"Committed to Excellence in Technical Education"

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# POKHARA Engineering College

Affiliated to Pokhara University

Draspectus

Bachelor of Civil Engineering
 Bachelor of Computer Engineering
 Bachelor of Architecture

B.E.IT (Proposed)M.Sc. in Construction Management

# FOUNDER PRINCIPAL

अद्वा समन

Late Er. Lekh Bahadur Gurung was an ideal guru, mentor and a great personality. He was a great visionary and a source of inspiration to the engineering society. He was a man of fertile imagination and with untiring energy. He established Pokhara Engineering College (PEC) at the time when there were very few private engineering colleges in the Kathmandu valley and none was there out of valley. The dark phase of the time was; a high percentage of aspiring students had to drop the study due to unavailability of colleges in their places. Considering the truth, Situation decided to establish a college in Pokhara and worked relentlessly with a sacred aim to make PEC a hub for engineering study to the students unable to go to Kathmandu. Present position of the institution proves his dream come true. Today majority of students from many districts prefer PEC for studying. His sudden demise in 2020 A.D. was a great shock to PEC family. Until his last breath he was apprehensive to holistic development of the institution. Working on his unfulfilled mission will be a true tribute to him.

Late Er. Lekha Bahadur Gurung



## Introduction

Pokhara Engineering College (PEC) was established in 1999 A.D. with a commitment to providing integrated quality education in different fields of engineering under the same roof through private initiation. It is the first engineering college of this region commencing both bachelor's and master's studies. Affiliated to Pokhara University, PEC feels proud in awards and achievements bagged in the past and reputation gained in catering quality education. We also feel proud to find our alumni dispersed in different engineering fields holding responsible and constructive positions within the country and outside. Placed a lot, PEC has been able to count itself among ideal and convincing institutions to the fresher wishing to shape themselves as professional engineers.

## Pokhara University

Pokhara University (PU) was established in 1997 A.D. under the Pokhara University Act 2053 B.S. It is one of the reputed universities of Nepal. Its central office is located in Pokhara Metropolitan-30, Khudi, Lekhnath, whch is 15 k.m. away from Pokhara on Prithivi Highway towards Kathndanu. PU is well recognized by all over the world. The Prime Minister of Nepal is the university Chancellor and the Minister of Education is the Pro-chancellor. The Vice-chancellor is the principal administrator of the university. It has 4 constituent, 4 joint constituent and 57 affiliated colleges. It has partnership with 35 international universities all over the world. PU has been offering Bachelor's, Master's, M.Phil. and PhD. degree programs. Currently more than 30,000 students are studying in the constituent and affiliated college of the university.

# WELCOME TO PEC



PEC is nestled in the downtown Pokhara Metropolitan city. It is on the shore of small Phirke river and surrounded by green hills with panoramic view of Majestic Himalayas. All round the year vibrant environment of the valley provides students to enjoy a pleasant atmosphere. The campus environment is peaceful and pollution free, fostering learning and creativity. The college carries an ethos to make students stand as the best in their related fields. Our quality education endowed with modern teaching and learning pedagogy encourage students to be independent and self-motivated learner. Today's market seeks qualities like creativity, goal setting, independence, teamwork and problem solving in employees. We help you to develop those skills to enhance your career successfully after the degree. Our door is open for all aspiring students. Welcome to PEC.



# Message from the Chairperson

Pokhara Engineering College (PEC) is the pioneer institution offering varities of courses in Engineering and Architecture. When we look back to our tireless efforts of two and half decades, we feel comfortable to find our alumni successfully contributing their services to national and international arenas with successful career.

During its establishment days, this college had a dream to provide engineering education to aspiring students from local to other parts of the country, while there was no option for higher education in engineering except heading to capital city Kathmandu. In such a crucial time Founder Principal Late Lekh Bahadur Gurung took a herculus responsibility to start a college under the affiliation of Pokhara University through private initiation. Having formed a dedicated academic team, he started it with undergraduate engineering programs, Civil, Electronics and Communication and Computer. Ever since, it has been proving excellent engineering education from bachelor's to master's levels.

At PEC we provide a conducive environment for the best learning. Well experienced and qualified faculty members, modern teaching pedagogy, full-fledged regular classes, friendly environment are some of the positive aspects of PEC. Technical education is a practice prone learning. PEC has always given priority to lab practices and field visits along with theory classes. The best infrastructure and modern lab equipments are assets to PEC. Students are made well versed with their practical knowledge because of which they easily get fit in the professional life after acquiring degree. Our respected Founder Principal, late Er. Lekh Bahadur Gurung had a dream to take this institution to great heights in quality and excellence, providing opportunities at affordable cost. Our motto is to carry his dream lifelong and keep putting efforts tirelessly for the holistic development of PEC. As said earlier, PEC happened to be established due to a strong need of an engineering college out of valley, now 'having an age of about two and half decades, PEC has been assuring all prospective students to join it or the best education and career.

Ms. Hira Gurung Chairperson

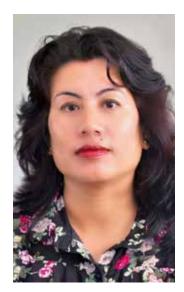
# **Message from the Principal**

I extend a hearty welcome to all the new students who want to pursue an Engineering Education in Pokhara Engineering College. We feel proud as the pioneer college of this region to start both Bachelor's and Master's programs in engineering.

Pokhara Engineering College was established in 1999 with the aim of imparting quality engineering education to produce qualified resources to develop our country. The development of a quality education system largely lies on the committed members of the faculty, quality infrastructure, supportive administration and large pool of learning resources. Our program is led by experienced and skilled academicians who provide the best conceptual, meaningful learning environment to widen the student's horizon of education.

Pokhara Engineering College has built an environment for delivering theoretical as well as practical knowledge. Engineering education is incomplete without practical knowledge. Our campus is equipped with labs for all disciplines, and the curriculum includes projects which simulate on-the-job experiences for our students.

Our college is committed to innovation, and as such provide support and encouragement to students to innovate. We give care and attention to all students through our counseling service to make them highly competent professionals. We believe that our college's education is the foundation for all the future careers. I extend my best wishes to all students in their career.



Ar. Rojana Joshi



Er. Som Gurung

## Message from the M.Sc. Co-ordinator

It is my great pleasure to welcome you all to M.Sc. in Construction Management programme. The programme was introduced at PEC in 2009 A.D. It has successfully completed 12th academic year securing good academic performance achieving position of Dean List almost in every year. Our objective is not only to prepare students to excel in examinations but also to nurture social, moral, and pragmatic values. This will make our graduates responsible and build in confidence to withstand any managerial challenges in life with fortitude and elegance.

The Master's Programme in Construction Management is running with a professional team of highly skilled academicians, providing a conceptual, meaningful learning environment. The two years Master's Programme has been designed to explore construction management knowledge globally, strengthen concepts of complexity of issues in today's construction business environment and adequate intellectual skills through coursework, case studies, seminars, project works and independent research activities as thesis work. We adopt best teaching methodologies as 3 P's i... Prepare, Participate and Practice.

So, if you want to be a successful Construction Project Manager and lead the large infrastructure projects in the country, it is certainly the right course and the right institution for you. We, as a PEC are very proud to be recognized as engineering excellence center. We extend our sincere gratitude to all our valued students, faculties, Pokhara University, Nepal Engineering Council (NEC), Nepal Engineering Association (NEA) and all well-wishers of college.

.Lastly, I would like to thank you all for choosing our master's programme.

## Vision

To excel professional education and achieve the best on par with global context.

## **Mission**

- » To motivate students to take chances to explore new avenues of expression and innovation.
- » To build up creative engineers, imbibed with original ideas.
- » To be recognized as innovative institution and make findings truly assets of the nation.
- » To indoctrinate the values of ethical standards in personal, social and public life and create leadership parallel to brilliant education as per the objective and need of the society and nation.
- » To pursuit excellence.





## **PEC** Aims

- Developing itself into a National Center of Academic Excellence
- Imparting distinctive quality education in the discipline of Engineering & Technology
- Keep on Promoting the college as a research center, envisaged during its establishment.
- Assure accessibility of Engineering Education to the deprived and talented community.
- Develop a person of physical,
  intellectual and spiritual potential,
  which could utilize chances to foster
  self-assurance and self-esteem.
- Expanding gradually relevant and latest programs from Bachelor to Master and above.

## Infrastructure

- Five storey buildings with more than 145 specious rooms.
- Two storey hostel building with 14 rooms.
- Badminton court, Basket ball court, and TT hall.
- Science and Engineering labs and workshops outfitted with materials, machines, tools and equipments.
- Model rooms.
- Specious auditorium hall.
- Well furnished mini conference hall
- College bus for transportation.
- Vehicle parking.

## **Undergraduate B.E. Programs**

### **Bachelor of Civil Engineering**

Civil Engineering concerns to structural, material, environmental, water resource and geotechnical engineering. It deals with planning, designing estimating, constructing and maintaining buildings, roads, railways, tunnels, airports, bridges, dams, hydropower etc. Nepal is an underdeveloped country. Emphasize is given on their developments. Furthermore due to rapid urbanization there is emerged need to develop the modern and mass infrastructure for which the nation has already embarked upon its implementation. So there is wide scope of Civil Engineers within the nation. PU curriculum is updated and time relevant. Students are capable to compete in the international level too.

### **Bachelor of Computer Engineering**

Considering the global change in the field of Information & Technology and observing the current trends leading to the future requirements and advancement in the technology, Pokhara Engineering College has accredited a 4 years Bachelor's Degree in Computer Engineering. Besides the common prospective of technical education, it offers the course with the collective specialization of Hardware and Software with quality focus always ahead through practical based studies. The course provides the opportunity for students to implement their skills in the field of software development, hardware and networking, design, installation and operation on automated systems. Where the world market is being leaded by the IT sector, PEC promises to provide potential, highly qualified and desirable IT professionals.

### Architecture

The Bachelor in Architectural Studies draw up undergraduate to revamp the surroundings and to make astonishing environments. With a project-based approach to learning and a diverse body of faculty and students, the program synthesizes creative, technical, environmental, and social considerations, and is driven by a forwardlooking and entrepreneurial spirit. We teach our students to master the essential tools and skills of the architect, while simultaneously encouraging them to think broadly and creatively about how these tools and skills might be used in the future. This bachelor's degree has an exclusive internship program that will allow you to gain invaluable work experience in some of the most prestigious studios worldwide. This program will allow you access to the Master in Architecture that is necessary to access the regulated profession of architecture.

### B.E. IT (Proposed)

Bachelor of Engineering in Information Technology is a course that prepeare students to have succesful career in the filed of IT. IT career is one of the most highly demanded profession in today's workplace areana. With almost every company requring some degree of infrastructure in its information technology and the advantage of studying IT is endless when it comes to opportunities for career advancement and versatility. When you choose to become an undergraduate in B.E.IT course, it can open up a wide spectrum of way to professional career as well as higher studies in the field of information technology.

## **Master of Science in Construction Management**

#### Program Introduction

M.Sc. in Construction Management is one of the key disciplines, which has a prime importance in the development of any nation. Keeping in view of the ever-increasing need of inventive and farsighted construction professionals with managerial efficiency and Planning, PEC offers M.Sc Program in Construction Management.

#### Objective of the Program

The objectives of this program are as follows:

- To equip engineers of all branches, architects, builders and surveyors to play an effective role in managing construction projects.
- To develop creative decision-making and problem-solving skills for success in a competitive business environment.
- To produce high level construction management professionals.
- To tie up construction industry and the academic institution for overall upliftment of the industry.
- To establish a pioneering academic institution in the field of construction management in order to enhance opportunities of advance study and research in construction engineering and management in the country.



#### Course Structure

This is a full time course of 60 credits divided into four semesters. The course offered is classified into three groups as core courses and electives. In addition to the above mentioned courses, each candidate has to undertake thesis work of 15 credits. For thesis work one has to identify a research topic and is required to defend successfully in accordance with the university thesis guideline.

#### Duration of the course

The time required for the degree is two years divided into four semesters with each semester of 16 weeks. First to third semesters are devoted to course work and the fourth semester is allocated to thesis work. The maximum duration for the completion of course is within 4 years and additional 1 year can be given to thesis work on special request upon approval of concerned authority.

# **FACILITIES AND RESOURCES**

#### Library

Library is an indispensable component of any educational institution. PEC owns a well furnished specious library. It boasts of more than 17 thousand text books and reference books. Enough number of tutorials, technical journals, magazines, periodicals, national dailies and online journals are additional assets of PEC library. Status of available books can be easily known from the catalogue provided. Silent environment, separate study room with access of personal lap top to internet encourage students to stay longer period in the library. It is open from 6:30 a.m. to 8:00 p.m. every working day.

#### Cafteria

PEC has a specious cafteria where students can enjoy Indian, Nepali and Continental foods of their choices. Food are hygeinic and comparatively cost-effective. Free wifi and airy space lures student's for a comfortable stay at the place.

#### **Transportation**

PEC bus is always ready to shuttle students from their place to college. Generally field visits, short distant tours, site visits etc. are emphasized to serve up by the college bus.

#### Stationery shop

A stationary shop with stationery materials at reasonable cost, lamination, binding and Xerox facilities are available within the college premises providing service from morning to late evening.

#### Internet Access

High speed internet access with free wifi is available 24/7 days within the college compound. It makes easy to studetns for e-learning and research works.

#### Computer Labs

PEC has well furnished computer labs like Advanced Computer Labs, Multipurpose Computer Labs and Hardware and Networking Labs which are full-fledged computer centers to run practical classes as per the curriculum as well as other non credit courses offered. Students are also encouraged to use the labs in off hours and even after the class time.

#### Auditorium

PEC has specious auditorium halls generally used for workshops, conferences, trainings, presentations and mass gatherings. Halls are fully equipped with necessary equipments convenient to run any program in techno friendly environment.



#### Conference Hall

A mini conference hall with a capacity of 50 seats is also available at PEC. Gathering of small number people for conference, meetings and briefings run in this cozy hall.

#### Play Fields and Sports

PEC gives priority to physical fitness of students through various games and sports. Each year inter semester sports week is conducted where various indoor and outdoor events are organized. Similarly representing the college, students participate in various tournaments organized by other colleges and reputed sports clubs. PEC possesses basketball and badminton courts and TT hall, where games can be practiced in leisure time.

#### Classrooms

PEC classrooms are well ventilated, spacious and airy. Each class is furnished with comfortable iron desks, lecture dais, whiteboard, OHP, multimedia and AV facilities.

#### Power Backup

Strong power backup is available for smooth running of theoretical and practical sessions of the college. A 20KVA power generator & 5KVA solar power are at the standby position for mantaining uninterrupted power supply.





# **RESEARCH ASPECTS**

#### RMC

Pokhara Engineering College has established Research Management Cell (RMC) under a set guideline instructed by PU Research Center. The main objective of the cell is to encourage its faculty and students in research activities through project and other research works and organizing research workshops and trainings. Pokhara University Curriculum provides enough technical knowledge both in the class and labs. Blending of acquired knowledge into inventive tasks is a crucial part of school education. RMC stimulate through working on new findings. It comprised of a group of dynamic professional.

#### CESIL

Civil Engineering Students' of Inventive League (CESIL) is a students' technical association meant to work together in invention and creative works in the branch of civil engineering. Working committee of CESIL is formed comprising students of different semesters of civil department. It stimulates students to work together in technical innovative works in the campus. RMCPEC directly guide and supervise its functions.

### **CAPEC**

Computer Association of Pokhara Engineering College (CAPEC) is similar to CESIL but related to computer department. Here students from different semesters of computer engineering participate and also form working committee through nomination or election process. CAPEC is also directly guided and supervised by RMCPEC for its research works.

### KALA

Kreative Association of Learning Architects is an association formed by the students of architecture faculty in Pokhara Engineering College. It was officially started in Baishak 2079 B.S with a quote "For us, by us." Its a non political association which works for the the betterment of architecture students who all in-fact are the members of KALA. The association organizes different possible creative and informative programs for the members maintaining the unity amongst all the batches. KALA encourages students to come forth with their certain problems and difficulties that can be solved through proper discussions and counselings if required. KALA also pushes students towards extra curricular activities and provides every possible help required in this long run of 5 years of architecture.

#### | Teaching Methods

- Well experienced, dedicated and student oriented faculties, possessing expertise in the related Subject, take classes in pedagogical methods using multimedia, audio visual and other modern teaching equipments.
- » Comprehensive lecture, group discussion, tutorials, practical sessions, field visits & industrial tours, project works, audiovisual presentation, talk programs etc.
- > Frequent guest lecture from prominent national and international personalities.



## **SOCIAL ASPECTS**



#### Liaison Officer

Liaison officer provides advice to student's about various academic and external affairs of the college. He/she does career counseling and handles student's disciplinary and misbehavior issues and also get in touch with individual quardians in co-ordination with class co-ordinators. He/ She is responsible to establish relationship with national and international institutions on behalf of the college. This wing manages internships and OJT for student's to help them explore new avenue of learning skills.

#### Youth Red Cross Circle

Pokhara Engineering College Youth Red Cross Circle is a sub Unit of Red Cross Society, Kaski District. Our youngsters spare time from their most valuable study hours and involve honestly in volunteer activities. They learn how to alleviate human sufferings and protect life and health. Similarly ensure respect for all human being promoting mutual understanding, friendship, co-operation and lasting peace among all people disregards of nationality, race, sex, religion, class and political thoughts. It boosts them to be the social engineers of tomorrow with a spirit 'Yes I serve', a soul slogan of the RCS.

#### Free Students' Council (FSC)

It is a non political students' welfare organization of the college which works together with college administration on various student's issues. It does bridging work between college management and students. It organizes annual sports, other extra curricular activities, fresher welcome program, farewell, various social tasks like fund raising for natural disasters, environmental awareness programs, students' interaction programs etc.



# **HOW TO GET ADMISSION**

#### Bachelor programs

Interested candidate should meet the eligibility criteria laid down for the enrollment in B.E. programs. One should have passed I. Sc./ 10 +2 Sc (including Bio group with 100 marks or 3 credit hour weightage in mathematics) or Diploma in Engineering (degree in related program is preferred) with at least in 2nd division or c grade in each subject or any other recognized certificate/diploma considered equivalent to above examinations and recognized by PU.

#### Master's Program

#### M.Sc. Construction Management

Candidates should have passed B.E. Civil, Machanical, Electrical, Hydropower, Geotechnical, B.Arch. or any degree equivalent to above examinations and recognized by PU. with at least 2.0 CGPA or 45% marks. Students have to face Central Entrance Examination arranged by Pokhara University.

#### **Total Intake**

| B. Architecture                  | - 48 (seats) |
|----------------------------------|--------------|
| B.E. Civil                       | - 96 (seats) |
| B.E. Computer                    | - 48 (seats) |
| B.E. IT (proposed)               | - 48 (seats) |
| M.Sc. in Construction Management | - 30 (seats) |

#### Important Documents

- Duly filled up application form which can be downloaded from the website too (bachelor programs only).
- Xerox copy of certificate of previous academic qualifications.
- Citizenship Xerox copy and original Migration Certificate.
- Equivalent Certificate for foreign university
- 2 PP size photographs

#### **Scholarships**

#### Merit Scholarship

Under this scheme, 20% to 50% of total fee is waived on the basis of marks obtained in the previous qualifying examination. Similarly in every semester freeships are offered to semester toppers of each program. Such students are awarded with 50% waiver on tuition fee of the subsequent semester. These freeships are granted strictly on the merit basis of the students' semester results.

#### **PU Scholarship**

Number of this scholarship is 10% of total quota in each program. Pokhara University keeps sole right to select and recommend students on merit basis. Under this scholarship full fee is waived.va

#### Grading System

Students are awarded Semester Grade Point Average (SGPA) for each semester and Cumulative Grade Point Average (CGPA) on the completion of the degree. Grades awarded in a particular subject is aggregate performance in internal and final examinations of each semester which is evaluated on a 4 point scale as under.

#### **Under Graduate Programs:**

| Grade | Grade point | Description                     |
|-------|-------------|---------------------------------|
| А     | 4.0         | Excellent                       |
| A-    | 3.7         |                                 |
| B+    | 3.3         |                                 |
| В     | 3.0         | Good                            |
| В-    | 2.7         |                                 |
| C+    | 2.3         |                                 |
| С     | 2.0         | Satisfactory                    |
| C-    | 1.7         |                                 |
| D+    | 1.3         |                                 |
| D     | 1.0         | Minimum Requirements for Credit |
| F     | 0           | Failing                         |



#### Graduate Programs:

| Grade | Grade point | Description          |
|-------|-------------|----------------------|
| А     | 4.0         | Excellent            |
| A-    | 3.7         |                      |
| B+    | 3.3         |                      |
| В     | 3.0         | Good                 |
| B-    | 2.7         |                      |
| C+    | 2.3         |                      |
| С     | 2.0         | Minimum Requirements |
| F     | 0           | Failing              |

#### **Degree Awarded**

On the successful completion of the entire course and the thesis work, candidates are awarded the M.Sc. degree in Construction Management. Similarly Bachelors and Masters levels students are required to secure CGPA 2.0 and 3.0 respectively to graduate from the programs.

#### Attendance

Students enrolled at PEC are compulsorily expected to attend every lecture, tutorial, seminar and practical class. Total attendance has to be at least 80% of the classes actually held. If the student is continuously absent from the college for more than four weeks without notifying, he/she is liable to be disqualified for both internal and external examinations.



It is very important to take the entire process of engineering seriously if a student wants the best outcomes in their student life. Pokhara Engineering college is quite supportive for students to groom themselves. I am very delighted to be a part of this college and the best thing about the college is good environment, co-operative teachers and staff which amazes and uplift me to do the best. I got to know many things here regarding engineering studies and future scope related to it which is still continue to gather. I'm very much grateful to our honorable teachers who always guide us and appreciate our tasks and make us very comfortable in every situation.

Ms. Smriti Pant (5th Sem. class topper 4 SGPA) B.E. Civil (6th Semester)



My journey to PEC was driven by my ambition to become a Software Engineer. PEC's scholastic community enchanted me from the very beginning and encouraged me to devote myself to studies. I'm lucky enough to get a reputed college like PEC at my hometown. Being a student of this college I'm enhancing my knowledge through practice base quality education delivered by my professional teachers. I feel proud to be a part of this college.



Ms. Sumita Poudel B.E. Computer (4th Semester) From my experience of two years' journey in PEC, I have felt that Architecture simply called as combination of art and science is a process of learning, unlearning and re-learning. This creative process



of making thoughtful spaces has ridden me to various roller coasters and I am thankful to all the dedicated faculty members for their time to time guidance and support that has helped me to shape my ideas in a better way. Beside well facilitated infrastructures, the college has provided friendly interactive environment where I could learn from my seniors and guide to juniors. This journey has helped me to discover an innovative side of me and I would like to express gratitude from the bottom of my heart to the college for guiding me in this process of knowing myself better.

#### Ms. Lina Tilija (3rd Sem. class topper 4 SGPA)

B.Arch. (4th Semester)

# **Curriculum Structure**

## **Bachelor of Civil Engineering**

| 1st Semster |                                       |                 |  |
|-------------|---------------------------------------|-----------------|--|
| Course Code | Course Description                    | Credit<br>Hours |  |
| MTH 112     | Engineering Mathematics I             | 3               |  |
| PHY 111     | Physics                               | 4               |  |
| MEC 111     | Thermal Science                       | 2               |  |
| MEC 120     | Engineering Drawing                   | 2               |  |
| CMP 113     | Programming in C                      | 3               |  |
| EIE 110     | Basic Electrical Engineering          | 3               |  |
|             | 2nd Semester                          | r               |  |
| Course Code | Course Description                    | Credit<br>Hours |  |
| MTH 114     | Engineering Mathematics II            | 3               |  |
| CHM 111     | Chemistry                             | 4               |  |
| CMP 115     | Object Oriented Programming in<br>C++ | 3               |  |
| ENG 111     | Communication Techniques              | 2               |  |
| MEC 110     | Mechanical Workshop                   | 1               |  |
| MEC 130     | Applied Mechanics I                   | 3               |  |
|             | 3rd Semester                          |                 |  |
| Course Code | Course Description                    | Credit<br>Hours |  |
| MTH 212     | Engineering Mathematics III           | 3               |  |
| MEC 131     | Applied Mechanics II                  | 2               |  |
| CVL 211     | Civil Engineering Materials           | 2               |  |
| WRE 210     | Fluid Mechanics                       | 3               |  |
| STR 210     | Strength of Materials                 | 3               |  |
| GTE 210     | Engineering Geology                   | 3               |  |
| CVL 290     | Project I                             | 1               |  |
|             | 4th Semester                          | ſ               |  |
| Course Code | Course Description                    | Credit<br>Hours |  |
| MTH 220     | Probability and Statistics            | 3               |  |
| CVL 221     | Surveying I                           | 3               |  |
| ELX 110     | Basic Electronics Engineering         | 2               |  |
| MTH 230     | Numerical Methods                     | 3               |  |
| WRE 211     | Hydraulics                            | 3               |  |
| STR 212     | Structural Analysis I                 | 3               |  |

| 5th Semester |                                             |                 |
|--------------|---------------------------------------------|-----------------|
| Course Code  | Course Description                          | Credit<br>Hours |
| ARC 358      | Building Technology                         | 2               |
| WRE 350      | Engineering Hydrology                       | 2               |
| STR 312      | Structural Analysis II                      | 3               |
| GTE 320      | Soil Mechanics                              | 4               |
| ENV 330      | Water Supply Engineering                    | 3               |
| CVL 390      | Project II                                  | 1               |
| CVL 321      | Surveying II                                | 3               |
|              | 6th Semester                                |                 |
| Course Code  | Course Description                          | Credit<br>Hours |
| WRE 320      | Irrigation Engineering                      | 3               |
| STR 320      | Design of Steel and Timber<br>Structures    | 3               |
| GTE 321      | Foundation Engineering                      | 3               |
| ENV 331      | Sanitary Engineering                        | 3               |
| STR 331      | Concrete Technology & Masonry<br>Structures | 3               |
| CVL 322      | Survey Field Project                        | 1               |
|              | 7th Semester                                |                 |
| Course Code  | Course Description                          | Credit<br>Hours |
| STR 440      | Design of R.C.C. Structures                 | 3               |
| TRP 411      | Transportation Engineering I                | 3               |
| WRE 430      | Hydropower Engineering                      | 3               |
| CVL 431      | Estimating and Valuation                    | 3               |
|              | Elective I                                  | 3               |
| ECO 411      | Engineering Economics                       | 3               |
|              | 8th Semester                                |                 |
| Course Code  | Course Description                          | Credit<br>Hours |
| CVL 441      | Construction Project Management             | 3               |
| CVL 440      | Engineering Professional Practice           | 2               |
| TRP 412      | Transportation Engineering II               | 3               |
|              | Elective II                                 | 3               |
| CVL 490      | Project III                                 | 5               |

## Bachelor of Computer Engineering

|                | 1st Semster                        |                 |
|----------------|------------------------------------|-----------------|
| Course<br>Code | Course Description                 | Credit<br>Hours |
| MTH 112        | Engineering Mathematics I          | 3               |
| CHM 111        | Chemistry                          | 4               |
| ENG 111        | Communication Techniques           | 2               |
| CMP 113        | Programming in C                   | 3               |
| ELE 110        | Basic Electrical Engineering       | 3               |
| MEC 110        | Mechanical Workshop                | 1               |
|                | 2nd Semester                       |                 |
| Course<br>Code | Course Description                 | Credit<br>Hours |
| MTH 114        | Engineering Mathematics II         | 3               |
| PHY 111        | Physics                            | 4               |
| MEC 120        | Engineering Drawing                | 2               |
| CMP 115        | Object Oriented Programming in C++ | 3               |
| MEC 111        | Thermal Science                    | 2               |
| MEC 130        | Applied Mechanics I                | 3               |
|                | 3rd Semester                       |                 |
| Course<br>Code | Course Description                 | Credit<br>Hours |
| MTH 212        | Engineering Mathematics III        | 3               |
| CMP 225        | Data Structure and Algorithms      | 3               |
| ELE 210        | Electrical Engineering Materials   | 2               |
| ELE 211        | Network Theory                     | 3               |
| ELX 211        | Electronics Devices and Circuits   | 3               |
| ELX 212        | Logic Circuits                     | 3               |
|                | 4th Semester                       |                 |
| Course<br>Code | Course Description                 | Credit<br>Hours |
| MTH 214        | Engineering Mathematics IV         | 3               |
| ELX 231        | Instrumentation                    | 3               |
| CMP 226        | Database Management Systems        | 3               |
| CMP 211        | Programming Technology             | 3               |
| ELX 230        | Microprocessors                    | 3               |
| CMP 290        | Project I                          | 1               |

| 5th Semester   |                                        |                 |  |
|----------------|----------------------------------------|-----------------|--|
| Course<br>Code | Course Description                     | Credit<br>Hours |  |
| MTH 230        | Numerical Methods                      | 3               |  |
| MTH 220        | Probability and Statistics             | 3               |  |
| CMP 330        | Operating Systems                      | 3               |  |
| CMP 332        | Computer Architecture                  | 3               |  |
| CMP 241        | Computer Graphics                      | 3               |  |
| CMP 326        | Theory of Computation                  | 3               |  |
|                | 6th Semester                           |                 |  |
| Course<br>Code | Course Description                     | Credit<br>Hours |  |
| CMP 350        | Simulation and Modeling                | 3               |  |
| CMM 340        | Data Communication                     | 3               |  |
| CMP 320        | Object Oriented Software Engineering   | 3               |  |
| ELX 312        | Embedded Systems                       | 3               |  |
| CMP 390        | Project II                             | 2               |  |
|                | Electives                              | 3               |  |
|                | 7th Semester                           | r               |  |
| Course<br>Code | Course Description                     | Credit<br>Hours |  |
| Code No        | Subject                                |                 |  |
| ECO 411        | Engineering Economics                  | 3               |  |
| CMP 441        | Image Processing & Pattern Recognition | 3               |  |
| CMP 455        | Artificial Intelligence                | 3               |  |
| CMP 335        | Computer Networks                      | 3               |  |
| CMP 483        | ICT Project Management                 | 3               |  |
|                | Electives                              | 3               |  |
|                | 8th Semester                           |                 |  |
| Course<br>Code | Course Description                     | Credit<br>Hours |  |
| CMM 442        | Digital Signal Analysis and Processing | 3               |  |
| CMP 484        | Social and Professional Issues in IT   | 2               |  |
| MGT 321        | Organization and Management            | 2               |  |
| CMP 481        | Information Systems                    | 3               |  |
| CMP 490        | Project III                            | 5               |  |
|                | Electives                              | 3               |  |

## **Bachelor of Architecture**

| 1st Semster |                                                  |              |  |
|-------------|--------------------------------------------------|--------------|--|
| Course Code | Course Description                               | Credit Hours |  |
| ASC 101     | Mathematics                                      | 3            |  |
| HIS 171     | Introduction to Architecture                     | 2            |  |
| BLT 151     | Building Materials                               | 2            |  |
| PRS 111     | Free Hand Sketching                              | 3            |  |
| PRS 112     | Basic Drafting                                   | 3            |  |
| PRS 113     | Basic Design                                     | 5            |  |
|             | 2nd Semester                                     |              |  |
| Course Code | Course Description                               | Credit Hours |  |
| ASC 102     | Communication Techniques                         | 2            |  |
| ASC103      | Statics and Dynamics                             | 2            |  |
| VIS 121     | Architectural Modeling                           | 2            |  |
| VIS 122     | Architectural Independent Studies                | 2            |  |
| PRS 114     | Architectural Graphics                           | 3            |  |
| ADS 131     | Design Studio-I                                  | 5            |  |
|             | 3rd Semester                                     |              |  |
| Course Code | Course Description                               | Credit Hours |  |
| HIS 272     | History of Architecture I<br>(Western & Eastern) | 3            |  |
| AES 241     | Building Science I                               | 2            |  |
| DTT 281     | Design Theory I                                  | 2            |  |
| ASC 204     | Structure I                                      | 2            |  |
| VIS 223     | Structural Forms                                 | 2            |  |
| PRS 215     | Computer Aided Design                            | 3            |  |
| ADS 232     | Design Studio II                                 | 6            |  |
|             | 4th Semester                                     |              |  |
| Course Code | Course Description                               | Credit Hours |  |
| BLT 252     | Building Construction I                          | 2            |  |
| HIS 273     | History of Architecture II (Modern)              | 2            |  |
| ASC 205     | Structure II                                     | 2            |  |
| ASC 206     | Surveying                                        | 2            |  |
| PRS 216     | Computer Aided 3D<br>Visualizations              | 2            |  |
| ADS 233     | Design Studio III                                | 6            |  |

| 5th Semester  |                                         |              |  |
|---------------|-----------------------------------------|--------------|--|
| Course Code   | Course Description                      | Credit Hours |  |
| ASC 307       | Structure III                           | 3            |  |
| BLT 353       | Building Construction II                | 2            |  |
| AES 342       | Landscape Architecture                  | 2            |  |
| HIS 374       | History of Architecture III (Nepalese)  | 3            |  |
| AEL 391       | Elective I                              | 2            |  |
| ADS 334       | Design Studio IV                        | 6            |  |
|               | 6th Semester                            |              |  |
| Course Code   | Course Description                      | Credit Hours |  |
| AES 343       | Building Science II                     | 2            |  |
| AES 344       | Settlement Planning                     | 3            |  |
| BMP 361       | Working Drawing and Detailing           | 3            |  |
| DTT 382       | Design Theory II                        | 2            |  |
| ASC 308       | Building Services                       | 3            |  |
| ADS 335       | Design Studio V                         | 6            |  |
|               | 7th Semester                            |              |  |
| Course Code   | Course Description                      | Credit Hours |  |
| BMP 462       | Practicum (Practical Office Experience) | 15           |  |
|               | 8th Semester                            |              |  |
| Course Code   | Course Description                      | Credit Hours |  |
| ASC 409       | Estimation, Valuation and Specification | 2            |  |
| BLT 454       | Building Construction III               | 2            |  |
| AEL 492       | Elective II                             | 2            |  |
| VIS 424       | Directed Studies and Seminar            | 2            |  |
| ADS 436       | Design Studio VI                        | 6            |  |
|               | 9th Semester                            |              |  |
| Course Code   | Course Description                      | Credit Hours |  |
| AEL 593       | Elective III                            | 2            |  |
| AES 545       | Architects & Society                    | 3            |  |
| ADS 537       | Design Studio VII                       | 6            |  |
| DTT 583       | Thesis- Part I                          | 4            |  |
| 10th Semester |                                         |              |  |
| Course Code   | Course Description                      | Credit Hours |  |
| BMP 563       | Professional Practice                   | 2            |  |
| DTT 584       | Thesis: Part II                         | 12           |  |

## M.Sc. in Construction Management

| 1st Semester   |                                                        |                 |
|----------------|--------------------------------------------------------|-----------------|
| Course<br>Code | Course Description                                     | Credit<br>Hours |
| MGT 511        | Project Planning and Control                           | 3               |
| MGT 512        | Human Resource Management                              | 3               |
| STT 505        | Statistical Analysis                                   | 3               |
| ECM 521        | Professional Ethics and Liability in Construction      | 3               |
| ECO 501        | Economics for Construction<br>Managers                 | 3               |
|                |                                                        | 15              |
|                | 2nd Semester                                           |                 |
| Course<br>Code | Course Description                                     | Credit<br>Hours |
| ECM 522        | Construction Policies, Environment and Law             | 3               |
| FIN 521        | Financial Management                                   | 3               |
| ECM 523        | Construction Project Management                        | 3               |
| ECM 524        | Management of Construction<br>Plant and Equipment      | 3               |
|                | Elective – I                                           | 3               |
|                |                                                        | 15              |
|                | 3rd Semester                                           |                 |
| Course<br>Code | Course Description                                     | Credit<br>Hours |
| ECM 621        | Construction Project Engineering<br>and Administration | 3               |
| ECM 622        | Construction Safety Engineering                        | 3               |
| RCH 601        | Research Methodology 3                                 |                 |
| ECM 623        | Construction Management in<br>Developing Countries 3   |                 |
|                | Elective – II                                          | 3               |
|                |                                                        | 15              |
| 4th Semester   |                                                        |                 |
| Course<br>Code | Course Description                                     | Credit<br>Hours |
| ECM c 625      | Thesis                                                 | 15              |









































## Views of PEC Alumni



Being a Civil Engineering student at PEC was amazing because of the incredibly encouraging environment, proper guidance, and gualified faculty who provided the best platform and guidance to achieve the best height and success. During my four years of engineering study, I always found the teachers to be encouraging and practical. I was fortunate enough to take the valuable advice and mentoring from the outstanding professionals that have been my professors as a guiding path for my own career. Thus, I was able to explore my creativity and also build a solid base of theoretical knowledge.

The decision to shape your future and make it bright is the most important thing. All of my learnings at PEC played a huge role in reaching where I am today. Thank you, PEC for providing me and several other young minds a platform to expand our horizons of knowledge and demonstrate our capabilities that strengthened our confidence. I'm glad to be part of such a prestigious college.

Er. Sudin Moktan | Senior Divisional Engineer, Ministry of Energy, Water Resources and Irrigation, GON.



Pokhara Engineering College has been a big part of my life. This is where I learnt my first line of code to start my IT journey. The curriculum is very well designed with the blend of theory and practical education. The faculty members are highly qualified professionals in their respective fields who've been teaching for number of years. I completed my Master of Information from Charles Sturt University, Sydeny and the knowledge from PEC had prepared me well. I am very grateful to this institution and its members for their guidance, support and the role they played in making me who I am today.

Sagar Gurung

BE Computer Engineering (2013–2017) Charles Sturt University, Sydeny



PEC has a duel virtue to me. Firstly, I started my teaching career from it and secondly, I did my graduation in M.Sc. C.M. from this institution. In both aspects, I found it wonderful. I remember the days when there were no engineering colleges in the nation outside Kathmandu valley and I started my teaching career since its initiation right after the completion of my undergraduate degree in civil engineering from IOE, Pulchowk. As a faculty member I got an amiable environment to groom my professional career. Similarly In 2009 A.D. when it started graduate program, I joined M.Sc. C.M. and could gualify as a Dean Listed student of the batch. In both angles PEC played a vital role in my life and in true sense I never get tired of praising this institution for its contribution in expanding engineering education to doors of students from all economic folds.

Er. Nirmal Baral

Campus Chief, IOE Paschimanchal Campus. Pokhara

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- Member
- Member
- Member Secretary
- Chief Administrator
- Library Chief
- Administration Visiting Medical Doctor

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- Er. Surai B. Tulachan
- Er. Bimal Bhandari
- Ar. Pradyumn Adhikari
- Er. Krishna Ghimire
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- Mr. Pradeep Subedi

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Er. Jayesh Chalise(Diploma Co-ordinator) Mr. Himlal Bhusal (Diploma Administrator)

#### Promoter Directors



Ms. Hira Gurung



Mr. Amber Gurung

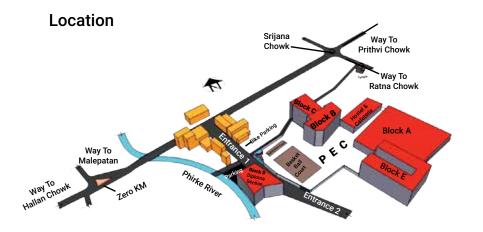


Dr. Sailesh Gurung

- Principal - Program Co-ordinator (M.Sc. Prgram)
- HoD, Computer
- HoD, Civil
- HoD, Architecture
- RMC Co-ordinator
- Liaison Officer
- Extra Curricular Activities Co-ordinator
- Exam Co-ordinator

#### **Bird's View**







## Pokhara Engineering College

Phirke, Pokhara-8, Kaski, Nepal Tel: 977-61-581209/578530 PO Box: 540, E-mail: info@pec.edu.np www.pec.edu.np