

WHY B.Tech (ECE) at NCU

The department of Electrical, Electronics and Communication Engineering (EECE) in The NorthCap University has been playing a pivotal role in producing technologists and entrepreneurs of the highest caliber ever since it was established in the year 1996. B.Tech (ECE) students at NCU are equipped with the capacity to work effectively and collaboratively to solve problems which continue to grow more and more complex, defy disciplinary borders and are prepared to be twenty-first century leaders. A highly professional team of faculty and students experiences the joys of innovative learning and research in emerging technologies for a rewarding career.



Program Highlights

- **Specializations** _____
 - Keeping current industry demand in mind, B.Tech in ECE at NCU offers two specialization options
 - ✦ Internet of Things (IoT)
 - ✦ Embedded Systems and VLSI Design.
- **Latest Industry Aligned Curriculum** _____
 - ✦ Balanced, industry-aligned curriculum, compares with the best like IITs, NITs, etc.
 - ✦ Includes current industry trends in ECE like 5G, IoT, Artificial Intelligence, VLSI Design, Embedded systems, Data Science and other emerging areas.
 - ✦ ECE programme provides the freedom to drift between the hardware and software fields. Here at NCU, during the four years of Electronics and Communication Engineering, students gain knowledge of both hardware and the software aspects.
- **Well Qualified Faculty** _____
 - ✦ Well qualified and highly experienced faculty with more than 90% faculty members having PhD degrees from well-known Universities like IITs, NITs.
 - ✦ Faculty Student Ratio (FSR) of better than 1:15, comparable to best Universities in the country.
- **Strong Industry Linkages** _____
 - ✦ B.Tech ECE programme has strong industry linkages which enables students to work in the industry on live and real projects under the direct guidance of industry professionals. It gives hands on experience to students sought by employers worldwide.
 - ✦ Faculty members have close interfaces with industry through faculty Externship program, an innovative step towards bridging industry academia gap.
 - ✦ Industry collaborations with MitsubishiElectrical Ltd. for automation, ISRO for research on Indian navigation systems, Greenstar R&D Pvt Ltd. for Live industry projects and Coding Ninza for enhancing coding skills

- **State-of-the-art Laboratories** _____•

- ✧ Regularly upgraded with the latest equipment and software. Industry standard software like MATLAB with unlimited academic head count license, CADENCE university bundle for VLSI labs, Xilinx, ORCAD-PSpice, Keil, CST, QualNet, Optisystem etc. are available for the students.
- ✧ Newly set up labs as per the current industry/research requirements
- ✧ Navigation with Indian Constellation (NavIC lab) set up in collaboration with Indian Space Research Organization (ISRO)
 - ⇒ Automation Lab set up in collaboration with Mitsubishi Electric India Ltd.
 - ⇒ Internet of Things (IoT) Lab for developing innovative IoT based solutions
 - ⇒ Tinkering Lab to promote innovative and interdisciplinary project work in the university

- **Project-based Learning** _____•

- ✧ Students apply what they learn by executing mini projects of relevance to the industry. This minimizes the gap between classroom and practice and orients the student to solve current and future industry problems.
- ✧ The curriculum includes In-house training after first year to orient future engineers. Students undergo the complete idea-to-product development life cycle from circuit design, PCB design and fabrication, PCB assembling and testing right after 1st year.
- ✧ Students get opportunity to work on industrial live and real projects, projects funded under VC innovation fund scheme, projects in Incubation Centre at NCU, projects funded by Government agencies
- ✧ Opportunity to undertake research at Undergraduate level

- **Holistic Pedagogy** _____•

Emphasis on development of higher order skills with strong emphasis on:

- ✧ Communication & soft skill modules
- ✧ Compulsory Foreign Language course

- ✧ Large number of open electives with interdisciplinary learning
- ✧ Flexibility in curriculum to choose electives
- ✧ Exposure through Fine Arts and Liberal Study courses for creative thinking
- ✧ Compulsory Problem Solving & Design Thinking course
- ✧ Extra-curricular and Co-curricular activities

- **Excellent Student Placements and Higher Education Opportunities in Premier Universities**____•

- ✧ Nearly 100 % placements of eligible students consistently for last many years in well-known companies like Delloitte, British Telecom, Reliance, Ericsson, Airtel, Cadence, Synopses, TCS, ExicomTelesytems, JLL, Lutron, Hero Motocorp and many more.
- ✧ Full support to students in providing internships, preparing students for placements
- ✧ Many of our students pursuing PG programs in prestigious universities abroad like University of Pennsylvania, Georgia Tech University, Carnegie Mellon University, University of California and so on as well as in India at IITs& IIMs etc.

- **Regular Student Mentoring & Guidance** _____•

- ✧ Dedicated student mentoring for providing career and other guidance throughout the program duration.
- ✧ Preparing e-portfolios for each student to identify their strengths and find out best employment match, based on individual student's aptitude and skillset

- **Strong Alumni Connect** _____•

- ✧ Have a large pool of successful alumni working in key positions in companies like Apple, Intel Cadence, Synopses and many others & in Govt depts. Many of our alumni have turned successful entrepreneurs.
- ✧ Alumni are mapped with the current students to guide them in project work, internships, career and placements opportunities