DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

INTRODUCTION


The Department has been accredited by NBA first from 2006 to 2009 which was then renewed from 2009 to 2012.

The Department motivates students to take up innovative projects through participation in an active in-house product development Lab. Industry interaction is being promoted through several projects.

Doctorates in ECE

<table>
<thead>
<tr>
<th>S.No</th>
<th>Name of the Faculty</th>
<th>Degree Awarded</th>
<th>No. of Publications(journals/conferences)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dr.T.C.Sarma</td>
<td>2007</td>
<td>57</td>
</tr>
<tr>
<td>2</td>
<td>Dr.G. Mamatha</td>
<td>2013</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>Dr. V Ayyem Pillai</td>
<td>2014</td>
<td>04</td>
</tr>
<tr>
<td>4</td>
<td>Dr.Ch. Usha Kumari</td>
<td>2015</td>
<td>17</td>
</tr>
</tbody>
</table>

Research Projects/FDP’s/Seminar Grants/Sanctioned

<table>
<thead>
<tr>
<th>S.No</th>
<th>Name of the Faculty</th>
<th>Title</th>
<th>Name of the Funding Agency</th>
<th>Amount in Lakhs</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dr. T.C.Sarma</td>
<td>MODROBS</td>
<td>AICTE</td>
<td>18</td>
<td>2013</td>
</tr>
</tbody>
</table>
## Resource Mobilization for Research (TEQIP-II)

<table>
<thead>
<tr>
<th>S.No</th>
<th>Name of the Faculty</th>
<th>Title</th>
<th>Name of the Funding Agency</th>
<th>Amount</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>A.Radhanand</td>
<td>Embedded System through Arduino</td>
<td>TEQIP-II</td>
<td>17,875</td>
<td>2013</td>
</tr>
</tbody>
</table>
Faculty and their publications:

Dr. T. C. Sarma, HOD & Professor of ECE (ID-986)

Qualifications: B.E(ECE)1973, Andhra University, Ph.D (BITS, PILANI-2007)

Experience: 11 (Teaching) 37 (Industry)

Research Interest: Reconfigurable Systems, Embedded Systems, Intelligent Systems

Journal Publications/ Conference Proceedings: 58

Journal Publications:

International Publications


5. T.C.Sarma and Anil Kumar, Data Reception Systems for IRS-1C, Published in current science journal special issue on IRS-1C, Vol.70, No – 7, dated April 10, 1996 , Indian Academy of Sciences , pp. 534- 542.

Conferences Proceedings:

International Proceedings


3. This was further published in the Asian Pacific Remote Sensing Journal by Regional Remote Sensing Programme (RRSP) under ESCAP/ UNDP, July 1990.


10.1109/TENCON.2006.344212.


8. T.C.Sarma, C.Ashok Kumar and M.Suryanarayana, Data Path Controller for Switching High Speed Data” for the International Conference on Instrumentation (INCON-2004), by ISOI and Department of Instrumentation and Control, Pune Institute of Engineering and Technology, December 19-21, 2004 PUNE, India.


13. T.C.Sarma and C.V.Srinivas “Design and development of elevation independent tracking system for the remote sensing satellite data acquisition”, International Conference on Signal Processing, Communications and Networking (ICSCN 2007), by Dept. of


20. T.C.Sarma, Modelling and development of systems for the automated validation of
antenna pointing accuracies for data reception from remote sensing satellites, for the IEEE International Conference on Industrial Technology (IEEE ICIT2008), April 21-24, 2008, Sichuan University, Chengdu, China.


**National Proceedings**


17. T.C.Sarma “Technological Evolutions for the Next Generation Networking Systems”, National Seminar on Role of Telecommunications for Betterment of Society, by the Institute of Engineers (India), AP State Center, Hyderabad, July 15-16, 2006, pp. 1.43-1.49.


27. T.C. Sarma, An automated approach for the information management for its life cycle in IT industry and its applications to remote sensing satellite data, for an all India seminar on “Role of IT in infrastructure development” conducted by The Institute of Engineers (India) at Andhra Pradesh Center, Hyderabad, Feb 23-24, 2008.


Dr. G. Mamatha Professor (ID-1301)

Qualifications: BE from Mysore University(1991), MS from BITS Pilani(1995), Ph.D (Full time) from IIIT Hyderabad(2013)

Experience: 18 years(Teaching), 6 years(Research)

Research Interest: VLSI, Signal Processing

Journal Publications/ Conference Proceedings: 10

Journal Publications

International Journals:


4. Mamatha Samson Stable and Low Power 6T SRAM International Journal of Computer Applications VOL 78 NO 2 September 2013 pp 6 -10


Conference Proceedings

International Conferences:


Dr. V Ayyem Pillai, Professor of ECE (ID-1294)

Qualifications: AMIE(Electronics & Communication Engineering) 1998, Institution of Engineers, India, ME(Industrial Electronics), Maharaja Sayajirao University of Baroda, Ph.D ( Anna University)

Experience: 12 Years (Teaching) 15 years (Industry-Indian Air Force)

Research Interest: Antennas, Smart antennas, MIMO, Signal Processing

Journal Publications/ Conference Proceedings: 5

Journal Publications:

International Publications


1687-5869, Thomson Reuters JCR impact factor 0.827) 3. Ayyem Pillai, V & Sudhakar, R ‘Computationally efficient norm-based capacity-maximizing MIMO antenna selection algorithms’, Springer, National Academy Science Letters- Published online DOI: 10.1007/s40009-014-0255-2 (ISSN 0250-541X, Thomson Reuters JCR impact factor 0.240).

2. 4. Ayyem Pillai, V, “Decoupled Transmit/Receive Incremental Successive MIMO Antenna Selection for Capacity Maximisation” Journal of Theoretical and Applied Information Technology(E-ISSN 1817-3195 / ISSN 1992-8645) accepted for publication. (Scopus Index)

Conference Proceedings

International Conference

1. Ayyem Pillai, V & Sudhakar, R 2013, ‘V-BLAST detectors: Performance investigation in correlated condition and time analysis’, Proceedings - 2013 IEEE International Multi Conference on Automation, Computing, Control, Communication and Compressed Sensing, iMac4s, pp. 98-103, DOI: http://dx.doi.org/10.1109/iMac4s.2013.6526390

Dr. Usha Kumari Chintalapati, (ID-1361)


Experience: 11 years

Research Interest: Wireless Communications

Journal Publications/Conference Proceedings: 18

Journal Publications:

International Publications:


International Conference Proceedings:


National Conference Proceedings:


6. “Investigation of Capacity parameters for a 3G WCDMA Cellular Network” in national


V. Aravind, Professor (ID-120)

Qualifications: Pursuing Ph.D

B.E. (ECE) (Thapar Institute of Engg & Technology, Patiala, 1988),
M.S. (EE) Northern Illinois University, IL, USA, 2000)

Experience: 12 (Teaching) 14 (Industry)

Research Interest: Signal Processing, Image Processing, Multimedia, Embedded systems, Radio Frequencies

Journal Publications/ Conference Proceedings: 1

Journal Publications:
International Publications
1. Hand-held Unit for Imaging ISSN: 2249-8958 International Journal of Engineering & Advanced technology

T. Jagannadha Swamy, Assoc. Professor (ID-422)

Qualifications: Pursuing Ph.D

B.Tech (ECE) (Nagarjuna University, 2001), M.E. (ECE) (Osmania University, 2006)

Experience: 14 years

Research Interest: Digital Signal Processing, Wireless Embedded
Chapters in Textbooks:

1. **March 2016**: Mr. T. Jagannadha Swamy, Associate professor contributed as an author for a book chapter with the following details:


Journal Publications:

International Publications:


Conference Proceedings:

International Proceedings:


2. Spectrum sensing: Approximations for Eigen value ratio based detection ICCCI 2012 DOI: 10.1109/ICCCI.2012.6158914


4. Adaptive Digital Beam forming for Radar antennas National Congress on CCAES

National Proceedings
   ICMID 2010


**M. Kiran, Assoc. Professor** (ID-403)

**Qualifications:** B.Tech (ECE) (Acharya Nagarjuna University, 2001),
M.Tech (C&C) (JNTU-K, 2007)

**Experience:** 12 yrs

**Research Interest:** Computers and Communications, Wireless communication

**Journal Publications/ Conference Proceedings:** 2

**Conference Proceedings: International Proceedings**
1. M. Naveen Kumar, M.Kiran “Design and Implementation od DDR3 controller with AXI compliency” IJAR in computer and communication Engineering Vol.4, Issue 8, August 2015

**Y.Sudarsana Reddy Associate Professor** (ID-126)

**Qualifications:** Pursuing Ph.D

B.E. (ECE) (MysoreUniversity,1993), M.Tech(DSCE)(JNTUA,2005)
,M. Tech(DSCE)(JNTUH,2011)

**Experience:** 19(Teaching)

**Research Interest:** Optical, Embedded systems

**Journal Publications/ Conference Proceedings:** 2

**Journal Publications:**

**International Publications**
1. Y.Sudarsana Reddy, K_ Multiprocessor Group(KMG) Optimal Scheduling Algorithm for Reducing Preemptions and Migrations in RTS
2. RTS Optimal Scheduling Algorithm-SBF9 for reducing of Preemptions and Migrations in Multiprocessor.
K. Padmavathi Associate Professor (ID-614)

**Qualifications:** BE from Andhra University (2000), M.Tech from JNTUA (2005)

**Experience:** 14 years

**Research Interest:** Signal Processing

**Journal Publications/ Conference Proceedings:** 17

**Journal Publications:**

**International Publications:**


Autoregressive modeling” International Journal of Electrical and Computer Engineering (IJECE),” vol. 5, no.1, pp. 64-70, Feb 2015. (Scopus indexed)


Conference Proceedings
International Proceedings


K.N.B. Kumar, Assoc. Professor (ID-676)

Qualifications: Pursuing Ph.D


Experience: 7(Teaching) 20(Industry)

Research Interest: Reconfigurable Systems, Wireless Communications, Embedded System Design
Journal Publications/ Conference Proceedings: 2

Conference Proceedings:

International Proceedings

1. Bandwidth Efficient Remote Data Acquisition for Internet ICMID 2010

National Proceedings

1. A systems approach to driver assistance systems in Low visibility conditions ASR-NSC 2009

A. Radhanand, Assoc. Professor (ID-677)

Qualifications: Pursuing Ph.D


Experience: 7(Teaching) 20(Industry)

Research Interest: Microcontrollers, Sensors, Image Processing, Digital Signal Processing

Journal Publications/ Conference Proceedings: 2

Conference Proceedings:

International Proceedings:
1. ICMID 2010, The case for Reconfigurable Hardware as a platform for Mobile Internet Devices (MIDS)

National Proceedings
1. A systems approach to driver assistance systems in Low visibility conditions ASR-NSC 2009
N. Swetha, Assoc. Professor  (ID-479)

Qualifications: Pursuing Ph.D


Experience: 12 yrs

Research Interest: Embedded Systems


Journal publications:

International publications


Conference Proceedings:

International Proceedings


2. Acoustic Emission Sensing Using Zigbee and Mobile Internet Devices(Mids) for Identifying Structural Damages  ICMID 2010
G.V.Subba Reddy  Assoc. Professor  (ID-579)


Experience:  13 yrs

Research Interest:  VLSI, Signal Image & Video Processing.

Journal Publications/ Conference Proceedings:3

Journal publications:

International publications


Conference Proceeding:

International Conferences

1. G.V. Subba Reddy , CH Usha Kumari “Estimation of Path loss in Received Signal order lognormal shadowing in 4G systems” IEEE Sponsored 3rd International Conference on innovations in information, Embedded and communication Systems held on 17th, 18th March 2016.


National Conference:

K. Jamal, Assoc. Professor (Id: 656)

Qualifications: Pursuing Ph.D (GITAM University), M.Tech (ECE) (Bharath University, 2005), B.Tech (ECE) (JNTU, 2003)

Experience: Teaching: 8.3 yrs Industry: 3 yrs

Research Interest: VLSI

Journal Publications/ Conference Proceedings: 8

International publications


Conference Proceedings:

1. K.Jamal, Dr.P.Sri hari “Test Vector Generation using Genetic Algorithm for Fault Tolerant Systems” 2nd International Conference on Human Computer Interactions (ICHCI-2016), Saveetha School of Engineering, Saveetha University, Chennai, TN.


National Proceedings:
1. K.Jamal, IBK Raju “Optimized Implementation of RNS Arithmetic Based on FPGAs”- National Conference on Signals and Image Processing (NCSIP-2012)
2. K.Jamal “Implementations of low power multiplier in Digital FIR filter” -National Conference on Computing Communication and Instrumentation (NCCCI'12) at GITAM University, Hyderabad

D.L. Chaitanya, Assoc. Professor (ID-461)

Qualifications: Pursuing Ph.D
B.Tech (ECE) (SKUniversity, 2005), M. Tech (ECE) (JNTUH University, 2010)

Experience: 10 yrs

Research Interest: VLSI


Journal publications:
International publications

National publications

Conference Proceedings:
International Proceedings
2. D.L.Chaitanya, “Robust Centralized spectrum sensing in Cognitive Radio Networks” for LAMSYS 2016 June 2016 conducted by SDSC, SHAR, ISRO.
G. Surekha, Associate Professor

**Qualifications:** Pursuing Ph.D


**Experience:** 13 yrs

**Research Interest:** VLSI & Communications

**Journal Publications/ Conference Proceedings:** 2

**International Journals:**


**Conference Proceedings**


K. Swaraja Asst. Professor (ID-1241)

**Qualifications:** Pursuing Ph.D

B.Tech (ECE) (JNTUA,2001), M.Tech (ECE) (JNTUH,2006),

**Experience:** 15 yrs Teaching

**Research Interest:** Image and Video processing, Communications

**Journal Publications/ Conference Proceedings:** 9

**Journal publications:**

**International publications**


Conference Proceedings:

National Proceedings


International Proceedings:


M.O.V. Pavan Kumar, Assistant Professor (ID-605)

Qualifications: M.Sc. (Electronics) (Acharya Nagarjuna University, 2003), M.Tech (ECE) (Satyabhama University, 2007)

Experience: 9 yrs

Research Interest: VLSI, Digital System Design, Digital IC Design

Journal Publications/ Conference Proceedings: 5

Journal publications:

International publications


Conference Proceedings:

International Proceedings


K.N.V. Khasim, Assistant Professor (ID-646)


Experience: 6 yrs
Research Interest: Communication Systems, Embedded Systems

Journal Publications/ Conference Proceedings: 8

Journal publications:
International publications

Conference Proceedings:
International Proceedings
1. Enhanced Image Transmission using Turbo Codes And 16QAM with Iterative De-
2. Noising Algorithm(Joint International Conference on Swarm, Evolutionary & Memetic Computing (SEMCCO) and Fuzzy & Neural Computing Conference (FANCCO) - 2011)
3. Impulse Noise Detection and Filtering Based on Adaptive Weighted Median Filter(ACNCN-2012)
4. Pavement image Analysis Using Radon Transform(ACNCN-2012)

K. Nagaja, Assistant Professor (Id: 871)

Qualifications: M .Tech (ESD) ( Bharat University, 2011) , B.E (ECE) (Periyar University, Tamil Nadu, 2003)

Experience: 11 yrs

Research Interest: Embedded Systems, Digital Electronics

Journal Publications/ Conference Proceedings: 1

Journal publications:
International publications

N. Madhusudhana Rao, Assistant Professor (Id: 556)


Experience: Teaching : 9.6 yrs Industry : 1 yr
**Research Interest:** Communication Systems, Electronics

**Journal Publications/ Conference Proceedings:** 2

**Journal publications:**

**International publications**


**V. HimaBindu, Assistant Professor**

**Qualifications:** Pursuing Ph.D (GITAM University), M.E (TC) (RMIT University, Australia, 2005), B. Tech (ECE) (JNTU, 2002)

**Experience:** Teaching : 9.8 yrs Industry : 2 yrs

**Research Interest:** Wireless Communication

**Journal Publications/ Conference Proceedings:** 5

**Journal publications:**

**International publications**


**Conference Proceedings:**


2. HimaBindu Valiveti, “D2D Handoff Mechanism based on SDN principles” for LAMSYS 2016 June 2016 conducted by SDSC, SHAR, ISRO.
A. UshaSree, Assistant Professor


Experience: 9 yrs

Research Interest: Communications, Embedded Systems.

Journal Publications/ Conference Proceedings: 1

Journal Publications:

International Publications:

Ch. PratyushaChowdari, Assistant Professor (Id: 937)


Experience: 6 yrs

Research Interest: VLSI & DSP

Journal Publications/ Conference Proceedings: 1

Conference Proceedings:

Y.Priyanka, Assistant Professor (ID-1100)


Experience: Teaching: 5 yrs Industrial: 2 yrs

Research Interest: Embedded Systems, Networking, Communications


Conference Proceedings:
A. Ambika, Assistant Professor (ID-1103)

Experience: 6 yrs
Research Interest: VLSI, Communications, Biomedical

Journal Publications:
International Publications:
1. Matlab simulation for diversity and performance enhancement of OSTBC-CDMA system using channel coding techniques over multichannel.-Recent Science-2012

Conference Proceedings:

B. Shilpa, Assistant Professor (ID:1097)
Experience: 9 years
Research Interest: RF
Journal Publications/ Conference Proceedings: 1

Journal publications:

International publications

V. Jyothi Sri, Assistant Professor (ID:1224)
Experience: 3 years
Research Interest: Communications, Image Processing
Journal Publications/ Conference Proceedings: 1

Journal publications:
International publications


B. Navya, Assistant Professor, (Id:1086)


Experience: 5.6 yrs

Research Interest: Communication

Journal Publications/ Conference Proceedings: 1

Journal publications:

International publications


Swathi Karumuri, Assistant Professor (ID:1285)


Experience: 4 years

Research Interest: VLSI

Journal Publications/ Conference Proceedings: 1

Conference Proceedings:

M. Navya, Assistant Professor (ID:1298)
Experience: 4 years
Research Interest: Embedded Systems
Journal Publications/Conference Proceedings: 1

Journal Publications:
International publications

G. Pradeep Reddy, Asst. Professor (ID-1332)
Experience: 8 (Teaching), 1 (Research)
Research Interest: Ultra Wide Band Communications

Journal Publications/Conference Proceedings: 4

Journal Publications:
International publications

Conferences Proceedings:
International Proceedings
2. G. Pradeep Reddy, Gerardine Immaculate Mary et al.,”UWB Indoor Channel profile identification with orthogonal hermite pulses” was presented in 3rd IEEE International Conference on Computer Science and Information Technology, 2010.(978-1-4244-5539-3)
K. Sravani, Assistant Professor (Id:1306)
Experience: 1.4 years
Research Interest: VLSI
Journal Publications/Conference Proceedings: 1

Journal publications:
International publications

Pallavi Dilipsathawane, Assistant Professor (Id:1307)
Qualification: B.E (electronics), passed out 2011, RTMNU, Nagpur
M.Tech (VLSI), 2014, JNTUH,
Experience: 1.4 years
Research Interest: VLSI
Journal Publications/Conference Proceedings: 1

Journal publications:
International publications

G. Nagaraju, Assistant Professor (Id:1311)
Experience: 1.4 years
Research Interest: VLSI
Journal Publications/Conference Proceedings: 1

Journal publications:
International publications
G. Meera, Assistant Professor (Id: 1320)
Experience: 1.4 years
Research Interest: SDR (Software defined Radio) and 5G cellular communication
Journal Publications/Conference Proceedings: 1

Journal publications:
International publications

K. Sarvani, Assistant Professor (Id: 1321)
Experience: 1.4 years
Research Interest: Biomedical imaging and sensing, bio medical area, sensor networks
Journal Publications/Conference Proceedings: 1

Journal publications:
International publications

G. Bindu Madhavi, Assistant Professor (Id: 1323)
Experience: 1.4 years
Research Interest: RF and Microwave Engineering
Journal Publications/Conference Proceedings: 1

Journal publications:
International publications