OWN YOUR CAREER
Electronics and Communication Engineering

Prepared By

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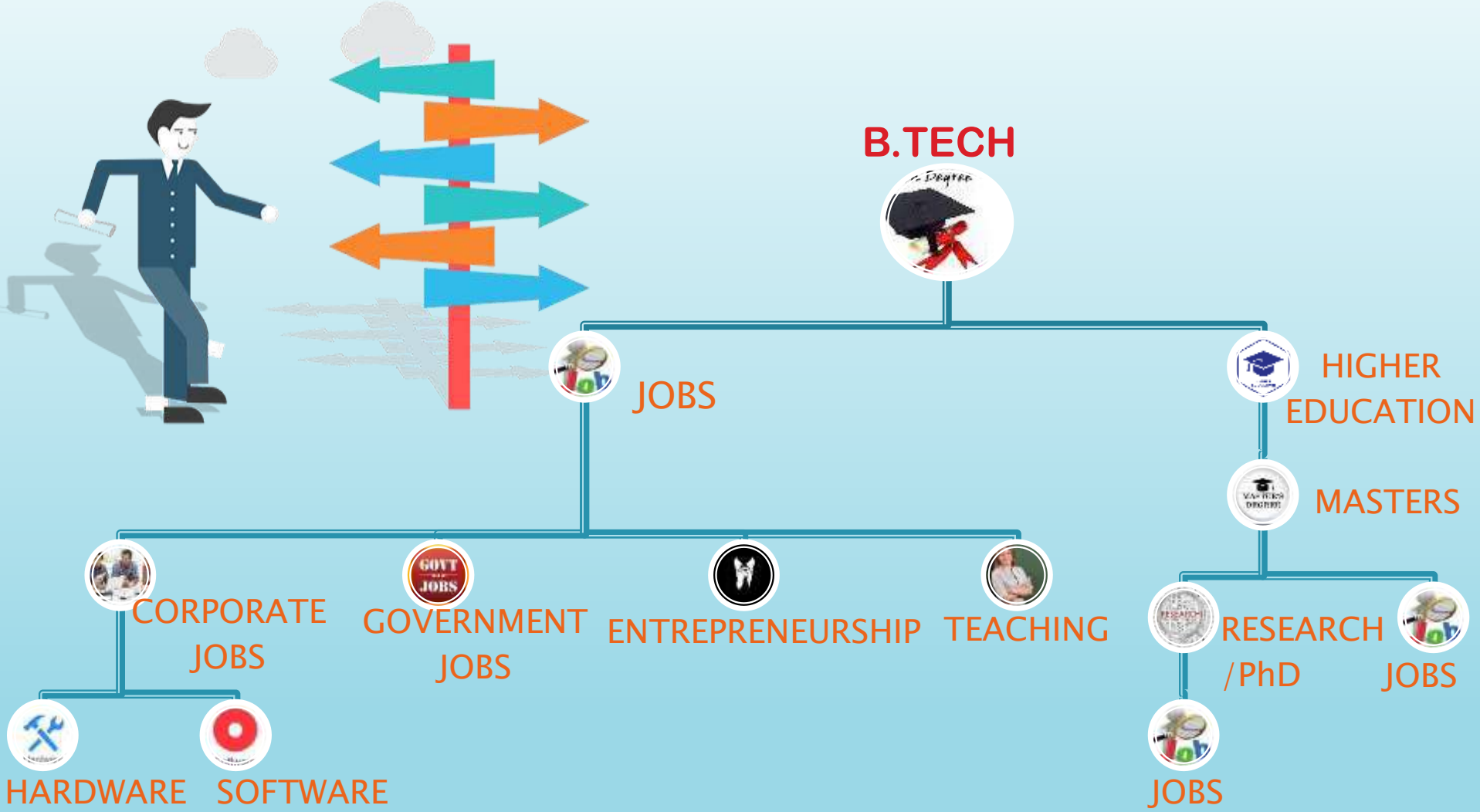
"Electronics and Communication Engineering deals with the electronic devices and software applications. It is an interface of chip level hardware and information technology"
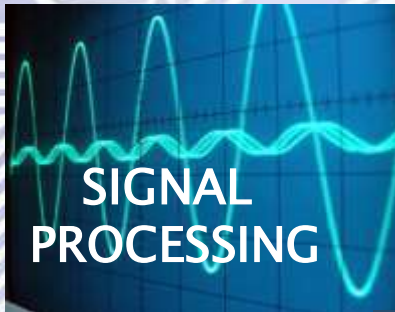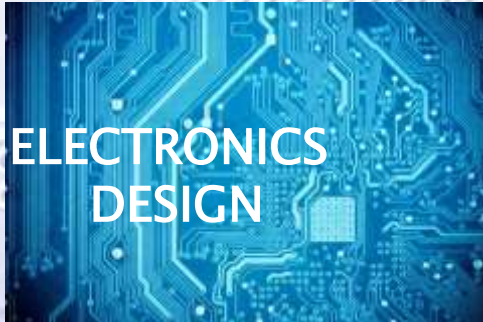
✓ One of the largest and fastest growing field of engineering
✓ Covers a wide range of applications such as television, radio, computers, telecommunication etc., which make our life easier and enjoyable
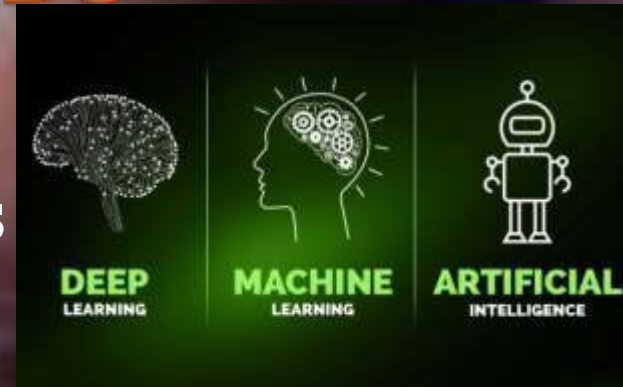
ELECTRONICS & COMMUNICATION ENGINEERING

After B tech, What next?

MAJOR CORE FIELDS

ELECTRONICS DESIGN

SIGNAL PROCESSING

VLSI

COMMUNICATION SYSTEMS

EMBEDDED SYSTEMS

Computer Hardware Engineering

ROBOTICS

Power Electronics

RECENT TRENDS

➢ **Artificial intelligence : Sometimes called machine intelligence, is intelligence demonstrated by machines**

➢ **Internet of Things (IoT) : An ecosystem of connected physical objects that are accessible through the internet**

➢ **Industrial Automation : Deals primarily with the automation of manufacturing, quality control and material handling processes**

Do you possess these skills? Then opportunity knocks you easily

JOB CATEGORY	REQUIRED SKILL SET	JOB OPENINGS
VLSI	VERILOG AND VHDL	VLSI JOBS
CIRCUIT DESIGN	ELECTRONIC CIRCUIT DESIGN PROCESS	CIRCUIT DESIGN JOBS
CHIP DESIGN	TRANSISTOR PROCESS TECHNOLOGY, MICROPROCESSORS	EMBEDDED JOBS
MOBILE COMMUNICATIONS	NETWORK SWITCHING, COMMUNICATION BASICS, VOICE OVER INTERNET PROTOCOLS AND INTERACTIVE VOICE RECOGNITION	TELECOM JOBS LIKE RF ENGINEER
IMAGE AND SIGNAL PROCESSING	SPEECH ANALYSIS AND SYNTHESIS,MATLAB,AI AND DEEP LEARNING	CODING DEVELOPER, STRATEGIC AND ROBOTICS

PUBLIC SECTOR JOBS – WRITTEN TESTS

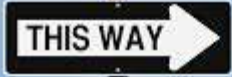▸ **STATE GOVERNMENT**

Legal Meteorology,
PWD, KEL, KSEB

▸ **CENTRAL GOVERNMENT**

Engineer and scientist jobs in Keltron

MAJOR PUBLIC SECTOR UNDERTAKINGS

MAJOR PRIVATE SECTOR COMPANIES

RECRUITMENT

Each company have their own recruitment process

THE RECRUITMENT PROCESS

JOB SPEC ①
SOURCE ②
SCREEN ③
INTERVIEW ④
ASSESS ⑤
REFERENCE ⑥
VERIFY ⑦
SHORTLIST ⑧
SELECT ⑨
CLIENT INTERVIEW ⑩

SUCCESSFUL PLACEMENT & GUARENTEE

APTITUDE TEST

PERSONAL INTERVIEW

RECRUITMENT

GROUP DISCUSSION

TECHNICAL INTERVIEW
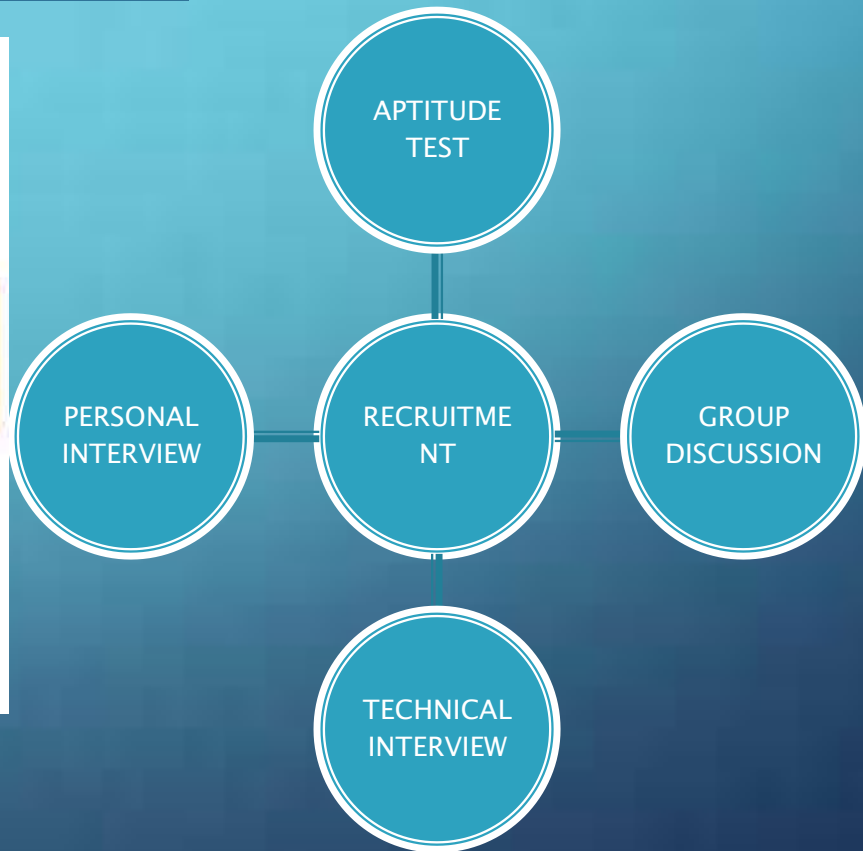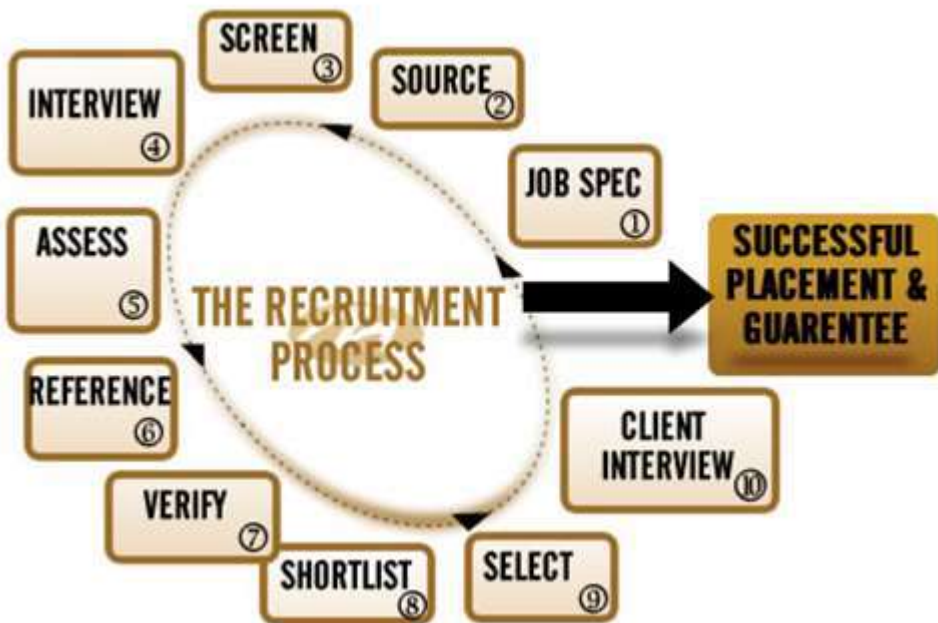
ENTREPRENEUR
- Be Your own Boss

The only way to do great work is to love what you do.

- Steve Jobs

Employee

Groupthink
Follow instructions
Art of the possible
Avoid risk
Logical argument, evidence, analysis
Specialist
Protect status quo
Share responsibility
Punish mistakes
Conformist
Impose Process
Rigid
Seek predictability and certainty
Receive objectives

Entrepreneur

Think independently
Act independently
See endless opportunity
Take risk
Use intuition
Generalist
Challenge status quo
Take responsibility
Celebrate mistakes
Individualistic
Encourage initiative
Flexible
Embrace ambiguity
Set own objectives

TEACHING PROFESSION

SKILLS REQUIRED

‣ Communication
‣ Presentation skills
‣ Passion for teaching
‣ Should be patient and calm enough to deal with students.
‣ Lifelong Learning

HOW TO GET JOB ???

‣ UGC-NET(national entrance test) in order to become lecturer in Government Engineering Colleges.

GRADUATES
NEXT EXIT

HIGHER EDUCATION

MTECH

MBA

INTEGRATED MTECH – PhD

PhD

ABROAD   MS

- Post graduation degree in engineering
- Duration – 2 years
- Qualifying Examination–GATE
  plus at least 60 per cent marks in the
  B. Tech course
- Specialisations :

- Embedded systems
- Bioinformatics
- Digital systems and communication
- Digital signal processing
- VLSI design
- Nanotechnology
- Opto-electronics
- Cyber security
- Software engineering

M.Tech
Master of Technology

GATE
Graduate
Aptitude Test
in Engineering

An all-India examination that primarily tests the comprehensive understanding of various undergraduate subjects in engineering and science

- Post-graduate level degree that imparts a strong theoretical foundation in business and management
- Few MBA specializations in India
  - ✓ MBA in Finance.
  - ✓ MBA in Marketing
  - ✓ MBA in Human Recourse (HR)
  - ✓ MBA in International Business (IB)
  - ✓ MBA in Operation Management.
  - ✓ MBA in Information Technology (IT)
  - ✓ MBA in Supply Chain Management
  - ✓ MBA in Rural Management

- One has to clear CAT examination to join MBA course at Top Institutes

- Top MBA Colleges in India
  - ✓ Indian Institute of Management (IIMs)
  - ✓ Indian Institute of Technology (IITs)
  - ✓ Xavier school of management, Jamshedpur
  - ✓ Management Development Institute, Gurgaon
  - ✓ Faculty of Management Studies, University of Delhi, Delhi

Integrated M.tech - PhD

Various institution provides integrated M.tech – PhD for B.tech graduates

- IIT Guwahati
  - Link – www.iitg.ac.in
- CSIR – CMERI
  - Duration – 5 yrs
  - Link – www.cmeri.res.in
- IIA, Indian Institute of Astrophysics
  - Duration – 6 yrs
  - Link – www.iiap.res.in
- IISc Bangalore
  - Link – www.iisc.ac.in

PhD-Doctor of Philosophy

▸ The highest academic degree awarded by universities in most countries

▸ Highest level of degree that a student can achieve

STUDY ABROAD

- If you wish to opt for MS in engineering, you can choose to write **Graduate Record Examinations (GRE)** or the **Graduate Management Admission Test (GMAT)**

- Additionally, you would also have to take the **International English Language Testing System (IELTS)**/ **Test of English as a Foreign Language (TOFEL)** to demonstrate your proficiency in English

- Most institution accepts a score of 6.5 on the IELTS to grant admissions.

- The GRE scores that popular institution accept range from 310 to 335
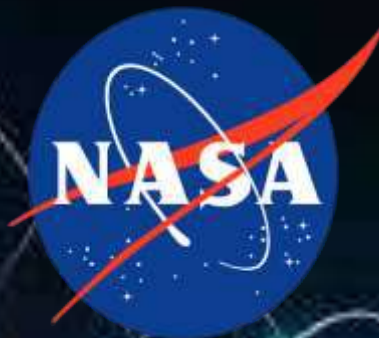
OUR TOP RECRUITERS

SI. No.	Company	Area related to ECE Core
1	CISCO	Wireless, Networking
2	HCL	Analog and Digital Electronics, Embedded System
3	INFOSYS	Analog and Digital Electronics, VLSI
4	INTEL	Analog and Digital Electronics
5	TATA ELXI	Embedded design, Analog and Digital Electronics, Networking, Wireless Communication
6	TCS	VLSI, Analog and Digital Electronics
7	VVDN	Embedded design, Networking, Wireless Communication
8	WIPRO	VLSI, Embedded system ,Communication

ALUMNI

GOVERNMENT

Shammy P S	–	Airports Authority Of India
Lt Bibin C Varghese	–	Indian Navy
Jobin Mathews	–	Indian Meteorological Dept.
Dinesh R	–	Indian Railways
Antony O T	–	Indian rare earths Ltd
Anwar K Backer	–	Indian Space Research Organisation
Arun G	–	Nuclear Power Corporation of India Ltd
Rakesh S R	–	Bharat Sanchar Nigam Limited

PRIVATE

Shaji CR	–	Intel
Jobin Jose Sebastian	–	Cisco Systems
Reshmi R	–	Cypress Semiconductor
Tom Mathews	–	Qualcomm Inc.
Samir Muhammad	–	Tech Mahindra
Alien Donal	–	Samsung R&D Institute Bangalore India
Kamchalabdhan TT	–	Magnum Networks Support Pvt. LTD

CAREER LINKS

✓ **Intel**
 http://www.intel.com/content/www/us/en/jobs/locations/india.html

✓ **Indian Navy**
http://nausena-bharti.nic.in/career.php

✓ **Wipro**
http://careers.wipro.com/

✓**Siemens**
https://jobs.siemens-info.com/jobs

✓**Bosch**
https://careers.smartrecruiters.com/BoschGroup/india

✓**Philips**
 https://www.careers.philips.com

✓**Texas Instruments**
 https://careers.ti.com/search-jobs/

✓ **Employment News**
http://employmentnews.gov.in/NewEmp/Home.aspx

Some Useful Links

✓ **Confederation of Indian Industry, Kerala**
   http://www.cii.in/States.aspx

✓   **Technopark, Trivandrum**
        http://www.technopark.org

✓   **Infopark, Kochi**
        http://www.infopark.in/

✓   **Startup Village**
        https://www.sv.co/?redirect_from=startupvillage.in

✓   **Centre for Engineering Research and Development, Govt of Kerala**
        http://www.dtekerala.gov.in/index.php/en/home/root/institutionsprogrammes/research-
        programmes-in-engineering-colleges/cerd

- **Several Electronics jobs**
  https://careers.electronicsforu.com/
- **iBall**
  https://www.iball.co.in/Careers
- **HCL**
  https://www.hcltech.com/careers#careers_opportunities
- **Amkette**
  https://www.amkette.com/careers/#opening-position
- **Bel**
  http://bel-india.in/CareersGridbind.aspx?MId=29&LId=1&subject=1&link=0&issnno=1&name=Recruitment%20-%20Advertisements
- **Cisco**
  https://jobs.cisco.com/jobs/SearchJobs/?source=Cisco+Jobs+Career+Site&tags=CDC+SnNG+students-and-new-graduate-programs

INSTITUTION & DEPARTMENT HIGHLIGHTS

➢ National Board of Accreditation (NBA) Accredited Courses

➢ One of the Top 5 Technical Institutions In State according to KTU ranking

➢ 3rd Rank In First Year KTU Results and top ranker in GATE.

➢ Full-fledged library containing international research journals, magazines and materials for civil service preparation.

➢ Full-fledged laboratory containing various communication devices and antenna parts designing.

➢ Core company recruitment.

ELECTRONICS & COMMUNICATION DEPARTMENT

❖ Research lab exclusively for speech processing funded by Govt. Of Kerala.

❖ Well knowledgeable faculties in various fields.

❖ Conducting talks and seminars on various subjects and thesis contests.

❖ Courses :B..Tech and Phd.

❖ M.tech in Advanced Electronics and Communication Engineering and M.Tech in Advanced Information and Communication Systems.

❖ Industrial Projects and Internship providing assistance in reputed central and state govt. Companies like IIST, IIT Madras, NISH, AIISH, ENTUPLE, Doordarshan, BSNLetc.

❖ Providing assistance in Start-Ups

Don't chase success.
Instead decide to *make a difference* and success will find you.

Wish you Good luck!

CREATE THE HIGHEST, GRANDEST VISION POSSIBLE FOR YOUR LIFE, BECAUSE YOU BECOME WHAT YOU BELIEVE.

— Oprah Winfrey —