

Power Electronics Lab

This laboratory is designed to carryout the power electronics and machine laboratory experiment by both undergraduate and graduate student.



Other Facilities

LCD projectors and notebook computers are available for lectures and presentation. Document printing and photocopying facilities are available at the department. Lecture notes and experiment manuals are provided to students. Admission, registration, accounting and examination related processes are performed in the Administrative Building (Block 2) and Dean's Office (Block 3). Canteen and Fast Food Center are also available inside the campus. On campus generators are operated in case of power outage. Insured medical facility is available at the Dhulikhel Hospital, which is one of the KU's teaching hospitals. KU has good sports facilities and organizes Sports Week every year.

INTERNSHIP

The Department not only aims at providing the best quality electrical and electronics engineering education during the four years of studies in the Bachelor of Engineering Program but also puts effort in facilitating its students in having industrial/real-world experience in various industries. This is expected to immensely help the students in finding out the correlation between the knowledge and skills acquired during their studies with the professional engineering practice requirements. The department sends its final year students to various industries related to their specialization area for about one month enabling them to gain firsthand experience of industry and exposure to the aspects of being an employee of an organization.

STUDENT LIFE

SEEE represents the students of the department and is actively involved in improving learning environment and the welfares of the students in the department. Conducting social welfare activities and improving interaction between students of other departments of the university itself and other institutions in Nepal has been the major work done so far by SEEE. SEEE is a forum whereby students can improve their personal and professional qualities and at the same time work as a team in the endeavor of making social contributions.

Each year SEEE organizes various extra curricular activities like interactive programs, welcome and farewell programs, SEEE Quiz etc.

SEEE also publishes annual magazine containing mostly technical articles, current development in the field of electrical electronics and communication technologies.

SEEE also conduct various co-curricular activities such as interaction program, talk program workshop and training sessions.



SCHOLARSHIPS

DoEEE Scholarship: One out of every thirty students admitted to the undergraduate program is awarded this scholarship. This scholarship covers all University fees, excluding accommodation and transportation.

Need based Scholarship: KU provides this scholarship to financially needy students. Students applying for this scholarship are required to show evidence of economic hardship. This is a loan scholarship and the students receiving this scholarship are expected to pay the amount back to the University within a few years after graduation. This scholarship contributes to up to 75% of the tuition fees and is awarded to about 5% of the total number of students.

Others: Other opportunities will be announced as funding becomes available. Some students secure funding from external agencies. Some "Work and study" opportunities may also be available.

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Department of Electrical & Electronics Engineering



General Information to BE Program Applicants

For more information:
Visit: www.ku.edu.np/ee
Email us at : eee@ku.edu.np



INTRODUCTION

The Department of Electrical & Electronics Engineering started Bachelor of Engineering program in 1994. Through all these years, it has significantly accumulated experience and resources to deliver quality education and perform quality research. Faculties with diverse academic backgrounds, quest for leadership in providing best electrical engineering education and continuously evolving teaching-learning and research processes are its major characteristics.

The prime objectives of the department are:

- ◆ To produce self-motivated, objective, confident, and creative graduates of highest quality with entrepreneurial attitude.
- ◆ To become a center of excellence in electrical & electronics engineering education and research.
- ◆ To closely collaborate with the industries and institutions so that the education and research in the department are inline with the current domestic and international needs.

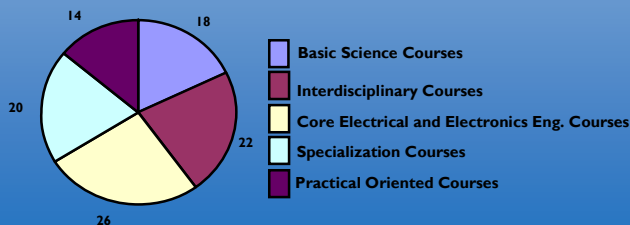
Outline of the Bachelor of Engineering Program

The Bachelor of Engineering program is the core program of the department. It is 4 year duration program comprising of 8 semesters. The department gives strong emphasis on facilitating learning-by-doing. Strong modular course structure is followed. Each course is given adequate practical component. At each level, engineering project practice is carefully planned. Continuous improvement in the curriculum and course delivery method is always sought.

The program provides a strong foundation on basic science subjects and core electrical and electronics engineering subjects up to the second year. Then the students branch into two specialization areas: communication engineering and power-and-control engineering. Communication engineering students are also provided with the knowledge in power apparatus and systems, and power-and-control engineering students are provided with the knowledge about digital and analog communication systems.

Students do projects in all the four years with varying degree of complexity, so that they can have the knowledge and the skills required for engineering design and implementation. While the laboratory work reinforces their understanding of various courses at each level, project work gives the students the platform for showing their creativity, testing their innovative ideas, and realizing the practicality of engineering education.

Thus, the total coursework of the BE program comprises basic science courses, interdisciplinary courses, core electrical and electronics engineering courses, specialization courses, and practical oriented courses. The approximate division of credit-hour among the courses is as follows.



FACULTIES & STAFFS

Currently, there are 17 faculties in the department and 3 technical support staffs. Other departments of KU (Computer Engineering, Mechanical Engineering, Natural Sciences and Languages and Mass Communications) also offer various courses to the students of the department. Several new regular faculties are expected to join from August 2010. Visiting faculties and local experts are invited to deliver specialization courses or seminars.

LABORATORY & OTHER FACILITIES

The department has several well equipped laboratories for student experiments and research-and-development. Laboratories are generally open for the working hours. With prior approval, all the laboratories can be utilized any other time, even during holidays. Existing laboratories are continuously being upgraded and new laboratories are added with Kath-

mandu University's own funding and with the help from international donors. Among the donors, NORAD and NHAM have provided significant

funding and the funding is still continuing. The students also are allowed to use the laboratories of other departments of Kathmandu University. Laboratories and workshops of the department of Mechanical Engineering are very much used by the students for their training and project works.

In addition to laboratory works, students are also taken to field visits to various industries and organizations to reinforce their learning and to observe real world technology. The lecture rooms and laboratories of the department are situated in the Prof. Inge Johansen Engineering Block [08] and High-Voltage Block.



Engineering Block



High Voltage Block

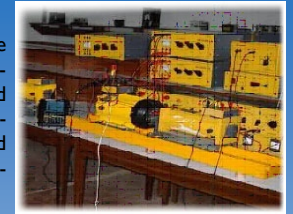


Electronics Lab

This laboratory is designed to facilitate the general electronics engineering experiments and project works by the undergraduate students.

Power Lab

The power lab has various moderate sized motors, generators, transformers, variable power supplies, and other power components. Experiments related to induction, DC, and synchronous machines can be conveniently performed in the laboratory.



Communication Lab

This laboratory is designed to carry out the undergraduate experiments and project works that are related to analog and digital communication systems, microwave and antenna systems,

Instrumentation and Control Lab

This laboratory is designed to carry out the undergraduate experiments and project works that are related to Measurement and instrumentation and Control



DSS Lab

The Digital Signals and Systems Laboratory is primarily for digital system design & digital signal processing experiments.

Computer Lab

This laboratory is to carryout the laboratory and project works which need computer programming and simulations.



High Voltage Lab

High Voltage Laboratory in KU is first of its kind in Nepal. The lab is constructed in cooperation with NTNU Norway. The major system in the lab comprises High Voltage Construction Kit from Haefely Test AG, Switzerland.

Lighting Lab

Lighting Laboratory in KU is first of its kind in Nepal. The lab is primarily for luminary and LED testing. The major system in the lab comprises LED measurement system.

