



Report on First Year's Induction Program (2025)

Day 1- Welcome & Connect

Session 1: Department visit and introduction by HOD

Date: August 18, 2025

Time: 10:30 AM – 11:30 AM

Venue: Room no.104

Organized by: Department of Electronics and Communication Engineering, BJI as a part of First Year Initiation Program

Objective of the Session:

As part of the Initiation Day Program organized for the newly admitted students, a dedicated Department Visit and Welcome Session was held to familiarise them with the campus environment.

Summary of the Session:

The session began with a guided tour of the department, where the students were introduced to key facilities such as classrooms, laboratories, seminar halls, project labs, and faculty cabins. Senior students and faculty members accompanied the new batch, explaining the purpose and functioning of each facility.

Following the tour, a formal welcome address was delivered by the Head of the Department, **Prof. Roy S.** The HOD warmly greeted the new students and congratulated them on beginning their academic journey in the department.

In the address, the HOD spoke about:





DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

- The vision and mission of the department
- An overview of the academic curriculum and key areas of specialization.
- Introduction to the Advisory system, Assessment, and Grading's in KTU
- Academic Calendar was introduced
- Research and innovation opportunities available to students
- Expectations regarding academic discipline and participation
- The importance of ethics, teamwork, and lifelong learning in professional growth

Students were encouraged to make full use of the department's resources, seek guidance when needed, and actively involve themselves in both academic and co-curricular activities.

Conclusion:

The session concluded with an interactive Q&A, where students clarified their doubts and expressed enthusiasm about the upcoming years.

The department visit and HOD's welcome created a strong sense of belonging among the new students and gave them a clear understanding of their academic environment.

Session 2: Ice-breaking session, Motivation and team-building session

Date: August 18, 2025

Time: 11:30 AM – 12:30 PM

Venue: Room no.104

Organized by: Department of Electronics and Communication Engineering, BJI as a part of First Year Initiation Program





Objective of the Session:

As part of the student engagement and relaxation activities during the Initiation Week, a Funny Quiz Session was organized which aimed to provide a light-hearted break from formal sessions and to help new students unwind and bond with their peers. Also to foster creativity, collaboration, and critical thinking among the new students, a Group Formation Process was carried out for the upcoming Idea Pitching Session.

Summary of the Session:

Prizes for the Quiz session were awarded not just for correct answers, but also for the funniest responses and best team spirit. The informal and cheerful atmosphere allowed students to relax, showcase their wit, and enjoy a shared sense of humour.

After the Quiz session students were divided into groups. The grouping process was conducted through a random draw to maintain fairness and spontaneity

Each group was then briefed on the theme and guidelines for the **Idea Pitching Session**, including:

- Choosing a real-world or campus-related problem
- Brainstorming innovative, practical solutions
- Preparing a short pitch for presentation before a panel

The group formation process was smooth, engaging, and well-received by the students. It successfully set the stage for collaborative thinking and enthusiastic participation in the upcoming presentation round.

Conclusion:

The overall session was a great success, leaving everyone in high spirits and eager to participate in final presentation round.





Day 2- Learn and Grow

Session 1: Interaction with an Industry Expert

Date: August 19, 2025

Time: 10:30 AM – 11:00 AM

Platform: Google Meet

Organized by: Department of Electronics and Communication Engineering, BJI as a part of First Year Initiation Program

Objective of the Session:

The primary objective of this virtual interaction was to bridge the gap between academic learning and real-world industry practices. The session aimed to expose students to current trends, expectations, and opportunities in the Hardware and Software industry through a direct interaction with an experienced professional.

Guest Speaker:

Mr. Praveen Kumar, Automation Engineer, **Microsoft, Bangalore.**

With over 15 years of experience in the Electronics and AI sector, Mr. Praveen Kumar specializes in System Automation, Cloud Computing, Artificial Intelligence and much more.

Summary of the Session:

The session commenced with a welcome note by Ms. Deepthi Felix, First Year Class Advisor, ECE Department. She introduced Mr. Praveen Kumar and highlighted the importance of such interactions in shaping the career paths of students.





Mr. Praveen Kumar began by sharing his journey, including his academic background and career progression. He then discussed the following key topics:

- Emerging technologies in the System Automation
- Emerging technologies in the IT field (AI, Cloud Computing, Cybersecurity)
- Skills in demand for fresh graduates
- Importance of internships and project work
- Agile methodology and its application in the industry
- Tips for cracking interviews at major companies

He also emphasized the value of continuous learning and adaptability in a rapidly changing tech environment.

Student Interaction:

The session was highly interactive, with 31 students participating. Students actively engaged in the Q&A segment, asking insightful questions such as:

- What certifications are most valued by companies today?
- How important is open-source contribution in resumes?
- What are common mistakes freshers make during technical interviews?

Mr. Praveen Kumar answered each question thoroughly, offering both technical and career-oriented advice. His approachable demeanor encouraged students to participate freely.

Feedback and Conclusion:

Students expressed great enthusiasm and appreciation for the session.

The session concluded with a vote of thanks delivered by Ms. Sarika Jose, First Year Sub-Advisor, ECE, acknowledging Mr. Praveen Kumar for his time and valuable insights.



**Outcome:**

- Enhanced student understanding of real-world industry practices
- Increased awareness of current trends and career paths
- Motivation for students to build relevant skills and engage in industry-oriented projects

Session 2: Interaction with Final Year students**Date:** August 19, 2025**Time:** 11:00 AM – 11:30 AM**Organized by:** Department of Electronics and Communication Engineering, BJI as a part of First Year Initiation Program**Senior Student Speakers:**

Ancy Maria Edwin

Greeshma Leonald

Rajeena Mary

Adarsh A

Objective of the Session:

As part of the welcome activities, a special talk was organized where senior students addressed the freshers, offering them guidance, motivation, and insights into college life.





Summary of the Session:

The session began with a warm welcome from the First year class Advisor Ms. Deepthi Felix, who introduced the purpose of the event which is to ease the transition of juniors into their new academic environment. This was followed by a series of speeches from senior students.

The speakers shared their personal experiences, including initial challenges they faced and how they overcame them. Topics such as time management, balancing academics and extracurriculars, mental health, and campus involvement were covered. The seniors also emphasized the importance of building positive relationships with peers and faculty, staying true to one's goals, and making the most of college resources. A Q&A session followed, where juniors eagerly asked questions ranging from academic advice to social life, receiving honest and helpful responses from the seniors.

Conclusion:

The session concluded with a vote of thanks, appreciating the seniors for their valuable insights and encouragement. Overall, the talk was well-received and helped create a welcoming and inclusive atmosphere for the incoming students.

Session 3: Aptitude Training

Date: August 19, 2025

Time: 11:30 AM – 12:30 PM

Venue: Room 104

Organized by: Department of Electronics and Communication Engineering, BJI as a part of First Year Initiation Program





Objective of the Session:

A special session on Aptitude Training was organized for the students which aimed to introduce students to the fundamentals of aptitude-based problem solving and to prepare them for future competitive examinations and placement processes.

Summary of the Session:

The event was coordinated by the Training and Placement Cell of BJI. The session was conducted by **Mr. Yadu** a well-known aptitude trainer with extensive experience in guiding students across various competitive platforms.

The training covered key areas such as:

- Quantitative Aptitude (simplifications, percentages, ratios, time & work, etc.)
- Logical Reasoning (patterns, coding-decoding, blood relations)
- Verbal Ability (reading comprehension, synonyms/antonyms, sentence correction)

Interactive methods, live problem-solving, and quick tips for improving speed and accuracy were used to engage the students effectively. The trainer also highlighted the importance of regular practice and shared online resources and preparation strategies.

Conclusion:

The session concluded with a short assessment quiz to help students evaluate their understanding. Overall, the aptitude training session was a productive initiative, equipping new students with essential skills for their academic and career growth.





Day 3- Explore and Create

Session 1: Talk by Entrepreneur

Date: August 20, 2025

Time: 10:30 AM – 11:30 AM

Venue: Room no.104

Organized by: Department of Electronics and Communication Engineering, BJI as a part of First Year Initiation Program

Objective of the Session:

This session aimed at inspiring and guiding new student. A special guest session was conducted featuring **Mr. Atul Mohan**, a successful entrepreneur in the field of electronics and embedded systems.

Summary of the Session:

The session was organized in association with the IEDC. Mr. Atul shared his journey from a student to a startup founder, highlighting key experiences, challenges, and lessons learned in building a successful venture in the electronics domain. Topics discussed included:

- Emerging trends in electronics and IoT, Robotics & Drone technology
- The importance of practical skills and prototyping
- Navigating the startup ecosystem
- Tips on product development, funding, and scaling a business
- The value of perseverance, innovation, and teamwork

An engaging Q&A session followed, where students asked questions related to startup ideas, technical skills, internships, and career paths in electronics entrepreneurship.



**Conclusion:**

The session was both **inspiring and informative**, giving students a fresh perspective on applying their academic knowledge in innovative and entrepreneurial ways.

Session 2: Mega to Micro: A Journey through Electronics and Communication

Date: August 20, 2025

Time: 11:30 AM – 12:30 AM

Venue: Room no.104

Organized by: Department of Electronics and Communication Engineering, BJI as a part of First Year Initiation Program

Objective of the Session:

This session was intended to introduce students to various subject streams available for the upcoming academic term. The objective of the session was to provide a detailed overview of each stream, its relevance, career prospects, and academic expectations.

Summary of the Session:

- **Subject Streams:**

- ✚ **Communication :** Ms. Blessy Babu & Ms. Sreeja

- Introduction to modern communication technologies such as wireless, cellular, satellite, and optical communication systems. To prepare students for careers in telecommunications, broadcasting, networking, and related fields.

- ✚ **VLSI and embedded Systems:** Mr. Roy.S & Mr. Mahesh Sankar





DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

- Introduction to VLSI which involves designing and fabricating ICs thus paving path for career development as Layout Engineer, FPGA Design Engineer, Verification Engineer, etc.
- Further the students will be introduced to the subject: Embedded Systems which involves programming hardware-level softwares thus securing various job roles as Embedded Software Engineer, RTOS Developer, IoT Developer, etc.

Electronic Circuits: Ms.Anju D.S & Ms. Neethu Mary Raju

- Introduction to Electronic Circuits with focus on designing, analysing, troubleshooting analog and digital circuits used in all devices from smartphones and computers to medical equipment and industrial systems. They will be introduced to the job roles of Instrumentation Engineer, Electronics design Engineer, Test and Validation Engineer, etc.

Students actively participated in the Q&A segment, raising queries about subject combinations, career alignment, and eligibility criteria for higher education. Faculty members responded with clarity and provided examples to help students visualize potential pathways.

Conclusion:

The students were encouraged to choose subjects based on their passion, aptitude, and long-term goals rather than peer pressure or societal expectations.





Day 4- Expert Talk

Date: August 21, 2025

Time: 10:30 AM – 12:30 PM

Venue: Room 104

Organized by: Department of Electronics and Communication Engineering, BJI as a part of First Year Initiation Program

Objective of the Session:

This session was handled by **Dr. B. Premlet**, who is a highly respected academician and researcher in the field of Electronics and Communication Engineering. With decades of experience in teaching and research, his contributions to the development of modern electronics education are widely recognized. His interactive and insightful sessions are known to inspire students to explore advanced areas of study and research.

Summary of the Session:

Dr. Premlet began the session by explaining the fundamentals of traditional electronics, including basic components such as resistors, capacitors, transistors, and integrated circuits. He emphasized the role of these components in modern devices and communication systems.

The session then transitioned into advanced concepts, highlighting the limitations of conventional electronics as devices are scaled down. He introduced nanoelectronics as the solution to overcoming these limitations, describing how devices at the nanometer scale offer higher performance, lower power consumption, and greater efficiency.

Key points covered included:

- * Moore's Law and its implications





- * Challenges in miniaturization and heat dissipation
- * Quantum effects in nanoscale devices
- * Applications of nanoelectronics in sensors, medical devices, and communication systems
- * Future research trends and career opportunities in nanotechnology

The students actively participated in the Q&A session, posing questions about real-world applications, research prospects, and the skills required to work in this domain. Dr. Premlet addressed these queries patiently, encouraging students to pursue higher studies and research in electronics and related fields.

Conclusion:

The session was highly informative and motivating. Students gained a deeper understanding of the evolution of electronics and the exciting possibilities that nanoelectronics presents. The practical examples and future career perspectives shared by Dr. Premlet provided valuable guidance for students planning their academic and professional journey.

Day 5- Inspire and Engage

Idea Solution Show Case

Date: August 22, 2025

Time: 10:30 AM – 12:30 PM

Venue: Room 104

Organized by: Department of Electronics and Communication Engineering, BJI as a part of First Year Initiation Program

Objective of the Session:





As part of the concluding activities of the College Initiation Program, a Students' Idea and Solution Presentation session was held. The event provided a platform for the newly inducted students to showcase their creativity, critical thinking, and problem-solving abilities.

Summary of the Session:

In this session, students groups which were already created on Day 1 into teams and tasked with identifying real-world problems related to campus life, academics, technology, environment, or social issues. Each team presented innovative ideas and practical solutions aimed at addressing these challenges.

Some notable presentations included:

- A technological solution for Prosopagnosia
- A mobile app idea for real-time class updates and student-faculty communication
- Suggestions for improving mental health support systems on campus
- A peer-led initiative for academic mentoring and resource sharing

The presentations were evaluated by a panel of faculty members and senior student mentors based on creativity, feasibility, presentation skills, and impact. The session encouraged collaboration, boosted confidence, and reflected the students' enthusiasm and potential to contribute positively to campus life.

Faculty members praised the efforts of the students and assured them of support in refining and implementing promising ideas in the future.

Conclusion:

Overall, the Idea and Solution Presentation was a fitting end to the initiation program, empowering students to think critically, work collaboratively, and become active contributors to the college community from the very beginning of their journey.





School of Engineering & Technology, School of Architecture & Design & School of Management Studies

A CENTRE OF EXCELLENCE IN PROFESSIONAL EDUCATION OF THE CATHOLIC DIOCESE OF QUILON

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

