepreneurship | 20HM5T03 | Elective | CSE | 3 | III-I | |
| 2 | Entrepreneurship | 20HM5T03 | Elective | IT | 3 | III-I | |
| 3 | Entrepreneurship | 20HM5T03 | Elective | CSE (AI&ML) | 3 | III-I | |
| 4 | Entrepreneurship | urship 20HM5T03 | | CSE (AI) | 3 | III-I | |
| 5 | Entrepreneurship | 20HM5T03 | Elective | CSE (DS) | 3 | III-I | |
| 6 | Marketing Management | 20HM7T04 | Elective | CE | 3 | IV-I | |
| 7 | Marketing Management | 20HM7T04 | Elective | EEE | 3 | IV-I | |
| 8 | Marketing Management | 20HM7T04 | Elective | ME | 3 | IV-I | |

| 9 | Marketing Management | 20HM7T04 | Elective | ECE | 3 | IV-I |
|----|----------------------|----------|----------|----------|---|------|
| | | | | | | |
| 10 | Marketing Management | 20HM7T04 | Elective | CSE | 3 | IV-I |
| | | | | | | |
| 11 | Marketing Management | 20HM7T04 | Elective | IT | 3 | IV-I |
| | | | | CSE | | |
| 12 | Marketing Management | 20HM7T04 | Elective | (AI&ML) | 3 | IV-I |
| | | | | | | |
| 13 | Marketing Management | 20HM7T04 | Elective | CSE (DS) | 3 | IV-I |

• No. of student's & faculty ideas generated :247

| SIH-23-24 | 86 IDEAS GENERATED |
|---------------------------|--------------------|
| YUKTI INNOVATION | 10 |
| APSHE STUDENT INNOVATION | 25 |
| MSME 3.0 WOMEN'S HEKATHON | 19 |

- No. of student's & faculty Innovation/prototypes developed = 2
- No. of IPs generated, published and granted = 4

ECE-2, ME-2

| S.No. | Name of the Inventor(s) | Patent Number | Title of the Patent | Date of Published | Date of filing | Patent Agency |
|-------|----------------------------|-----------------------------------|---|----------------------|----------------|------------------|
| 1 | Dr. G Satish | Application No. Design 390362-001 | Banana Fiber Extractor | | 13.07.2023 | IPINDIA |
| 2 | Dr. G Satish | Application No. 202341061459 | A Vehicle Gas Flow Systems Using Alternative Fuels And Method Thereof | 06.10.2023 | 06.10.2023 | IPINDIA |

- No. of Student & Faculty Start-ups/Ventures established. =0
- Amount spent on promotion and awareness generation on Innovation Entrepreneurship in the campus
- Amount grant or fund supported to student & Faculty lead Innovations, start-ups and IPR
- No. of Technology Transfer and Commercialisation happened
- F. Highlight few best IIC Faculty/Student members and their achievements/ Rewarded for the innovations at different forum [Profile of few faculties with 2-3 line of their achievements]

IIC Faculty

Student members

| Teamleader Name | Phone number | Branch | Year | Mentornam e | Problem statement number | category | | IdeaID(che ckWebsite) | Nameofthe Nodalcentre | City | State |
|--|-----------------|--------|------|---------------------------------|--------------------------------|----------|-------|--------------------------|--|----------------|---------------------|
| Pvvskeerthan a | 9573648231 | CIVIL | 3rd | B.Indranipari mala | SG-864 | Software | 19955 | 21361 | Nationalinstit uteoftechnolo gy | Silchar | Assam |
| GaliVenkates h | 9133539219 | CSE | 3rd | M.vrajesh | RK774 | Software | 18721 | 23578 | SriEswariEng ineeringColle ge | Combitore | Tamilnadu |
| ana | 8885532345 | ECE | 4th | Dr.SubodhP anda | MA1216 | Hardware | 26389 | 24684 | Kalasaling amAcade my | Srivilliputtur | TamilNadu |
| Vetukuride vyanjalisrina galakshmi | 9390333842 | ECE | 4th | TSekhar | Dv1081 | Software | 18729 | 20567 | Kluniversity | Vijayawada | AndhraPrade sh |
| letiNav | 7386965212 | ECE | 4th | D.V.VLaks hmi | RK1113 | Software | 26320 | 23632 | Prin.L.N.We lingkarInstit uteofManage | Mumbai | Maharashtr a |
| yaSri | | | | B.kalyancha | | | | | ment Developmen Prin.L.Nweli | | |
| Bejjisaipraval lika | 9392633387 | ECE | 4th | kravarthy,M .S.V.VRame sh | RK1113 | Software | 26414 | 24053 | ngkarinstitut eofmanagem ent | | Maharashtr a |
| S.AHARON | 8367593669 | EEE | 4th | A. MOHANDU RGAKUMA R | DA1072 | Hardware | 18412 | 25249 | B. S. Abdur Rahman CrescentInst ituteofScien ce&Technol | | TamilNadu |
| S. M. MANIK YAVAL LI | 9398724268 | IT | 4th | D.KONDAB ABU | GM747 | Software | 18697 | 17038 | Shri Ramdeobaba College ofEngineerin gandManage ment, | | MAHAR ASHTR A |

G. Highlight selected best Innovations & images with mention of inventor/innovation name

1. Winners at India, International Space Hackathon 2023 at Haryana, 17-20 January 2024





- H. Highlight selected start-ups established by students/faculties with mention of founder/cofounder name
- I. List if any break through Innovations / Technology Developed at the institute (2-3 technology with 2-3 lines about technology and innovation
- J. Participation of IIC-institute in various programs of Central and Stage Govt. Highlighting specially for the schemes or programs
- ARIIA participation and Rank



• NISP Adoption status - Trained Faculty, Policy Formulation, Policy Implementation

• Smart India Hackathon etc.

1) UNDER SMART INDIA HACHATHON -23-24

Total 86 teams consisting of 415 students participated in Internal Hackathon. The above teams presented projects in problem statements mentioned in Smart India Hackathon (SIH) 2023-24.

a) Out of 86 teams, 50 teams are shortlisted in internal hackathon and nominated for SIH 2023-24.

2) APSCHE/STUDENTS INNOVATION AWARD = 25 IDEA SUBMITTED

3) UNDER YUKTI NATIONAL INNOVATION RESPOSITORY

10 IDEA AND 06 INNOVATION/PROTOTYPE student project has been submitted. One Student Idea Selected for Yukti Innovation Repository.

He presented idea at IIC REGIONAL MEET, KL University, Vijayawads on 06/01/2024.



G.VENKATESH (CSE-DS- IV Year)

4) MSME WOMEN IDEA HACKOTHAN-3.0 = 19 teams Submitted their ideas, 1 team selected

K. Detail of Social Media & Connections of IIC institute

IIC PRAGATI ENGINEERING COLLEGE -FACEBOOK PAGE

https://www.facebook.com/p/IIC-Pragati-Engineering-College-100068486282278/

IIC PRAGATI ENGINEERING COLLEGE -YOUTUBE CHANNEL

https://www.youtube.com/@iicpragatiengineeringcolle1688

L. Testimonials from IIC members and external about IIC institute and IIC of MoE's Innovation Cell

IIC-PEC in parallel guidance of MOE's / IIC & APSHE-ESIC Developing ecosystem for the following.

- 1. encourage, inspire and nurture young students by supporting them to work with new ideas and transform them into prototypes while they are informative years.
- 2. create a vibrant local innovation ecosystem.
- 3. Start-up supporting Mechanism in Pragati Engineering College.
- 4. Working for Atal Ranking of Institutions on Innovation Achievements Framework.
- 5. Establish Function Ecosystem for Scouting Ideas and Pre-incubation of Ideas.
- 6. Develop better Cognitive Ability for Technology Students.

M. Images





































