# NEHRU COLLEGE

## OF ENGINEERING & RESEARCH CENTRE

### (ACCREDITED BY NAAC, APPROVED BY AICTE, AFFILIATED TO KTU)

Pampady, Thiruvilwamala, Thrissur- 680588

**NEHRU GROUP OF INSTITUTIONS**

Moulding True Citizen

**Since 1968**

NCERC

*Change your thoughts and you change your world."*
*– Norman Vincent Peale*

# DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

# About the NCERC
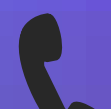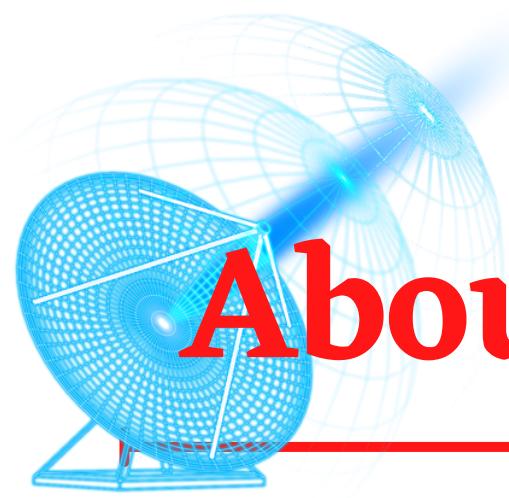
Nehru College of Engineering and Research Centre(NCERC), situated on the Bank of the river Nila, is a premier Engineering college that has pioneered engineering education, research and training in the private sector. Established in 2002 by the founder chairman Shri P.K. Das, NCERC is committed to impart world class quality education in engineering and research. Dedicated to the service in the realm of technical education in Kerala, it is an ISO 9001:2015 certified institution, approved by All India Council for Technical Education (AICTE), affiliated to A P J Abdul Kalam Technological University(KTU) and is accredited by National Assessment and Accreditation Council (NAAC). Over these years NCERC has grown to be one of the Best Self Financing College in Thrissur, Kerala.

# About the Department

Department of ECE established in 2002 with an intake of 60 students to undergraduate (B.Tech) programme. The department offers two Postgraduates(M.Tech) programmes in "Electronics". "Applied Electronics & Communication System" from 2011 with an intake of 18 students and " VLSI Design" from 2012 with an intake of 18.

Highly qualified, experienced and dedicated staff members are the backbone of the Department. The Department always strive hard to satisfy the knowledge thirst of both students and faculties by organizing workshops / technical talks / conferences etc. The faculty members are actively involved in research work and regularly present/ publish their work in various national and international conferences / journals. The ECE Department is proud to host state-of- the art Laboratories in the area of VLSI, Embedded Systems, Microprocessor and Microcontrollers, Circuits, Analog and Digital Communication and Microwave and Optical communication.
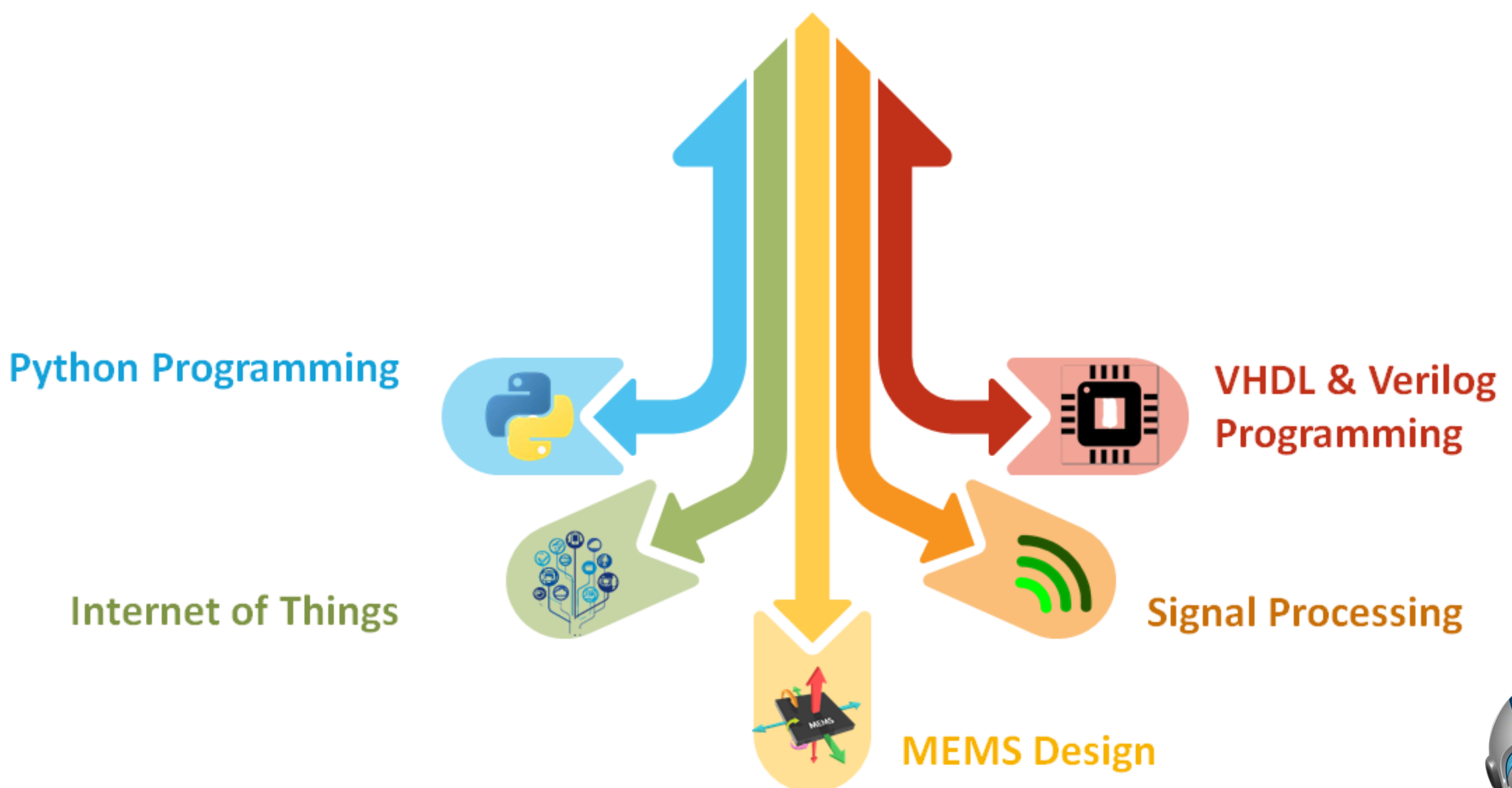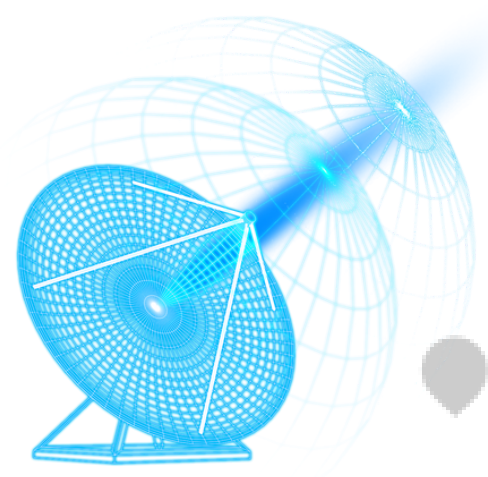
# Courses Offered

## B.Tech
### Electronics & Communication Engineering
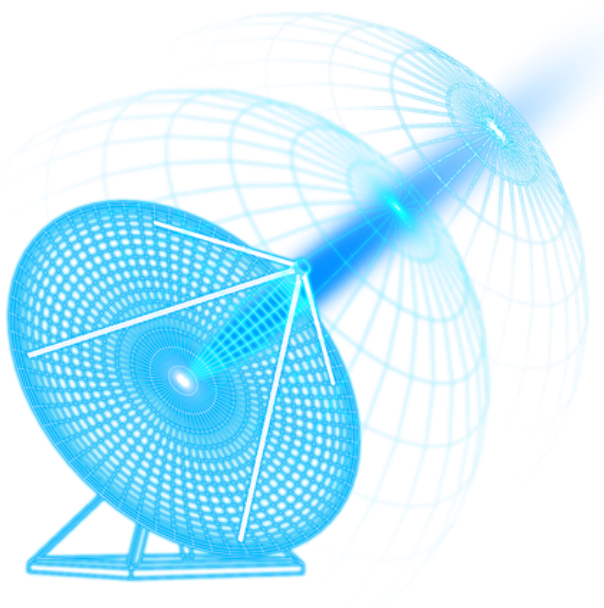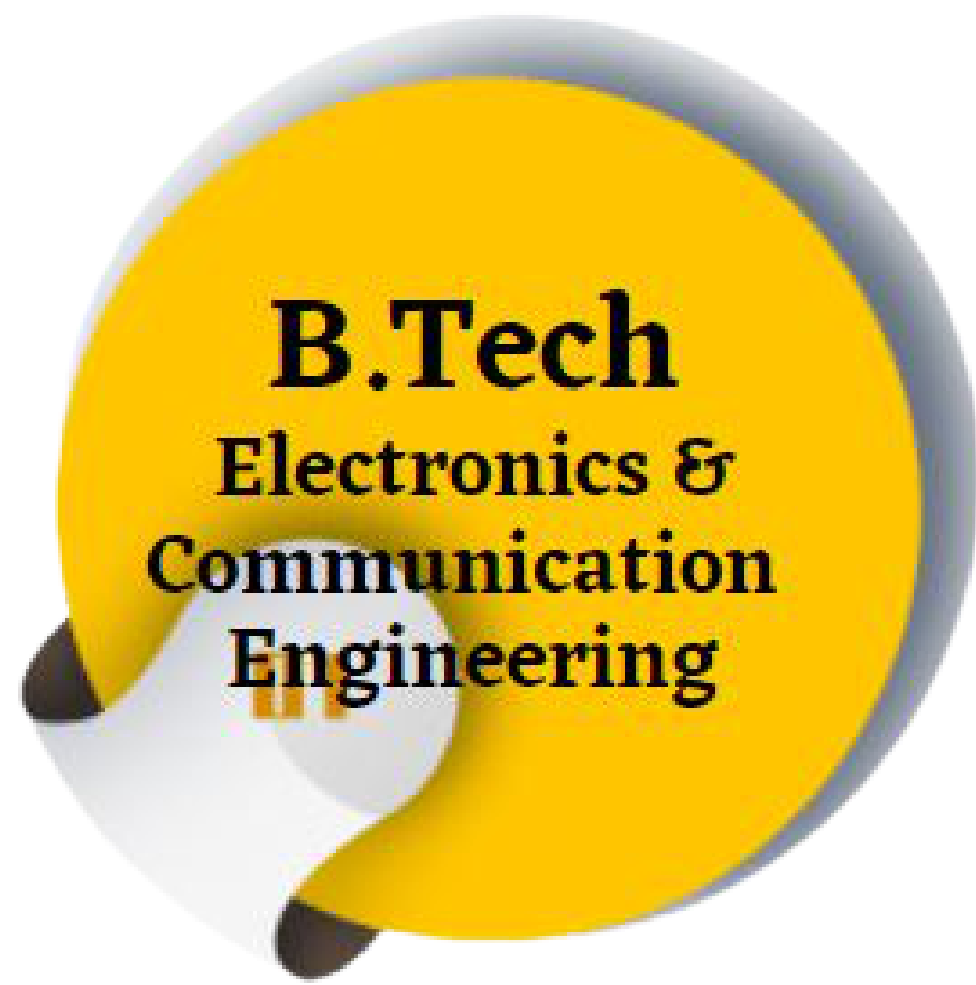
## M.Tech
### VLSI

| Course | Duration | Number of Seats |
|--------|----------|-----------------|
| B.Tech ECE | 4 Years /8 Semesters | 60 |
| M.Tech VLSI | 2Years /4 Semesters | 18 |

# Value Added Courses

**Python Programming**

**Internet of Things**

**VHDL & Verilog Programming**

**Signal Processing**

**MEMS Design**

# Our Laboratories

**Electronics Workshop**
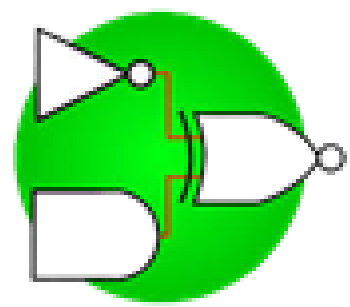
**Linear Circuits & VLSI Lab**

**Digital Electronics Lab**
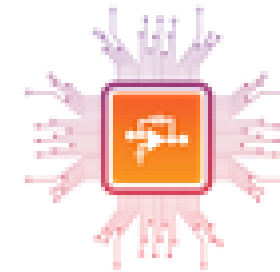
**Microprocessor & Microcontroller Lab**

**Communication Lab**

**Internet of Things Lab**

01

02

03

04

05

06
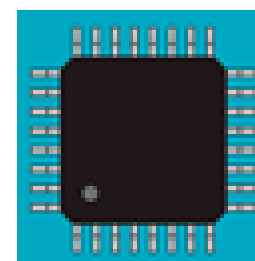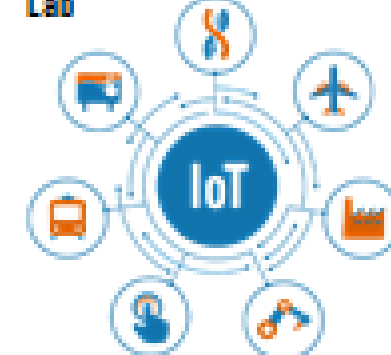
**Electronics Workshop**

**Internet of Things Lab**

**Digital Electronics Lab**
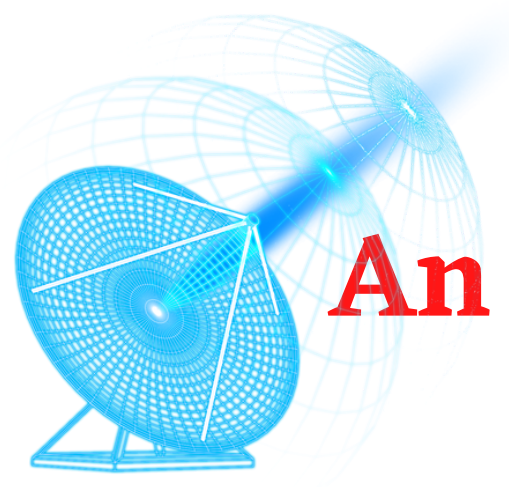
**Communication Laborotary**

**VLSI Laborotary**

**Microprocessor & Microcontroller Lab**

# Major technologies in which
# An Electronics & Communication Engineer
# can work on

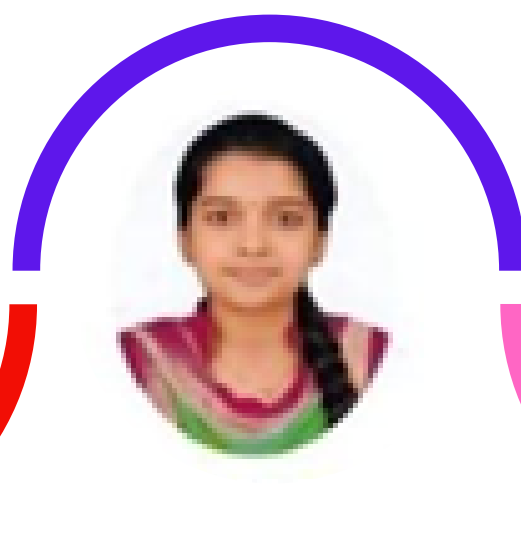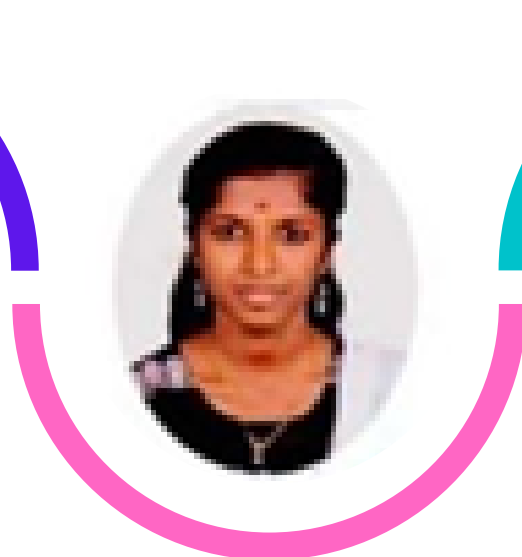| | |
|---|---|
| 1 Analog and Radio Frequency Circuits | 10 Control systems & Robotics |
| 2 Communication & Signal Processing | 9 Remote Sensing |
| 3 VLSI & Digital Systems | 8 Nanotechnology |
| 4 Networking | 7 Sustainable Energy & Power systems |
| 5 Computer vision & Image processing | 6 Energy Storage Technology |

# Our University Rank Holders

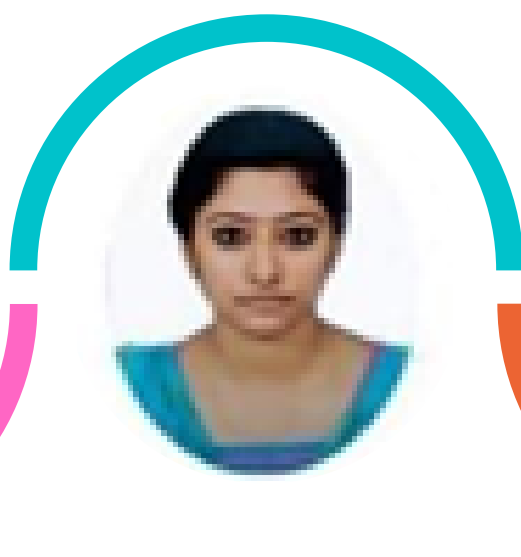## 2014-18 BATCH

FASNA M
RANK 1

SUMAYA K S
RANK 12

ATHULYA S
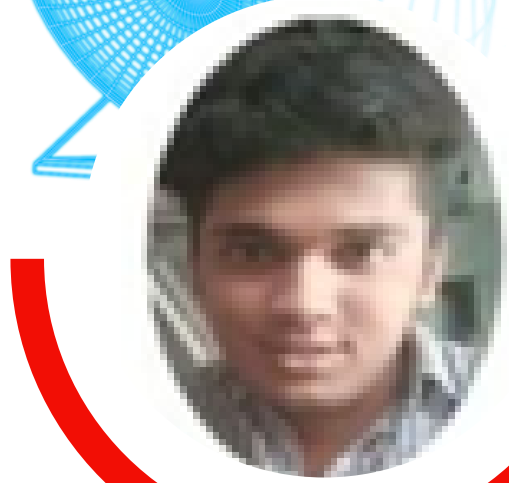RANK 20

SRUTHY P
RANK 28

ARYA K R
RANK 29

PARVATHI DINESH
RANK 32

SHARON S
RANK 33

VEENA V
RANK 34

NITHUNA S
RANK 35

SUKANYA C R
RANK 39

RADHIKA P T
RANK 41

# 2014-18 BATCH

PAVITHRA
VELAYUDHAN
RANK 1

KEERTHY R
RANK 3

DIVYA
RANK 7

SARATH K S
RANK 20

KEERTHY K
RANK 29

AISWARYA ARUN
RANK 37

JOTHISH J
RANK 37

GREESHMA P M
RANK 44

SRUTHY MOL V
RANK 50

# PISAT Satellite Mission-ISRO Project

M.TECH APPLIED ELECTRONICS AND COMMUNICATION SYSTEM STUDENTS (2010 TO 2012 ) Blesson,Akhila, Greeshma and Praveena doing their PG projects is related to PISAT satellite mission.NCERC is the first and only Engineering college in Kerala to take part in the PISAT satellite mission



SEPTEMBER 26, 2016
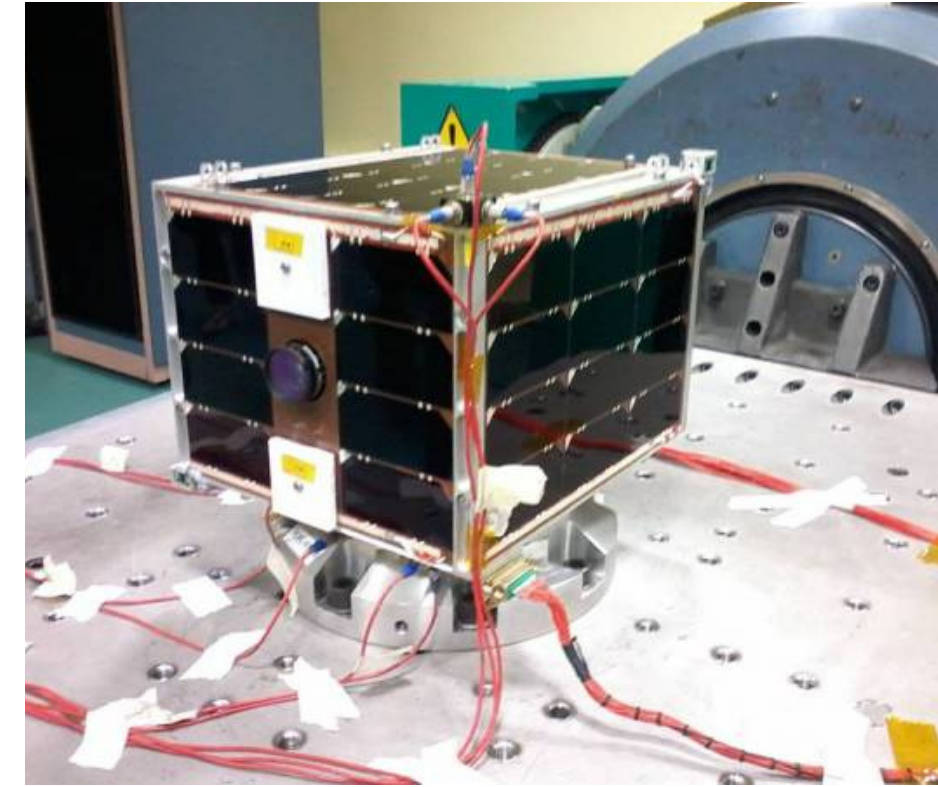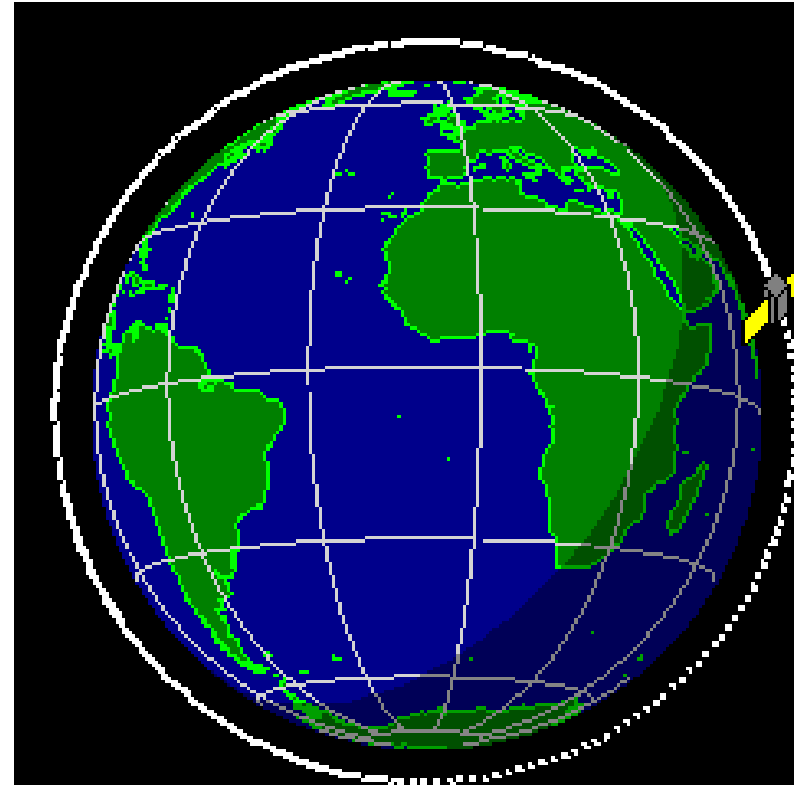A GOLDEN LETTER DAY TO THE HISTORY OF NCERC

NCERC is the first and only Engineering college in Kerala to take part in the PISAT satellite mission.

**PES**

When the launch vehicle PSLV-C35 fires off from Sriharikota on September 26, it will carry a student satellite named PISAT on board developed by a team of students of Nehru College of Engineering & Research Centre, Pampady, Thrissur, with PES University, Bengaluru, VEL Tech Technical University, Chennai, SKR Engineering College, Chennai, SONA College of Technology, Salem and Institution of Engineers, India.

We sincerely wish the launch of PISAT

*All Success*

NEHRU GROUP OF INSTITUTIONS
TAMILNADU • KERALA
ISO 14001:2004 CERTIFIED INSTITUTIONS



NEHRU COLLEGE OF ENGINEERING & RESEARCH CENTRE
Pampady , Thiruvilwamala

A Golden Letter Day to the History of NCERC by M.Tech Applied Electronics & Communication System Students(2010-12 Batch)...

NCERC is the First & only Engineering College in Kerala to take part in the PISAT Satellite Mission.

Akhila      Blesson
Greeshma    Praveena

Hearty Congrats ...

# Massive Open Online Courses-MOOC/NPTEL
## Gold & Silver medal Winners



**Elite**
NPTEL Online Certification
(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to
AJAY KUMAR P V
for successfully completing the course

**Introduction to Internet of Things**

with a consolidated score of 99 %

| Online Assignments | 23.91/25 | Proctored Exam | 75/75 |

Total number of candidates certified in this course: 5439

Jan-Apr 2019
(12 week course)

A. Goswami
Prof. Adrijit Goswami
Dean, Continuing Education & NPTEL Coordinator
IIT Kharagpur

Indian Institute of Technology Kharagpur

**Elite**
NPTEL Online Certification
(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to
ADHWAITHA M
for successfully completing the course

**Introduction to Internet of Things**

with a consolidated score of 86 %

| Online Assignments | 24.56/25 | Proctored Exam | 61.5/75 |

Total number of candidates certified in this course: 5439

Jan-Apr 2019
(12 week course)

A. Goswami
Prof. Adrijit Goswami
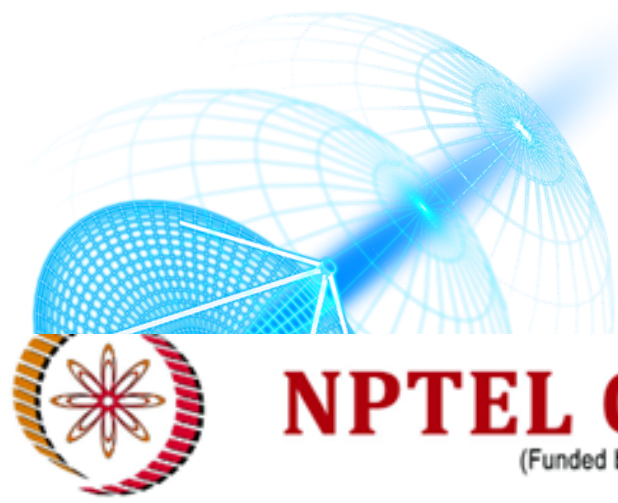Dean, Continuing Education & NPTEL Coordinat
IIT Kharagpur

Indian Institute of Technology Kharagpur

Roll No: NPTEL19CS31S31910099      To validate and check scores: http://nptel.ac.in/noc

# NPTEL Online Certification
(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to
**AMRITHA KRISHNADAS**
*for successfully completing the course*

**Introduction to Internet of Things**

with a consolidated score of **93** %

| Online Assignments | 23.72/25 | Proctored Exam | 69/75 |
|---|---|---|---|

Total number of candidates certified in this course: 5439

*A. Goswami*
**Prof. Adrijit Goswami**
Dean, Continuing Education & NPTEL Coordinator
IIT Kharagpur

**Jan-Apr 2019**
(12 week course)

Indian Institute of Technology Kharagpur

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**Elite**

# NPTEL Online Certification
(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to
**APARNA RENNY PAUL**
*for successfully completing the course*

**Introduction to Internet of Things**

with a consolidated score of **84** %

| Online Assignments | 23.94/25 | Proctored Exam | 60/75 |
|---|---|---|---|

Total number of candidates certified in this course: 5439

*A. Goswami*
**Prof. Adrijit Goswami**
Dean, Continuing Education & NPTEL Coordinat
IIT Kharagpur

**Jan-Apr 2019**
(12 week course)

Indian Institute of Technology Kharagpur

Roll No: NPTEL19CS31S41910061

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**Elite**

# NPTEL Online Certification
(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to
**HALEEMA H**
*for successfully completing the course*

**Electronic Waste Management -
Issues And Challenges**
with a consolidated score of **80** %

| Online Assignments | 24.42/25 | Proctored Exam | 55.1/75 |
|---|---|---|---|

Total number of candidates certified in this course: 1516

*A. Goswami*
**Prof. Adrijit Goswami**
Dean, Continuing Education & NPTEL Coordinator
IIT Kharagpur

**Jan-Feb 2019**
(4 week course)

Indian Institute of Technology Kharagpur

Roll No: NPTEL19CE06S11690134

To validate and check scores: http://nptel.ac.in/noc

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**Elite**

# NPTEL Online Certification
(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to
**VARSHA MK**
*for successfully completing the course*

**Technical English for Engineers**

with a consolidated score of **76** %

| Online Assignments | 21.67/25 | Proctored Exam | 54.75/75 |
|---|---|---|---|

Total number of candidates certified in this course: 2734

*Devendra Jalihal*
**Prof. Devendra Jalihal**
Chairman
Centre for Continuing Education, IITM

*Prof. Andrew Thangaraj*
NPTEL Coordinator
IIT Madras

**Jul-Sep 2019**
(8 week course)

Indian Institute of Technology Madras

Roll No: NPTEL19HS31S21820099

To validate and check scores: https://nptel.ac.in/noc

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**Elite**

# NPTEL Online Certification
(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to
**DEVISREE D**
*for successfully completing the course*

**Electronic Waste Management -
Issues And Challenges**
with a consolidated score of **76** %

| Online Assignments | 24.42/25 | Proctored Exam | 52.04/75 |
|---|---|---|---|

Total number of candidates certified in this course: 1516

*A. Goswami*
**Prof. Adrijit Goswami**
Dean, Continuing Education & NPTEL Coordinator
IIT Kharagpur

**Jan-Feb 2019**
(4 week course)

Indian Institute of Technology Kharagpur

Roll No: NPTEL19CE06S11690142

To validate and check scores: http://nptel.ac.in/noc

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**Elite**

# NPTEL Online Certification
(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to
**ASHWATHY UMESH MENON**
*for successfully completing the course*

**Interaction Design**

with a consolidated score of **81** %

| Online Assignments | 19.00/25 | Proctored Exam | 61.5/75 |
|---|---|---|---|

Total number of candidates certified in this course: 67

**Prof. Sunil Khijwania**
Head, Center for Educational Technology
NPTEL Coordinator, IIT Guwahati

**Aug-Sep 2018**
(4 week course)

Indian Institute of Technology Guwahati

# Contribution Towards Covid 19

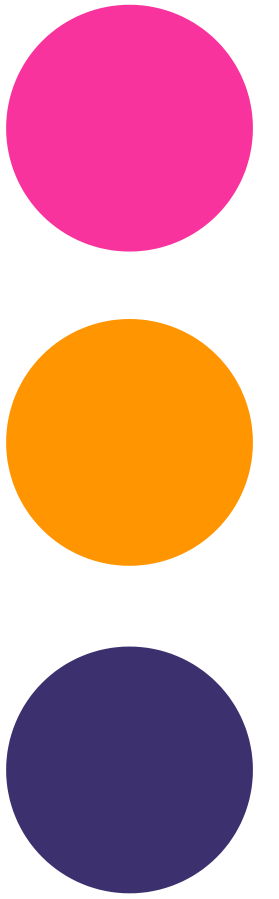**FINAL YEAR STUDENT MUHAMMED SHAFFAHAN developed an innovative project named UV Disinfection System**
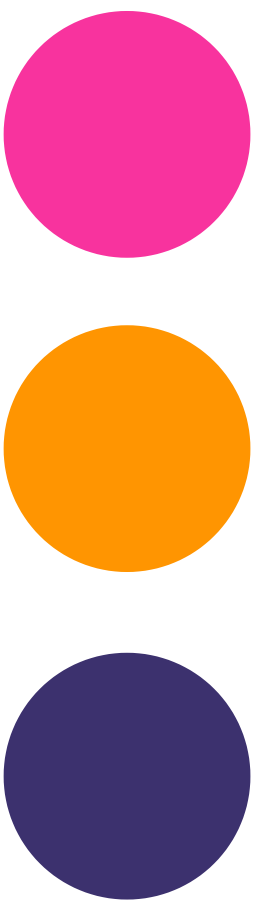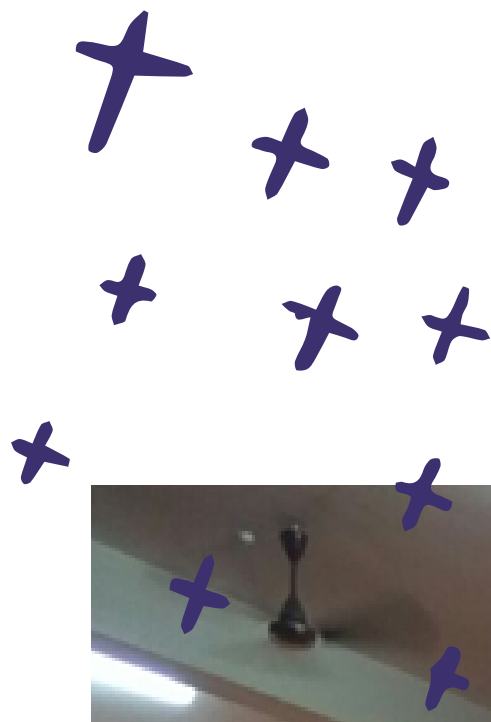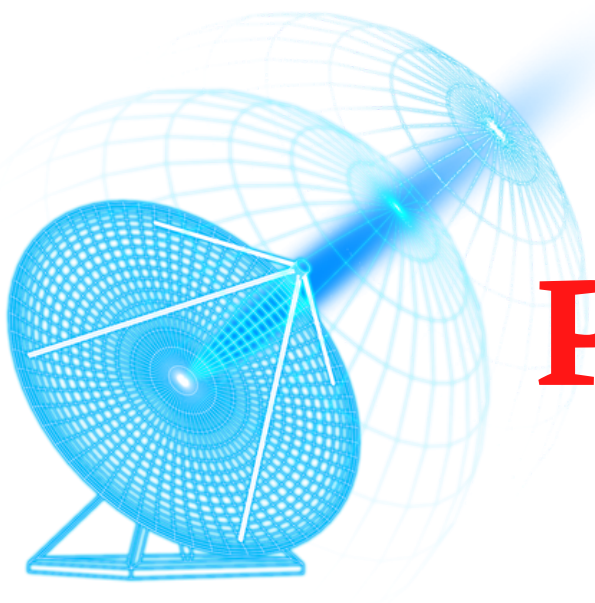


# Major Projects

# Student Support Activities

**NCC**

**IETE**

# Placements

**TATA CONSULTANCY SERVICES**

**VVDN TECHNOLOGIES**

**Aiswariya A.P**
*(2019-21 M.Tech VLSI)*

**Vishnumaya C**
*(2019-21 M.Tech VLSI)*

**CSS CORP**

**Anjali Krishnan**
**2016-20 B.Tech ECE**

**Abhinaya Vishakhan**
**2016-20 B.Tech ECE**
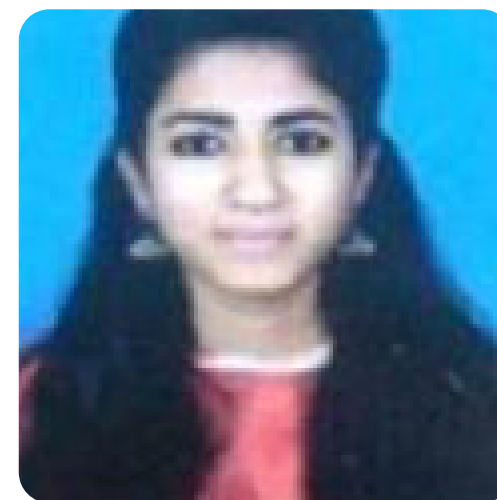
**Reshma Krishna**
**2016-20 B.Tech ECE**

**Rishana N**
**2016-20 B.Tech ECE**

**TATA CONSULTANCY SERVICES**
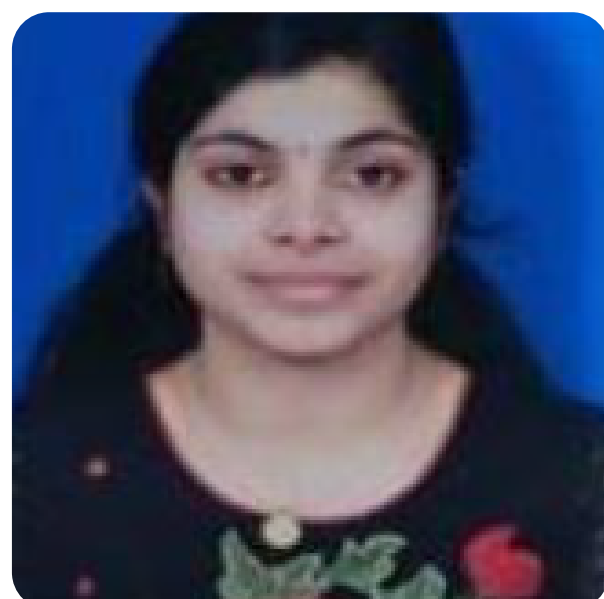
**Ahalya S**
**2016-20 B.Tech ECE**

**Maya M**
**2016-20 B.Tech ECE**

**Greeshma M G**
**2016-20 B.Tech ECE**

**Dhanusha M**
**2016-20 B.Tech ECE**

**Binzilz V**
**2016-20 B.Tech ECE**

**Janeesa John**
**2016-20 B.Tech ECE**

**Athul Gopinath**
**2016-20 B.Tech ECE**

# Potential Recruiters

# TRENDS TRANSFORMING THE ELECTRONICS INDUSTRY OUTLOOK

## Impact of 5G Technology
**1.2 Billion dollars  for the sales & retail sector**
Increased Bandwidth, Low latency Communications, High Availability, Greater Energy Efficiency

## Extended Reality(XR)
Virtual Reality  + Augmented Reality

## Biomedical Engineering on the Rise
employment of biomedical engineers is projected to grow 4 percent from 2018 to 2028

## IoT & AI
**520 Billion Dollar Value**
Hardware + Software +Integrated Sysyems + Tele Communication Services

## Product Information Management (PIM)
Product Information  + PIM Solutions + Sales Channels

## Fast track to Industry 5.0
Industry 5.0 (I5) adds a human touch to automation, combining industrial automation with human cognitive skills and critical thinking

# The Spirit Of Youth-Bloom