Bachelor of Electrical and Electronics Engineering – An Official Site of Pokhara University

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Bachelor in Electrical and Electronics Engineering

The Department of Electrical and Electronics Engineering strives to be a centre of excellence in education, training and research, producing high quality engineers and researchers. In this endeavor, the department will continually develop knowledge and quality of staff, upgrade and create new laboratory facilities, revise the teaching program, acquire adequate new equipment to keep abreast, contribute and progress in the emerging technologies and committed for rendering the best service to the society.

School of Engineering has started Bachelor program in Electrical and Electronics Engineering from 2018. PU, SoE's Electrical and Electronics Engineering program is one of few most demanding course in the rapidly growing field of engineering and only one in serene city Pokhara (Western Region), educating the next generation of Electrical & Electronic Engineers, who will create the technology of tomorrow that work effectively and efficiently. Integrating both the knowledge of Electrical and Electronics, the course technically focuses on the application and design of equipment in electrical sector. Further, the program educates students in an academic environment through inter disciplinary projects and hands-on-learning. The confidence in managing new knowledge society requires continuous learning a novel approaches supported with research and development works in the areas of power and energy. Thus, the department's vision and mission reflects this and my department joins me in meeting this mission by producing knowledgeable and committed technologists to serve our country and humanity as a whole. The hard work and sincerity are strong pillars of success. Through our practices we strive to impress our students to inculcate these values and support the mission of Faculty of Science & Technology, Pokhara University. I welcome our alumni to join hands in supporting our endeavors by all means of interaction. Our doors are always open to Universities, research organizations, industries and utility companies to collaborate with us in building valuable knowledge society foreseeing bright future.

Objectives:

We are committed to

1. produce graduates with a strong foundation in the basic sciences and mathematics that will enable them to identify and solve electrical engineering problems;
2. provide students with a solid foundation in Electrical Engineering that prepares them for life-long careers and professional growth in fields of their choice;
3. provide the basic skills to communicate effectively and to develop the ability to function as members of multi-disciplinary teams;

4. provide a broad-based education so that they can appreciate diversity of opinion, better understand ethical issues, and develop a more global perspective;
5. provide a relevant engineering design experience that is integrated across the four-year curriculum which will develop an understanding of the relationships between theory and practice.

Career Opportunities:

The graduates of Electrical & Electronics Engineering program have ample scope of opportunity to build their career in following sectors.

1. Government Sectors
2. Civil Aviation Authority
3. Nepal Electricity Authority
4. Nepal Telecom
5. Private Consulting Service

1. Private Electrical & Electronics Companies
2. INGOS
3. NGOS
4. Research Institutions

Course Structure and the Curriculum

Semester I			**Semester II**		
Course Code	*Course Description*	*Credit Hours*	*Course Code*	*Course Description*	*Credit Hours*
MTH 112	Engineering Mathematics I	3	MTH 114	Engineering Mathematics II	3
PHY 111	Physics	4	CHM 111	Chemistry	4
MEC 111	Thermal Science	2	CMP 115	Object Oriented Programming in C++	3
MEC 120	Engineering Drawing	2	ENG 111	Communication Techniques	3
CMP 113	Programming in C	3	MEC 110	Mechanical Workshop	1
ELE 110	Basic Electrical Engineering	3	MEC 130	Applied Mechanics I	3

Semester III	**Semester IV**

Course Code	*Course Description*	*Credit Hours*	*Course Code*	*Course Description*	*Credit Hours*
MTH 212	Engineering Mathematics III	3	MTH 214	Engineering Mathematics IV	3
ELE 210	Electrical Engineering Materials	2	MTH 230	Numerical Methods	3
ELE 211	Network Theory	3	ELX 231	Instrumentation	3
ELX 212	Logic Circuits	3	ELX 214	Electronic Circuits	3
ELX 210	Electronic Devices	3	ELX 230	Microprocessors	3
ELX 220	Electromagnetic Field and Waves	3	ELE 220	Electrical Machines	3

Semester V			**Semester VI**		
Course Code	*Course Description*	*Credit Hours*	*Course Code*	*Course Description*	*Credit Hours*
MGT 321	Organization and Management	2	ELX 310	Power Electronics	3
ELE 320	Advanced Electrical Machines	3	ELE 333	Power System Analysis	3
CMM 310	Signals and Systems	3	CMM 312	Communication System Engineering	3
ELE 330	Transmission and Distribution	3	ELE 331	Power Plant Equipment	3
ELE 322	Control Systems	3	ELE 332	Switch Gear and Protection	3
MTH 220	Probability and Statistics	3	ELE 360	Research Methodology	2

Semester VII	**Semester VIII**

Course Code	*Course Description*	*Credit Hours*	*Course Code*	*Course Description*	*Credit Hours*
ECO 411	Engineering Economics	3	ELE 431	Utilization of Electrical Power	3
ELE 430	Transmission Line Design	3	ELX 460	Professional Ethics in Engineering	2
ELE 420	Machine Design	3	ELE 433	Power Plant Design	3
ELX 430	Advanced Instrumentation	3	ELX 432	High Voltage Engineering	3
	Elective I	3		Elective II	3
ELE 390	Project I	1	ELE 490	Project II	4

Eligibility for Admission

Student seeking admission to Bachelor level engineering programs must have completed Intermediate in Science (I. Sc.) or Higher Secondary Education Level (10+2 with science stream), or Diploma in Engineering or Architecture or equivalent, from recognized Institution, securing at least second division marks or “C” Grade (average of theory & practical) in each subject on grade 11 and 12. Besides the basic academic requirement, applicants must enlist themselves in the merits list of the entrance exam taken by School of Engineering.