



ELECTRO VISION' 19

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Department of Electronics and Communication Engineering

SRI INDU COLLEGE OF ENGINEERING & TECHNOLOGY

HYDERABAD

VISION

To be a premier Institution in Engineering & Technology and Management with competency, values and social consciousness.

MISSION

IM1: Provide high quality academic programs, training activities and research facilities.

IM2: Promote continuous Industry-Institute interaction for employability, entrepreneurship, leadership and research aptitude among stakeholders.

IM3: Contribute to the economical and technological development of the region, state and nation.

www.sriindu.ac.in

**DEPARTMENT OF
ELECTRONICS & COMMUNICATION ENGINEERING**

DEPARTMENT VISION

To be a centre of excellence in Electronics and Communication Engineering Education and to produce professionals for ever-growing needs of society.

DEPARTMENT MISSION

DM1: To promote and facilitate student- centric learning.

DM2: To involve in activities that enable overall development of stakeholders.

DM3: To provide holistic environment with state-of-art facilities for students to develop solutions for various social needs.

DM4: Organize trainings in embedded systems with Industry interaction

PROGRAM EDUCATIONAL OBJECTIVES (PEOS)**PEO 1: Higher Degrees & Professional Employment:**

Graduates with ability to pursue career in core industries or higher studies in reputed institution.

PEO 2: Domain Knowledge:

Graduates with ability to apply professional knowledge/skills to design and develop product or process.

PEO 3: Engineering Career:

Graduates with excellence in Electronics and Communication Engineering along with effective inter-personnel skills.

PEO 4: Lifelong Learning:

Graduates equipped with skills in recent technologies and be receptive to attain professional competence through life-long learning.

PROGRAM SPECIFIC OUTCOMES (PSOs)**PSO 1: Basic Electronic and communications knowledge:**

Apply basic knowledge related to electronic circuits, VLSI, communication systems, signal processing and embedded systems to solve engineering/societal problems.

PSO 2: Design Methods:

Design, verify and authenticate electronic functional elements for different applications, with skills to interpret and communicate results.

PSO 3: Experimentation & Communications:

Engineering and management concepts are used to analyze specifications and prototype electronic experiments/projects either independently or in teams.

POS	PROGRAM OUTCOMES STATEMENTS
PO1	Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO2	Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3	Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
PO4	Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO5	Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
PO6	The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
PO7	Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8	Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO9	Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO10	Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PO11	Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO12	Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

STUDENT ACHIEVEMENT

PLACEMENT ACTIVITIES

S. No.	Student Name	Student ID	Employer	Date of offer / Appointment
1	CHETELLI SPANDANA	14D41A0439	IBM India Pvt. Ltd	22-02-2019
2	CHILUVERU SAI RAM	14D41A0442	NebuLogic	01-02-2019
3	E BHARATH SIMHA REDDY	14D41A0451	NebuLogic	01-02-2019
4	BANALA SANDHYA	14D41A0456	NebuLogic	01-02-2019
5	H PRADEEP KUMAR REDDY	14D41A0480	NebuLogic	01-02-2019
	J SRIKANTH	14D41A0481	IBM India Pvt. Ltd	22-02-2019
7	L AJAY KUMAR	14D41A04A8	NebuLogic	01-02-2019
8	KAPARLA SUSMITHA	14D41A04A9	IBM India Pvt. Ltd	22-02-2019
9	K PRAVEEN KUMAR REDDY	14D41A04B2	NebuLogic	01-02-2019
10	M RAGHAVENDAR REDDY	14D41A04B8	IBM India Pvt. Ltd	22-02-2019
11	M BHARGAVI REDDY	14D41A04C0	NebuLogic	01-02-2019
12	N NARENDRA KUMAR	14D41A04E2	NebuLogic	01-02-2019
13	N PALLAVI	14D41A04E4	IBM India Pvt. Ltd	22-02-2019
14	P SRIMANTHKUMAR	14D41A04F4	NebuLogic	01-02-2019
15	PETERI SNEHA	14D41A04F8	IBM India Pvt. Ltd	22-02-2019

STUDENTS ACHIEVEMENTS IN NPTEL NOC COURSES

S. no	Course Name	Student Name	Final Score	Certificate Type
1	Embedded System Design with ARM	P SRI SHANTAN	80	Elite+Silver
2	Modern Digital Communication Techniques	NAVYA SRI GARLAPATI	73	Elite
3	Modern Digital Communication Techniques	MUNIGADUPA MOUNIKA	72	Elite
4	Modern Digital Communication Techniques	NAGULA JAYAPAL REDDY	70	Elite
5	Modern Digital Communication Techniques	RANGA SAI PAVAN	70	Elite
6	Modern Digital Communication Techniques	PADAMPALLE KAPIL	67	Elite
7	Modern Digital Communication Techniques	THANTHENAPALLY RAMYA SREE	64	Elite
8	Embedded Systems Design	SAKIRAN ELLURI	64	Elite
9	Modern Digital Communication Techniques	REPAKA NANDINI	63	Elite
10	Modern Digital Communication Techniques	MANNE.NIKHITHA	62	Elite
11	Modern Digital Communication Techniques	SAMA.PRAGATHI	62	Elite
12	Modern Digital Communication Techniques	R SRAVYA GEETHIKA	62	Elite
13	Modern Digital Communication Techniques	TAVADABOINA PAVAN KUMAR	61	Elite
14	Modern Digital Communication Techniques	PALLE.SHIVANI	60	Elite
15	Modern Digital Communication Techniques	MIRYALA SHIRISHA	60	Elite
16	Modern Digital Communication Techniques	MEDA MADHURITHA	60	Elite
17	Modern Digital Communication Techniques	P.VARUN RAJ	58	Successfully completed
18	Electromagnetic Waves in Guided and Wireless Media	B.NIKHIL KUMAR	58	Successfully completed
19	Modern Digital Communication Techniques	MANNEM ASHA JYOTHI	57	Successfully completed
20	Modern Digital Communication Techniques	PRODUTURI ANIRUDH SAI	57	Successfully completed
21	Modern Digital Communication Techniques	SATULURI VENKATA NAGA SAI BHAVANA	57	Successfully completed
22	Modern Digital Communication Techniques	T MANIDEEP	57	Successfully completed
23	Electromagnetic Waves in Guided and Wireless Media	A.TEJASWINI	57	Successfully completed
24	Modern Digital Communication Techniques	DUDALA SAI BABA	56	Successfully completed
25	Modern Digital Communication Techniques	PERVALA VASUNDHARA	55	Successfully completed
26	Modern Digital Communication Techniques	POOJA ERUKULLA	55	Successfully completed
27	Electromagnetic Waves in Guided and Wireless Media	DEPA SAHITHI	55	Successfully completed
28	Modern Digital Communication Techniques	SAMALA MAHAVEER REDDY	54	Successfully completed
29	Modern Digital Communication	THUMPALLY PAVANI REDDY	54	Successfully

	Techniques			completed
30	Modern Digital Communication Techniques	MEGAVATH SANTOSHA	54	Successfully completed
31	Modern Digital Communication Techniques	AKULA PARAMESHWAR RAO	54	Successfully completed
32	Modern Digital Communication Techniques	VARAKALA SHRAVAN KUMAR	54	Successfully completed
33	Modern Digital Communication Techniques	MANSUNI RAMYA	53	Successfully completed
34	Modern Digital Communication Techniques	N.GNANESHWARI	53	Successfully completed
35	Modern Digital Communication Techniques	PASUPIULETI GOPI	53	Successfully completed
36	Modern Digital Communication Techniques	SHAIK RAMEEZ	53	Successfully completed
37	Modern Digital Communication Techniques	ANTHARAM SRIVANI	53	Successfully completed
38	Modern Digital Communication Techniques	VAISHNAVI SAMA	52	Successfully completed
39	Electromagnetic Waves in Guided and Wireless Media	MOUNIKADACHEPALLY	52	Successfully completed
40	Electromagnetic Waves in Guided and Wireless Media	LASYA REDDY	52	Successfully completed
41	Electromagnetic Waves in Guided and Wireless Media	K.POOJITHA	52	Successfully completed
42	Modern Digital Communication Techniques	N.GAYATRI PAMAR	51	Successfully completed
43	Modern Digital Communication Techniques	PUJARI AKSHAY	51	Successfully completed
44	Modern Digital Communication Techniques	S RAMESH	51	Successfully completed
45	Modern Digital Communication Techniques	SANNAILA VIJETHA	51	Successfully completed
46	Modern Digital Communication Techniques	SANGA KARTHIK	51	Successfully completed
47	Principles of Signals and Systems	RAKESH REDDY GANJI	51	Successfully completed
48	Electromagnetic Waves in Guided and Wireless Media	BANDAMIDI SAI TEJA	51	Successfully completed
49	Electromagnetic Waves in Guided and Wireless Media	ANURAG DULLUR	51	Successfully completed
50	Modern Digital Communication Techniques	P.SANDHYA RANI	50	Successfully completed
51	Modern Digital Communication Techniques	NALLOLA SRINATH	50	Successfully completed
52	Modern Digital Communication Techniques	KATRAVATH MANYA	50	Successfully completed
53	Electromagnetic Waves in Guided and Wireless Media	JATAVATH SUBHASH NAIK	49	Successfully completed
54	Electromagnetic Waves in Guided and Wireless Media	BETHAPUDI RAGHU VARMA	49	Successfully completed
55	Modern Digital Communication Techniques	SIRISHA MEKALA	48	Successfully completed
56	Modern Digital Communication Techniques	MUHAMMAD ZEESHAN HADI	48	Successfully completed
57	Modern Digital Communication Techniques	CHAVVA HARI CHANDANA	48	Successfully completed
58	Modern Digital Communication Techniques	VISLAVATH BHANINDAR	48	Successfully completed
59	Evolution of Air Interface towards 5G	BOYA AKHIL KUMAR	48	Successfully completed

60	Modern Digital Communication Techniques	MOHD ILIYAS AHMED	47	Successfully completed
61	Electromagnetic Waves in Guided and Wireless Media	DANDA KALYAN KUMAR REDDY	47	Successfully completed
62	Principles of Signals and Systems	P G VINOD	46	Successfully completed
63	Electromagnetic Waves in Guided and Wireless Media	GANAPURAM JYOTHIKA	46	Successfully completed
64	Modern Digital Communication Techniques	MANIKANTA PATWARI	45	Successfully completed
65	Modern Digital Communication Techniques	MOHEMMED SIRAJ	45	Successfully completed
66	Modern Digital Communication Techniques	MARIKANTI HARIMOHAN REDDY	44	Successfully completed
67	Electromagnetic Waves in Guided and Wireless Media	K V SAI GOPAL	44	Successfully completed
68	Electromagnetic Waves in Guided and Wireless Media	KORTIKANTI SANKETH	44	Successfully completed
69	Electromagnetic Waves in Guided and Wireless Media	KALAVAKURI .MAHESH BABU	44	Successfully completed
70	Modern Digital Communication Techniques	ROKKAM SAIPRIYA	43	Successfully completed
71	Modern Digital Communication Techniques	MANURI SAIRAM	43	Successfully completed
72	Modern Digital Communication Techniques	VEMULA MANOGNA	43	Successfully completed
73	Modern Digital Communication Techniques	TINGIRKAR SAIPRIYA	43	Successfully completed
74	Electromagnetic Waves in Guided and Wireless Media	B.PAVAN KUMAR	43	Successfully completed
75	Electromagnetic Waves in Guided and Wireless Media	GADDAM AKHILESH	43	Successfully completed
76	Electromagnetic Waves in Guided and Wireless Media	K.MANUSHA	43	Successfully completed
77	Modern Digital Communication Techniques	SHALINI KUMARI OJHA	42	Successfully completed
78	Embedded Systems Design Verification and Test	SAIKIRAN ELLURI	42	Successfully Completed
79	Modern Digital Communication Techniques	MD.SHAREEF	40	Successfully completed
80	Modern Digital Communication Techniques	MARVATHU ROHITH	40	Successfully completed
81	Modern Digital Communication Techniques	NETHI SRAVYA	40	Successfully completed
82	Electromagnetic Waves in Guided and Wireless Media	KALAKONDA SRAVAN	40	Successfully completed

FACULTY ACHIEVEMENTS

The lists of following faculty members were participated in NPTEL NOC MOOC courses and achieved various categories.

S.no	Course Name	Faculty Name	Score	Certificate Type
1	Introduction to Internet of Things	DEEPIKA RATHOD BHUKYA	100	Elite+gold
2	Introduction to Internet of Things	G.SURESH	95	Elite+gold
3	Introduction to Internet of Things	S.MATIN	91	Elite+gold
3	Evolution of Air Interface towards 5G	LAVANYA NALLA	87	Elite+Silver
4	Evolution of Air Interface towards 5G	K MAHESHWARI DEVI	85	Elite+Silver
5	Modern Digital Communication Techniques	LAVANYA NALLA	84	Elite+Silver
6	Modern Digital Communication Techniques	PRATHYUSHA V	80	Elite+Silver
7	Evolution of Air Interface towards 5G	PRATHYUSHA V	77	Elite+Silver
8	Modern Digital Communication Techniques	SRAVANTHI G	76	Elite+Silver
9	Modern Digital Communication Techniques	K MAHESHWARI DEVI	73	Elite
10	Modern Digital Communication Techniques	KOTRA RAGHU RAJITHA	72	Elite
11	CMOS Digital VLSI Design	SOMISETTI ASHALATHA	71	Elite
12	Introduction to Internet of Things	SANDHYA BOLLA	70	Elite
13	Fuzzy Logic and Neural Networks	N C SENDHILKUMAR	68	Elite
14	Fuzzy Logic and Neural Networks	G.SURESH	67	Elite
15	Embedded System Design with ARM	G.SURESH	67	Elite
16	Modern Digital Communication Techniques	DEEPIKA RATHOD BHUKYA	66	Elite
17	Modern Digital Communication Techniques	KANUGU RAM MOHAN RAO	64	Elite
18	Evolution of Air Interface towards 5G	PASULA MAMATHA	61	Elite
19	Evolution of Air Interface towards 5G	SARADA.R	61	Elite
20	CMOS Digital VLSI Design	UDAYASRI PABBU	61	Elite
21	CMOS Digital VLSI Design	B.HEMAVATHI	61	Elite
22	CMOS Digital VLSI Design	THUMMALA NAGAVENI	61	Elite
23	Introduction to Soft Computing	G.SURESH	59	Successfully completed
24	Evolution of Air Interface towards 5G	KOTRA RAGHU RAJITHA	57	Successfully completed
25	CMOS Digital VLSI Design	D SANDHYA RANI	56	Successfully completed
26	CMOS Digital VLSI Design	PAYYAVULA SWATHI	55	Successfully completed
27	CMOS Digital VLSI Design	BOMMALA.NEERAJ	55	Successfully

		A		completed
28	Electromagnetic Waves in Guided and Wireless Media	GONUGUNTA RAJ KUMAR	54	Successfully completed
29	CMOS Digital VLSI Design	K SRAVANI	54	Successfully completed
30	Fuzzy Logic and Neural Networks	MUKUNTHAN	54	Successfully completed
31	Antennas	NARSIMULU SRIBACCHA	52	Successfully completed
32	Introduction to Coding Theory	PRATHYUSHA V	51	Successfully completed
33	Modern Digital Communication Techniques	A.VENU	50	Successfully completed
34	CMOS Digital VLSI Design	PARUSHA RAMU EASARI	49	Successfully completed
35	CMOS Digital VLSI Design	PASULA MAMATHA	48	Successfully completed
36	Introduction to Coding Theory	KANUGU RAM MOHAN RAO	48	Successfully completed
37	Principles of Signal Estimation for MIMO/OFDM Wireless Communication	KANUGU RAM MOHAN RAO	47	Successfully completed
38	Introduction to Wireless and Cellular Communications	Martin Sahayaraj	46	Successfully completed
39	Evolution of Air Interface towards 5G	SRINIVAS BHUKYA	44	Successfully completed
40	Electromagnetic Waves in Guided and Wireless Media	NARSIMULU SRIBACCHA	44	Successfully completed

PHOTO GALLERY









Loon's Balloons Deliver Emergency Internet Service to Peru Following 8.0 Earthquake



When a magnitude 8.0 earthquake struck Peru on Sunday, it wreaked havoc on the country's communications infrastructure. Within 48 hours, though, people in affected regions could use their mobile phones again. Loon, the Alphabet company, was there delivering wireless service by balloon. Such a rapid response was possible because Loon happened to be in the country, testing its equipment while working out a deal with provider Telefonica. Both terrestrial infrastructure and the balloons themselves were

already in place, and Loon simply had to reorganize its balloons to deliver service on short notice. The last time Loon delivered emergency mobile service was in Puerto Rico, after Hurricane Maria devastated the island, killing nearly 3,000 people. In that case, it took the company four weeks from the day the storm hit to begin providing mobile data for the island. That was partly because the company had to launch the balloons from its facility in Winnemucca, Nevada and fly them over. But it was also because Loon wasn't integrated into Puerto Rico's existing network infrastructure before Maria hit.

While testing in various countries, Loon has used its facility in Winnemucca, and now one in Puerto Rico as well, to launch its balloons, rather than launching them on-site in the places it intends to serve. Loon's balloons (which is as satisfying an exclamation as "Gadzooks!") can rise and drop to opportunistically catch winds in the direction the company wants them to travel. The balloons currently providing service in northern Peru navigated from the company's Puerto Rico site. Northern Peru was hit hardest by the

earthquake, which has killed at least two people.

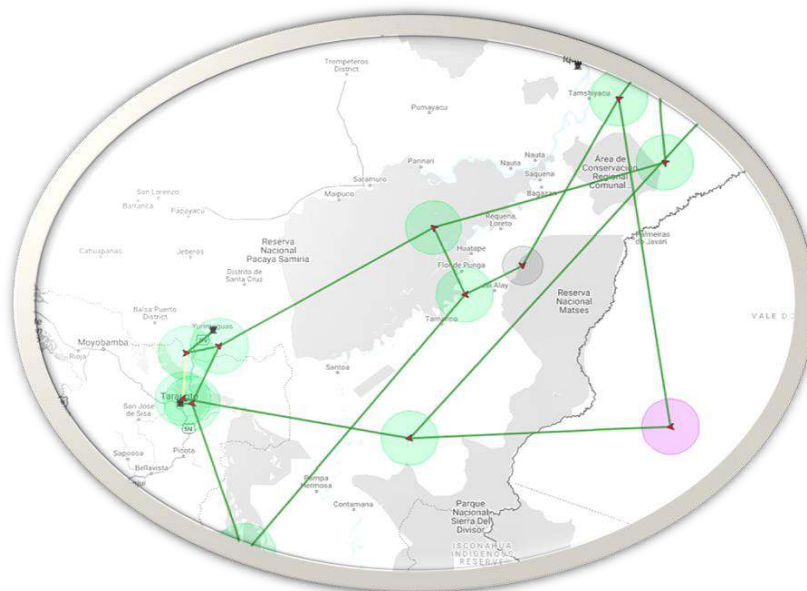


Image: Loon's balloons are spread across northern Peru to provide LTE coverage in populated areas. Each balloon covers 5,000 square kilometers and communicates wirelessly with nearby balloons to create a backhaul to the

closest ground infrastructure.

A representative from Loon clarified that the regions receiving emergency service include some areas covered by the company's ongoing tests, as well as areas that were

outside of that zone. In the latter case, Loon is doing something new—it's sending signals from on-the-ground infrastructure to one balloon, and then hopping those signals from balloon to balloon, to carry service all the way out to the afflicted areas. The company previously demonstrated its ability to chain signals across seven balloons, but is now routinely linking 10 balloons at a time in Peru.

After Maria, Loon provided mobile data, but not voice. The company is following the same plan in Peru, and is now offering LTE service. The balloons are transmitting using band 28, or 700 megahertz, and Loon is using the E-band (75 to 85 gigahertz) for backhaul. Approximately 20,000 people used the balloons' service in the first 48 hours. Each balloon covers about 5,000 square kilometers. Loon hadn't intended to make its commercial service plans with Telefonica public yet, but the earthquake changed that schedule. If the deal works out, Telefonica won't be the first wireless provider to work with Loon—that distinction will go to Telkom Kenya later this year. "Response is actually an imprecise way to view our unique capabilities. Preparedness is a more accurate way to understand them," wrote Loon CEO Alastair Westgarth in a blog post. The company's efforts in Peru have made it clear that Loon's networks are flexible enough to respond quickly in the wake of a natural disaster, but that its success still largely depends on laying the groundwork for such a response ahead of time. And, while it certainly helps to already have balloons in the region, it's just as critical to have the regulatory approvals and infrastructure agreements in place.

EDITORIAL TEAM

Chief Editor

Dr.N.C.SENDHIL KUMAR

Dr.P.MUKUNTHAN

Associate Editors

Mr.ABDUL KHAJA PASHA

Mr.E.PARUSHA RAMU

CONTACT:

Sri Indu College Of Engineering & Technology
Sheriguda (Village), Ibrahimpatanam,
RR Dist.- 501 510,
Telangana, India
+91 - 08414 – 202085
+91 - 9347353999 (AO)
induprincipal@gmail.com

