Course Breakdown

To obtain the B.Sc. degree in EEE, students will have to successfully complete minimum 140 credits. The credit and course requirement for the EEE degree program is shown in the table below.

Course Type	Courses	Credit
General Education (GED)	8	24
Essential Skills	4	0
Major Core	17+15L	66
Basic Science: Physics and Chemistry	3 + 2L	11
Mathematics and Statistics	4	12
Major Concentration	4+2L	14
Optional/Minor*	3	9
Final Year Design Project	1	4
Total	44 + 19L	140

N.B.: L denotes a lab course.
*For Minor, total 5 courses are equivalent to 15 credits.

Co- and Extra-Curricular Activities

The EEE Department regularly organizes seminar, webinar, workshop, project fair, EEE Fest, industry visit, excursion, picnic, sports week etc. in collaboration with ULAB Electronics and Robotics Club, IEEE Robotics and Automation Society, IEEE WIE. Resource persons from industry and academia both from home and abroad share their knowledge, expertise and experiences with the students.

Outcome-Based Education (OBE) Curriculum

The EEE program started Outcome-Based Education curriculum since Fall 2020. In this curriculum 12 Program Outcomes of BAETE (Board of Accreditation for Engineering and Technical Education), IEB, have been adopted.

Job Prospects

ULAB
UNIVERSITY OF LIBERAL ARTS BANGLADESH

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ULAB
UNIVERSITY OF LIBERAL ARTS BANGLADESH

DEPARTMENT OF
ELECTRICAL & ELECTRONIC ENGINEERING (EEE)

ulabeee linkedin.com/in/ulabeee eee.ulab.edu.bd

Statement of Identity

Vision

The Department of Electrical and Electronic Engineering is focused on producing high-quality graduates and researchers with excellent analytical skills and social values to become globally competitive.

Mission

The Department of Electrical and Electronic Engineering will offer high-quality education through updated curriculum and state-of-the-art laboratory facilities in Electrical and Electronic Engineering on major areas including Electronics, Power, Communication and Computer with a view to producing competent graduates for both industry and academia.

Contribute to the engineering profession and devote to the welfare of society by adopting an array of contemporary and innovative service activities through liberal arts perspective

Core Courses

Course Code	Course Title	Credits
EEE 1101	Electrical Circuits I	3
EEE 1102	Electrical Circuits I Lab	1
EEE 1203	Electrical Circuits II	3
EEE 1204	Electrical Circuits II Lab	1
EEE 1301	Electronic Circuits I	3
EEE 1302	Electronic Circuits I Lab	1
EEE 2103	Electronic Circuits II	3
EEE 2104	Electronic Circuits II Lab	1
ME 2201	Introduction to Mechanical Engineering	3
EEE 2205	Electrical Machines I	3
EEE 2309	Electrical Machines II	3
EEE 2310	Electrical Machines Lab	1
EEE 2313	Signals and Systems	3
EEE 2216	Numerical Techniques Simulation Lab	1
EEE 2301	Digital Electronics	3
EEE 2302	Digital Electronics Lab	1
CSE 2105	Introduction to Programming with Python	3
CSE 2106	Introduction to Programming with Python Lab	1
EEE 3103	Digital Signal Processing	3
EEE 3104	Digital Signal Processing Lab	1
EEE 3105	Electrical Properties of Materials	3
EEE 3109	Communication Systems	3
EEE 3110	Communication Systems Lab	1
EEE 3207	Power System I	3
EEE 3208	Power System I Lab	1
EEE 3209	Applied Machine Learning	3
EEE 3210	Applied Machine Learning Lab	1
EEE 3311	Microprocessors and Embedded Systems	3
EEE 3312	Microprocessors and Embedded Systems Lab	1
EEE 3316	Electrical Service Design Lab	1
EEE 4103	Control System I	3
EEE 4104	Control System I Lab	1
EEE 4196	Final Year Design Project	4

EEE Concentration Group

I. Electronics Concentration
II. Communication and Signal Processing Concentration
III. Power Concentration
IV. Smart Systems and IoT Concentration

Scholarships and Financial Aid

ULAB provides approx. 15 crore taka every year as scholarships and financial aid in different categories.

Highlights of the EEE Department

- Faculty members hold Master's and PhD degrees from renowned national and international universities.
- Strong Research background with active research in Power Systems, Electronics, Machine Learning, IoT, Renewable Energy, and Wireless Communication.
- Strong industry-academia collaboration.
- Modern Labs: Well-equipped labs for Electronics, Control Systems, VLSI, Power Systems, and Electrical Machines.
- Research Support: Students use MATLAB, Power World Simulator, Cadence Virtuoso, PSpice, and have full IEEE Access for research papers.
- Innovation & Projects: The department organizes hardware projects, circuit design contests, and technical showcases.
- Career & Industry Links: Opportunities for internships, training, and industrial visits in both the power sector and the VLSI/semiconductor sector.
- Mentorship & Guidance: Faculty support students in academics, projects, and career planning.
- Regular workshops. seminars, and technical talks by industry and academic experts from home and abroad.
- Regular Industry visits and Internships at renowned public and private organizations.
- Research collaboration with foreign universities.
- Credit transfer facilities to foreign universities

EEE Lab Facilities

The EEE department emphasizes on students to gain hands-on experience to facilitate industry exposure, and to understand the demand of real life and possess the ability to tackle real life problems through the knowledge acquired at ULAB. The department has enriched laboratory facilities equipped with modern hardware and software facilities.

Electrical Circuit Lab

Electronics Lab

Communication Lab

VLSI Lab

Physics Lab

Chemistry Lab

Control Systems and Robotics Lab

Machine Lab

Power System Protection Lab

Digital Systems Lab

Internet of Things (IoT) Lab

Power System Lab

Faculty Information

The EEE department has excellent faculty members who hold both PhD, and M.Sc. degrees obtained from around the world. The department includes Professor, Associate Professor, Assistant Professor, Senior Lecturer, and Lecturers. The faculty members have strong research backgrounds and are actively engaged in research in Power Systems, Electronics, Machine Learning, IoT, Renewable Energy, and Wireless Communication. They also possess extensive industry and academic experience. Both the faculty members and students have easy access to a range of electronic journals, including IEEE, Science Direct, and Springer.